The University of Mississippi Medical Center (UMMC) Bulletin presents information, which at the time of publication, accurately describes the current curricula and the regulations and requirements of the Medical Center. The Bulletin is updated at the beginning of each academic session, three times a year. THIS CATALOG IS NEITHER A CONTRACT NOR AN OFFER TO CONTRACT.

All statements in this publication are statements of the present policies only and are subject to change at any time by proper authority to be effective whenever determined by UMMC. The right to change any provision, offering, or requirement may occur within a student’s period of study at UMMC. The University of Mississippi Medical Center reserves the right to require a student to withdraw from any program for cause at any time.

Published by the
Office of the Associate Vice Chancellor for Academic Affairs
The University of Mississippi Medical Center
2500 North State Street, Jackson, Mississippi 39216-4505
April, 2015
CONTENTS

GENERAL INFORMATION
GENERAL INFORMATION ................................................................................................. 3
UNIVERSITY OF MISSISSIPPI MEDICAL CENTER MISSION STATEMENT .......................................................... 3
UNIVERSITY OF MISSISSIPPI MEDICAL CENTER VISION .............................................................................. 3
FACILITIES .................................................................................................................................................. 3
ACADEMIC REGULATIONS .......................................................................................................................... 4
INSTRUCTIONAL PROGRAMS ....................................................................................................................... 4
ADMISSION .................................................................................................................................................. 4
TUITION AND FEES .................................................................................................................................... 5
WITHDRAWAL POLICY ................................................................................................................................. 6
LEGAL RESIDENCE ..................................................................................................................................... 6
SUPPORT SERVICES ...................................................................................................................................... 7
STUDENT HEALTH ....................................................................................................................................... 8
STUDENT GOVERNMENT ............................................................................................................................... 11
STUDENT PROFESSIONAL ORGANIZATIONS ................................................................................................. 11
STUDENTS’ RIGHTS AND RESPONSIBILITIES ............................................................................................. 11
FEDERAL FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974 ..................................................... 12
EQUAL EMPLOYMENT OPPOORTUNITY STATEMENT .................................................................................. 13
BOARD OF TRUSTEES .................................................................................................................................... 14
ADMINISTRATION .......................................................................................................................................... 15
POSTGRADUATE EDUCATION ....................................................................................................................... 16

SCHOOL OF MEDICINE
ACADEMIC CALENDAR .............................................................................................................................. 19
HISTORY ....................................................................................................................................................... 21
MISSION ....................................................................................................................................................... 21
OBJECTIVES .................................................................................................................................................. 21
A COVENANT FOR MEDICAL EDUCATION .................................................................................................. 21
MEDICAL STUDENT PROFESSIONALISM CODE .......................................................................................... 21
POLICY ON PROFESSIONAL BEHAVIOR ..................................................................................................... 24
PROGRAM ..................................................................................................................................................... 25
DISTRIBUTION OF INSTRUCTION BY SEMESTER HOURS .................................................................... 26
POLICY ON ACADEMIC STATUS .................................................................................................................. 28
ADMISSIONS .................................................................................................................................................. 30
ADMISSIONS CRITERIA .................................................................................................................................. 32
APPLICATION DEADLINES .............................................................................................................................. 37
EARLY DECISION PROGRAM (EDP) ............................................................................................................. 37
REGULAR DECISION PROGRAM (RDP) ......................................................................................................... 38
ADVANCED STANDING TRANSFER ............................................................................................................ 40
VISITING STUDENTS ..................................................................................................................................... 41
APPLICANT EVALUATIONS AND DECISIONS .............................................................................................. 41
ACCEPTED APPLICANTS ............................................................................................................................... 46
FINANCIAL AID .............................................................................................................................................. 47
STATE SCHOLARSHIP AND LOAN PROGRAMS ......................................................................................... 47
FEDERAL SCHOLARSHIP AND LOAN PROGRAMS ....................................................................................... 47
EXTERNAL SOURCES OF FUNDS ................................................................................................................... 48
UMMC INSTITUTIONAL SCHOLARSHIPS ...................................................................................................... 49
UMMC INSTITUTIONAL LOAN FUNDS ........................................................................................................... 51
HONOR SOCIETIES ....................................................................................................................................... 51
PROFESSIONAL ORGANIZATIONS ................................................................................................................ 52
THE MEDICAL ALUMNI GUARDIAN SOCIETY ............................................................................................ 52
AWARDS AND PRIZES ................................................................................................................................... 52
ANESTHESIOLOGY ......................................................................................................................................... 55
BIOCHEMISTRY ................................................................................................................................................ 56
POSTMASTER'S DNP PLAN OF STUDY ................................................................. 181
COURSE DESCRIPTIONS (700-level courses) .................................................. 181
PHD IN NURSING PROGRAM ........................................................................... 182
INTERDISCIPLINARY COURSES (600 and 700-level courses) ........................................... 183
FACULTY ........................................................................................................ 183

SCHOOL OF HEALTH RELATED PROFESSIONS
ACADEMIC CALENDAR .................................................................................... 187
HISTORY .......................................................................................................... 189
MISSION .......................................................................................................... 189
PROGRAMS ..................................................................................................... 189
GENERAL ADMISSION REQUIREMENTS .................................................................. 189
GENERAL APPLICATION PROCEDURE ................................................................... 190
TUITION AND REQUIRED FEES ...................................................................... 191
FINANCIAL AID ............................................................................................... 191
SCHOLARSHIPS AND LOANS .......................................................................... 191
AWARDS AND HONORS ............................................................................... 192
ACADEMIC REGULATIONS ............................................................................ 195
DEGREE REQUIREMENTS ............................................................................ 197
COUNSELING .................................................................................................. 197
STUDENT GOVERNMENT ................................................................................ 197
CYTOTECHNOLOGY (BS) ................................................................................... 197
DENTAL HYGIENE (BS) .................................................................................. 200
ADVANCE STANDING DENTAL HYGIENE ....................................................... 202
HEALTH ADMINISTRATION (DHA) .................................................................... 205
HEALTH INFORMATICS AND INFORMATION MANAGEMENT (BS) ..................... 207
TRADITIONAL HEALTH INFORMATICS AND INFORMATION MANAGEMENT .......... 208
PROGRESSION HEALTH INFORMATICS AND INFORMATION MANAGEMENT ......... 229
HEALTH INFORMATICS AND INFORMATION MANAGEMENT (MHIIM) ................. 212
HEALTH SCIENCES (BS) .................................................................................. 215
HEALTH SCIENCES (MHS) ............................................................................. 218
MAGNETIC RESONANCE IMAGING (MRI) ....................................................... 220
MEDICAL LABORATORY SCIENCES (BS) ......................................................... 223
TRADITIONAL MEDICAL LABORATORY SCIENCES ......................................... 223
PROGRESSION MEDICAL LABORATORY SCIENCES ........................................ 225
NUCLEAR MEDICINE TECHNOLOGY (NMT) .................................................. 227
OCCUPATIONAL THERAPY (MOT) .................................................................... 229
PHYSICAL THERAPY (DPT) ............................................................................. 234
RADIOLOGIC SCIENCES (BS) ........................................................................ 239
TRADITIONAL RADIOLOGIC SCIENCES ........................................................ 239
ADVANCED STANDING RADIOLOGIC SCIENCES ............................................ 241
FACULTY .......................................................................................................... 244

SCHOOL OF DENTISTRY
ACADEMIC CALENDAR .................................................................................... 251
HISTORY .......................................................................................................... 253
PROGRAMS ..................................................................................................... 253
MISSION .......................................................................................................... 253
CORE VALUES .................................................................................................. 253
ADMISSION TO DENTAL CURRICULUM ......................................................... 254
SPECIAL STUDENT .......................................................................................... 254
TECHNICAL STANDARDS FOR ADMISSION .................................................... 255
ACCEPTED APPLICANT INFORMATION ........................................................ 256
ACADEMIC REGULATIONS ............................................................................ 257
TUITION AND REQUIRED FEES ...................................................................... 258
LOANS 258
SCHOLARSHIPS ............................................................................................... 258
The University of Mississippi established the Medical Center campus on July 1, 1955, when the School of Medicine was relocated from the Oxford campus to Jackson under the leadership of Chancellor J.D. Williams and Dean David Pankratz. The School of Medicine, originally founded in 1903, had been a two-year course of study. However, the move to Jackson provided a traditional program leading to the four-year MD degree, a medical library and a teaching hospital situated on 164 acres.

The Jackson campus, now referred to as the University of Mississippi Medical Center (UMMC), of the University presently serves over 2,800 students through the School of Medicine, established in 1955; the School of Nursing (1958), the School of Health Related Professions (1971); the School of Pharmacy (1971); the School of Dentistry (1973); and the School of Graduate Studies in the Health Sciences (2001).

As the academic health sciences campus of the University of Mississippi, UMMC functions as a separately accredited, semi-autonomous unit responsible to the chancellor of the university and through him to the constitutional Board of Trustees of State Institutions of Higher Learning. The University of Mississippi Medical Center is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award baccalaureate, master and doctorate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by telephone (404) 679-4500, or online (1) to learn about the accreditation status of the institution visit; (2) to file a third-party comment at the time of the institution’s decennial review; or (3) to file a complaint against the institution for alleged non-compliance with a standard or requirement. For academic questions about the University of Mississippi Medical Center, such as admission requirements, financial aid and educational programs, visit online or call (601) 984-5009.

UNIVERSITY OF MISSISSIPPI MEDICAL CENTER MISSION STATEMENT
The mission of the University of Mississippi Medical Center is to improve the health and well-being of patients and the community through excellent training for health care professionals, engagement in innovative research and the delivery of state-of-the-art health care.

UNIVERSITY OF MISSISSIPPI MEDICAL CENTER VISION
The University of Mississippi Medical Center will be a premier academic health sciences system that is recognized nationally for high-quality clinical care, for innovative research and for training committed health care professionals who work together to improve health outcomes and eliminate health disparities.

FACILITIES
The University of Mississippi Medical Center is located in the heart of the capital city with the original eight-story building now serving as the nucleus of a major academic health sciences complex. The Jackson campus is home to six health science schools: Medicine, Nursing, Health Related Professions, Dentistry, Graduate Studies and Pharmacy. Although the School of Pharmacy is based on the Oxford campus, students receive their final two years of clinical training at the Medical Center.

Over the years, the vision and mission of education, research, and healthcare has prompted continuous growth in the form of new buildings and major additions. These include the Arthur C. Guyton Laboratory Research Center (with a later addition); the state’s only children’s hospital (Blair E. Batson) with a two-story addition of a pediatric surgical suite; the School of Health Related Professions building; Winfred L. Wiser Hospital for Women and Children; the Norman C. Nelson Student Union; the Wallace Conerly Heart. With construction under way on the Translational Research Facility, the School of Medicine building and a parking garage, progress is continuously being made. Progress that extends beyond the Jackson campus and spreads across the state of Mississippi to include multiple clinics in the Jackson area, specialty clinics in Rankin County, and hospitals in Grenada and Lexington.

UMMC realizes that exercise and nutrition are essential to health. The acquisition of the Courthouse Fitness Centers located in Brandon, Byram, Flowood and Jackson brings the mission of a healthier Mississippi full circle.

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER BULLETIN — The 722-bed University Hospitals and Health System is the teaching center for all Medical Center educational programs and a diagnostic and treatment referral center for the entire state. The system includes ambulatory services at the Jackson Medical Mall, the University Medical Pavilion, University Rehabilitation Center and University Physicians Grants Ferry; and hospital services at Children’s Healthcare of Mississippi, the Wallace Conerly Hospital for Critical Care, the Winfred L. Wiser Hospital for Women and Infants, University Hospital and Select Specialty Hospital in northeast Jackson. Additionally, the system operates the Holmes County Hospital and Clinic in Lexington and University of Mississippi Medical Center Grenada. The hospital staff is appointed from the faculty of the Schools of Medicine and Dentistry.

AFFILIATED MEDICAL CENTERS — The University of Mississippi Medical Center is a member of the system of hospitals and clinics operating under the name G. V. “Sonny” Montgomery Veterans Affairs Medical Center of Jackson, with 163 general patient beds, is the principal teaching affiliate for Medical Center educational programs. The Addie McBryde Rehabilitation Center for the Blind, completed in 1972, adjoins the University Hospital as does the Mississippi Methodist Hospital and Rehabilitation Center, which opened in 1975.
NORMAN C. NELSON STUDENT UNION — The Norman C. Nelson Student Union houses the bookstore, continuing education and convention facilities, food services and student facilities. Student facilities include conference room, study rooms, television/recreational areas, gymnasium, running track, aerobics room, exercise facilities, locker room and equipment checkout.

ROWLAND MEDICAL LIBRARY — The nearly 45,000-square-foot Rowland Medical Library is the general library for the Medical Center community. Named in honor of Dr. Peter Rowland, former professor of pharmacology, the library houses a print collection of more than 318,000 volumes and provides access to electronic books and journals. The main floor provides access to current journal and reference collections and a computer lab while the second floor houses textbooks, monographs, bound journals, and archives. There are small group and individual study areas on both floors.

Library services include interlibrary loan, document delivery and circulation along with individual consultation and instruction on information retrieval. The library instructional program introduces students to biomedical literature retrieval skills within the curriculum to facilitate identifying best practice and evidence-based information for clinical decision making. The Medical Center’s wireless network is accessible throughout the library.

Rowland Medical Library is a resource library within the National Network of Libraries of Medicine Southeastern/Atlantic Region.

ACADEMIC REGULATIONS

The academic regulations of the institution are set forth in Academic Affairs policy and procedure. All Academic Affairs policy and procedure will conform to SACS COC expectations to be approved through appropriate institutional procedures, published in appropriate institutional documents, accessible to those affected, and enforced by the institution. These policies and procedures may be available in the UMMC Document Center, the Policy Directory or in the school-specific student handbooks. Changes may be made to the academic policy or procedure at any time to promote the best interests of the Medical Center and its students. The dean of each school is the final arbiter of academic regulations for that school. The Associate Vice Chancellor for Academic Affairs adjudicates academic regulations that affect more than a single school at the Medical Center.

INSTRUCTIONAL PROGRAMS

SCHOOL OF DENTISTRY — The School of Dentistry offers a four-year program leading to the degree of Doctor of Dental Medicine.

SCHOOL OF GRADUATE STUDIES IN THE HEALTH SCIENCES — The School of Graduate Studies in the Health Sciences offers programs leading to the Master of Science (Biomedical Materials Science, Biomedical Sciences, Clinical Anatomy and Clinical Health Sciences – this program no longer accepting new graduate students) and the Doctor of Philosophy (Anatomy, Biochemistry, Biomedical Materials Science, Clinical Health Sciences, Medical Pharmacology, Microbiology, Neuroscience, Nursing, Pathology and Physiology and Biophysics).

SCHOOL OF HEALTH RELATED PROFESSIONS — The School of Health Related Professions offers programs leading to the Bachelor of Science (Cytotechnology, Dental Hygiene, Health Informatics and Information Management, Health Sciences, Medical Laboratory Science and Radiologic Sciences), post-baccalaureate certificates in Nuclear Medicine Technology and Magnetic Resonance Imaging, Master of Health Informatics and Information Management, Master of Health Sciences, Master of Occupational Therapy, Doctor of Health Administration and the Doctor of Physical Therapy.

SCHOOL OF MEDICINE — The School of Medicine offers a four-year program leading to the degree of Doctor of Medicine. Additionally, a combined MD/PhD program is offered to highly qualified students by the School of Medicine in collaboration with the School of Graduate Studies in the Health Sciences.

SCHOOL OF NURSING — The School of Nursing offers programs leading to the Bachelor of Science in Nursing, the Master of Science in Nursing, and the Doctor of Nursing Practice. Additionally, the School offers post-master’s certificate programs in adult-gerontology acute care nurse practitioner, family nurse practitioner, psychiatric mental health nurse practitioner, nurse educator, nursing and health care administrator, and adult-gerontological nurse practitioner.

SCHOOL OF PHARMACY — The School of Pharmacy offers a seven-year program leading to the degree of Doctor of Pharmacy, including three years of a pre-pharmacy early entry program and four years in the professional program. The first two years of the professional program are administered on the Oxford campus and the final two years are administered on the UMMC campus.

ADMISSION

Admission to the University of Mississippi Medical Center is administered under policies established by state law, the Board of Trustees of State Institutions of Higher Learning and the Medical Center’s faculty. For program-specific admission requirements, please see the respective schools’ sections of this Bulletin. Admission requirements are subject to change without notice at the direction of the Board of Trustees.

STUDENT ENROLLMENT STATUS

Certification of full-, half- or less than half-time enrollment status for loan deferment, medical insurance, etc. is based on hours of enrollment in a term (fall, spring, summer). Listed below are the requirements that determine student status for official enrollment certification purposes by the Office of the Registrar and for financial assistance. Students are required to be enrolled in at least half-time status to receive federal student loans, be covered for health/medical insurance or to defer repayment of student loans.
TUITION AND FEES

It is the intent of the University of Mississippi Medical Center to provide the highest quality education at a reasonable cost. Since student tuition and fee charges are used for operating costs, including scholarships and waivers, the Medical Center reserves the right to increase or modify tuition and fees without prior notice subject to the approval of the Board of Trustees of State Institutions of Higher Learning as required by the Department of Education. Information regarding tuition and fees for programs available at the Medical Center can be found within the respective schools’ sections of this Bulletin.

PAYMENT — Tuition and fees are assessed either by credit hour, or, in the case of medical and dental students, based on the approved tuition rate for the year. Insurance and test fees are also billed to the student tuition account. Billing statements are emailed to each student’s UMMC email account. Students are expected to check their email account on a regular basis. Payment is due by June 15, September 30 and February 15 for the summer, fall and spring semesters, respectively.

If payment is not received by the due date, late charges and/or service fees may be assessed on the unpaid balance. Nonpayment of accounts does not constitute class withdrawal or cancellation of health insurance. Delinquent accounts may be reported to outside collection agencies and credit bureaus. Any collection costs or legal fees incurred in collecting unpaid accounts will be charged to the student. Additional information concerning billing and payment of fees is available online.

RETURNED CHECKS — Checks returned by the bank are charged back to the student’s account and a $30 insufficient funds fee is assessed. The student will be notified of the return and must make payment within 15 days or legal action may be initiated. Online payments returned for non-sufficient funds (NSF) are also subject to the NSF fee. Accounts with a balance due to charge backs are subject to late fees.

REFUNDS — By registering for school, students incur a financial obligation to pay for the entire academic term for which they are registered. Registering for a term includes early registration and all courses added after the student’s initial registration. Students who withdraw or go on an approved leave of absence may be eligible for a refund of their tuition and fees provided they complete the official withdrawal or leave of absence procedures within the refund period. Failure to attend classes is not considered an official withdrawal. For purposes of this section, withdrawals and leaves of absence will all be termed “withdrawals.” Refund dates are included in the academic calendar and are also posted on the student portal. In the event a student who was receiving financial aid drops hours, withdraws or goes on leave of absence, all or a portion of that aid may have to be returned to the source based upon the Return to Title IV (R2T4) calculation performed by the Office of Student Financial Aid as outlined in Federal Regulation 34 CFR 668.22. Tuition reversals based upon last date of attendance may not wholly offset the amount of aid returned and the student will be required to pay the difference to clear their account.

In the event that the student is owed a refund, a check will be mailed to the student at the address provided during the exit process. Students who owe money to the school at the time of withdrawal will be required to pay the account balance at the time they withdraw. If the account is not paid, the account will be considered delinquent and may be referred to an outside collection agency and reported to a credit bureau. The student will be required to pay for any collection costs and legal fees incurred in the collection process.

GENERAL FEES — The following fees are applicable to all students.

<table>
<thead>
<tr>
<th>UNDERGRADUATE</th>
<th>GRADUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time</td>
<td>Full-Time</td>
</tr>
<tr>
<td>12 Hours and above</td>
<td>9 Hours and above</td>
</tr>
<tr>
<td>Three-Quarter Time</td>
<td>Three-Quarter Time</td>
</tr>
<tr>
<td>11, 10, 9 Hours</td>
<td>7 and 8 Hours</td>
</tr>
<tr>
<td>Half-Time</td>
<td>Half-Time</td>
</tr>
<tr>
<td>8, 7, 6 Hours</td>
<td>5 and 6 Hours</td>
</tr>
<tr>
<td>Less Than Half Time</td>
<td>Less Than Half Time</td>
</tr>
<tr>
<td>5 or less Hours</td>
<td>4 or less Hours</td>
</tr>
</tbody>
</table>

Tuition reversals based upon last date of attendance may not wholly offset the amount of aid returned and the student will be required to pay the difference to clear their account.

In the event that the student is owed a refund, a check will be mailed to the student at the address provided during the exit process. Students who owe money to the school at the time of withdrawal will be required to pay the account balance at the time they withdraw. If the account is not paid, the account will be considered delinquent and may be referred to an outside collection agency and reported to a credit bureau. The student will be required to pay for any collection costs and legal fees incurred in the collection process.

GENERAL FEES — The following fees are applicable to all students.

Tuition

Application fee

School of Health Related Professions, School of Nursing and School of Graduate Studies in the Health Sciences

Application fee for residents – School of Medicine and School of Dentistry

Transcript fee

Requests for transcripts initiated by other persons and agencies will not be filled until written authorization has been received from the student and remittance of fee has been made.

Health Insurance

See the Student Health section of the Bulletin for more information regarding health insurance. Health insurance premiums are revised annually in September. An optional dental/vision plan is also available. Contact the Office of Student Accounting for plan benefits and prices.

Course audit fee

Returned check fee

Varies by school

Varies by school

$25

$50

$5 per transcript

$2,450 per year, single coverage

Same per hour rate as tuition

$30
WITHDRAWAL POLICY

Registration for a course makes the student responsible for attending that class until the course is completed or until, with the permission of the dean or designee, the student withdraws from the course. Official withdrawal is facilitated by the dean or designee submitting official notice of withdrawal to the Offices of the Registrar, Student Financial Aid and Student Accounting. Failure to officially withdraw will result in the recording of a failing grade in the course in which the student is registered. An approved withdrawal, if completed on or before the last day specified in the academic calendar, will not be recorded on the student’s record. Withdrawals authorized after this date will be recorded “W” unless the student has completed the course, in which case the final grade in the course will be recorded.

Registration in an academic program makes the student responsible for completion of the course of study or until, with the permission of the dean or designee, the student withdraws from the curriculum. Official withdrawal is facilitated by the dean or designee submitting official notice of withdrawal to the Offices of the Registrar, Student Financial Aid, and Student Accounting. Failure to officially withdraw will result in the recording of a failing grade in the course(s) in which the student is registered. An approved withdrawal, if completed on or before the last day specified in the academic calendar, will not be recorded on the student’s record. Withdrawals authorized after this date will be recorded W unless the student has completed the course, in which case the final grade in the course will be recorded.

Individual schools may have stricter withdrawal policies, and a student is allowed only as many withdrawals as his/her specific school prescribes.

For program specific withdrawal requirements, please see the respective schools’ sections of this Bulletin.

LEGAL RESIDENCE

The Medical Center applies the definitions and conditions stated here as required by state law in the classification of students as residents or nonresidents for the assessment of fees. Requests for a review of residency classification should be submitted to the Office of Student Records and Registrar.

RESIDENCE OF A MINOR — The residence of a person less than 21 years of age is determined based on the residence of the father, the mother or a general guardian duly appointed by a proper court in Mississippi. If a court has granted custody of the minor to one parent, the residence of the minor is that of the parent who was granted custody by the court. If both parents are dead, the residence of the minor is that of the last surviving parent at the time of that parent’s death, unless the minor lives with a general guardian duly appointed by a proper court of Mississippi, in which case his/her residence becomes that of the guardian. A minor student who, upon registration at the University of Mississippi Medical Center, presents a transcript demonstrating graduation from a Mississippi secondary school and who has been a secondary school student in Mississippi for not less than the final four years of secondary school attendance shall not be required to pay out-of-state tuition.

RESIDENCE OF AN ADULT — The residence of an adult is that place where he/she is domiciled, that is, the place where he/she actually physically resides with the intention of remaining there indefinitely or of returning there permanently when temporarily absent.

REMOVAL OF PARENTS FROM MISSISSIPPI — If the parents of a minor who is enrolled as a student at the University of Mississippi Medical Center move their legal residence from Mississippi, the minor shall be immediately classified as a nonresident student; such a change in classification shall not affect the tuition to be charged upon completion of the semester in which the move takes place.

RESIDENCE REQUIRED — No student may be admitted to the University of Mississippi Medical Center as a resident of Mississippi unless his/her residence has been in Mississippi preceding his/her admission.

RESIDENCY PETITIONS — Nonresidents may petition the University of Mississippi Medical Center for a change of residency classification. A person who enters Mississippi from another state and enters a system institution is considered a nonresident, unless the person meets the residency requirements as a minor or adult as set out above. Provided, however, that any person who has attained 21 years of age and has thereafter actually established residency as an adult and resided within Mississippi for 12 consecutive months after attaining 21 years of age upon sworn affidavit and other representation, may petition the University of Mississippi Medical Center for a change in residency classification for the purposes of fees and tuition assessment. The Medical Center may make reasonable inquiry into the validity of the petitioner’s claim. Such petition for change of residency must be made on or before the last day a student may register at the Medical Center without penalty.

LEGAL RESIDENCE OF A MARRIED PERSON — A married person may claim the residence status of his/her spouse, or he/she may claim independent residence status under the same regulations set out above as any other adult.

CHILDREN OF FACULTY OR STAFF — Children of parents who are members of the faculty or staff of the University of Mississippi Medical Center may be classified as residents for the purpose of attendance at the Medical Center.

MILITARY PERSONNEL ON ACTIVE DUTY STATION IN MISSISSIPPI — Members of the U.S. Armed Forces on extended active duty and stationed within Mississippi and members of the Mississippi National Guard may be classified as residents for the purpose of attendance at the University of Mississippi Medical Center. Resident status of such military personnel, who are not legal residents of Mississippi, shall terminate upon their reassignment for duty in the continental United States outside of Mississippi.
SPouse or CHILD of MILITARY PERSONNEL — Resident status of a spouse or child of a member of the U.S. Armed Forces on extended active duty shall be that of the military spouse or parent for the purpose of attending the University of Mississippi Medical Center during the time that their military spouse or parent is stationed within Mississippi and shall be continued through the time that the military spouse or parent is stationed in an overseas area with last duty assignment within Mississippi, excepting temporary training assignments en route from Mississippi.

Resident status of a minor child terminates upon reassignment under Permanent Change of Station Orders of the military parent for duty in the continental United States outside Mississippi, excepting temporary training assignments en route from Mississippi. The spouse or child of a member of the U.S. Armed Forces who dies or is killed is entitled to pay the resident tuition fee if the spouse or child becomes a resident of Mississippi. If a member of the U.S. Armed Forces is stationed outside Mississippi and the member’s spouse or child establishes residence in Mississippi and registers at the University of Mississippi Medical Center, the Medical Center shall permit the spouse or child to pay the tuition, fees and other charges provided for Mississippi residents without regard to length of time that the spouse or child has resided in Mississippi. A member of the U.S. Armed Forces or the child or spouse of a member of the U.S. Armed Forces who is entitled to pay tuition and fees at the rate provided for Mississippi residents under another provision of this section while enrolled in a degree or certificate program is entitled to pay tuition and fees at the rate provided for Mississippi residents in any subsequent term or semester while the person is continuously enrolled in the same degree or certificate program. A student may withdraw or may choose not to re-enroll for no more than one (1) semester or term while pursuing a degree or certificate without losing resident status only if that student provides sufficient documentation by a physician that the student has a medical condition that requires withdrawal or non-enrollment. For purposes of this section, a person is not required to enroll in a summer term to remain continuously enrolled in a degree or certificate program. The person’s eligibility to pay tuition and fees at the rate provided for Mississippi residents under this section does not terminate because the person is no longer a member of the U.S. Armed Forces or the child or spouse of a member of the Armed Forces of the United States.

CERTIFICATION OF RESIDENCE OF MILITARY PERSONNEL — A military person on active duty stationed in Mississippi who wishes to avail himself/herself or his/her dependents to be classified as residents for the purpose of attendance at the University of Mississippi Medical Center must submit a certificate from his/her military organization showing the name of the military member; the name of the dependent, if for a dependent; the name of the organization of assignment and its address (may be in the letterhead); that the military member will be on active duty stationed in Mississippi on the date of registration at the Medical Center; that the military member is not on transfer orders; and the signature of the commanding officer, the adjutant or the personnel officer of the unit of assignment with signers rank and title. A military certificate must be presented to the Office of Student Records and Registrar each semester or tri-semester at (or within 10 days prior to) registration each semester for the provisions of said section to be effective.

The Medical Center complies with section 702 of the Choice Act in determination of tuition for selected veterans and their dependents.

SUPPORT SERVICES

The University of Mississippi Medical Center offers a comprehensive program of student support services through the Division of Academic Affairs, the Office of the Chief Student Affairs Officer, the individual schools, the Office of Student Financial Aid, the Office of Academic Support, the Office of Student Records and Registrar, the Student and Employee Health Service and the University Police. The Medical Center believes these services are an important adjunct to the total educational program and essential to the continuing fulfillment of the institution’s purpose.

ACADEMIC ADVISEMENT — Faculty advisors are an important resource for students in their programs and for career and personal counseling. Faculty advisers are assigned to first-time entering students in the School of Medicine, School of Dentistry, School of Nursing and the School of Graduate Studies in the Health Sciences. Each of the educational programs in the School of Health Related Professions has its own faculty student advisement service, and students are encouraged to take advantage of their services.

ACADEMIC AFFAIRS — The Division of Academic Affairs promotes the pursuit of excellence in education delivery to students in all academic programs, supports the faculty who provide instruction, and provides leadership to and coordination among services for faculty and students. The Division of Academic Affairs provides expertise and services to faculty and students related to adult education, teaching, learning, professionalism and interprofessional training. Services are provided by the following offices: Academic Support; Assessment; Biomedical Illustration Services; Center for Bioethics and Medical Humanities; Institutional Research; Simulation and Interprofessional Education Center; Multimedia Services; Rowland Medical Library; Student Records and Registrar; and support for the Medical Center’s course management platform, Blackboard, through the Division of Information Systems.

ACADEMIC SUPPORT — The Office of Academic Support provides oversight to the following University of Mississippi Medical Center support services:

Academic Consulting Services
University Tutoring Services
Writing Support Services
Academic Accommodations

Academic Consulting Services. The Office of Academic Support provides Academic Consulting Services to students, residents and fellows currently enrolled at the University of Mississippi Medical Center. Academic consultants meet individually with learners and provide assistance with developing the skills and behaviors that are essential to academic success and professional development.
Services are available at no charge to the learner and may address a wide range of issues. These include transition to professional school, time management, study skills, stress management, testing strategies, interpersonal and communication skills, clarifying career goals and coping strategies.

Individuals may initiate contact with the office or be referred by faculty. To make an appointment, individuals should complete the Request Academic Consultation online form on the Academic Consulting Services web page.

**University Tutoring Services.** The Office of Academic Support manages University Tutoring Services, the peer tutoring program available at no cost to all students currently enrolled at the University of Mississippi Medical Center. This program is designed to promote academic excellence through supportive instruction by peers with similar educational experiences and backgrounds. Tutoring occurs on UMMC’s campus and scheduling is negotiated by the student and assigned tutor. You must be registered in the course for which you request tutoring to be eligible for the services. Tutors are not available for all courses at the institution. Once you have submitted the Request Tutoring form on the University Tutoring Services web page, you will be notified if tutoring is available for the requested course and provided further information about the program.

To request tutoring or receive more information about available courses, individuals should go to the Office of Academic Support webpage and complete the Request Tutoring online form.

**Writing Support Services.** The Office of Academic Support provides writing support services to students, residents, and fellows who are currently at the University of Mississippi Medical Center. A writing coach is available to meet individually and at no charge to the learner and may address many aspects of academic and professional writing.

To request writing support or receive more information about the services, individuals should go to the Office of Academic Support webpage and complete the Request for Writing Support form.

**Academic Accommodations.** The Office of Academic Support manages academic accommodations at the University of Mississippi Medical Center. Note: Students in the School of Pharmacy should apply for academic accommodations through the University of Mississippi, Oxford Campus.

The University of Mississippi Medical Center is committed to ensuring equal access to a quality education for qualified students through the provision of reasonable academic accommodations which support UMMC standards and academic integrity. UMMC policy provides for reasonable academic accommodations to be made for students with verified disabilities on an individualized and flexible basis as specified under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA). UMMC provides reasonable academic accommodations to students on campus who request accommodations and who meet eligibility criteria. For more information or to request academic accommodations, individuals should go to the Office of Academic Support webpage and complete the Request Academic Accommodations online form.

**Office of Academic Support**
University of Mississippi Medical Center
Verner Holmes Learning Resource Center, U155-A
Phone: (601) 815-4233 • Fax: (601) 815-5828

**BOOKSTORE** — Located in the Norman C. Nelson Student Union building, the Bookstore provides Medical Center students with a selection of textbooks, medical instruments, school supplies, insignia items, computer supplies, and gifts. You can also find us online and on Facebook.

**FINANCIAL AID** — The University of Mississippi Medical Center subscribes to the principle that the amount of financial aid granted to a student should be based upon financial need. Therefore, students wishing to apply for financial aid must complete the FAFSA (Free Application for Federal Student Aid) online (using the Medical Center’s Federal School Code number 004688), apply for a Personal Identification Number (PIN) online, and complete loan counseling online. For detailed information regarding the Office of Student Financial Aid’s various programs, procedures, and policies, please visit their website.

**FOOD SERVICES** — Students may find a variety of food service options within the Medical Center, including the University Hospital Cafeteria, Winfred L. Wiser Hospital Dining Room, Methodist Rehabilitation Center Cafeteria, Norman C. Nelson Student Union Commons, McDonalds and Subway.

**POSTAL SERVICES** — A contract station of the U.S. Post Office is located on campus and offers most standard services.

**SECURITY** — The UMMC Campus Police provides service and protection to the Medical Center’s students, faculty, staff, properties and campus. The publication, Guidelines for Campus Security, lists the services provided by UMMC police as they strive to ensure a high quality of student-faculty life by promoting a tranquil, safe atmosphere conducive to the objectives of the Medical Center.

**STUDENT HEALTH**
The Student and Employee Health Service provides ambulatory medical care to students from 8 a.m.–4 p.m. weekdays and on a walk-in basis during standard sick-call hours. Under the direction of a board-certified physician, a nurse practitioner and nurses work with patients and collaborate with other providers to provide personalized and timely care to UMMC students. All staff of UMMC’s Student and Employee Health Service have no role in any student’s academic assessment or evaluation and/or decisions in advancement and/or graduation. The only exceptions are for the release of information in accordance with the lawful requirements of Mississippi and the United States. Emergency service is provided in the University Hospital emergency department at nights and
on weekends. The Student and Employee Health Service does not provide medical care for dependents of students nor can it reimburse students for treatment received elsewhere. In order to maintain student confidentiality, the Medical Center contracts for mental health services with off-site providers at nearby health care locations. Information on these providers can be obtained on the Employee and Student Health website.

**DRUG POLICY** — Pursuant to the Anti-Drug Abuse Act passed in October 1988 and the Drug-Free Schools and Communities Act Amendments of 1989 (Public Law 101-226), the Medical Center is committed to maintaining a drug-free work place and to prevent the illicit use of drugs and the abuse of alcohol by students and employees. All students are to abide with this policy. The institution has educational resources available for students regarding the dangers of alcohol and illicit drug abuse through Employee and Student Health Services. Policies for a Drug Free Campus is available on the Campus Police website.

Policy:

1. You are prohibited from being under the influence of alcohol or illegal drugs while on campus, in other training sites, such as affiliated hospitals and clinics, and in extramural settings for elective courses.
2. The possession, transfer, purchase or sale of illegal drugs is a violation of the law and is strictly prohibited; such action will be reported to law enforcement officials and to licensing agencies when appropriate.
3. The use, sale or possession of an illegal drug in your capacity as a student is cause for your dismissal from school.
4. Any student who commits an unlawful act on or off the Medical Center or whose conduct discredits the Medical Center in any way will be subject to disciplinary action, up to and including dismissal.
5. No alcoholic beverage may be brought or consumed on the Medical Center premises.
6. Prescription drugs may be brought and used by you on the Medical Center premises only in the manner, combination and quantity prescribed, as long as your ability to perform as a student is not affected.
7. Any student whose on-or off-duty abuse of alcohol, illegal drugs or improper use of prescription drugs interferes in any way with his/her performance as a student will be referred to Student and Employee Health Services for evaluation and/or testing.

**HEALTH INSURANCE** — Hospitalization insurance is mandatory for students attending the University of Mississippi Medical Center. Students may enroll in the group plan offered by the Medical Center, or must demonstrate comparable coverage under another provider. Students not enrolled in the Medical Center’s student group health insurance plan will be required to sign a waiver card specifying the name of their insurance carrier. All applications, changes in coverage and deletion requests must be submitted to the Office of Student Accounting.

Applications for coverage must be received in time to forward them to the insurance carrier within 30 days of the student’s initial registration. Applications after that period must be due to a special qualifying event such as loss of other coverage or by acquiring a dependent, and special rules apply. Open enrollment occurs during the month of December, with coverage effective January 1. Contact the Office of Student Accounting for specific enrollment questions. Cancellations cannot be made for the partial months or retroactively. Students will be automatically dropped from the policy after graduation, or other separation from enrollment, unless they qualify and apply for continuation of coverage. Students may be cancelled for nonpayment of premiums. This could result in permanent loss of coverage under the student group insurance plan. It is the student’s responsibility to read all materials related to health insurance policy provisions. Questions should be addressed to Student Accounting.

**IMMUNIZATIONS AND VACCINATIONS** — The Board of Trustees of State Institutions of Higher Learning, in cooperation with the Mississippi Department of Health, has issued regulations requiring proof of immunization for measles, mumps and rubella of all students, unless exempt because of (a) actual or suspected pregnancy (measles or rubella vaccines are not required for females who are pregnant; if pregnancy is suspected, a valid certificate of medical exception from a health provider is required until pregnancy is resolved); (b) medical contraindication; or (c) birth prior to 1957. If the preceding exemptions do not apply, the proof of immunization must consist of the following:

- Documented history of two doses of measles (rubeola), mumps and rubella vaccine, given after January 1, 1968, usually given as MMR. The first dose must have been given on or after the first birthday and the second dose at least one month or more thereafter; or
- Written documentation of serologic evidence of immunity to measles (rubeola) and rubella (a blood test); or
- Documentation of a history of physician-diagnosed measles (rubeola). A history of rubella is not satisfactory to imply immunity.
- All students are also required to have an up-to-date tetanus, diphtheria and pertussis vaccine (Tdap) administered within the past 10 years, Varicella vaccine (2 doses or proof of immunity), hepatitis B vaccine (3 doses or proof of immunity) and an influenza (flu) vaccine. The Flu vaccine is only required during the flu season (October 1-March 31)

A standardized report of a recent physical examination is required for admission to any Medical Center educational program. Students admitted to health education programs that cause them to be potentially exposed to blood or body fluids are required to provide proof of hepatitis B vaccination.

All foreign students shall provide proof of current test screening for tuberculosis by chest X-ray. “Current” shall mean a chest X-ray taken within three months prior to enrolling at an institution of higher learning and after arriving in the United States. All Medical Center students are required to have annual TB skin tests. The TB skin test is administered by the Student Health Service between the hours of 7:30 a.m.-3:30 p.m. weekdays except Thursdays.
ACQUIRED IMMUNE DEFICIENCY SYNDROME — Acquired Immune Deficiency Syndrome (AIDS) is a condition which destroys the body’s immune (defense) system and allows life-threatening infections to develop. It has no known cure or vaccine for prevention, and an individual can transmit the virus even in the absence of symptoms. Current medical knowledge indicates that transmission is primarily through sexual contact or through the sharing of intravenous drug paraphernalia. According to the Centers for Disease Control, contracting the disease in most situations encountered in an individual’s daily activities is not known to occur. Terms associated with AIDS include:

- HIV - human immunodeficiency virus (the causative agent of AIDS).
- HIV antibody - a protein in the body produced in response to exposure to the human immunodeficiency virus.

The Medical Center does not routinely screen students, faculty or staff for antibodies to HIV or ask if they are HIV-positive. However, students who know they are HIV-positive are encouraged to report this fact to the director of the Student and Employee Health Service so they can obtain appropriate medical care, consultation and counseling for their own protection and that of others. The information will remain confidential as a part of the student’s medical record.

Students with AIDS, and those with other manifestations of HIV infection, are deemed to have a handicapping condition as defined in the Rehabilitation Act of 1973. Selection of applicants for the University of Mississippi Medical Center’s educational programs is made on a competitive basis, without regard to race, sex, color, religion, marital status, age, national origin, disability or veteran status.

The school in which the student is enrolled will make every reasonable accommodation to enable a student who is HIV-positive to successfully complete the requirements of his/her educational program. The school also will make available career counseling should the student wish to review his/her educational objectives in light of the realities of HIV infection.

HIV-infected students may have their educational program modified by their school to limit any potential risk of disease transmission. Restrictions on any clinical assignments and/or off-campus clinical rotations or externships will be made on a case-by-case basis.

Immunizations — Students who have HIV infection are not exempted from Medical Center requirements for non-live virus vaccinations. However, because of potentially serious consequences for HIV-infected persons receiving live virus vaccines, HIV-infected students who are required to receive such immunizations should consult the Student and Employee Health Service or the Hinds County Department of Health for current recommendations.

Testing and Care — Students who wish to get HIV antibody testing will be referred to the Hinds County Department of Health or the Student and Employee Health Service. Students who become HIV-positive during the course of their enrollment may get appropriate medical care, consultation and counseling through the Student and Employee Health Service.

Confidentiality — Medical information will not be released to any person, group, agency, insurer, employer or institution without specific written consent of the patient or legal guardian except as required by law. Every effort will be made to preserve the confidentiality of the medical record of a student who is HIV-positive. Knowledge of a student’s HIV status will be limited to those with an absolute necessity to know.

Public Health Reporting Requirement — The Medical Center complies with all public health reporting requirements of the Mississippi State Department of Public Health and the Centers for Disease Control. Students who are known to be HIV-positive are reported to the State Department of Health.

Personnel — Since many people with HIV infections are not identified in advance, universal precautions, as defined by the Centers for Disease Control and by OSHA, guide Medical Center procedures for the handling of blood and body fluids of any student, employee or patient. Questions regarding these safety guidelines should be directed to the director of Student and Employee Health Services or to the dean of the school in which the student is enrolled.

Universal Precautions — Manuals and procedures in use at the Medical Center cover the precautions which should be taken when handling infectious materials.

All Medical Center personnel, including students, will use disposable, one-use needles and other equipment if the skin or mucous membranes of patients, employees or students will be punctured. Extreme caution should be exercised when handling sharp objects, particularly in disposing of needles. All used needles should be placed in a puncture-resistant container designated for this purpose. Needles should never be bent or recapped after use. Blood-soiled articles should be placed in puncture-proof bags and labeled prominently before being sent for reprocessing or disposal in accordance with Medical Center infection control guidelines. Students who have questions about universal precautions or other Medical Center infection control guidelines should see the infection control website.

Teaching Laboratories — Laboratory courses requiring exposure to blood, such as courses in which blood is obtained by finger-prick for typing or examination, must use disposable equipment. No lancets or other blood-letting devices should be re-used or shared.

Behavior Risk — Medical Center students who are HIV-positive and are aware of their condition and engage in behavior which threatens the safety and welfare of other students, patients or Medical Center personnel may be subject to disciplinary action.

Applicability of Other Medical Center AIDS Policies — More specific written guidelines and procedures are the responsibility of the individual schools and may be developed, as needed, by the deans and department heads. All unit policies must comply with those for the institution as a whole.
STUDENT GOVERNMENT

The Associated Student Body (ASB) is the student government organization of the University of Mississippi Medical Center. Comprised of elected representatives and designated officers from the Schools of Dentistry, Graduate Studies in the Health Sciences, Health Related Professions, Medicine, Nursing and Pharmacy, the ASB meets with and provides information and opinions of student concern to the Medical Center administration and faculty. ASB also develops activities relating to academic programs and sponsors extracurricular activities including intramural sports and publication of the campus yearbook (Medic) and the student newspaper (Murmur).

STUDENT PROFESSIONAL ORGANIZATIONS

There are active professional organizations for students enrolled in the various academic programs at the Medical Center. Information on these organizations may be obtained from each school’s Office of Student Affairs or from the Division of Multicultural Affairs.

STUDENTS’ RIGHTS AND RESPONSIBILITIES

SCHOLARSHIP AND PROMOTION — Promotion of students is dependent upon the satisfactory completion of each year’s work. Promotions within the academic divisions of the University of Mississippi Medical Center are considered on the basis of recommendations by individual instructors, on departmental evaluations and on the student’s total record. The faculty of each of the academic programs has the obligation and right to determine methods for evaluating a student’s performance and to evaluate each student individually in compliance with applicable Medical Center, school and departmental regulations.

Regulations for all of the programs have their basis in the Medical Center’s vision to be a great academic health sciences center dedicated to improving lives. Information about the scholarship and promotion policies may be found in each school’s section in this Bulletin or student handbooks. Inherent in these policies is the right of students to use the institutional student appeals process to seek redress of decisions involving academic status, disciplinary matters and other areas of student life.

Students dismissed for academic reasons or subjected to disciplinary action may appeal the decision as stated in the letter of notification from the academic program in which the student is enrolled. The Institutional Executive Officer has delegated full authority regarding student appeals to the various academic deans; therefore, the decision of the dean for the program in which the student is enrolled is final. However, if a student provides compelling evidence of incorrect application of the school-specific appeal process, a procedural appeal may be considered at the institutional level.

Students who wish to appeal decisions, in such matters as student financial aid, should contact the appropriate office. The student will be notified in writing about the appropriate appeals process.

In all cases of student appeals, students are free to present pertinent information and material, to have an attorney present or to bring faculty and other appropriate spokespersons to the appeal hearing. The faculty and administration reserve the right to make changes in curricula regulations when such changes are determined to be in the best interest of the student, the school and the institution.

NON-ACADEMIC DISCIPLINARY ACTION — All students enrolled in any educational program at the University of Mississippi Medical Center are expected to conduct themselves in an honest and ethical manner appropriate to a professional student whether on or off campus. Examples of unprofessional conduct include, but are not limited to, these examples: dishonesty, cheating, falsifying documents, accessing or divulging protected health information, violating the Medical Center Information Policy, and knowingly violating any other Medical Center policy. Any student who does not meet the standards of professional conduct as defined in his/her school’s Student Handbook may be subject to disciplinary action up to and including dismissal from the institution. Students have the right to appeal any adverse disciplinary action as outlined in their school’s student handbook.

STUDENT COMPLAINTS — Students seeking to resolve an academic or misconduct complaint will seek resolution through the school’s published administrative channels, entering at the appropriate level and proceeding in the order stated. All decisions by the school’s dean or executive faculty concerning academic matters are final. Procedural appeals may be filed to the associate vice chancellor for academic affairs. In the case of a procedural violation, the case will be returned to the point of the procedural issue and readdressed. Information on academic and conduct complaints are published in the Bulletin and also included in the individual school’s handbook.

A student seeking to resolve a non-academic or non-misconduct complaint will seek resolution through the appropriate office on campus designated to address the particular student concern. Issues involving such matters as sexual harassment, discrimination, disability, employment or mistreatment fall under the institutional policies that are handled by specific offices, such as the Office of Human Resources or the Equal Employment Opportunity Office.

In the event that a student believes the non-academic or non-misconduct complaint has not been resolved satisfactorily, he/she may file a written grievance with the chief student affairs officer. In such cases, the chief student affairs officer will work to ensure a fair and equitable process, soliciting a written response to the grievance from the appropriate institutional representative within 10 working days. An ad hoc Grievance Review Committee will be convened to review the complaint. A recommendation will be made by the ad hoc Grievance Review Committee within 15 working days.
The ad hoc Grievance Review Committee may:

- Recommend rejection of the grievance and deny the requested outcome;
- Support the grievance and recommend approval of the requested outcome, or;
- Support the grievance and recommend approval of a revised outcome.

The chief student affairs officer shall communicate in writing the recommendation of the ad hoc Grievance Review Committee to the associate vice chancellor for academic affairs. The decision of the associate vice chancellor of academic affairs is final and completes the grievance review process. All parties will be notified in writing of the final decision within 10 working days.

Additionally, the Office of Student Affairs provides a web-based version of a student comment/complaint box. This form is used to collect and track student issues and concerns. Best efforts will be made to respond within 48 hours - unless the student wishes to remain anonymous.

The Student Affairs Council will maintain a protected record of all non-academic and non-misconduct student complaints in a proactive effort to identify institutional opportunities for improvement. The associate dean/director of student affairs from each school will report all non-academic and non-misconduct complaints that rise to the level of the individual school dean’s office to the Student Affairs Council on a quarterly basis. The chief student affairs officer will report all student complaints that rise to the institutional level to the Student Affairs Council on a monthly basis.

RELGIOUS DIVERSITY — The Medical Center embraces religious diversity for individuals of all faiths. It is the intent of the institution to make every effort to reasonably accommodate individuals based on their religious beliefs. Observation of religious holidays in all faiths will be supported except when detrimental to patient care or established policies. Conflicts between religious obligations and patient care obligations are handled much as they would be in clinical practice. That is, patient care responsibilities take precedence unless coverage has been previously arranged.

In an effort to respect students’ religious customs, academic departments will attempt to adjust schedules to allow the observance of these holidays. Any observance of religious holidays will not be a negative factor in the grading of a student’s performance. In the event the conflict is with an essential experience (e.g., board exams), then these essential experiences will take precedence. It is the student’s responsibility to inform the appropriate person in the department prior to or at the initial clinical rotation orientation of his/her request for accommodation so that patient care and on-call responsibilities can be met in full. It is also the student’s responsibility to obtain coverage so that patient care and on-call coverage are not compromised. In the event students cannot obtain coverage, they are expected to meet their responsibilities by taking call regardless of the schedule conflict.

Conflicts with religious observances and daily patient care or educational activities will be resolved by the department on a case-by-case basis. These arrangements must be made in advance and must be satisfactory to the department.

Questions and requests for additional information should be directed to either the associate vice chancellor for academic affairs, student affairs officers or the director of pastoral services.

FEDERAL FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

Student Access to Records — Each year, the Medical Center informs entering students of their rights of access to their official records as stated in the law. By written request to the Office of Student Records and Registrar, students who are or who have been in attendance may review recorded information maintained by the institution for use in making decisions about students.

Recorded information includes grades, copies of correspondence sent to the students by the educational programs and other institutional offices, and completion of licensure applications. The recorded information may also include an electronically stored transcript of courses and grades and a folder containing application materials and supporting documents, such as transcripts from previous schools and supplementary material submitted with the application.

Confidential letters or statements of recommendation to which students have waived access rights are not available for inspection. As defined by the law, students do not have access to medical, psychiatric or comparable records if these are used exclusively for treatment purposes. However, students may designate an appropriate professional to examine these records. Students do not have the right to see parents’ financial records submitted to the institution. Students do not have access to instructional, supervisory and administrative personnel records which are not accessible or revealed to any other individual; campus security records which are used exclusively for law enforcement purposes, and which are not disclosed to individuals other than law enforcement officials; and employment records except when such employment requires that the person be a student.

Release of Information — The institution is prohibited from releasing educational information or personally identifiable information other than directory information about the students without their written consent except to specified agencies and persons such as school officials and certain federal or state offices as defined in the law. Directory information includes: students’ names, the educational program they are enrolled in and their classification. Students must file a written request with the Office of Student Records and Registrar to obtain any of this information.

Under the law, students may not see confidential letters or statements of recommendations written prior to January 1, 1975, and may, but are not required to, waive the right of access to future confidential letters of recommendations. The institution secures from students their instructions regarding their access rights to confidential letters or statements of recommendation written on their behalf while enrolled at the Medical Center. These signed statements are permanently filed in the students’ folders. Any questions concerning student access to records should be directed to the Registrar.
Accuracy of Educational Records — The Family Educational Rights and Privacy Act of 1974, allows students to challenge the contents of their educational records on the basis of accuracy. Students who request that information be amended or deleted from their records on the basis of incorrect information should first submit their request to the official primarily responsible for the information. If the matter is not resolved to their satisfaction, students may request a formal hearing before an appropriate institutional body or consult Section 99.36 of the law's regulations for additional grievance procedures. The Office of Student Records and Registrar will furnish a copy of the Family Educational Rights and Privacy Act, 1974, upon request. Notification of rights guaranteed under PL 93-380 and policies and procedures pertaining to educational records is provided to all students through this Bulletin section, by a memorandum distributed at the time of registration, and in the orientation sessions for the school year.

Equal Employment Opportunity Statement — The University of Mississippi Medical Center complies with all applicable laws regarding affirmative action and equal opportunity in all its activities and programs and does not discriminate against anyone protected by law because of age, color, disability, national origin, race, religion, sex, sexual orientation, handicap or status as a veteran or disabled veteran.
By CONSTITUTIONAL AMENDMENT, the governance of The University of Mississippi and the other public institutions of higher learning in the state of Mississippi is vested in a Board of Trustees appointed by the governor with the advice and consent of the Senate. After January 1, 2004, as vacancies occur, the 12-member Board of Trustees of State Institutions of Higher Learning shall be appointed from each of the three Mississippi Supreme Court districts, until there are four members from each Supreme Court district.

The terms are staggered so that all members appointed after 2012 will have a term of nine years. The Board of Trustees selects one of its members as president of the board. The board maintains offices at 3825 Ridgewood Road, Jackson, MS 39211.

**Members whose terms expire May 7, 2021:**
Karen L. Cummins, Southaven, Northern Supreme Court District
Dr. Ford Dye III, Oxford, Northern Supreme Court District
Shane Hooper, Tupelo, Northern Supreme Court District
Hal Parker, Bolton, Central Supreme Court District

**Members whose terms expire May 7, 2018:**
Alan W. Perry, Jackson, Central Supreme Court District
Christy Pickering, Biloxi, Southern Supreme Court District
Douglas W. Rouse, Hattiesburg, Southern Supreme Court District
C.D. Smith Jr., Meridian, Central Supreme Court District

**Members whose terms expire May 7, 2015:**
Ed Blakeslee, Gulfport, Southern Supreme Court District
Bob Owens, Jackson, Central Supreme Court District
Aubrey Patterson, Tupelo, Northern Supreme Court District
Robin Robinson, Laurel, Southern Supreme Court District

**Officers of the Board**
Aubrey Patterson, President
Alan W. Perry, Vice President
Dr. Jim Borsig, Commissioner of Higher Education
ADMINISTRATION

CHANCELLOR
Daniel W. Jones, MD, Chancellor

VICE CHANCELLOR
LouAnn Woodward, MD, Vice Chancellor for Health Affairs and Dean of the School of Medicine

EXECUTIVE OFFICERS
Bettina M. Beech, DrPH, MPH, Associate Vice Chancellor for Population Health
Claude Brunson, MD, Senior Advisor to the Vice Chancellor for External Affairs
David Chou, MSHA, Chief Information Officer
Kevin Cook, MBA, Chief Executive Officer, University Hospitals and Health System
Ralph Didlake, MD, Associate Vice Chancellor for Academic Affairs and Chief Academic Officer
Michael Estes, BS, Chief Human Resources Officer
Tom Fortner, MBA, Chief Public Affairs and Communications Officer
Guy Giesecke, MHA, MBA, Chief Executive Officer, Children’s Healthcare of Mississippi
J. Michael Henderson, MBChB, FRCS, FACS, Chief Medical Officer
Rondah Marks, BA, Chief Marketing Officer
Mart McMullan, MD, Senior Advisor to the Vice Chancellor for Internal Affairs
Sara Merrick, MA, Chief Development Officer and Executive Director of Development
Charles O’Mara, MD, Associate Vice Chancellor for Clinical Affairs
Richard Summers, MD, Associate Vice Chancellor for Research
James Wentz, MBA, Chief Financial Officer
Jeffrey Walker, JD, Chief Legal Officer and General Counsel
Jonathan Wilson, MSN, Chief Administrative Officer

ACADEMIC OFFICERS
Jessica H. Bailey, PhD, Dean of the School of Health Related Professions
Joey Granger, PhD, Dean of the School of Graduate Studies in the Health Sciences
Kim Hoover, PhD, Dean of the School of Nursing
Gary Reeves, DMD, Dean of the School of Dentistry
Leigh Ann Ross, PharmD, Associate Dean for Clinical Affairs, Department of Pharmacy Practice
POSTGRADUATE EDUCATION

RESIDENCIES
Postgraduate training for physicians is offered at the University of Mississippi Medical Center in the disciplines listed below. Application should be made to the appropriate department.

MEDICAL SPECIALTIES
Anesthesiology
  Pain Management
Dermatology
Emergency Medicine
Family Medicine
  Sports Medicine
Medicine
  Internal Medicine
  Medicine/Pediatrics
Allergy/Immunology
Cardiovascular Diseases
Interventional Cardiology
Clinical Cardiac Electrophysiology
Endocrinology
Gastroenterology
Geriatrics
  Hematology/Oncology
Infectious Diseases
Nephrology
Pulmonary/Critical Care Medicine
Rheumatology
Neurology
  Neuro-Critical Care
  Neurophysiology
  Neuromuscular Medicine
  Vascular Neurology
Neurosurgery

Obstetrics and Gynecology
  Maternal-Fetal Medicine
Ophthalmology
Orthopedic Surgery
Hand Surgery
Otolaryngology
Pathology (Anatomic/Clinical)
  Cytopathology
Pediatrics
  Pediatric Cardiology
  Pediatric Critical Care
  Pediatric Hematology/Oncology
  Pediatric Hospice & Palliative Medicine
  Pediatric Neonatal-Perinatal Medicine
  Pediatric Neurology
Psychiatry
  Child Psychiatry
  Sleep Medicine
Radiation Oncology
Radiology
Surgery
  General Surgery
  Pediatric Surgery
  Plastic Surgery (Hand)
  Surgical Critical Care
  Thoracic Surgery
  Urology
  Vascular Surgery

PSYCHOLOGY
A residency in clinical psychology, approved by the American Psychological Association, is offered. The program is one year in duration starting July 1. Write the Psychology Residency Training Program, Department of Psychiatry and Human Behavior, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505 for information and applications.

DENTISTRY
The School of Dentistry offers a one-year general practice residency from July 1-June 30, a one-year advanced education in general dentistry residency program, a two-year pediatric dentistry residency program and a four-year oral-maxillofacial surgery residency program. For information, write the School of Dentistry, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505.

SCHOOL OF HEALTH RELATED PROFESSIONS
The Department of Physical Therapy offers two residency programs, one in Sports Physical Therapy and one in Neurologic Physical Therapy. Each is one calendar year in duration and typically begins in the summer and fall semesters respectively. Contact and application information is available on the department website.

The Division of Orthotics and Prosthetics offers two residency programs, one in Orthotics and one in Prosthetics. Each is 12 months in duration and typically begins in the summer. Contact and application information can be obtained by contacting the Division of Orthotics and Prosthetics located in the University Rehabilitation Center. The phone number is (601) 815-04844 or e-mail rpsonak@umc.edu.
A NEW SCHOOL OF MEDICINE

1,000 new doctors by 2025
## ACADEMIC YEAR 2015-2016
### M1 and M2 SEMESTER ACADEMIC CALENDAR

<table>
<thead>
<tr>
<th>FALL SEMESTER</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>August</strong></td>
<td>5</td>
<td>Wednesday</td>
<td>Orientation, CiM, and registration (M1 Class only)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Wednesday</td>
<td>General orientation (M1 Class only)</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Thursday</td>
<td>White Coat Ceremony (M1 Class only)</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Monday</td>
<td>Classes begin (M1 and M2 Classes)</td>
</tr>
<tr>
<td><strong>September</strong></td>
<td>1</td>
<td>Tuesday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and receive a tuition refund</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Monday</td>
<td>Labor Day holiday observed</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td><strong>November</strong></td>
<td>25</td>
<td>Wednesday</td>
<td>Thanksgiving Holiday begins at 5:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td><strong>December</strong></td>
<td>18</td>
<td>Friday</td>
<td>Christmas Holiday begins at 12:00 p.m. (M1 and M2 Classes)</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Friday</td>
<td>End of fall semester</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING SEMESTER</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>January</strong></td>
<td>11</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Monday</td>
<td>Martin Luther King's birthday holiday observed</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td><strong>February</strong></td>
<td>1</td>
<td>Monday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and receive a tuition refund</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Wednesday</td>
<td>Student Financial Wellness Seminar</td>
</tr>
<tr>
<td><strong>March</strong></td>
<td>4</td>
<td>Friday</td>
<td>Spring holiday begins at 5:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td><strong>April</strong></td>
<td>18</td>
<td>Friday</td>
<td>Match Day (M4 Class, M1-M3 Officers)</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Monday</td>
<td>Registration begins for 2016-2017 summer term and fall semester</td>
</tr>
<tr>
<td></td>
<td>Apr. 25-June 3</td>
<td>Mon-Fri</td>
<td>Study Days/USMLE Step 1 (M2 Class only)</td>
</tr>
<tr>
<td><strong>May</strong></td>
<td>6</td>
<td>Friday</td>
<td>School of Medicine Honors Day</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Friday</td>
<td>Commencement</td>
</tr>
<tr>
<td>Month</td>
<td>Date</td>
<td>Day</td>
<td>Event Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>June</td>
<td>8-9</td>
<td>Mon-Tue</td>
<td>Orientation, CiM, registration, and Clinician Ceremony</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Wednesday</td>
<td>Clerkships begin</td>
</tr>
<tr>
<td>July</td>
<td>3</td>
<td>Friday</td>
<td>Independence Day holiday</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Monday</td>
<td>Clerkships resume at 8:00 a.m.</td>
</tr>
<tr>
<td>September</td>
<td>2</td>
<td>Wednesday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and receive a tuition refund</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Monday</td>
<td>Labor Day holiday observed</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Tuesday</td>
<td>Clerkships resume at 8:00 a.m.</td>
</tr>
<tr>
<td>November</td>
<td>25</td>
<td>Wednesday</td>
<td>Thanksgiving holiday begins at 5:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>Monday</td>
<td>Clerkships resume at 8:00 a.m.</td>
</tr>
<tr>
<td>December</td>
<td>18</td>
<td>Friday</td>
<td>Christmas and New Year’s holidays begin at 5:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>Monday</td>
<td>Clerkships resume at 8:00 a.m.</td>
</tr>
<tr>
<td>January</td>
<td>1</td>
<td>Friday</td>
<td>New Year’s Day holiday observed</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Monday</td>
<td>Clerkships resume at 8:00 a.m.</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Monday</td>
<td>Martin Luther King’s birthday holiday observed</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Tuesday</td>
<td>Clerkships resume at 8:00 a.m.</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>Friday</td>
<td>Senior Planning Day</td>
</tr>
<tr>
<td>February</td>
<td>1</td>
<td>Monday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and receive a tuition refund</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Wednesday</td>
<td>Student Financial Wellness Seminar</td>
</tr>
<tr>
<td>May</td>
<td>6</td>
<td>Friday</td>
<td>Honors Day</td>
</tr>
<tr>
<td></td>
<td>*3-20</td>
<td>Tues-Fri</td>
<td>Clinical Skills Assessment</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>Thursday</td>
<td>Last day of clinical rotations</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Friday</td>
<td>Commencement</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>Monday</td>
<td>Memorial Day holiday observed</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>Tuesday</td>
<td>National Board Comprehensive Clinical Science Exam</td>
</tr>
</tbody>
</table>

**Note:**

1) Clinical activities of students may vary and may not conform to this schedule.

2) The required junior medical Clinical Skills Assessment will be scheduled between May 3-20, 2016. Each student will test for one day in this time period. The student will be notified of details regarding scheduling of this required activity.

3) *Dates for the Clinical Skills Assessment are subject to change.*
The School of Medicine is accredited by the Liaison Committee on Medical Education and is committed to the ethical and altruistic work expected of physicians. Graduates must possess the necessary knowledge of the altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases and conditions.

A special act of the Board of Trustees created the School of Medicine in 1903. Except for the 1909-1910 session when clinical training was provided at the Charity Hospital in Vicksburg, it operated continuously as a two-year school on the Oxford campus for more than half a century. In the summer of 1955, the school was moved to the state capital at Jackson and expanded to include the third and fourth years. The first class was graduated in June 1957. The School of Medicine is accredited by the Liaison Committee on Medical Education.

The educational program of the School of Medicine is designed to achieve the multiple goals of dissemination of knowledge through teaching, application of knowledge through clinical practice, and creation of new knowledge through scientific research. The specific educational program objectives set forth below reflect the essential requirements for physicians to act in an ethical and altruistic fashion while providing competent medical care and fulfilling their obligations to their patients.

I. Graduates must have sufficient knowledge of the structure and function of the human body to recognize alterations from the normal. They must understand the various causes of such abnormalities and their pathogenesis. At the completion of the medical school curriculum, students must be able to demonstrate:

- Knowledge of the normal structure and function of the human body and each of its major organ systems.
- Knowledge of the molecular, biochemical and cellular mechanisms which help maintain the body’s homeostasis.
- Knowledge of the various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of diseases and the ways in which they impact on the body (pathogenesis).
- Knowledge of the altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases and conditions.
- An understanding of the power of the scientific method in establishing the causation of disease and efficacy of traditional and nontraditional therapies.
- Commitment to engage in lifelong learning to stay abreast of relevant scientific advances, especially those in the disciplines of genetics and molecular biology.

II. Graduates must possess the necessary diagnostic and interventional skills to accurately evaluate, diagnose and plan treatment appropriate for each patient. At the completion of the medical school curriculum, students must be able to demonstrate:

- Competence in obtaining an accurate medical history that covers all essential aspects of the patient's history, including issues related to age, gender, ethnic and socioeconomic status.
- Competence in performing both a complete and an organ system specific examination, including one for mental status.
- Competence in performing routine technical procedures including, at a minimum, venipuncture, inserting an intravenous catheter, arterial puncture, inserting a nasogastric tube, inserting a foley catheter and suturing simple lacerations.
A COVENANT FOR MEDICAL EDUCATION

THE TEACHER-STUDENT RELATIONSHIP

Preparation for a career in medicine requires the acquisition of a large base of knowledge. It also demands the virtues that form the basis of the doctor-patient relationship and sustain the profession of medicine as a moral enterprise. This covenant serves as both a commitment and a reminder to teachers and students that their conduct in fulfilling their mutual obligations is the medium through which the profession instills its ethical values.

PRECEPTS

Medical educators have a duty to convey the knowledge and skills required to deliver the profession’s contemporary standard of care, to instill the values and attitudes required to preserve the medical profession’s social contract across the generations. The learning environments conducive to conveying professional values must be grounded in integrity. Students learn enduring lessons of professionalism by observing and emulating role models who epitomize authentic professional values and attitudes. Fundamental to the ethic of medicine is respect for every individual. Mutual respect between learners, as novice members of the medical profession, and their teachers, as experienced and esteemed professionals, is essential for nurturing that ethic. Given the inherently hierarchical nature of the teacher-student relationship, teachers have a special obligation to ensure that students are always treated with respect.
COMMITSMENTS OF FACULTY
• We pledge our utmost efforts to ensure that all components of the educational program for medical students are of the highest quality.
• As mentors for our student colleagues, we pledge that we will maintain high professional standards in all of our interactions with patients, colleagues, and staff.
• We pledge that we will respect all students as individuals, without regard to gender, race, national origin, religion, age, or sexual orientation; we will not tolerate anyone who manifests disrespect or who expresses biased attitudes toward any student.
• We pledge that students will have sufficient time to fulfill personal and family obligations, to enjoy recreational activities, and to obtain adequate rest; we will monitor time required for “call” on clinical rotations.
• In nurturing both the intellectual and the personal development of students, we pledge to celebrate expressions of exemplary professional attitudes and behaviors, as well as achievement of academic excellence.
• We pledge that we will not tolerate any abuse or exploitation of students.
• We pledge that we will encourage any student who experiences mistreatment or who witnesses unprofessional behavior to report the facts immediately to appropriate faculty or staff; and we pledge that we will treat all such reports as confidential and will not tolerate reprisals or retaliations of any kind.

COMMITSMENTS OF STUDENTS
• We pledge our utmost efforts to acquire the knowledge, skills, attitudes, and behaviors required to fulfill all educational objectives established by the faculty.
• We pledge that we will cherish the professional virtues of honesty, compassion, integrity, fidelity, and dependability.
• We pledge to respect all faculty members and all students as individuals, without regard to gender, race, national origin, religion, age, or sexual orientation.
• As physicians in training, we pledge that we will embrace the highest standards of the medical profession and conduct ourselves accordingly in all of our interactions with patients, colleagues, and staff. We pledge to respect all individuals without regard to gender, race, national origin, religion, age, or sexual orientation.
• In fulfilling our own obligations as professionals, we also pledge to assist our fellow students in meeting their professional obligations.

MEDICAL STUDENT PROFESSIONALISM CODE
As a student of Medicine, I am now a member of the medical community, and as a member, I accept responsibility for my conduct and expect the highest standards of myself. I will also support others in upholding these standards. I understand that the behavior and attitudes of the individual medical student reflects on our classmates, our school, our families, our communities, and our profession. I recognize that it is an honor and a privilege to be a part of the medical profession. As a medical student in lecture, lab, small group, an administrator's office, support staff's office, clinic or the hospital, whether patients are present or not, I will act in a professional manner.

I pledge to uphold the following tenets of professionalism:
Honesty and Integrity
• I will demonstrate truthfulness and fidelity in academic and clinical activities, including examinations, evaluation and any other representation of my work.
• I will not participate in or be a party to unfair advancement of academic standing.
• I will be truthful in all interactions with patients, peers and faculty.
• I will be honest in the collection, interpretation and reporting of data pertinent to academic work or patient care.
• I will adhere to the highest standard of integrity in professional relationships, including those with industry representatives.
Respect for Others
• I will demonstrate the highest standards of ethical and professional behavior in the academic and clinical setting.
• I will not discriminate against patients or their families based on race, ethnicity, religion, age, gender, sexual orientation, disability, diagnosis, socioeconomic status or ability to pay.
• I will treat my classmates, staff, those of various medical disciplines and health care team members with respect.
• I will display and expect non-discriminatory behavior toward and from my supervisors, my peers, and staff with whom I work.
• I will respect that faculty have devoted their time and experience to teaching medical students in lectures, labs, small groups, simulations, clinics, and hospitals.
• I will show respect in all oral, written, and e-mail communications, including patient presentations, clinical documentation, course evaluations and challenges to grades or test questions.
• I will protect patient confidentiality, discussing information with no one who does not have legitimate need to know.
• I will uphold the dignity of our patients.
• I will show respect for others by dressing appropriately, including wearing a clean white coat and appropriate identification during all anticipated patient or simulated patient contact. The Professional Appearance Policy for University Hospitals and Clinics can be found online.
Reliability and Responsibility

- I will maintain patient well-being as my main focus and primary responsibility.
- I will fulfill responsibilities assigned to me with careful consideration of consequences to both patients and colleagues, recognizing that my failure to contribute fully increases the workload of others or may compromise the well-being of our patients.
- I will be punctual.
- I will educate myself about the ethical standards of my profession and the legal standards that may apply to my patients.
- I will acknowledge my strengths as well as my limitations, offering assistance when I am able and seeking assistance when necessary.
- I will not be under the influence of alcohol or other drugs while performing academic or clinical responsibilities.

Commitment to Self-Improvement

- I will continue to strive for knowledge, skills, competence, and best practices.
- I will prepare to the best of my ability for class, labs, small groups, clinic, and rounds.
- I will commit to participate through attendance in class, labs, small groups, and clinical settings.
- I will demonstrate willingness to share in the learning process with peers, faculty and staff to promote the student-teacher relationship and to assist others in meeting professional obligations.
- I will seek assistance from colleagues or professionals for any problems that adversely affect my education, quality of patient care or service to society.
- I will willingly assess my progress and identify areas for improvement and issues for continued learning.
- I will incorporate feedback into self-improvement.
- I will effectively use technology to manage information for patient care and self-improvement.
- I will continue to strive to become an honest, responsible and compassionate member of the medical profession, with service to and well-being of the patient as my guide.

Finally, as a student, I will adhere to UMMC policies on professionalism, conduct, personal appearance, patient confidentiality, and compliance.

Adapted from the University of Minnesota Medical Student Professionalism Code, 2002, by the University of Mississippi School of Medicine Curriculum Committee, Professionalism Subcommittee, November 2006.

POLICY ON PROFESSIONAL BEHAVIOR

Students enrolled in the School of Medicine must develop the professional behaviors expected of a physician. Students will be evaluated in the areas of attentiveness, maturity, cooperation, responsibility, personal appearance, respect (for authority, peers, patients and other members of the health care team), communication, judgment, ethics, honesty, morality, as well as other characteristics of professionalism important for a career in medicine.

Each day, a medical student will encounter a number of people who will observe professional or unprofessional behaviors. These people may report compliments or concerns related to the professional behavior of a student through verbal, written or other mechanisms. Examples of report sources include: faculty members, residents, nurses, other health care providers, other medical center employees, medical school peers, patients, or patient’s family members. Reports of exemplary professional or unprofessional behaviors or concerns should be directed to the Assistant or Associate Dean for Student Affairs or for Academic Affairs and can be completed using the electronic student evaluation system E*Value.

When a student receives a report of a concern related to unprofessional behavior, the Associate Dean for Student Affairs or for Academic Affairs will meet with the student to discuss the incident.

Following the initial meeting with the Associate Dean for Student Affairs or for Academic Affairs, the following actions will be taken:

1. If the incident is felt to be minor:
   - The initial interview and counseling session, as well as further monitoring of a student’s performance in the area of concern may suffice.
   - Other Associate Deans in the School of Medicine may be asked to participate in counseling and meeting with the students. The counseling session will be documented in the student’s file in the office of the Associate Dean for Student Affairs or for Academic Affairs, but the report will not carry forth to future evaluations if the behavior does not recur and if there are no other reports of unprofessional behavior.
   - If the reported incident, upon investigation, is found to be frivolous and not valid, this fact will be clearly documented in the student’s file.

2. If the incident is of serious concern or if there has been a pattern (greater than two) of minor incidents, the Associate Dean for Student Affairs or for Academic Affairs, or other Associate Deans in the School of Medicine will interview and counsel the student as above and may:
   - Discuss the incident with the Dean’s Council, and recommend that the student be placed on leave of absence.
   - Discuss the incident with the Dean’s Council, and recommend that the student be placed on probation for unprofessional behavior.
   - Discuss the incident with the Dean’s Council, and recommend that the student repeat the course.
Discuss the incident with the Dean’s Council, and recommend the student repeat the academic year.
Discuss the incident with the Dean’s Council, and recommend the student be dismissed from the School of Medicine.

These recommendations will be presented to the Dean of the School of Medicine for approval.

The Mechanism for Appeal is outlined in the Student Handbook.

A student who returns after a suspension, dismissal, or withdrawal for unprofessional behavior will automatically be on academic probation for at least one academic semester.

A student dismissed from the School of Medicine for unprofessional behavior may appeal for re-admission to advanced standing.

Approved by the School of Medicine Executive Faculty, February 22, 2005

PROGRAM

The School of Medicine offers a course of study leading to the degree of Doctor of Medicine. The four-year course leading to the degree of Doctor of Medicine is accredited by the Liaison Committee on Medical Education (LCME).

DOCTOR OF MEDICINE DEGREE

The degree of Doctor of Medicine is conferred upon candidates of good moral character who have studied in a LCME-accredited medical school at least four academic sessions, of which the last two sessions must be spent in the regular four-year course of this school; who have properly fulfilled all academic requirements of the medical curriculum; and who have discharged all financial obligations to this school. The diploma is awarded summa cum laude to the graduate who ranks first in the class in academic achievement, magna cum laude to the graduates who rank second, third, and fourth, and cum laude to the graduates who rank fifth through tenth.

THE CURRICULUM IN MEDICINE

The purpose of the medical curriculum is to give students with high academic promise the opportunity to develop the knowledge, clinical skills, attitudes and behaviors of excellent physicians. The fundamentals of medicine are taught by a distinguished faculty in a caring environment.

The curriculum in medicine consists of four academic sessions. During the two preclinical years, students learn the sciences basic to the study of medicine and participate in laboratory exercises, small-group discussion, computer-assisted learning, and independent study. The first year (M1) curriculum was revised with the goal of increasing integration, improving the sequencing of course content, and providing earlier clinical experience for medical students in a manner similar to what already occurs in the second year (M2) curriculum. Sophomore students must complete Step 1 of the United States Medical Licensing Examination (USMLE) to be eligible for promotion to the junior year. Students may begin the junior (M3) year on a contingent basis pending receipt of the results of their initial USMLE Step 1.

The third year involves full-time clinical study as students rotate through the major clinical disciplines and selected electives. Students also participate in the team care of patients in the University Hospitals and Clinics, Veterans Affairs Medical Center and various community settings. ACLS and the required technical skills must be completed in the third year. The student must demonstrate skills in specified technical procedures and complete the documentation by the end of the third year.

<table>
<thead>
<tr>
<th>MD PROGRAM</th>
<th>YEAR 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>JUNE</td>
<td>JULY</td>
</tr>
<tr>
<td>BIOCHEMISTRY</td>
<td>CORE CONCEPTS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MD PROGRAM</th>
<th>YEAR 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>JUNE</td>
<td>JULY</td>
</tr>
<tr>
<td>REMEDIATION AND/OR LABORATORY OR CLINICAL RESEARCH OPPORTUNITIES</td>
<td>CLINICAL PSYCHIATRY</td>
</tr>
</tbody>
</table>
## MD PROGRAM YEAR 3

<table>
<thead>
<tr>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
<th>MAY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELECTIVES x 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FAMILY MEDICINE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEDICINE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEUROSCIENCE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OBSTETRICS AND GYNECOLOGY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEDIATRICS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYCHIATRY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SURGERY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLIN. SKILLS ASSESSMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## MD PROGRAM YEAR 4

<table>
<thead>
<tr>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
<th>MAY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMBULATORY CORE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GENERAL MEDICINE CLERKSHIP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEDIATRICS CORE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SURGERY CORE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SENIOR SEMINAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELECTIVES x 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USMLE STEP 2 CK AND CS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## DISTRIBUTION OF INSTRUCTION BY SEMESTER HOURS

### MEDICAL YEAR 1

- **ANAT 611** Medical Gross Anatomy: 12 weeks, 16 hours
- **ANAT 613** Medical Histology and Cell Biology: 6 weeks, 6 hours
- **ANAT 615** Medical Neurobiology: 6 weeks, 6 hours
- **ANAT 616** Medical Developmental Anatomy: 2 weeks, 2 hours
- **BIO 610** Biochemistry: 10 weeks, 10 hours
- **CONJ 623** Core Concepts in Medicine: 6 weeks, 6 hours
- **CONJ 624** Population Health, Disease Prevention and Health Promotion: 4 weeks, 4 hours
- **CONJ 625** Fundamentals of Epidemiology and Biostatistics: Interpreting the Medical Literature: 2 weeks, 2 hours
- **PHYSIO 611** Medical Physiology: 12 weeks, 12 hours
- **PSYCH 611** Psychiatry: 3 weeks, 3 hours

**TOTAL SEMESTER HOURS: 63**

### MEDICAL YEAR 2

- **CONJ 621** Introduction to Clinical Medicine: 14 weeks, 14 hours
- **MICRO 611** Medical Microbiology: 12 weeks, 12 hours
- **PATH 621** General and Systemic Pathology: 16 weeks, 16 hours
- **PHARM 620** Introduction to Pharmacology and Therapeutics: 12 weeks, 12 hours
- **PSYCH 621** Introduction to Clinical Psychiatry: 2 weeks, 2 hours

**TOTAL SEMESTER HOURS: 56**

### MEDICAL YEAR 3

#### Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Elective</th>
<th>Weeks</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM 631</td>
<td>Family Medicine Preceptorship</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>MED 631</td>
<td>Medicine Clerkship</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>OB/GYN 631</td>
<td>Obstetrics and Gynecology</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>PED 631</td>
<td>Junior Pediatrics</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>PSYCH 631</td>
<td>Junior Clerkship in Psychiatry</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>SURG 631</td>
<td>Surgery</td>
<td>8</td>
<td>20</td>
</tr>
</tbody>
</table>

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
### Medical Year 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Months</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED 651</td>
<td>General Medicine Clerkship</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>CONJ 652</td>
<td>Senior Seminar</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Ambulatory Care</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Pediatrics Core</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Surgery Core</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Electives x 4</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL SEMESTER HOURS</strong></td>
<td></td>
<td>90</td>
</tr>
</tbody>
</table>

In the third year, all students must take all required courses/clerkships, and in addition, students choose three two-week electives from the following:

- ANES 630  Survey of Anesthesia
- CONJ 633  Medical Student Research Program (MSRP)
- CONJ 634  Evolution in Health and Disease
- CONJ 636  Public Health
- DERM 640  Dermatology
- EM 630    Life-Saving Skills
- MED 633   Clinical Endocrinology
- MED 634   Outpatient Care of the Geriatric Patient
- MED 635   Hematology/Oncology
- MED 636   Infectious Disease
- MED 637   Pulmonary Medicine
- MED 638   Rheumatology
- MED 640   Ambulatory Internal Medicine Clerkship
- MED 641   Cardiology
- OPHTH 630 Introduction to Ophthalmology
- ORTHO 630 Orthopedic Surgery
- OTO 630   Otolaryngology
- PATH 630  Pathology: Anatomic Elective
- PATH 631  Pathology: Clinical Elective
- PATH 633  Pathology: Clinical Elective
- PED 632   Child Development and Behavioral Pediatrics
- PED 633   Pediatric Gastroenterology
- PED 634   Medical Genetics
- PED 635   Pediatric Palliative Medicine
- PED 636   Pediatric Allergy/Immunology
- PED 637   Pediatric Neurology
- MED 638   University Hospital General Surgery
- MED 639   Veterans Administration General Surgery
- MED 640   Cardiovascular Surgery
- MED 641   Surgical Critical Care
- MED 642   Surgical Research
- MED 643   Plastic and Reconstructive Surgery
- MED 644   Trauma Surgery
- MED 645   Urology
- MED 646   Vascular Surgery
- MED 647   Vascular Surgery
- MED 648   Vascular Surgery
- MED 649   Vascular Surgery

In the fourth year, all students must take MED 651 Medicine and CONJ 652 Senior Seminar. In addition, students must choose one course each in the following core areas:

#### Ambulatory (choose one)

- EM 680  Emergency Medicine
- FM 651  Family Medicine Preceptorship
- FM 652  Family Medicine Clerkship
- MED 652  Ambulatory Medicine
- MED 673  Ambulatory Internal Medicine In Economically Underserved Areas of Mississippi

#### Pediatrics (choose one)

- PED 651  Pediatric Ambulatory Care
- PED 652  Pediatric Internship
- PED 653  Neonatal Medicine
- PED 655  Pediatric Cardiology
- PED 656  Pediatric Hematology-Oncology

#### Surgery (choose one)

- NS 655  Neurosurgery
- ORTHO 657 Orthopedic Surgery
- ORTHO 658 Outpatient Orthopedic Surgery
- OTO 661  Otolaryngology - Surgical

---

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
Students must also select four electives in the fourth year. Although any fourth-year course/clerkship may be taken as an elective, no student shall be allowed to count the same course/clerkship (such as PED 651) twice to satisfy the Core Pediatric requirement and the Core Ambulatory requirement. Within the eight required months, no student shall be allowed to take the same course/clerkship twice for credit or be given credit for more than two months of extramural coursework.

Arrangements for extramural courses to be taken for credit shall be made in advance by the student with the appropriate department, the associate dean for student affairs and the registrar.

Students will be certified for graduation only after all requirements for graduation are completed. These requirements include passing the USMLE Step 2 Clinical Knowledge and Clinical Skills Exams.

POLICY ON ACADEMIC STATUS

PROMOTIONS COMMITTEE

The Promotions Committee shall be the primary body to act upon matters of student academic evaluation for promotion, recommendation for graduation, withdrawal, and dismissal. The committee shall consist of faculty members in the appropriate teaching departments in the School of Medicine. The Chairman of the Promotions Committee shall be appointed or designated by the Dean. The Promotions Committee shall be responsible for decisions regarding promotion and academic status in each year and for recommendation for graduation to receive the M.D. degree. These recommendations shall be sent to the Dean, and shall be presented to the Executive Faculty of the School of Medicine for review prior to final implementation or notification of the student.

GRADING

Each department directing a course or clinical block shall specify the requirements of that course or block, and the standards by which students of that course or block are evaluated and shall submit electronically in SAP for each student a numerical percentage grade for that course, with 70.0 as the minimum passing grade.

Each department shall submit electronically in SAP grades in completed courses within 30 days of the final examination. When national testing examinations are to be used in the compilation of final grades, student grades must be submitted within 30 days of receipt of the results of such examinations.

A grade of incomplete will be given when, at the end of a regular course period, additional work is required, due to non-completion of a portion of the course requirements, i.e., lost time or missed examination because of illness, or other extenuating circumstances. A grade of incomplete may be removed by completing missed work, and/or by successful completion of examinations, whichever is appropriate. A grade of incomplete must be removed within twelve months.

A grade below 70.0 is a failing grade, given when a student demonstrates deficiency in required performance, and will require significant make-up work and/or reexamination, or repeating the course.

If a student is required to repeat a portion of a course including examination(s), an entire course, or any entire year, the initial grade and the subsequent grade are both recorded on permanent records of that student, with the initial grade used to compute class academic rank and grade point average (GPA).

At the end of each academic year, a weighted average will be computed to determine a class ranking which may provide a means to determine honors, awards, and scholarships specifying an academic rating as a stipulation, or which may be used in transfers to other schools.

Student performance at UMMC is evaluated according to academic criteria, not on the basis of opinions or conduct in matters unrelated to academic standards. An instructor (defined as one who has responsibility for a class or directed individual study) is given the authority over all matters affecting the academic conduct of that instructional unit, including assignment of grades. The instructor shall be presumed to have assigned the proper grade until it is proven otherwise. The burden of proof to the contrary rests with the student. Students shall have protection against prejudiced or capricious academic evaluation. It is expected that the method of grading by instructors be made clear to students and that instructors be required to justify disputed grades. All records on which grades are based are expected to be retained on file for a minimum of six months following scheduled completion of any instructional unit. Disputes associated with the assignment of grades must be filed with the instructor’s chair/department head and the School of Medicine in writing within 10 working days of the receipt/posting of the grade. The chair/department head will have 10 working days to respond to the student’s dispute. If the student still feels the matter has not been resolved appropriately, a written appeal shall be made to the dean (See MECHANISM FOR APPEAL).

A course instructor may change a reported grade only if the original grade was incorrectly assigned due to clerical or computational error, or if a student meets the requirements for the removal of an “I” grade.
PROMOTION
To be eligible for promotion, a student must achieve a grade of not less than 70.0 in each course, have no incomplete grade, and have a weighted average of 75.0 or higher. Sophomore students must also pass Step 1 of the United States Medical Licensing Examination (USMLE) to be eligible for promotion to the junior year. Senior students must also have passed USMLE Step 2 (clinical knowledge and clinical skills) to be eligible for graduation.

At the end of the year, a student who has no failing grades, but has a weighted average below 75.0, will be required to satisfactorily complete remedial work prior to promotion or graduation; in such a case, remedial work may include the possibility that an entire academic year be repeated.

A student must satisfactorily complete all requirements before being promoted to the next higher academic year and before beginning courses in the next higher academic year. An exception to the latter may temporarily be made when grades are not immediately available as in the case of delayed national test results. Under no circumstances will a student with known and unremediated academic deficiencies be allowed to begin courses in the next higher academic year.

Students with failing grades in one or more courses shall be placed on academic probation, and if not dismissed, will be required to remove probationary status by reexamination, by repeating a course, or by repeating the year, as required by the Promotions Committee, Executive Faculty and Dean. The Promotions Committee shall take into account a student's overall performance and extenuating circumstances before reaching a final decision in this regard.

Students with incomplete grades in one or more courses must satisfactorily complete these courses as required by course directors prior to promotion to the next academic year. A grade of incomplete must be removed within twelve months.

Students may be required by the Promotions Committee to do remedial work in a course and/or to take a repeat examination(s). Failure upon reexamination in any course requires that student must either repeat the entire course, the entire year, or be dismissed as recommended by the Promotions Committee and the Executive Faculty.

Students who are required to repeat an entire year, shall register for the actual credit hour value of that year, and shall pay the usual fees of a full-time student for the period of time specified.

Sophomore students, satisfactorily completing all course work for the second (M2) year, may begin the junior (M3) year on a contingent basis, pending receipt of the results of their initial USMLE Step 1. Students who fail Step 1 may continue with the junior year, completing the rotation that is in progress if the student is in passing status. At the end of said rotation, such students will be placed in Independent Study for a period not to exceed 10 total weeks. Students who receive a passing score on USMLE Step 1 during this period qualify for promotion and may resume their junior (M3) year on the next available block. A passing score on the repeated attempt must be received before a student can resume their junior (M3) year and begin clinical work. No junior (M3) medical student will be allowed to spend more than 10 total weeks in Independent Study without being required to repeat the junior (M3) year.

Students who fail to receive a passing USMLE Step 1 score and miss more than 10 total weeks of the junior (M3) year will be placed on leave and be required to repeat the junior (M3) year in its entirety. To be eligible for a repeated attempt of the junior (M3) year, students must take USMLE Step 1 by April 1, allowing them to restart the junior (M3) year from its beginning with the next class. Repeating students will also be required to complete a 30 day clinical refresher course held during the month of May. Students who fail to follow this process will be dismissed from the School of Medicine.

Senior students, satisfactorily completing all course work for graduation but failing to receive a passing score on USMLE Step 2, will be given one year beyond the original expected date of graduation to pass Step 2 and to receive their degree. Students failing to pass Step 2 within that year are no longer eligible for the M.D. degree without additional course work at this school. Such additional course work shall consist of a remedial third (M3) year of medical school, which must be taken and passed in its entirety with all examinations. Any failed course or National Board examination in the remedial year may not be repeated, and such a failure will result in the student's dismissal from medical school. Following satisfactory completion of the entire remedial year, students again become eligible for the M.D. degree and have one additional year to pass the USMLE Step 2. Thereafter, students are no longer eligible for the M.D. degree and will be dismissed from the School of Medicine.

LEAVE OF ABSENCE
Leave of absence from medical school may be granted by the Dean or his administrative designee under the following conditions:
1. For students in good academic standing to pursue training as a medical scientist (i.e., to pursue research experience or to complete a Master's or PhD degree).
2. Leave of absence for students with academic, personal, financial or medical problems may be granted in special circumstances.

If the leave of absence is granted during the academic year for the remainder of that academic year with the potential of returning to repeat the entire academic year, final grades in courses which have been completed will be recorded in the Office of the Registrar. Grades in courses in progress shall be reported to the Office of the Registrar as “withdrawn.”

WITHDRAWAL
A student with academic, personal or health problems precluding satisfactory performance or continued enrollment which require more than one academic semester of leave, may be allowed to withdraw.

At the time of withdrawal, final grades in courses which have been completed will be recorded in the Office of the Registrar. Grades in progress shall be returned to the Office of the Registrar with a determination of “withdrawn.”
Any withdrawal by a student shall be presented to the appropriate Promotions Committee, which shall determine conditions under which a student may be readmitted, if at all, and shall make such recommendations to the dean and executive faculty. The student shall be informed of readmission eligibility status and requirements.

Students who voluntarily withdraw may not be readmitted except as a beginning first-year student (i.e., no advanced standing) if over two years have elapsed since withdrawal. If two years or less have elapsed since withdrawal, a student may be admitted to advanced standing but must repeat entirely any course/block not previously completed. Alternatively, depending on academic standing and time elapsed, a student may be required to repeat the entire academic year from which he/she withdrew.

In the event of withdrawal prior to the end of the first semester of the first year, the student will not be eligible for readmission, except that he/she may apply for admission to the first year class as any other new student.

A student who withdraws and has been declared eligible for readmission must apply for readmission by petitioning the dean, stating the reasons for his/her withdrawal and why he/she now believes he/she is able to pursue academic studies successfully. This petition shall become a part of the student’s permanent record.

DISMISSAL
A student dismissed from the School of Medicine shall not be eligible for readmission in advanced standing. Such students shall not be precluded from applying for readmission to the first-year class as any other new candidate. Dismissal from the School of Medicine may be for:

1. Academic failure. Included are: (a) students who have academic deficiency in the current school year; (b) students who have a repeat failing grade in any repeated course or block or who failed any course or block in a repeated year; (c) other failure as determined by the Promotions Committee.
2. Health reasons. In this category are students who by reason of health, including behavioral and psychiatric disorders, are precluded from satisfactory academic performance or satisfactory performance as a physician in the practice of medicine.
3. Conviction of a felony.
4. Conduct deemed to be other than honorable or ethical (i.e., cheating on examination, taking credit for work not one’s own, etc.).
5. Any student who commits an unlawful act on or off the Medical Center or whose conduct discredits the Medical Center in any way will be subject to disciplinary action, up to, and including, dismissal.

MECHANISM FOR APPEAL
The executive faculty shall act as an appeal body for all academic and/or unprofessional behavior matters that concern grades, promotion, conditions imposed by suspension, dismissal or withdrawal. Students shall be notified of adverse academic decisions such as requirements for remedial work, conditions upon withdrawal, or dismissal. Each student shall be notified of his or her right to appear before the executive faculty to appeal such decisions. Any request for appeal must be by written petition to the dean within 14 days of the recommendation of the sanction. Failure to make a written appeal within this 14-day time period shall constitute a waiver of the appeal right and shall result in the sanction becoming final as recommended. A member of the faculty also may appeal to the executive faculty on behalf of a student. During an appeal hearing before the executive faculty, the student shall be permitted, at his/her expense, to have an adviser or legal counsel represent him or her at the hearing and through all other stages of the disciplinary process. The role of the counsel shall be limited to an advisory capacity only. He/she will not be permitted to make opening or closing statements/questions, choose witnesses, or make concluding statements on his/her behalf. The student is entitled to present witnesses or other evidence, question opposing witnesses, and make opening and concluding statements on his/her own behalf.

The executive faculty shall record all hearings, which record shall be preserved until the time for all avenues of appeal have expired. The executive faculty shall have the right to approve the recommended sanction, impose a lower sanction or no sanction, or impose a harsher sanction than recommended. The executive faculty shall render a written decision within ten (10) working days of the completion of the hearing, and shall notify the student with a copy of the written decision. All decisions by the Executive Faculty concerning academic matters are final. The student shall have the right to file a procedural appeal in writing to the Associate Vice Chancellor for Academic Affairs/Provost within five (5) working days. In the case that a procedural violation is found to have occurred, the case will be returned to the point of procedural issue and readdressed.

ADMISSIONS
PRE-APPLICATION COUNSELING
Students wanting to become a doctor should visit, the Association of American Medical Colleges’ (AAMC) web site, “Considering a Medical Career.” The UMMC Medical School Admissions web site contains useful information including “Pathway to Medical School,” “Application Workshop,” “Interview Workshop,” “Reasons to Attend this Medical School” and “Photos of Medical Student Life,” which outline medical school education, preparation, useful links, a time line for applying, degree programs offered by this school, the selection process, entering class statistics and some reasons why you should attend the University of Mississippi School of Medicine.

Pre-application counseling is available for prospective applicants and post-application counseling is available for unsuccessful applicants. To make an appointment, call the medical school admissions office (601-984-5010). After the Admissions Office confirms
an appointment, a student seeking pre-application counseling will be given a password to access and submit an on-line Pre-
application Counseling Form on which background information is obtained that will be useful during counseling. E-mail
communication with the Admissions Office is encouraged.

ADMISSION TO THE MEDICAL CURRICULUM
Details about the admissions process, including deadlines and links to the application and admission test, can be found at the
school's web site; select the “admission” tab.

The authority to select applicants for admission to the School of Medicine is vested in the Admissions Committee. The committee,
appointed by the dean of the School of Medicine, is chaired by the associate dean for medical school admissions and is composed
of members of the basic science and clinical faculty. No student may enroll for courses in the School of Medicine, either as a regular
full-time student or as a special part-time student, without being admitted by the committee.

Correspondence regarding admission (such as requests for counseling and application status updates) should be addressed to:
Associate Dean for Medical School Admissions, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS
39216-4505; telephone (601) 984-5010; Fax (601) 984-5008; E-mail AdmitMD@umc.edu.

Letters of evaluation must be submitted directly to the American Medical College Application Service (AMCAS), VirtualEvals or
Interfolio.

Official admissions records (such as transcripts) are handled and filed in the Office of Student Records and Registrar and become the
property of the School of Medicine. They cannot be returned to the applicant or forwarded to another school or individual.
Correspondence regarding official records should be addressed to the Office of Student Records and Registrar, University of
Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505, telephone (601) 984-1080.

Selection of applicants is made on a competitive basis, without regard to race, creed, sex, color, religion, marital status, sexual
orientation, age, national origin, disability or veteran status. Qualified handicapped students will be considered in relation to the
Technical Standards which follow.

TECHNICAL STANDARDS FOR ADMISSION, RETENTION, PROMOTION AND CERTIFICATION FOR THE DEGREE OF DOCTOR OF
MEDICINE
Because the M.D. degree awarded to a senior medical student signifies that the holder is prepared for entry into the practice of
medicine within postgraduate training programs, it follows that graduates must have the knowledge and skills to function in a broad
variety of clinical situations and to render a wide spectrum of patient care.

If they are to function in this manner, medical students must have somatic sensation and the functional use of the senses of vision
and hearing, and equilibrium. They must have sufficient exteroceptive sense (touch, pain and temperature), sufficient
proprioceptive sense (position, pressure, movement, stereognosis and vibratory) and sufficient motor function to perform the
activities described in the sections that follow. Students also must be able to consistently, quickly, and accurately integrate all
information received by whatever sense(s) and have the intellectual ability to learn, integrate, analyze and synthesize data, and the
appropriate behavioral and social skills for patient interaction.

In accordance with the Americans with Disability Act (ADA) of 1990 and ADA Amendments Act of 2008 (http://www.ada.gov/pubs/ada.htm),
technological compensation can be made for some handicaps in certain of these areas, but the student should be able to perform in a largely independent manner.

Observation - The medical student must be able to observe and participate in demonstrations and experiments in the basic sciences,
including, but not limited to, physiologic and pharmacologic demonstrations in animals, microbiologic cultures, and microscopic
studies of microorganisms and tissues in normal and pathologic states, and anatomical specimens. The student must be able to
observe a patient accurately at a distance and close at hand. Observation necessitates the functional use of the senses of vision,
hearing, and somatic sensation. It is enhanced by the functional use of the sense of smell.

Communication - A medical student should be able to speak, to hear, and to observe patients in a sensitive manner. A medical
student should be able to elicit information, describe changes in the patient’s mood, activity and posture, and perceive nonverbal
communications. The student also must be able to communicate effectively in oral and written form with all members of the health
care team.

Motor - Students should have sufficient motor function to obtain information from patients by palpation, auscultation, percussion
and other diagnostic maneuvers; to do basic laboratory tests; to carry out diagnostic procedures; to read electrocardiograms and
radiographs; and to conduct anatomical dissections in the basic sciences and clinical years. A student should be able to execute the
motor movements reasonably required to provide general and emergency care to patients. Examples of emergency treatment
reasonably required of physicians are cardiopulmonary resuscitation, administration of intravenous medication, application of
pressure to stop bleeding, opening of obstructed airways, suturing of simple wounds and performance of simple obstetrical
maneuvers. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the
senses of touch and vision.

Intellectual-Conceptual, Integrative, and Quantitative Abilities - These abilities include measurement, calculation, reasoning,
analysis and synthesis. Problem solving, the critical skill demanded of physicians, requires all of these intellectual abilities. In
addition, the student must be able to comprehend three dimensional relationships and to understand the spatial relationships of
structures.
Behavioral and Social Attributes - A student must possess the emotional health required to fully use his or her intellectual abilities; to exercise good judgment; to promptly complete the responsibilities attendant to the diagnosis and care of patients; and to develop mature, sensitive and appropriate relationships with patients. Students must be able to tolerate physically taxing workloads and to function effectively under stress. They must be flexible and able to adapt to changing environments, and capable of functioning in the face of uncertainties inherent in the clinical problems of many patients.

COMMITMENT TO DIVERSITY

The University of Mississippi Medical Center’s Mission Statement (see Medical Center General Information section) states in part:

The School of Medicine is proud to be part of Mississippi’s only academic health science campus. Fulfillment of the school’s mission requires student, faculty, administration and staff respect for and appreciation of the rich cultural heritage and growing diversity of the citizens of Mississippi, including their:

- Demographic attributes (race, ethnicity, gender, gender identity, sexual orientation, age, educationally or financially disadvantaged background, socioeconomic status, marital and family status, rural, state and national origin, languages spoken, religious and spiritual beliefs, and culture),
- Personal attributes (including integrity, communication, skills and abilities, disabilities, work habits, interactions with people, desire to learn) and
- Life experiences (including healthcare, community service, leadership, teamwork, and employment).

Diversity, inclusion and cultural humility enrich the teaching and learning environment; students think more vigorously and imaginatively, enhancing their preparation as citizens and professionals committed to providing all patients, including those from underserved populations, access to quality and equitable healthcare that can ameliorate the healthcare disparities of Mississippians and the nation through medical education, biomedical research and patient care.

Medical students are not required to participate in any procedure or service for which they have religious objection. Students must attend all required educational sessions whether or not they have religious objection to the material discussed and are responsible for the educational content of the session. In addition, students may not refuse to provide care to a patient based on religion, gender, sexual orientation, race, patient diagnosis, or any other patient personal characteristic. It is required that students communicate with the course or clerkship director at the beginning of the course or clerkship when they are aware that procedures to which they object may occur.

ADMISSIONS CRITERIA

Medical school admissions requirements nationwide have for the most part remained unchanged for decades. While students who have achieved them performed well in medical school, these requirements have often burdened and even discouraged non-science majors from applying to medical school and they impeded creativity in undergraduate premedical education. Furthermore, they fail to convey the need to cover modern topics. After considering the ongoing transformation in medical school admissions, the array of admissions requirements used by medical schools nationwide and the type of applicant this medical school seeks to educate, an Admissions Task Force appointed by the vice dean of the School of Medicine (SOM) concluded that 1) it was in the best interest of this medical school to abandon the current list of prescribed courses; and 2) to afford applicants flexibility in meeting requirements for admission. Recommendations of the Admission Task Force were endorsed by the SOM Admissions Committee and approved by the Council of Deans.

Dates for phasing out current admissions requirements, phasing in new admissions criteria options (detailed in chart) and when Medical College Admissions Test (MCAT®) scores from the current (MCAT1991) and forthcoming (MCAT2015) exams will be acceptable are summarized in the following table. Further explanation of each admissions criteria options follows. Starting with the 2015 entering class, applicants must indicate on the SOM Secondary Application which criteria they wish to use to qualify for admission and courses taken or planned that fulfill that option.
CURRENT ADMISSIONS REQUIREMENTS

Acceptable through the 2017 entering class

Students, in consultation with a premedical adviser, should develop proficiency in a specific major area of study while in undergraduate school and acquire a background in the humanities and social sciences. Non-science majors with an interest in medicine are encouraged to apply.

Course credits are acceptable from only accredited U.S. colleges and universities. The applicant must show credit for at least three years of college work, totaling not fewer than 90 acceptable semester hours (excluding unacceptable courses described below), completed in an accredited college. These minimum 90 hours consist of courses required for entrance to this medical school and other courses (referred to here as electives) required by an undergraduate institution for a baccalaureate degree.

Strong preference is given to applicants who will have completed all requirements for a baccalaureate degree prior to entering medical school. For those applicants applying with the minimum 90 acceptable semester hours, a maximum of 65 semester hours of credit from an accredited community college may be applied toward the minimum 90 acceptable semester hours required for admission. College graduates may complete additional post-baccalaureate coursework to satisfy prerequisites at any accredited U.S. college or university, regardless of the number of community college credit hours applied toward their completed undergraduate degree.

Required courses for entrance into this medical school include one academic year each of four core science courses with laboratories (biological science, general chemistry, organic chemistry and physics) plus one year each of mathematics, English and advanced science.

All required courses must have a college grade; therefore, advanced placement credit cannot meet these requirements. If an applicant has advanced placement credit for any required course, he/she can fulfill the requirement by taking either that course for a grade or a higher-level course in the same department for a grade. The minimum 90 acceptable semester hours will be completed by other course work (such as approved electives described below).

When evaluating course work, the Admissions Committee focuses on courses that contribute to the biology, chemistry, physics and math (BCPM) grade point average (GPA) calculated in the American Medical College Application Service (AMCAS®) application. Courses that contribute to the BCPM GPA are determined by AMCAS® course classification; however, when determining whether or not a science or math course will be acceptable as a prerequisite for this medical school, Student Records and Registrar examines the course number for a relevant prefix (such as BIOL, CHEM, PHYS or MATH). Required core science, advanced science and math courses must be taken in either science or math departments; thus, courses with either a related name or BCPM course classification but with a course number that contains another prefix (including but not limited to BESS, CLS, COMP, ENGI, HEAL, MEDC, NPSC, PHARM, PHCL) are not acceptable as requirements for entrance to this medical school.

There is no time limit on the validity of a baccalaureate degree; however, the Admissions Committee has concerns when prerequisite courses have been taken 10 or more years ago. If a required core science course (biological science, general chemistry, organic chemistry and physics) was taken 10 or more years ago, it should be repeated.

If all required core science courses were taken 10 or more years ago, the applicant should take at least 32 semester hours of BCPM course work to convince the committee that they are currently capable of sustaining the rigors of learning in a classroom environment. Such applicants are encouraged to retake the required core science courses; however, this may be substituted by either 32 credits of upper level undergraduate BCPM courses beyond the advanced science requirement or 32 credits of graduate BCPM courses (see chart). In the evaluation of applicants for interviews, the admissions committee initially considers only those courses that contribute to an undergraduate BCPM GPA; however, post-baccalaureate and graduate BCPM GPAs are considered later in the interview screening process.
### Required Core Sciences
- Required courses in biological science, general chemistry, organic chemistry and physics must be taken in science departments (course number prefix must be BIOL, CHEM or PHYS) and include formal laboratory work. If a department spreads the content of a typical two-semester required science course over three semesters, students enrolled at that institution must take all three semesters to satisfy the course requirement. The advanced science courses (see below) must be taken in a senior college.

### Mathematics
- A minimum of three semester hours of college algebra and three semester hours of trigonometry is required. A two-semester course, including algebra, trigonometry, analytical geometry and calculus, also is acceptable. Students who qualify by placement tests to enter calculus I directly can satisfy their mathematics requirement with a three- or four-hour calculus I course; the remaining two or three hours required to meet the 90-hour minimum may be met with a recommended elective course.

### English
- The usual freshman college course of six semester hours in English composition or literature is required. The applicant is urged to take an advanced course in English composition.

### Required Advanced Science
- These courses must be taken at a senior college science or math department (course number prefix must be BIOL, CHEM, PHYS or MATH). Examples of advanced science courses that are relevant to medical school are comparative anatomy, embryology, genetics, histology, physiology, microbiology, biochemistry, quantitative analysis, physical chemistry, calculus II, III or IV, differential equations and advanced physics. It is recognized that laboratories are not offered with all advanced sciences.

### Approved Elective Courses
- A partial list of recommended elective courses includes advanced English, sociology, psychology, philosophy, history, geography, foreign language, computer science, fine arts (up to six semester hours) and selected advanced courses in mathematics, chemistry, physics and biology.

### Unacceptable Courses
- None of the 90 semester hours of minimum collegiate requirements listed or described or recommended above may be met by the following: correspondence courses; courses in physical training, military science, or dogmatic religion; courses in mathematics or science designed for non-science majors; or course credit granted without college-level testing. A limited number of telecourse credits may be accepted for liberal arts electives; however, none will be accepted for required science and math courses. Courses taken outside science and math departments (course prefix other than BIOL, CHEM, PHYS or MATH) are not acceptable as required courses.

### Credit Transferred from a Community College
- For applicants who do not have a baccalaureate degree, 65 semester hours of credit from an accredited community college is the maximum that may be applied toward minimum 90 acceptable semester hours required for admission. For applicants who have a baccalaureate degree, there is no limit to the number of hours one can acquire from a community college to satisfy prerequisite coursework. The Office of Student Records and Registrar will select those courses that count toward satisfaction of prerequisites.

### Completion of Degrees
- An applicant enrolled in a degree-granting program at any college or university is expected to complete the requirements for and earn that degree before enrollment in medical school. Unless prior approval has been granted by the admissions committee, this applies to both undergraduate and graduate degrees.

### NEW ADMISSIONS CRITERIA OPTIONS
Available starting with the 2015 entering class
- Students, in consultation with a premedical adviser, should develop proficiency in a specific major area of study while in undergraduate school and acquire a background in the humanities and social sciences. Non-science majors with an interest in medicine are encouraged to apply.

---

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Substitute</th>
<th>But</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Science</td>
<td>8</td>
<td>Equal credits of higher level BIOL</td>
<td>If any core pre-requisite course(s) is 10 years old, retake that course(s).</td>
</tr>
<tr>
<td>Freshman Chemistry</td>
<td>8</td>
<td>Equal credits of higher level CHEM</td>
<td>If ALL pre-requisites 10 years old, recommend re-taking 32 core credits; however, accept 32 credits of either upper level BCPM beyond Advanced Science requirement or graduate BCPM.</td>
</tr>
<tr>
<td>Organic Chemistry</td>
<td>8</td>
<td>Equal credits of higher level CHEM</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>8</td>
<td>Equal credits of higher level PHYS</td>
<td></td>
</tr>
<tr>
<td>Core</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>6</td>
<td>Other writing intensive courses (writing for scientists, honors, courses, specifically petitioned, thesis credits)</td>
<td>No need to repeat</td>
</tr>
<tr>
<td>Math (Trigonometry, Algebra)</td>
<td>6</td>
<td>3 credits Calculus</td>
<td>No need to repeat</td>
</tr>
<tr>
<td>Advanced Science</td>
<td>6</td>
<td>Any junior or senior level BCPM courses</td>
<td>No need to repeat</td>
</tr>
<tr>
<td>Other</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

The University of Mississippi Medical Center
Course credits are acceptable from only accredited U.S. colleges and universities. The applicant must show credit for at least three years of college work, totaling not fewer than 90 acceptable semester hours. These minimum 90 hours consist of courses required for entrance to this medical school and other courses required by an undergraduate institution for a baccalaureate degree. None of the 90 semester hours of minimum collegiate course work may be met by the following: correspondence courses; courses in physical training, military science, or dogmatic religion.

Strong preference is given to applicants who will have completed all requirements for a baccalaureate degree prior to entering medical school. For those applicants applying with the minimum 90 acceptable semester hours, a maximum of 65 semester hours of credit from an accredited community college may be applied toward the minimum 90 acceptable semester hours required for admission. College graduates may complete additional post-baccalaureate coursework to satisfy prerequisites at any accredited U.S. college or university, regardless of the number of community college credit hours applied toward their completed undergraduate degree.

An applicant must indicate on the SOM Secondary Application which of the following three admissions criteria options they wish to use to qualify for admission and courses taken or planned that fulfill that option.

For all options described below, the admissions committee evaluation of academic performance will not be limited to these courses; an applicant’s entire academic record is subject to evaluation.

**End-Point Courses** - The objective of this option is to describe what courses need to be taken; but, not the path to achieve this end point. Undergraduate institutions will decide acceptable pathways to these end-point courses that may include traditional course requirements, condensed or novel requirements, AP credit and online course work.

Any applicant selecting this option must document on a transcript that required end-point courses have been taken; well prepared applicants may also indicate which recommended courses have been taken.

**The following courses are required:**

- **Life Sciences:** 2 semesters of any combination of the following:
  - Zoology
  - Cellular Biology
  - Molecular Biology
  - Physiology
  - Anatomy
- **Biochemistry:** 1 semester
- **Physics:** 2nd semester

**Familiarity with the following subjects is recommended;** content might be acquired by taking courses by that name, courses with different names but similar content or self-study:

- Algebra
- Statistics
- Psychology
- Sociology

**Course-Competency Maps** - Applicants eligible for this admissions criteria option are limited to those enrolled at institutions with departments that have constructed course-competency maps that have been submitted to the School of Medicine and approved by the Admissions Committee. The current list includes:

- Millsaps College - Biology, Chemistry & Biochemistry, Physics
- Mississippi College - Biology, Chemistry & Biochemistry, Mathematics Computer Science, Physics
- Mississippi State University - Agricultural & Biological Engineering, Biochemistry & Molecular Biology, Biology, Chemistry, Mathematics, Physics
- University of Mississippi - Biology, Chemistry & Biochemistry, Mathematics, Philosophy & Religion, Physics & Astronomy

The current model for this option is derived from 2010 Howard Hughes Medical Institute - Association of American Medical Colleges report, Scientific Foundations for Future Physicians. These competencies or their source may change.

To qualify for admission, an applicant must complete any combination of courses, whose combined content has been mapped to cover the 37 learning objectives that can provide the following eight entering medical student competencies:

- **E1-** Apply quantitative reasoning and appropriate mathematics to describe or explain phenomena in the natural world.
- **E2-** Demonstrate understanding of the process of scientific inquiry, and explain how scientific knowledge is discovered and validated.
- **E3-** Demonstrate knowledge of basic physical principles and their applications to the understanding of living systems.
- **E4-** Demonstrate knowledge of basic principles of chemistry and some of their applications to the understanding of living systems.
- **E5-** Demonstrate knowledge of how biomolecules contribute to the structure and function of cells.
- **E6-** Apply understanding of principles of how molecular and cell assemblies, organs, and organisms develop structure and carry out function.
E7- Explain how organisms sense and control their internal environment and how they respond to external change.
E8- Demonstrate an understanding of how the organizing principle of evolution by natural selection explains the diversity of life on earth.

**Novel Curricular Tracks** - Applicants eligible for this admissions criteria option are limited to those enrolled at institutions that have devised novel premedical curricula that have been submitted to the School of Medicine and approved by the Admissions Committee.

Institutions currently developing Novel Curricula include Millsaps College and the University of Mississippi.

To qualify for admission, an applicant must complete an approved track of multidisciplinary courses that integrate the learning objectives that can provide entering medical student competencies.

**Indication of Courses that Fulfill Admissions Criteria Options** - Upon receipt of a verified AMCAS® application, the medical school admissions office will email an applicant the URL for the SOM Applicant Portal. This online tool provides access to the Secondary Application to this medical school which, among other information, will ask applicants to select the admission criteria options they wish to use to qualify for admission and courses taken or planned that fulfill that option. Options include the following:

- **Prescribed Course Requirements** (acceptable through 2017 entering class)
  - Applicants must list the number and name of courses that fulfill the requirements

- **End-point Courses**
  - Applicants must list the number and name of courses taken or planned that fulfill this option
  - Applicants will be given the option to list the number and name of courses taken or planned that are recommended under this option

- **Course-Competency Maps**
  - Applicants must list the number and name of courses taken and planned whose content maps to learning objectives that can provide the desired competencies.
  - This option applies only to students at schools with course-competency maps previously approved by the SOM admissions committee.

- **Novel Curricula**
  - Applicants must list the number and name of courses taken or planned that comprise eligible novel curricula. This option applies only to students at schools with novel curricula previously approved by the SOM admissions committee.

**Non-Traditional Applicants** - There is no time limit on the validity of a baccalaureate degree; however, the Admissions Committee has concerns when relevant courses have been taken 10 or more years ago. Required courses should be recently completed or current regardless of the option chosen. End-point courses (life sciences, biochemistry or physics) or any course used to meet the course-competency map option that were completed 10 more years prior to applying are not acceptable. Applicants have the choice of either repeating 10 year old courses or completing new coursework to satisfy the selected admissions option.

**Conditional Acceptance** - Acceptance to this medical school is conditional; the Admissions Committee may rescind an offer of acceptance at any time before matriculation if an applicant fails to maintain expectations upon which the acceptance was based. Examples include, but are not limited to, a significant decline in academic performance, failure to complete prerequisites or other course work and degrees in progress, patterns of unprofessional behavior and incidents discovered in a criminal background check.

**RESIDENCY CLASSIFICATION**
The Office of Student Records and Registrar is responsible for determining whether or not an applicant meets the requirements for being a legal resident of Mississippi for the purpose of enrollment. When requested, applicants must complete a Request for Review of Residency Classification form and provide copies of a driver’s license, car registration, car tag, voter registration card, proof of in-state banking and proof of a permanent in-state domicile. A copy of the Request for Review of Residency Classification form can be acquired from the School of Medicine [web page](http://www.som.ummc.edu) or the Office of Student Records and Registrar (601-984-1080).

**ADMISSIONS STANDARDS AND LEGAL POLICY**
For admission purposes, the School of Medicine at the University of Mississippi Medical Center gives preference to residents of the State of Mississippi, as defined by Miss. Code §§ 37-103-7, 37-103-13 and IHL Policy 610. As such, the School of Medicine currently accepts admission applications only from individuals who are U.S. citizens or lawful permanent residents. The School of Medicine may choose to not accept applications from students who cannot demonstrate residency as defined by Miss. Code § 37-103-7 and 37-103-13. In recent years, it has not been possible to admit nonresidents of the State of Mississippi.

**MEDICAL SCHOOL APPLICATION AND ADMISSION TEST**
The Association of American Medical Colleges (AAMC) [web page](http://www.aamc.org) for student services provides valuable information on medical schools and electronic access to the following:

- **American Medical College Application Service (AMCAS®) Applications** – All applications must be made through AMCAS®, a nonprofit, centralized application processing service for applicants to the first-year entering classes at participating U.S. medical schools. The AMCAS® application is available only [online](http://www.aamc.org). More information may be obtained by writing to the American Medical College Application Service, 2501 M Street, NW, Lobby-26, Washington, DC 20037-1300 or by e-mail: amcas@aamc.org.

- **Medical College Admission Test (MCAT®)** - All applicants for admission to the School of Medicine must take the MCAT®. The test is computer-based, offered at specific test sites only and offered multiple times each year. By following a well-planned schedule, the premedical student should be ready to take the test no later than the spring of the junior year and release scores to all schools to which they intend to apply. Selection of applicants for the medical school class entering in a given calendar
year will be based, in part, on MCAT® scores acquired during the previous four calendar years only. Selection of alternates may include consideration of MCAT® scores acquired in the same calendar year.

- MCAT® information (including test sites, registration deadlines and testing dates) and registration may be accessed online. This information can also be acquired from most college premedical advisers or writing to the MCAT® Program Office, P.O. Box 4056, Iowa City, Iowa 52243-4046.
- Fee Assistance Program (FAP) - The AAMC FAP is designed to be used in conjunction with registration for the MCAT® and/or for application to medical school through the AMCAS®. The FAP is provided to assist individuals with extreme financial limitations whose inability to pay the full MCAT® registration fee or the AMCAS® application fee would prevent them from taking the examination or applying to medical school. Further information and the FAP application are listed at the website. The supplemental application fee for this medical school will be refunded for applicants who are approved for FAP.
- Nonacademic and Personal Preparation - Applicants are advised that in addition to academic preparation, MCAT® performance, and interviews, the Admissions Committee seeks evidence of: health related experiences, volunteer/community service activities, and leadership as well as other notable time commitments such as employment, athletics, research, hobbies, etc. Experience (volunteer or paid) in a health related environment is strongly encouraged. These activities should be listed and explained by the applicant in the Work/Activities section of the AMCAS® application.

APPLICATION DEADLINES

Applicants are advised that everyone who completes a file by published program deadlines will be considered for admission; however, since those who submit applications and complete files early may have an advantage in the selection process, the following timeline is strongly suggested. During the fall of the junior year, traditional applicants (who plan to enter medical school the August after graduation from a four-year baccalaureate degree-granting program) are recommended to begin the timeline below. Non-traditional applicants should consider a similar timeline beginning about two years before the anticipated fall enrollment in medical school.

- September - Begin preparation for Medical College Admissions Test (MCAT)
- March - Take 1st MCAT
- May - Request transcripts & faculty evaluation letters
- June - Complete and submit on-line American Medical College Application Service (AMCAS) application
- Summer - Repeat MCAT, if needed
- September - Interviews begin

The tables that follow summarize dates for submitting required documentation to the Association of American Medical Colleges (AAMC) and the University of Mississippi Medical Center (UMMC). Details for the Early Decision Program (EDP), Regular Decision Program (RDP) and Combined MD/PhD Program follow.

Applicants should submit all documents as early as possible and well ahead of deadlines. Applicants alone are solely responsible for ensuring all required documents reach the appropriate offices by the specified deadlines. An applicant file lacking any item on the specified deadline will be considered incomplete and ineligible for consideration for admission. The Associate Dean for Medical School Admissions may, for good cause shown, grant individual deadline extensions if the applicant can document that circumstances beyond his/her control were encountered that prevented timely arrival of required documentation. To monitor timely document receipt, an applicant should:

- Contact AAMC to confirm his/her AMCAS® application is complete and transcripts for all college course work have been received.
- Access the School of Medicine's restricted Secondary Application System to confirm that the secondary application, supplemental application fee, transcripts for all college course work and required faculty Letters of Evaluation have been received.
- An applicant's file for this medical school is not considered complete until all of these items have been received. Due to the volume of material received, anticipate a few days delay between receipt and posting of information to this site.
- For questions pertaining to transcripts, contact Student Records and Registrar.
- For everything else, contact the Associate Dean for Medical School Admissions.

EARLY DECISION PROGRAM (EDP)

Students interested in early acceptance may apply for admission under the EDP. Two important aspects of the EDP should be understood: (1) the applicant can apply to only one school of choice until a decision is received and, if accepted, must attend that school; (2) if not accepted under the EDP, the applicant may be reconsidered as a RDP applicant by that school and is automatically eligible to apply to other schools. Since EDP decisions are rendered before most RDP applications are reviewed, only above average applicants are competitive for the EDP. The typical entering class at this medical school has an undergraduate biology, chemistry, physics and mathematics (BCPM) cumulative grade point average (GPA) of 3.6 and MCAT® scores that average 9 in verbal reasoning, physical science and biological science.
DATES FOR EDP

<table>
<thead>
<tr>
<th>Submit to</th>
<th>Item</th>
<th>Earliest Receipt Date</th>
<th>Receipt Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMCAS®</td>
<td>AMCAS® Application</td>
<td>June 1</td>
<td>August 1</td>
</tr>
<tr>
<td></td>
<td>Transcripts¹</td>
<td>June 1</td>
<td>August 1</td>
</tr>
<tr>
<td></td>
<td>Letters of Evaluation⁴</td>
<td>June 1</td>
<td>September 15</td>
</tr>
<tr>
<td>UMMC</td>
<td>Transcripts²</td>
<td>June 1</td>
<td>September 15</td>
</tr>
<tr>
<td></td>
<td>Secondary Application⁵</td>
<td>June 1</td>
<td>September 15</td>
</tr>
<tr>
<td></td>
<td>MCAT Scores</td>
<td>June 1</td>
<td>August 1</td>
</tr>
</tbody>
</table>

Notification Date: Not later than October 1

¹A complete set of all undergraduate and post-baccalaureate transcripts must be mailed to: American Medical College Application Service, 2501 M Street, NW, Lbby-26, Washington, DC 20037-1300; e-mail: amcas@aamc.org

²An additional set of all undergraduate and post-baccalaureate transcripts must be mailed to: Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505; Telephone (601) 984-1080

³Access to UMMC's web-based Secondary Application System is restricted. A nonrefundable supplemental application fee of $50 for residents and $100 for nonresidents is required.

⁴Letters of evaluation, must be written by faculty who taught the applicant preferably pre-requisite courses and who can provide information not readily available elsewhere. No specific format is required; however, the Premedical Faculty Appraisal Form may be provided to letter writers to indicate areas of interest to the Admissions Committee. Above all, we seek information on an applicant's approach to academic studies including how difficulties encountered along the way were dealt with. A minimum of three faculty letters is required: however, one composite evaluation from a pre-professional advisory committee will suffice. Supplemental letters should be kept to a minimum. When appropriate, a supplemental letter from a physician the applicant has shadowed or current employer may be considered by the admissions committee; but it does not replace required faculty evaluations. All letters of evaluation must be submitted directly to the American Medical College Application Service (AMCAS), VirtualEvals or Interfolio.

Both AMCAS® and the Medical Center require receipt of specific documents by specified deadlines summarized above. Applicants who wish to apply for the EDP must submit a web-based AMCAS® application and transcripts of all undergraduate and post-baccalaureate work to AAMC. In addition, EDP applicants must submit a web-based Secondary Application to UMMC, transcripts of all undergraduate and post-baccalaureate work to the Office of Student Records and Registrar and three faculty letters of evaluation to the associate dean for medical school admissions. A final decision on EDP applications will be rendered on or before October 1.

REGULAR DECISION PROGRAM (RDP)

Students may simultaneously apply for admission to multiple medical schools under the RDP. Both AMCAS® and the Medical Center require receipt of specific documents by specified deadlines summarized above. Applicants wishing to apply for the RDP may begin on June 1 and must submit a web-based AMCAS® application by October 15 and transcripts of all undergraduate and post-baccalaureate work to AMCAS® by October 29. In addition, RDP applicants must submit a web-based Secondary Application to UMMC, transcripts of all undergraduate and post-baccalaureate work to the Office of Student Records and Registrar and three faculty letters of evaluation to the associate dean for medical school admissions. Applicants accepted for admission under the RDP will be notified on a rolling basis between October 16 and March 15; all other decisions will also be rendered by March 15. Applicants who hold multiple acceptances must inform this school of their decision by May 15.

DATES FOR RDP

<table>
<thead>
<tr>
<th>Submit to</th>
<th>Item</th>
<th>Earliest Receipt Date</th>
<th>Receipt Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAMC</td>
<td>AMCAS® Application</td>
<td>June 1</td>
<td>October 15</td>
</tr>
<tr>
<td></td>
<td>Transcripts¹</td>
<td>June 1</td>
<td>October 29</td>
</tr>
<tr>
<td></td>
<td>Letters of Evaluation⁴</td>
<td>June 1</td>
<td>December 1</td>
</tr>
<tr>
<td>UMMC</td>
<td>Transcripts²</td>
<td>June 1</td>
<td>December 1</td>
</tr>
<tr>
<td></td>
<td>Secondary Application⁵</td>
<td>June 1</td>
<td>December 1</td>
</tr>
<tr>
<td></td>
<td>MCAT Scores</td>
<td>June 1</td>
<td>October 15</td>
</tr>
</tbody>
</table>

Notification Date: Acceptances notified on a rolling basis between October 16 and March 15

¹A complete set of all undergraduate and post-baccalaureate transcripts must be mailed to: American Medical College Application Service, 2501 M Street, NW, Lbby-26, Washington, DC 20037-1300; e-mail: amcas@aamc.org

²An additional set of all undergraduate and post-baccalaureate transcripts must be mailed to: Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505; Telephone (601) 984-1080

³Access to UMMC's web-based Secondary Application System is restricted. A nonrefundable supplemental application fee of $50 for residents and $100 for nonresidents is required.

⁴Letters of evaluation, must be written by faculty who taught the applicant preferably pre-requisite courses and who can provide information not readily available elsewhere. No specific format is required; however, the Premedical Faculty Appraisal Form may be provided to letter writers to indicate areas of interest to the Admissions Committee. Above all, we seek information on an applicant's approach to academic studies including how difficulties encountered along the way were dealt with. A minimum of three faculty letters is required: however, one composite evaluation from a pre-professional advisory committee will suffice. Supplemental
letters should be kept to a minimum. When appropriate, a supplemental letter from a physician the applicant has shadowed or current employer may be considered by the admissions committee; but it does not replace required faculty evaluations. All letters of evaluation must be submitted directly to the American Medical College Application Service (AMCAS), VirtualEvals or Interfolio.

**COMBINED DOCTOR OF MEDICINE (M.D.)/DOCTOR OF PHILOSOPHY PROGRAM (PhD)**
The MD/PhD program is offered to highly qualified students by the School of Medicine in collaboration with the School of Graduate Studies in the Health Sciences. The program is designed primarily to train physician scientists who seek a professional career combining clinical skills and research. For this combined program, the degree of Doctor of Philosophy is offered in the health sciences programs. Information can be found [online](#).

Students interested in pursuing the MD/PhD program must complete all medical school application materials. In addition, applicants must:

- Complete the MD/PhD Motivation and Significant Research essays in their AMCAS application, describing all relevant research experience and research presentations;
- Submit Graduate Record Examination (GRE) scores;
- Submit at least one supplemental faculty letters of evaluation from someone able to evaluate the applicant’s research potential.
- Adhere to RDP deadlines.

Applicants to this combined degree program must be sequentially accepted for admission by the admissions committees of both the School of Medicine and School of Graduate Studies in the Health Sciences.

The MD/PhD program is a seven-year program. During the first three years, the student is enrolled respectively in the freshman, sophomore and junior medical courses/clerkships. For the following three years, the student is enrolled in courses required by a relevant graduate program in the biomedical sciences, which are listed under the School of Graduate Studies in the Health Sciences, and performs independent scientific research leading to the successful defense of a PhD. dissertation. During the final year, the student is enrolled in senior medical courses.

A limited number of stipends are available for students enrolled in this combined degree program. Competitive scholarships may also be available which offer a waiver of medical and graduate school tuition.

It is also possible for first- or second-year medical students not currently in the MD/PhD program to pursue an MD/PhD degree. Interested students should contact the graduate program director of a specific program about the possibility of pursuing a PhD degree in that program before applying to graduate school.

**MD PROGRAM**

**YEAR 1**

<table>
<thead>
<tr>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
<th>MAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOCHEMISTRY</td>
<td>CORE CONCEPTS</td>
<td>FUNDAMENTALS OF EPIDEMIOLOGY AND BIOSTATISTICS</td>
<td>MEDICAL DEVELOPMENTAL ANATOMY</td>
<td>MEDICAL GROSS ANATOMY</td>
<td>MEDICAL HISTOLOGY AND CELL BIOLOGY</td>
<td>MEDICAL PHYSIOLOGY</td>
<td>MEDICAL NEUROBIOLOGY</td>
<td>POPULATION HEALTH</td>
<td>PSYCHIATRY</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MD PROGRAM**

**YEAR 2**

<table>
<thead>
<tr>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
<th>MAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>REMEDIATION AND/OR LABORATORY OR CLINICAL RESEARCH OPPORTUNITIES</td>
<td>CLINICAL PSYCHIATRY</td>
<td>GENERAL AND SYSTEMIC PATHOLOGY</td>
<td>INTRODUCTION TO CLINICAL MEDICINE</td>
<td>MEDICAL MICROBIOLOGY</td>
<td>INTRODUCTION TO PHARMACOLOGY AND THERAPEUTICS</td>
<td>USMLE STEP 1 STUDY AND EXAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## ADVANCED STANDING TRANSFER

Applications for admission to advanced standing at levels up to the beginning of the junior year in the University of Mississippi School of Medicine are considered by the Admissions Committee. Prior to admissions committee deliberations, the associate deans for admissions, student affairs and academic affairs consult with the dean of the School of Medicine who determines whether space exists within the pertinent medical student class. This process ensures that adequate resources exist so that the training of currently enrolled students will not be adversely affected.

Advanced standing applicants must be currently enrolled and in good academic standing at an LCME accredited U.S. medical school and strong preference is given to those who fulfill Mississippi residency requirements (see Admissions, Standards and Legal Policy). The applicant will be required to submit evidence of withdrawal in good standing from the LCME accredited medical school previously attended and a validated transcript of the work completed at that school. The applicant’s undergraduate biology, chemistry, physics and mathematics (BCPM) cumulative grade point average (GPA) and Medical College Admission Test (MCAT®) scores must be competitive with those of the class he/she seeks to enter. If the applicant’s previous medical coursework is incompatible with the curriculum or schedules in this school, the applicant may be asked to complete a required course(s) before being accepted to transfer or the applicant may be accepted to a lower level of advanced standing and be required to complete a particular course(s) before proceeding with the next academic year. No student will be admitted to advanced standing if there is a condition or failure in any subject or if the applicant is not in good standing at the medical school from which he/she wishes to transfer.
transfer. For a student applying for transfer to the junior year, receipt of the student’s official transcript from the National Board of Medical Examiners demonstrating a passing score on United States Medical Licensing Examination Step 1 is a requirement for admission to, and for initiating, the junior year in this school.

A prospective applicant for transfer should email or write the Associate Dean for Admissions, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505, or visit online for information concerning applications. Completed application must be returned to this address by March 31.

VISITING STUDENTS

For medical students at University of Mississippi School of Medicine who wish to take senior electives at other medical schools - The Visiting Student Application Service (VSAS) is the AAMC application designed to make it easier for medical students to apply for senior electives at other U.S. medical schools. Information regarding the VSAS process can be found online. Each medical school must issue a student authorization before he/she may log into VSAS. You will be notified of these authorizations by e-mail.

If you are applying to a medical school that does not use VSAS, please use the Extramural Electives Compendium (EEC) for visiting student application information or the individual medical school website.

For medical students at other schools who wish to take senior electives at the University of Mississippi School of Medicine - Senior medical students who are enrolled in good standing in an LCME-accredited school, or an American Osteopathic Association (AOA)-accredited school, in the U.S. or Canada and who are formally approved by their parent school can be offered a senior elective in the School of Medicine. The Registrar’s Office verifies the credentials of visiting senior medical students, formally registers them, and maintains a roster of these students.

The University of Mississippi School of Medicine participates in the American Association of Medical College’s (AAMC) Visiting Student Application Service (VSAS). Verification of credentials for prospective visiting students is part of the application process for the extramural block. Visiting students from other schools for clinical clerkships and electives must possess qualifications equivalent to students in this medical school. Approval by the chairman of the appropriate department and by the dean of the parent LCME-accredited or AOA-accredited school, as well as verification of: professional liability insurance coverage, individual health insurance, HIPAA certification, OSHA certification, criminal background check, BLS/ACLS training, and immunization compliance for the visiting student is required. The registrar, in consultation with the associate dean for student affairs, screens applications to ascertain that applicants are enrolled in good standing in LCME- or AOA-accredited U.S./Canadian medical schools, that applicants are (or will be) senior medical students, and that applicants have been granted approval by their school. Final acceptance of the applicant, on a space available basis, for a senior block in our program is vested in the department.

Evaluations of these students are provided to their parent schools by the respective departments offering the electives. Health services are available to visiting students through Student-Employee Health and University Hospital. The liability insurance policy for our students provides coverage for visiting senior medical students; however, if visiting students have liability insurance coverage in effect through their parent schools, our student policy then provides only secondary coverage for them.

Prospective visiting students should visit the AAMC’s Visiting Student Application Service (www.aamc.org/vsas) or write the Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505, for information and an application.

APPLICANT EVALUATIONS AND DECISIONS

In 2010, leadership of the Association of American Medical Colleges challenged medical schools to transform the admission process in several ways. For example, they encouraged schools to employ a holistic admissions review that affords each applicant balanced consideration of life experiences, personal attributes and academic metrics, and to select not only those who can succeed but those who can contribute to the diversity of a medical school class that can serve as a driver of educational excellence. To meet this challenge, the University of Mississippi’s School of Medicine (SOM) employs the following steps for evaluating applicants and the information they submit in American Medical College Application Service (AMCAS®) and SOM Secondary applications. This process is aligned with the mission and diversity interests of this medical school.

Mississippi Residency

For admission purposes, the School of Medicine (SOM) at the University of Mississippi Medical Center gives preference to residents of the State of Mississippi, as defined by Miss. Code §§ 37-103-7, 37-103-13 and IHL Policy 610; see Admissions Standards and Legal Policy. As such, the SOM currently accepts admission applications only from individuals who are U.S. citizens or lawful permanent residents. The SOM may choose not to accept applications from students who cannot demonstrate residency as defined by Miss. Code § 37-103-7 and 37-103-13. In recent years, it has not been possible to admit nonresidents of the State of Mississippi.

Residency determination is not based solely on information provided in an AMCAS® application; it is based on information provided in the UMMC Secondary Application and, when requested, a Request for Review of Residency Classification form and supporting documentation. Questions regarding residency classification should be addressed to the Office of Student Records and Registrar.

Life Experiences

The admissions committee values applicant experiences in the following areas:

- Health care - Shadowing (individual physicians or hospital/clinic programs), premedical organizations, health-related courses or clinical training, employment or volunteering at a health care facility including nursing homes, medical research involving
contact with patients or patient records, primary health care provider, work with medically underserved populations or rural medicine programs, participation in health care pipeline programs

- Volunteer/community service - Social and other campus, community and faith-based organizations, campus ambassador/recruiter, disaster relief, mentoring/tutoring/coaching and other

- Leadership/responsibility - Elected office, supervisor or other role with responsibility in social or other campus, governmental or military organizations, mentoring/tutoring/coaching

- Research - Employment or volunteer work in a basic science or clinical laboratory

- Employment - Any part- or full-time employment concurrent with or independent of enrollment in school

- Other significant time commitments - Participation in collegiate, semi- or professional level athletics (including cheerleading) or artistic endeavors (theater, band, orchestra) and other major time commitments beyond those already listed

File Review Subcommittee (FRS)
Three members of a FRS, whose access to an American Medical College Application Service (AMCAS®) application is limited to Work/Activities and Essay sections only, read and score activities in each area of interest. Scores are based on the number of activities, the length of time devoted to each activity, the quality, or lack thereof, of the description of the activity.

Experience scores are used to screen applicants for interviews, render admissions committee decisions and post-application counseling for unsuccessful applicants.

Personal Attributes
The admissions committee values applicants who possess the following personal attributes.

- Written communication skills - Clear and well organized presentation of ideas, such as an applicant’s motivation for a career in medicine and observations, personal growth, and value of acquired experiences

- Initiative - Motivation to seek, participate in or initiate activities independent of groups, leadership role in sustaining a group or founding a new group.

- Interacting with people - Written evidence of empathy, compassion and altruism for diverse people

- Motivation for medicine - Extent of interest expressed both in writing and participation in health-related activities

- Workload - Year-by-year evaluation of credit hours taken and time committed to employment and extracurricular activities

- Desire to learn - Academic achievement beyond the minimum prerequisites or degree requirements including single/multiple majors/minors/degrees, and honors college enrollment

The first four attributes are scored by the same three File Review Subcommittee (FRS) members who score the applicant’s experiences. FRS members have limited access to the American Medical College Application Service (AMCAS®) application Work/Activities and Essay sections only. Scores are based on reading these sections of the application and evaluating what the applicant has done to illustrate initiative, interaction with diverse people, and motivation for medicine as well as the clarity with which this has been conveyed in the written application.

The admissions staff scores workload and desire to learn.

Attribute scores are used to screen applicants for interviews, render admissions committee decisions and post-application counseling for unsuccessful applicants.

Academic Metrics
Grade Point Averages (GPAs) and Medical College Admissions Test (MCAT®) scores comprise the academic metrics considered for admission. For information regarding when and how they are applied in the admissions process, see Interviews and Admissions Committee Deliberations.

- GPAs - The scholastic record in courses preparatory for the medical school curriculum is important. This is summarized as the applicant’s cumulative undergraduate grade point average (GPA). Due to variations in grading schemes between schools, only GPAs calculated in the American Medical College Application Service (AMCAS®) application will be considered. It is recommended that students receive a grade in all courses that satisfy the admission criteria option selected by the applicant to qualify for admission (see Admissions Criteria), avoiding courses with pass-fail grades. Academic averages are calculated on a 4.0 basis. If a course is repeated, all grades are used in calculating the average.

The admissions criteria option selected in the SOM Secondary Application determines which GPA will be primarily considered in evaluating whether or not the applicant qualifies for admission; however, grades in all academic course work may be considered during admission committee deliberations.

AMCAS® cumulative undergraduate biology, chemistry, physics and math (BCPM) GPA will be used to assess applicants who select the following options: 1) pre-requisite courses; 2) end-point courses; and 3) course-competency-maps for science majors. In addition to considering any available BCPM GPA, AMCAS® cumulative undergraduate all other GPA and grades in pertinent courses will be used to assess applicants who select the following options: 1) course-competency-maps for non-science majors; and 2) novel premedical curricula.

The minimum cumulative undergraduate GPA required for automatic file review and consideration for interviews is 2.8. For applicants with a GPA close to but below this threshold, a file review will be conducted that includes any available post-baccalaureate and graduate GPAs, MCAT® scores, life experiences and personal attributes to determine if, on a case-by-case basis, the admissions committee finds a compelling reason to invite the applicant to interview.
• MCAT® Scores - An equally important metric is scores reported for the applicant's performance on the MCAT®. Applicants must take the MCAT® and release score reports to this medical school. Selection of applicants for the medical school class entering in a given calendar year will be based, in part, on MCAT® scores acquired during the previous four calendar years only.

The minimum MCAT® sum (add scores for all sections on any one exam) required for automatic file review and consideration for interviews is 21, provided that no one section score is less than 5 (MCAT®1991 format). The highest MCAT® sum on any single examination will be considered for applicants who report scores for more than one MCAT®. For applicants whose MCAT® score is close to but below this threshold, a file review will be conducted that includes GPAs, life experiences and personal attributes to determine if, on a case-by-case basis, the admissions committee finds a compelling reason to invite the applicant to interview. While initial emphasis is placed on the sum of section scores, individual section scores will be examined for balance.

The typical entering class at this medical school has an average BCPM GPA of 3.6, overall GPA of 3.7 and an MCAT® sum of 28 (MCAT®1991 exam, not MCAT®2015).

Interviews
No applicant is accepted until interviewed by members of the SOM Admissions Interview Subcommittee (IS). Applicants should not present themselves for interviews until requested to do so by the associate dean for medical school admissions.

Selection for Interviews
Criteria for selecting interviewees are established by the SOM Admissions Committee. Selection for interviews is based on a balance between life experiences, personal attributes (those evaluated by reading the AMCAS® application) and metrics. Criteria may vary slightly from year to year depending on the number of applications received and the quality of the applicant pool.

Applicants with minimum metrics (2.8 GPA and 21 MCAT® sum) will automatically have their files reviewed by a File Review Subcommittee (FRS) to determine if there is evidence of life experiences and personal attributes that this medical school values and seeks in its students and graduates. Notable deficiencies in either experiences or attributes may result in applicants with high metrics not being invited to interview.

Applicants whose GPA or MCAT® sum are close to but below thresholds listed above, may have their files reviewed by a FRS to determine if there is compelling evidence of life experiences or personal attributes that this medical school values and seeks in its students and graduates. Notable experiences or attributes may result in applicants with low, but acceptable, metrics being invited to interview.

Multiple Mini Interviews (MMIs)
The MMI consists of a circuit of eight to ten interview “stations”, each of which provides a ten minute scenario-based encounter. Each station has a trained rater who is a member of the Interview Subcommittee; therefore, each applicant will be evaluated by approximately eight to ten different raters. The station scenarios do not test or assess scientific or clinical knowledge; instead, they focus on personal competencies such as oral communication skills, service orientation, respect for others including compassion and empathy, critical thinking and decision making, teamwork, awareness of ethics, maturity, coping skills and opinions on health care issues.

Additional information will be provided to applicants when they are invited to interview and during the admissions interview day program.

Scheduling Interviews
Applicants whom the admissions committee selects are notified to contact the Admissions Office to schedule their interview date. Interviews are generally scheduled two days each month from September through December. MMIs will be conducted at the UMMC Clinical Skills Assessment Center located at the Jackson Medical Mall (see Maps and Directions).

Interview Day Program
All MMI participants must sign a School of Medicine Participant Agreement and Statement of Confidentiality. Applicants will be provided a copy to read and sign during the Registration and Welcome (see below).

The following schedule is for illustrative purposes only. While times beyond registration may vary, it is imperative that applicants plan to arrive well ahead of time to ensure participation in the complete program.

8:00 am  Registration and Welcome
8:30 am  Circuit 1 - MMIs
          Circuit 2 - Admissions Program
10:30 am Circuit 1 - Admissions Program
          Circuit 2 - MMIs
12:30 pm Transportation from Medical Mall to UMMC campus
          Lunch at Student Union
1:30 pm  Tour of UMMC (wear comfortable shoes)
2:30 pm  Transportation from UMMC campus to Medical Mall
Faculty Letters of Evaluation

Evaluations must be written by either faculty who taught the applicant, preferably courses used to satisfy admissions criteria, or faculty who supervised the applicant conducting research outside the classroom. A minimum of three faculty evaluation letters is required; however, one composite evaluation from a pre-professional advisory committee will suffice. Composite letters must contain the names of faculty who participated in the evaluation of the applicant.

All letters must be printed on institutional letterhead, signed by the author(s) and state the course(s) in which he/she taught the applicant.

Letter Content

This medical school seeks information on unique contributions that an applicant might provide to a medical school class and the presence, or absence, of any of the following core, entry-level competencies for entering medical students. Authors are encouraged to consult AAMC Guidelines for Writing a Letter of Evaluation for a Medical School Applicant for details.

Thinking & Reasoning Competencies
- Critical Thinking
- Quantitative Reasoning
- Scientific Inquiry
- Written Communication

Science Competencies
- Living Systems
- Human Behavior

Interpersonal Competencies
- Service Orientation
- Social Skills
- Cultural Competence
- Teamwork
- Oral Communication

Intrapersonal Competencies
- Ethical Responsibility to Self and Others
- Reliability and Dependability
- Resilience and Adaptability
- Capacity for Improvement

Supplemental letters should be kept to a minimum. When appropriate, a supplemental letter from a physician the applicant has shadowed or current employer may be considered by the admissions committee, but it does not replace required faculty evaluations.

Letter Submission

Instructions for submitting letters are provided to applicants in the American Medical College Application Service (AMCAS®) application. In all cases, applicants must provide authors a letter request form generated from the applicant’s AMCAS® application. Letters sent directly to this medical school will not be accepted.

Letters of evaluation can be submitted online as a .PDF file to the appropriate site:
- AMCAS® Letter Writer Application - This application enables letter writers to upload documents securely to AMCAS® rather than send letters via the mail. If you are interested in this option, and can upload a .PDF version of your letter, make note of the requesting applicant’s AAMC ID and AMCAS® Letter ID included in the letter request form.
- VirtualEvals (VE) - VE is available to members of the National Association of Advisors for the Health Professions (NAAHP). If you are a VE user, make note of the requesting student’s AAMC ID and AMCAS® Letter ID included in the letter request form and upload your letter(s) to VE.
- Interfolio - AMCAS® can receive letters sent to Interfolio if the student requesting this letter is an Interfolio user or your institution/organization uses Interfolio to deliver letters of evaluation/recommendation.

Mail hard copy to AMCAS® for scanning into .PDF file. If you select this option, attach the letter request form to your letter(s) and mail to:

Attn: AMCAS Letters
American Medical College Application Services
P.O. Box 18958
Washington, DC 20036

AMCAS® will acknowledge receipt of your letter; this office will not. AMCAS® will load .PDF files into applications and distribute your letter electronically to all medical schools indicated by the applicant in his/her AMCAS® application.

Applicants who reapply must submit new evaluation letters with each application.
Admissions Committee Deliberations

The authority to select applicants for admission to the School of Medicine (SOM) is vested in the admissions committee. This committee is chaired by the associate dean for medical school admissions and composed of members of the basic science and clinical faculty and community representatives appointed by the dean of the school of medicine. No student may enroll for courses in the SOM, either as a regular full-time student or as a special part-time student, without being admitted by the committee.

The medical school Admissions Committee reviews the entire file for every interviewed applicant. Committee deliberations include a discussion of: where an applicant was raised and educated noting financial, educational and socioeconomic advantages and disadvantages; an applicant’s life experiences and personal attributes including scores assigned by the File Review Subcommittee; personal attributes reflected in the written application, performance on multiple mini interviews rated by members of the Interview Subcommittee and faculty evaluations; and academic metrics including trends in GPAs and MCAT® scores. Attention is given to applicants who in the opinion of the Admissions Committee best fulfill the mission and diversity interests of the SOM.

Selection of applicants is made on a competitive basis, without regard to race, color, religion, national origin, age, disability, marital status, gender, sexual orientation or veteran status. Qualified handicapped students will be considered in relation to the technical standards.

Decisions Rendered

Admissions decisions are made on a rolling basis; therefore, the sooner an applicant applies, the earlier his/her file will be reviewed and considered for interviews. If files are complete, applicants are discussed within two to three weeks of interviews and one of three decisions rendered: 1) acceptance; 2) decision postponed; or 3) no position available for this year.

Applicants to the Early Decision Program will be notified as soon as a decision has been rendered; applicants to the Regular Decision and Combined MD/PhD programs will be notified starting October 16 and thereafter as soon as a decision has been rendered. All applicants receive a final disposition of their application not later than March 15. Final notification will be one of the following: 1) acceptance; 2) placement on the alternate list; or 3) no position available for this year.

Alternates will be used to fill any vacancies that may occur if accepted applicants choose not to attend. Any applicant who does not gain acceptance is invited to schedule an appointment after February 15th for post-application counseling on how to improve the competitiveness of their application should the applicant choose to subsequently reapply.

Conditional Acceptance

Acceptance to this medical school is conditional. The admissions committee may rescind an offer of acceptance at any time before matriculation if an applicant fails to maintain expectations upon which the acceptance was based. Examples include, but are not limited to, a significant decline in academic performance, failure to complete prerequisites or other course work and degrees in progress, patterns of unprofessional behavior and incidents discovered in a criminal background check.

Criminal Background Checks (CBCs)

Any preadmission agreement executed by the health care program with a student shall be void if there is a disqualifying incident or pattern of unprofessional behavior in the CBC prior to enrollment. Since clinical rotations are an integral part of the education of medical students at University of Mississippi Medical Center (UMMC), all applicants accepted to the School of Medicine (SOM) must undergo both the CBCs described below.

- **AAMC-Facilitated CBC** - All successful applicants to the SOM undergo a centralized Association of American Medical Colleges (AAMC)-facilitated CBC. Certiphi Screening, Inc., a Vertical Screen® company, will conduct a CBC based on inspection of local, state and national records. Upon initial acceptance to this or any other participating medical school, applicants will be provided electronic access to consent that will give permission to initiate the CBC.

  When the Certiphi CBC is complete, accepted applicants will be given 10 calendar days to review the report on a secure website. Applicants may release reports immediately or contest inaccuracies prior to releasing it to the requesting medical school. If the applicant does not respond within 10 calendar days, the report will be released automatically.

- **Fingerprint-Based CBC** - Effective July 1, 2004, Section 37-29-232 of the Mississippi Code requires that students enrolled in a health care professional academic program undergo fingerprinting and a CBC before any clinical rotation in a licensed health care facility may occur. Independent of the AAMC-facilitated CBC, all accepted applicants must call the SOM admissions office to schedule an appointment with UMMC Human Resources sometime between December 1 and June 1 prior to enrollment so that a set of digital fingerprints and photograph can be acquired. Fingerprint will be submitted to the Mississippi Public Safety Commission and Department of Justice Federal Bureau of Investigation for a criminal background check. If any potentially disqualifying event is reported, Human Resources will mail to the medical school applicant a letter (such as Determination of Non-Suitability for Employment in a Healthcare Facility) indicating that a potentially disqualifying event(s) has been reported and a copy of the criminal history report record. Copies will be sent to the associate dean for medical school admissions. Currently, there is no charge to the applicant for this service.

  The steps involved in evaluating a criminal background history are described in the SOM Procedures for Criminal Background Checks.

- **Subsequent Convictions** - Applicants are responsible for notifying the associate dean for medical school admissions if any further criminal action occurs subsequent to submitting an AMCAS® application or the conduct of CBCs described above. This
includes the following: if you are convicted of, or plead guilty or no contest to, any misdemeanor or felony crime(s) after the date of your submission of the medical school application and prior to your medical school matriculation. Your communication must be in writing, and must occur within 30 days of the occurrence of the criminal action.

Other Nonacademic and Personal Attributes
In addition to interviews, evidence for these attributes is acquired from “work/activities” listed on an applicant’s AMCAS® application. Examples of what the Admissions Committee seeks include evidence of: exposure to clinical medicine (volunteer work or employment at a hospital, clinic, nursing home or hospice, shadowing physicians, participating in medical missions); interaction with diverse people; volunteer service; community activities; leadership; academic pursuits beyond the classroom (such as research); cultural interests and other activities that require commitment of time outside the classroom (employment, athletics, artistic performance). Applicants who acquire such experience while maintaining high academic performance and time management skills possess qualities that can contribute to success in medical school.

RESPONSE TO LETTER OF ACCEPTANCE
Upon notification of acceptance, an applicant will be provided on-line access to Information and Instructions, Statement of Acceptance, Criminal Background Check, Technical Standards, Academic Accommodations, and White Coat Ceremony forms that must be read, completed and submitted electronically within 15 days after the date of notification that the applicant has been accepted. Failure to do so within the specified period may automatically void the offer of acceptance.

- Statement of Acceptance - A form for applicants to indicate their intention to attend this medical school.
- Criminal Background Check Form - A description of CBC policies and procedures for this medical school that includes an applicant’s responsibility to report, to the Associate Dean for Admissions, any incident that occurs subsequent to a CBC check.
- Technical Standards - A description of Technical Standards applicants are expected to meet for admission, retention, promotion and certification as an MD.
- Academic Accommodations Form – A description of Academic Accommodations policies and procedures can be found online.
- White Coat Ceremony Form - A form that enables an accepted applicant to verify the listing of his/her name and specify the size of the coat that he/she will receive at a ceremony held during orientation.

The medical school admissions committee may rescind an offer of acceptance at any time before matriculation if an applicant fails to maintain expectations upon which the acceptance was based. Examples include, but are not limited to, a significant decline in academic performance, failure to complete prerequisites or other course work and degrees in progress, unprofessional behavior and incidents in a criminal background check.

ACCEPTED APPLICANTS
For useful information, accepted applicants are encouraged to consult the web pages of Student Affairs and Academic Affairs.

Contact Information - Accepted applicants must keep all contact information (especially e-mail address, preferred mailing address and telephone numbers) updated in the AMCAS® application until arrival for orientation. Updates must also be provided to the Office of Student Records and Registrar.

Start Date - There is a mandatory orientation and registration for the entering class held in the fall. The Associate Dean for Student Affairs will mail further details during the summer. For questions, call (601) 984-5012.

TUITION AND REQUIRED FEES
Medical school tuition for residents of Mississippi and non-residents is shown in the table below. The tuition assessment includes required registration, laboratory and library usage fees. Medical school tuition is assessed in accordance with financial aid disbursement regulations. Health insurance is mandatory. A group plan is available for UMMC students. Participation in a group disability insurance plan is mandatory for all medical students. Tuition fees for the 2015-2016 year are $25,649 for Mississippi residents. Non-resident tuition fees are $58,114.

A disability insurance fee of $55 per year is assessed with the first tuition assessment. Tuition and fees are subject to change.

Students registered in the combined MD/PhD program will pay graduate tuition for graduate hours and prorated clock hours for School of Medicine courses. A nonrefundable supplemental application fee of $50 is required. Current medical school tuition information can be found on the student accounting website under ‘Doctor of Medicine.’

SCHOOL OF MEDICINE STUDENT HANDBOOK
The purpose of the School of Medicine Student Handbook is to provide students with specific information concerning school policies, regulations and services. As a student at the University of Mississippi School of Medicine, you have a responsibility to read and become familiar with the contents of this handbook and all other such publications distributed by the institution. All members of the Medical Center community endeavor to create and maintain an environment that is safe, friendly, and conducive to learning. Students are provided with a physical copy of the handbook during M1 orientation. This publication is subject to change. The most up-to-date edition can always be found on the School of Medicine’s website.

REQUIRED LAPTOPS
Entering medical students are required to have a laptop computer that meets the annually revised UMMC Minimal Laptop Specifications that are posted on the School of Medicine website. Funds are budgeted in the student financial aid package to cover the cost of a laptop computer. Students should purchase a laptop meeting or exceeding the UMMC Minimal Specifications from
regular retail channels. High-end laptops from any IBM-PC or Apple compatible manufacturer should be acceptable. Students will be personally responsible for maintenance/repair of their laptop. All students are required to maintain up to date virus and spyware detection software to allow access to the UMMC public wireless network. Students should acquire their laptop prior to the first week of August. Students will need to bring their functional laptop to a computer orientation seminar to be held on the last day of registration/orientation before classes.

REQUIRED CLICKERS
Entering medical students are also required to purchase an Interwrite PRS RF Clicker Personal Response System from the UMMC bookstore prior to the beginning of classes. Models from other manufacturers or from previous years will be not compatible with the classroom participation systems in use during medical school classes.

Questions about required products or the laptop specifications should be emailed to Dr. William L. Lushbaugh, School of Medicine, e-Learning Director.

TEXTBOOKS AND SPECIAL EQUIPMENT
Students must provide their own required textbooks and special equipment, including stethoscopes and dissecting instruments, as specified throughout the course of study. These items are normally available through the Medical Center Bookstore.

FINANCIAL AID
The web site for the Office of Student Financial Aid is designed to serve students in all schools at this medical center; however, the information presented below is particularly useful for medical students. Consult Student Financial Aid for general information and access the Incoming Student link and Frequently Asked Questions.

About 90% of first year students at the University of Mississippi School of Medicine receive some form of merit/need based financial aid. Financial aid sources are diverse and include private donations, institutional accounts, state, and federal governmental programs. The most authoritative and up-to-date information is available at the Student Financial Services web site. Questions beyond what is provided here should be directed to Student Financial Aid or (601) 984-1117.

Timeliness for making financial aid awards, mailing statements, posting credits and issuing award checks are approximate; variations may occur due to specific program requirements that this institution cannot control. For example, policies governing military scholarships require the institution to invoice the student for tuition/fees before funds will be provided to credit the account. It is important for students to become familiar with policies governing their specific awards.

Every attempt is made to provide incoming students accurate figures for the cost of attendance and financial aid awards in advance of enrollment; however, these figures are not fully under institutional control. For example, increases in tuition and fees mandated by the Mississippi State Institutions of Higher Learning and increases in medical insurance premiums charged by insurance carriers may not be imposed until the summer before enrollment. Some forms of financial aid may be able to accommodate these increases while others may not.

STATE SCHOLARSHIP AND LOAN PROGRAMS
State Funded Financial Assistance - Under the governance of the Board of Trustees of State Institutions of Higher Learning, the Mississippi Office of Student Financial Aid is responsible for the administration of all state-funded financial aid programs, including grants, scholarships and loans. These funds provide assistance to Mississippi residents in pursuit of their educational and professional goals. Several programs are designated to provide financial assistance to medical students.

State Medical Education Loan/Scholarship - (Family Medicine, Internal Medicine, Obstetrics/Gynecology, Pediatrics) Accepted applicants and matriculated medical students are eligible to apply. Online applications must be submitted to the Mississippi Office of Student Financial Aid before March 31. Applicants accepted to medical school after this deadline (for example, from the alternate list) may still qualify for funds if an online application is submitted before the above deadline. All of these programs incur service obligations in State of Mississippi Physician Shortage Areas. The list of counties that qualify is extensive, but subject to change on an annual basis. For further information, contact Mississippi Office of Student Financial Aid, 3825 Ridgewood Road, Jackson, MS 39211-6453, (601) 432-6997 or (800) 327-2980.

FEDERAL SCHOLARSHIP AND LOAN PROGRAMS
The Direct Unsubsidized Loan - This loan is available to students regardless of income or need. With an unsubsidized loan, you are responsible for all interest that accrues during in-school, grace and deferment periods. You may choose to pay the interest portion only while in school, which would keep your loan balance at principal. If you choose to defer such payments, the interest will be capitalized, resulting in an increase in both total debt and the amount of monthly payments. Loans are usually issued for a single academic year, and both eligibility and amount are redetermined annually throughout your academic career.

Your Direct Loan eligibility is determined by the Financial Aid Office and is based on information you provided in the Free Application for Federal Student Aid (FAFSA). Federal criteria include:
- Enrollment in an eligible school at least half-time in a degree program
- U.S. citizenship, permanent residency, or eligible noncitizen status
- Satisfactory academic progress (as determined by the Office of Financial Aid)
• No unresolved defaults or overpayments owed on Title IV educational loans and grants
• Satisfaction of all Selective Service Act requirements

**Federal Perkins Student Loan** – This program provides low interest loans to help needy students finance the costs of postsecondary education. The school's revolving Perkins loan fund is replenished by ongoing activities, such as collections by the school on outstanding Perkins loans made by the school and reimbursements from the Department for the cost of certain statutory loan cancellation provisions. Students must file a Free Application for Federal Student Aid (FAFSA) as part of the application process. Students also will need to complete a Perkins promissory note in order to receive a loan.

**Federal Scholarships/Loans for Disadvantaged Students** - The University of Mississippi School of Medicine annually applies to the U.S. Department of Health and Human Services (HHS) Bureau of Health Profession's (BHP) Division of Health Careers Diversity and Development (DHCCDD) for funds to assist needy students finance their medical school education. The amount of funds awarded to the institution varies each year based on: availability, the proportion of graduated students going into primary care, the proportion of underrepresented minority students, and the proportion of graduated students going into medically underserved communities. Permitting funding, you are eligible to apply for Scholarships for Disadvantaged Students (SDS) and Loans for Disadvantage Students (LDS) funds if you:

- have been accepted to or are currently enrolled in this medical school;
- are a citizen, national, or a lawful permanent resident of the United States or the District of Columbia, the Commonwealths of Puerto Rico or the Marianas Islands, the Virgin Islands, Guam, the American Samoa, the Trust Territory of the Pacific Islands, the Republic of Palau, the Republic of the Marshall Islands and the Federated State of Micronesia; and
- are from an environmentally or economically disadvantaged background.

Participating medical schools are responsible for selecting SDS and LDS recipients, making reasonable determinations of financial need, and providing funds that do not exceed the cost of attendance (tuition, reasonable educational expenses and reasonable living expenses).

## EXTERNAL SOURCES OF FUNDS

**American Medical Association [AMA] Fund** - The AMA Foundation created several scholarship opportunities designed to help students face the financial challenge of paying for a medical school education. Additional information is available online which provides a comprehensive list of AMA financial aid resources, including information about medical education financing and student debt, as well as information on a variety of scholarships and service opportunities.

- **The Physicians of Tomorrow Scholarship** (formerly known as The National Scholarship) - This $10,000 scholarship was created in 2004 by the AMA Foundation as part of its ongoing effort to provide financial assistance to medical students facing a spiraling debt load. In its first year, one scholarship was awarded; since then, the Foundation has expanded the program and more scholarships have been added. The Physicians of Tomorrow Scholarship provides the highest level of tuition assistance available from the Foundation to a deserving student enrolled in an accredited United States medical school, based on financial need or academic excellence. All nominees must be rising seniors (M3 students). UMMC may nominate one student. **Deadlines: UMMC May 1, AMA May 29**

- **Minority Scholars Award** - Ten $10,000 scholarships are available to students underrepresented in the medical profession. Eligible students of minority background include African American/Black, Native American, Native Hawaiian, Alaska Native and Hispanic/Latino. The selection of awards is based on a combination of financial need, academic excellence and promise for the future. Nominees must be rising-second or rising-third-year medical students. Each medical school dean may nominate two candidates for this scholarship. **Deadlines: UMMC March, 15 AMA April 15**

Questions about these scholarship opportunities should be directed to Dina Lindenberg, Program Officer, (312) 464-4193.

Application materials are available from the Associate Dean for Medical School Admissions.

**The American Medical Association-Educational Research Foundation** loan program is a source for loans to medical students, interns, and residents. Students are eligible to apply for loans upon the successful completion of two or more quarters of medical school.

**Greenwood Leflore Hospital Educational Reimbursement Agreement** - This program will provide the cost of medical school attendance for an African American medical student at least 21 years old who upon completion of his/her educational and residency requirements will serve as a licensed physician employed by the hospital in Greenwood, MS, or as a member of hospital's active medical staff in private practice in the hospital’s service area as a participating provider in Medicare, Medicaid and similar programs for a period of five years (60 consecutive months). Reimbursement for educational expenses previously paid is available. Additional information and a copy of the agreement are available from the Associate Dean for Medical School Admissions.

**Mississippi Rural Physicians Scholarship Program** - In 2007, the Mississippi Legislature created the Mississippi Rural Physicians Scholarship Program, creating a unique longitudinal program that identifies rural college students who aspire to return to their roots to practice medicine. Academic enrichment, faculty and physician mentoring plus solid medical school financial support through the Mississippi Rural Physicians Scholarship Program will enable capable young Mississippians to address the challenge of Mississippi's healthcare crisis.

Additional information is available online and Mississippi Rural Physicians Scholarship Program, University of Mississippi School of Medicine, 2500 North State Street Jackson, MS 39216-4505, 601. 815.9022.
The Armed Services Health Professions Scholarship Program through the Army, Navy, Air Force and the USPHS offers Health Professions Scholarships to students interested in serving in the military. Students are required to serve a year as a commissioned officer for each year of participation in the program, with a two-year minimum. These scholarships provide tuition, other academic fees, required books, required equipment, and a monthly living stipend.

UMMC INSTITUTIONAL SCHOLARSHIPS

(Scholarships awarded on merit, no application necessary)

James T. Baird Memorial Scholarship Fund was established in 2000 through a gift to the Medical Center. At least one scholarship is available each year in the School of Medicine. All recipients must be in good academic standing, and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

Thomas M. Blake Dean's Merit Scholarship was established in 2003 to recognize a medical student who demonstrates an ability and willingness to accept responsibility, exercise initiative, and utilize innovative approaches.

Frank Bradley Baker Memorial Scholarship is a scholarship endowment sponsored by the Class of 1965 of the School of Medicine to honor and memorialize their deceased classmate, Frank Bradley Baker. This scholarship is administered by the School of Medicine Loan and Scholarship Committee according to the criteria developed by the Class of 1965. It is awarded to the sophomore with the highest academic average for the preclinical years.

Maribel Barber Scholarship in Medicine was established in 1972 through a bequest to the University of Mississippi for outstanding medical students who are legal residents of Mississippi. Four-year scholarships are awarded. Recipients are selected for their scholastic promise and leadership qualities. To retain the award in succeeding years, the recipient must maintain satisfactory academic progress during formal preparation for a career in medicine.

Bryan Barksdale, MD, School of Medicine Scholarship, made possible by the Barksdale Foundation Account, is awarded to a first-year medical student who is a Mississippi resident. The Barksdale Foundation Account provides scholarships to promote excellence among School of Medicine students and to achieve educational benefits to students derived from a diverse student population. Recipients are selected by the School of Medicine Scholarship and Awards Committee. Selection is based on prior academic achievement, the student's potential for success in medicine, and accepted institutional financial aid guidelines. The scholarship is renewable each year as long as the recipient remains in good academic standing. Recipients must commit to reside and practice medicine in Mississippi for a period of five years.

Jim and Donna Barksdale School of Medicine Scholarship, made possible by the Barksdale Foundation Account, is awarded to first-year medical students who are Mississippi residents. Recipients are selected by the School of Medicine Admissions Committee. The purpose of the scholarship is to recognize men and women with superior academic achievement and outstanding experiences in healthcare, service and leadership who will potentially impact the medical school class and practice of medicine in Mississippi. The scholarship is renewable each year as long as the recipient remains in good academic standing. Recipients must commit to reside and practice medicine in Mississippi for a period of five years.

Max, Doris and Jewel Blackmon Trust Fund Scholarship provides scholarships for outstanding medical students enrolled in this School of Medicine who have been selected by the Scholarship and Awards committee on the basis of academic potential or financial need. The scholarship may be renewed annually if the student remains in good scholastic standing. Preference is given to students who intend to practice in Mississippi.

A. Wallace Conerly M.D. Scholarship, which honors Dr. Conerly's service as Vice Chancellor for Health Affairs and Dean of the School of Medicine from 1994-2003, provides both medical and graduate tuition for outstanding MD/PhD students.

John C. and Nina S. Culley Memorial Scholarship was established in 1968 through a $50,000 bequest from Dr. John Culley to the University of Mississippi. When earnings permit, the scholarship is awarded to the top premedical student at the University of Mississippi who applies to the University of Mississippi School of Medicine by November 1 of the year preceding admission.

Hattiesburg Physicians' Scholarship was established in 1983 by the Board of Directors of the Hattiesburg Community Blood Center, Inc. Award recipients must be sophomores or juniors in the upper one-third of their class. Preference is given to medical students from the Hattiesburg area.

Robert M. Hearin Support Foundation Minority Scholarship is available to three minority students in the School of Medicine M1 class every year who, in the opinion of the Admissions Committee, are most likely to provide health care to underserved Mississippians.

Robert M. Hearin Support Foundation Scholarships, established by the Robert M. Hearin Support Foundation, are awarded to outstanding students selected on the basis of their premedical record and financial need.

F.A. Hunt Scholarship was established through a bequest from Fannie Gordon Hunt to honor her husband. It is awarded annually on the basis of academic excellence.

Dr. M. Winter Jackson Medical Scholarship is awarded to a third-year student on the basis of academic standing, potential for growth and development in the chosen field and need. In the first year the scholarship is awarded, a fourth-year recipient also will be chosen. In subsequent years, the third-year student selected to receive the scholarship also will receive it in the fourth year of medical school if he/she continues to meet the criteria.

Dr. and Mrs. Henry O. Leonard Scholarship Fund was established in June 1988, by Helen G. Snider in memory of her aunt and uncle. Dr. Leonard was in general practice in Coffeeville for many years. Juniors in good academic standing with proven financial need are
eligible for the Leonard Scholarship. Recipients must plan to go into the practice of family medicine and must commit to practice in state for a period of five years following graduation and residency training.

John F. Lucas Sr., MD, Scholarship was established by family and friends of Dr. Lucas, an obstetrician-gynecologist in Greenwood for more than 48 years. Incoming freshmen from Leflore, Sunflower, Washington, Bolivar, Humphreys and Yazoo counties are eligible. Selection is based on financial need.

James A. McDevitt, MD, Medical Scholarships, established through a bequest from Alma Valentine McDevitt in memory of her husband, are awarded to worthy and deserving medical students. The scholarships are renewable for each year of medical school provided the recipient maintains good academic standing.

Fred McDonnell, MD, School of Medicine Scholarship, made possible by the Barksdale Foundation Account, is awarded to a first-year medical student who is a Mississippi resident. The Barksdale Foundation provides scholarships to promote excellence among School of Medicine students and to achieve educational benefits to students derived from a diverse student population. Recipients are selected by the School of Medicine Scholarship and Awards Committee. Selection is based on prior academic achievement, the student’s potential for success in medicine, and accepted institutional financial aid guidelines. The scholarship is renewable each year as long as the recipient remains in good academic standing. Recipients must commit to reside and practice medicine in Mississippi for a period of five years.

Medical Alumni Scholarship is awarded to a rising M3 who is in the top half of his or her class, has no other M3 scholarship, and intends to practice in Mississippi after completing all training.

Medical Reunion Scholarship, established in 1996 by the Medical Alumni Chapter, is awarded to a medical student based on academic criteria and financial need.

Miller-Pittman Medical Scholarship was established through a bequest from the late Mary Eugenia Miller. The scholarship is designed to assist “deserving medical students enrolled in the School of Medicine.”

Mississippi Medical and Surgical Association Scholarship Fund is applied toward tuition. Preference is given to an incoming M1 who is an African American or represents another minority group.

Don Mitchell, MD, School of Medicine Scholarship, made possible by the Barksdale Foundation Account, is awarded to a first-year medical student who is a Mississippi resident. The Barksdale Foundation provides scholarships to promote excellence among School of Medicine students and to achieve educational benefits to students derived from a diverse student population. Recipients are selected by the School of Medicine Scholarship and Awards Committee. Selection is based on prior academic achievement, the student’s potential for success in medicine, and accepted institutional financial aid guidelines. The scholarship is renewable each year as long as the recipient remains in good academic standing. Recipients must commit to reside and practice medicine in Mississippi for a period of five years.

Nina Bess Goss-Moffitt, MD, Scholarship, established by Dr. Ellis M. Moffitt in 1999 in memory of his wife, Dr. Nina Bess Goss-Moffitt, who was a longtime member of the Medical Center Department of Psychiatry and Human Behavior faculty. The scholarship is awarded on the basis of need and potential for successful completion of the four-year curriculum. Recipients will receive the Goss-Moffitt scholarship each year in medical school if they remain in good academic standing.

Norman C. Nelson, MD, Scholarships, established as the Dean’s Scholarships in 1988, were designated in the name of Dr. Norman C. Nelson in 1994, in honor of his 21-year tenure as Vice Chancellor for Health Affairs and Dean of the School of Medicine. Nelson Scholarships are awarded to superior students who have exceptional academic potential. The scholarship is renewable each year if the recipient remains in good academic standing.

Orr-Russwurm Memorial Scholarship Fund provides financial support to a student in any medical center school planning a full- or part-time career in Christian missionary work.

William K. Purks, MD, Scholarship, established by the Vicksburg Hospital Medical Foundation in 1990, is awarded to a freshman medical student selected on the basis of outstanding academic achievement, character, and potential in the field of medicine. This scholarship may be renewed for each year of medical school.

Regions Bank Scholarship, established in 1986, goes to a senior in recognition of outstanding academic achievement and promise in the field of medicine.

Ottlie Schillig Memorial Scholarship Fund was established in 1984 through a gift to the Medical Center from the Schillig Trust. Miss Schillig, a native of Port Gibson, was a noted concert singer. At least one scholarship is available each year in the School of Medicine. All recipients must be in good academic standing, and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

Robert E. and Margaret Shands Memorial Fund was established in 1963 by Mrs. Robert E. Shands in memory of her husband, Dr. Shands, a medical certificate alumnus of the University of Mississippi School of Medicine, who had served as president of the Medical Alumni Chapter. This scholarship fund exists to provide financial assistance to students of medicine. The Shands children redesignated the scholarship as a memorial to both their parents in 2000.

E.H. Sumners Foundation Scholarships were established in 1977 by Mrs. E.H. Sumners of Eupora, MS, to provide scholarship assistance for students from Webster, Montgomery, Attala, Carroll and Choctaw counties who are enrolled at the University of Mississippi Medical Center.

Trustmark National Bank Scholarship, established in 1988, is awarded to a junior medical student in recognition of scholastic excellence.
Helen Reeves Turner, MD, PhD Scholarship was established in 2013 and is awarded each year to a deserving student from one of the Medical Center Schools. The recipient of this award, selected by the dean or his designee, exemplifies Dr. Turner’s outstanding attributes of leadership, education and service.

Pearl L. and Otis Walters Scholarship was established by a bequest from the Walters to the University of Mississippi Foundation.

John Houston Wear Foundation Scholarships were established by the Wear Foundation to aid worthy students. These scholarships are awarded for academic excellence.

L.D. Webb, MD, Memorial Scholarship was established with a bequest from Dr. Webb in 1990. A two-year alumnus of the Ole Miss School of Medicine who earned his MD at the University of Tennessee, Dr. Webb was in family practice in Calhoun City for more than 35 years. First-year students who demonstrate financial need and academic promise are eligible for this scholarship renewable for each year of enrollment if the student remains in good academic standing. Preference is given to students from northeast Mississippi.

Dr. Bill Weatherford Memorial Scholarship, which is awarded annually, was established in 1984. The recipient must be a Jackson County resident with demonstrated financial need.

Lettie Pate Whitehead Scholarship was established by the Lettie Pate Whitehead Foundation. These awards are available to female medical students who show evidence of financial need.

Hazel Wilmington Medical Scholarship, established in 1992, is awarded to a freshman medical student based on demonstrated financial need and overall promise in the field of medicine. The award is renewable each year if the recipient maintains good academic standing.

UMMMC INSTITUTIONAL LOAN FUNDS

Idalou Bagley Memorial Cancer Educational Loan Fund was established by Clara Bagley in memory of her sister, Idalou Bagley. Recipients should be in their fourth year of medical school and display an interest in cancer research or cancer diagnosis and treatment.

Googe Memorial Medical Loan Fund was established in 1979 by family of the late Dr. and Mrs. George W. Googe of Rienzi. Dr. Googe practiced medicine in Northeast Mississippi for more than 50 years. Students who have successfully completed at least two quarters in medical school may apply. Applicants must show evidence of financial need and be in good academic standing. Preference is given to applicants from Alcorn and Prentiss counties.

Robert Wood Johnson Loan Fund, made possible by the Robert Wood Johnson Foundation, provides low interest loans to medical students who show evidence of financial need.

Kellogg Loan Fund was established in 1942 by the W.K. Kellogg Foundation as a loan fund of $10,000 for the purpose of providing loans for assistance to medical students.

Levine Loan Fund, established by the late Dr. Julius Levine, is available to junior and senior medical students who are native Mississippians and who show evidence of financial need.

George C. and Laura B. McKinstry Scholarship/Loan Fund was established in 1973 by Dr. McKinstry in memory of his father and mother to provide low-interest loans to needy students in the School of Medicine and the Graduate Programs.

G.D. Shands Memorial Loan Fund was established in 1943 by Dr. and Mrs. Paul Hill Saunders in memory of Mrs. Saunders’ father, Lt. Gov. Garvin D. Shands, who for many years was Dean of the University of Mississippi School of Law. This fund exists for the benefit of medical students.

R.J. Nichols Loan Fund was established in memory of Dr. R.J. Nichols to provide loans to medical students who demonstrate financial need and academic promise.

J.K. Oates Loan Fund was established in 1957 in honor of Dr. J.K. Oates to provide loans to worthy medical students.

HONOR SOCIETIES

Alpha Omega Alpha – a national honorary medical society installed on the Medical Center campus in 1958. Undergraduate membership is based entirely on scholarship, personal honesty and leadership potential. Alumnus membership is granted for distinctive achievement in the art and practice of scientific medicine and honorary membership is granted to eminent leaders in medicine and allied sciences.

The Society of the Sigma Xi – a national honorary society installed on the Medical Center campus in May 1967. The society is dedicated to the encouragement of original investigation in the pure and applied sciences. Membership requirements include noteworthy achievement as an original investigator in a pure or applied science.

Phi Kappa Phi – a national honorary scholastic fraternity installed on the Oxford campus in 1959. It is open to those medical, dental, graduate, nursing and health related students who qualify.

Gold Humanism Honor Society - a national honorary society installed on the Medical Center campus in 2005. This society honors senior medical students, residents, role-model physician teachers and other exemplars recognized for demonstrated excellence in clinical care, leadership, compassion and dedication to service. Members are selected by a peer nomination and faculty nomination process.
PROFESSIONAL ORGANIZATIONS
Active chapters of the American Medical Association-Medical Student Section and the Student National Medical Association provide students with the opportunity to participate in a variety of programs.
Through the University Medical Society, a component society of the Mississippi State Medical Association, official voting delegates participate in the House of Delegates of the Mississippi State Medical Association.
Medical students also participate as voting delegates of the Organization of Student Representatives of the Association of American Medical Colleges.
There are active organizations for spouses of medical students to promote closer friendship through informational programs and service projects to help prepare them for their roles in the health care community.

THE MEDICAL ALUMNI GUARDIAN SOCIETY
The society is a special organization sponsored by the medical alumni to encourage extraordinary giving by alumni, friends and faculty of the School of Medicine. The gifts, representing either current or deferred contributions, may be restricted or undesignated. The membership holds the responsibility of insuring that available funds are distributed to the School of Medicine as well as serving as trustee for specially designated charitable programs.

AWARDS AND PRIZES
Alford Memorial Award, established by the Class of 1967 in memory of Raymond Alford, consists of a plaque on which is engraved the name of the medical student who achieves the highest academic record during the freshman year.
Chris Allenburger Memorial Award, established in 1986 by Dr. and Mrs. Gray Hilsman, is a cash prize awarded to a senior medical student or a resident who best displays clinical skills indicative of the courage, dedication, empathy and love shown by Chris Allenburger.
Alpha Omega Alpha Student Scientific Award, given by the Mississippi chapter, consists of a certificate and cash prize awarded annually to a medical student for the best original paper.
American Medical Association Scholars Fund Award is made possible by gifts to the foundation from state physicians and the Mississippi State Medical Association Alliance. The award is presented to a student for superior academic performance to offset tuition expenses.
American Society of Clinical Pathologists Award is given to a capable sophomore medical student who shows special promise for a career in pathology. The award includes a book provided by the American Society of Clinical Pathologists and a certificate from the Department of Pathology.
Blair E. Batson Award for Excellence in Pediatrics recognizes a senior whose clinical performance and devotion to pediatrics are judged superior in the class by the pediatric faculty. It is given to honor Dr. Blair E. Batson, first chairman of the Department of Pediatrics.
Thomas M. (Peter) Blake, M.D. Award, established in 2001 by the Department of Medicine in memory of Dr. Peter Blake who served as the course director for Physical Diagnosis from 1955-90. This award consists of an engraved plaque, cash and a textbook on advanced physical diagnosis and is presented to a medical student in recognition of academic excellence in the Introduction to Clinical Medicine course, and a pursuit of knowledge, professionalism, and reliance on self rather than others in the ultimate achievement of his/her own goals.
Thomas J. Brooks Jr. Award in Preventive Medicine, established to honor the first chairman of the Department of Preventive Medicine and sponsored by the department and Connaught Laboratories, Inc., is awarded annually to a junior who has demonstrated excellence in the course composing the preventive medicine block the previous academic year.
Margie Bulboff Award established in 2001 by the Office of Alumni Affairs in honor of Margie Bulboff, a long-time Department of Pathology employee and friend to generations of medical students. This $1,000 scholarship goes to a second-year medical student in good standing who successfully balances the demands of the educational program with family, community, philanthropy and intramural activities. The Bulboff Award is presented on Honors Day.
CIBA Award is presented to a sophomore medical student selected by the class members in recognition of outstanding community service.
Clinical Skills Assessment Award recognizes a senior student for outstanding performance on the end of third-year Clinical Skills Assessment exam. The exam is designed to teach and evaluate students’ clinical skills including verbal and written communication, history, and physical examination, differential diagnosis and professionalism.
Dr. Wally Conerly Community Service Award is presented to a third- and/or a fourth-year medical student who most exemplifies Dr. Conerly’s outstanding attributes of leadership and community outreach and service. The award is sponsored by the Mississippi State Medical Association.
Virginia Covington and Kay Fulton Award was established by the Class of 2006 and consists of a cash prize and certificate given to a medical student participating in a medical mission trip. The recipient should be viewed as a role model and demonstrate a compassion for others.
Dean’s Awards are presented annually to selected students with outstanding academic records from the M1, M2 and M3 years. These awards currently are $1,000 for each of the recipients. Awards are subject to renewal provided the recipient maintains academic standing in the upper one-third of the class.

Charles L. Dodgen Memorial Award is given to a third-quarter freshman in memory of Dr. Charles Dodgen, who served on the UMMC Biochemistry faculty from 1958 to 1980. At the time of his death, he was chairman of the Admissions Committee. Recipients of this award are chosen on the basis of overall performance and professional potential.

Daryl Douglas Memorial Award, established by the Class of 1978 in memory of Daryl Douglas, a classmate, consists of a plaque on which are engraved the names of sophomore students who most consistently demonstrate readiness to serve and assist their classmates in the pursuit of medical knowledge and skills.

Medical Student Service Award in Emergency Medicine is presented to a senior medical student interested in emergency medicine for recognition of outstanding care to patients in a manner that exemplifies professionalism and a humanistic approach to patients, their families, and fellow health care workers.

Excellence in Emergency Medicine Award is presented to a senior medical student who has demonstrated outstanding proficiency in emergency medicine.

Carl Gustav Evers Award was established in 1993 by the Mississippi State Medical Association Foundation in memory of Dr. Evers, who was professor of pathology and Associate Dean for Academic Affairs in the School of Medicine at the time of his death in November 1992. This award is given to a senior medical student who has demonstrated qualities of scholarship, peer to peer support, and exceptional leadership in student activities of the American Medical Association and the Mississippi State Medical Association.

Leonard W. Fabian Award, established in 1992 by the Department of Anesthesiology to honor its first chairman, consists of a certificate and cash award. It is presented to a senior medical student in recognition of outstanding achievements in anesthesiology.

Family Medicine Award, sponsored by the Department of Family Medicine and the Mississippi Academy of Family Physicians, goes to a senior who demonstrates excellence in family medicine. It includes a cash prize, textbook and inscription of the student’s name on a plaque.

William B. Gallagher Award, established in 1969 in memory of Dr. William B. Gallagher, is a cash prize given to the senior considered most outstanding in obstetrics-gynecology.

Ernest W. Goodpasture Award is given to the sophomore pathology student with the highest grade in pathology. The tangible components of this award are a cash prize and a certificate, both from the Department of Pathology.

James E. Griffith Pulmonary Award is sponsored by the Mississippi Thoracic Society and is in memory of Dr. James E. Griffith. It is given yearly to a fourth-year medical student who shows interest in pulmonary medicine.

William Forrest Hutchison Memorial Award was established in 1996 in memory of Dr. William Forrest Hutchison by his family. Dr. Hutchison was a member of the School of Medicine faculty from 1955 until 1990. The award is given to a sophomore in the top 25 percent of the class who demonstrates excellence in and a commitment to community service.

Donald T. Imrie Award, established by the Department of Orthopedic Surgery to honor Dr. Imrie, is a $250 prize and certificate awarded to a senior for outstanding performance in orthopedics.

Waller S. Leathers Award is a medal given on Commencement Day to the graduating student with the highest academic average for the four years in medical school. The medal is awarded in memory of the first dean of the School of Medicine, Waller S. Leathers, MD.

Lippincott, Williams and Wilkins Book Awards are for academic excellence in the anatomical sciences. One award is given to the medical student with the highest academic standing in gross anatomy and neurobiology and the second to the highest ranking student in medical histology.

Blanche Lockhard Scholarship Endowment in Medicine provides an annual award toward tuition for a deserving female medical student. Dr. Lockhard was an obstetrician-gynecologist and a longtime member of the School of Medicine’s clinical faculty.

Robert A. Mahaffey Jr. Memorial Award, established in 1976 in memory of graduate student, Robert A. Mahaffey Jr., includes a cash prize, certificate and plaque. The award goes to a PhD candidate chosen for exceptional research potential by the graduate faculty in pathology.

McGraw-Hill, Merck and Lange Book Awards consist of medical books presented to senior, junior, sophomore and freshman students in recognition of scholastic excellence.

J.P. "Jake" Mills Award in Obstetrics and Gynecology was established in 2000 in memory of J.P. "Jake" Mills of Tupelo, who served on the Board of Trustees of Institutions of Higher Learning from January 1992, until his death April 17, 1999. Students eligible for this award are seniors who have matched for residency training in obstetrics and gynecology. Preference is given to those students who plan to practice in Mississippi.

Mississippi Eye, Ear, Nose, Throat Society Awards are given to two senior medical students for excellence in otolaryngology and ophthalmology. The awards consist of plaques on which the names of recipients are inscribed.

Mississippi Psychiatric Association Outstanding Senior Award is a certificate awarded to the senior with the most outstanding clinical and academic record in psychiatry.

Neuroscience Research Award, sponsored by the Mississippi Chapter, Society for Neuroscience, consists of a cash prize and certificate, and recognizes meritorious research in the neurosciences.

Department of Ophthalmology Award is a cash prize and award given to a senior medical student for excellence in the field of ophthalmology.
Department of Otolaryngology and Communicative Sciences Award is a book award and certificate given to a senior medical student for excellence in the field of otolaryngology.

David S. Pankratz Scholarship, awarded in memory of the first dean of the four-year School of Medicine and first director of the Medical Center, is a cash prize given to a sophomore student in recognition of outstanding academic achievements in the freshman medical year.

Department of Pathology Prize consists of a cash prize presented to the sophomore student or students with superior scholastic performance in pathology.

Powell Award for Excellence in Family Medicine is sponsored by the Mississippi Academy of Family Physicians. A cash prize and textbook are presented to the senior student demonstrating excellence in family medicine. The recipient’s name is engraved on a plaque.

Brenda Joy Nicholson Pritchard Scholarship Fund was established in 1999 with a bequest from the estate of Sarah Margaret Ridgell Nicholson and named for her daughter, a graduate of University Medical Center School of Medicine and Pathology Residency. This scholarship is given to a deserving medical student ranked in the top half of the class with financial need.

Professor of the Year Awards were established by the University of Mississippi Medical Alumni Chapter and consist of a cash prize in recognition of teaching excellence. The clinical professor is selected by the senior class and the preclinical professor by the sophomore class.

Joey Purvis Memorial Fund Award honors Joey Purvis, a member of the Class of 2002, who was killed in an automobile accident while in route to Pennsylvania State University Medical Center to interview for an ob-gyn residency position. This award goes to a medical student who best exemplifies Joey’s caring concern for patients and fellow students.

Rear Admiral Dennis Wright Military Medical Student Award honors Rear Admiral Dennis Wright, a 1968 graduate of the School of Medicine, and is presented to a medical student enrolled in a military program, in recognition of outstanding achievement in medical course work.

Rice-Holland Memorial Award, established in memory of Dr. James C. Rice and Dr. William C. Holland, former chairmen of the Department of Pharmacology and Toxicology, consists of a cash prize awarded to an outstanding medical student in pharmacology.

Curtis Delgadillo Roberts MD, Scholarship in Medicine honors the memory of a longtime Brandon family physician who died in 1989. The scholarship is awarded on the basis of exceptional merit and/or exceptional need and potential for successful completion of the four-year curriculum. Preference is given to Rankin County residents.

Stanley C. Russell Award was established by Dr. Russell’s family in 2001 in celebration of his 70th birthday. Eligible students are seniors who plan to go into a residency in family medicine. Selection is based on academic excellence, character, bedside manner and commitment to practice in a rural area of Mississippi. The Russell Award is presented on Honors Day.

W.B. Saunders Medical Physiology Award consists of a book award and framed certificate presented to the medical or graduate student with superior scholastic performance in the medical physiology course.

Sigma Xi Student Research Awards consist of a certificate and a cash prize awarded annually to a medical student and a graduate student for the best original research work.

Robert D. Sloan Award honors the first chairman of the Department of Radiology. It includes a textbook and plaque and goes to the senior considered most outstanding in radiology.

Mark T. Smith Memorial Award was established by the Class of 2000 in memory of Mark Thompson Smith, a classmate, to a medical student with a true caring Christian spirit and attitude towards classmates, instructors, and patients; with intellectual curiosity in the field of medicine, and enthusiasm for life with a heartfelt smile even when confronted with a challenge.

J. Robert Snavely Award, established in memory of Dr. J. Robert Snavely, first chairman of the Department of Medicine, consists of an engraved wristwatch and plaque awarded to a senior medical student for outstanding scholastic achievement in internal medicine.

Department of Surgery Prize is awarded to the senior medical student for outstanding performance in surgery during the clinical years.

Virginia Stansel Tolbert Award, sponsored by the Mississippi State Medical Association, is a cash prize and plaque given to a medical student who has demonstrated superior scholarship and leadership in campus activities. Additionally, the recipient must exhibit interest in issues which affect the profession and willingness to devote time and effort to those matters.

Helen R. Turner Academic Medicine Award, established in 2012 by the University of Mississippi School of Medicine, honors Dr. Helen Turner and her contributions to academic medicine, which have laid a foundation for success to benefit the next generation of health care professionals, their future patients, and the communities in which they will serve. This award is presented to a fourth year medical student selected on the basis of demonstrated promise in the field of academic medicine.

Jimmy Waites, MD, Student of the Year Award, sponsored by the Mississippi Physicians Care Network and the Medical Alumni Chapter, consists of a cash prize and plaque designation. The award honors the memory of Dr. Waites who was a longtime family physician in Laurel and a member of the School of Medicine's second graduating class. The award is presented to a graduating senior medical student selected by the senior class in recognition of those qualities most desired in a physician - which Dr. Waites so exemplified.
ANESTHESIOLOGY
Douglas R. Bacon, MD, MA, Professor and Chair

FACULTY

Professors:
Claude Brunson, MD  Ike Eriator, MD, MPH  Mahesh Mehta, MD
Luiz De Lima, MD  Anna Lerant, MD

Associate Professors:
Ines Berger, MD  Daniel Castillo, MD  Douglas Maposa, MD
Arthur Calimaran, MD  Candace Keller, MD, MPH  Natesan Manimekalai, MD

Assistant Professors:
John Adams, MD  Pankaj Jain, MD  Madhankumar Sathyamoorthy, MD
Suwarna Anand, MD  Lakshmi Kurnutala, MD  Ramarao Takkalapalli, MD
Harris Baig, MD  Marissa Lyttle, MD  Henrique Vale, MD
John W. Bethea Jr., MD  Olga Ostrovyk, MD  Cynthia Vaughn, MD
Irina Borissova, MD  Kenneth Oswalt, MD  Todd Versteegh, MD
Karen Page Branam, MD  Leticia Otchere-Darko, MD  Juan Villani, MD
Y. Melissa Chan, MD  Anand Prem, MD  Mack Woo, MD
Raouf F. Daoud, MD  Iliana Ramirez-Saldana, MD  Sloan Youngblood, MD
Semyon Fishkin, MD  Charles Robertson, MD
William Hulett, MD  Anesh Rugnath, MD

Instructors:
Xioali Dai, MD

THIRD YEAR
ANES 630. SURVEY OF ANESTHESIA.  A two-week elective course for students with an interest in Anesthesiology. The goals of the course are to introduce M3 students to the daily practice of anesthesiology and to improve the student’s understanding of the diagnosis and treatment of pain, including the psychosocial and economic impact of pain on the patient and society. The student will spend time with practitioners in several subspecialties (pediatrics, chronic pain management, general and obstetrical anesthesiology) learning about the specialty and discussing how anesthesiology fits into and helps fulfill their life goals. (Six (6) students each rotation unless special permission granted by course director. Available all rotations.)

FOURTH YEAR
ANES 651. CLINICAL ANESTHESIOLOGY.  A one-month elective affording an overview of and introduction to anesthesiology. Under direct supervision, students will undertake “hands-on” participation in all parts of anesthesia care with particular emphasis on: preoperative evaluation/preparation, vascular access, airway maintenance (including intubation), physiology and pharmacology of anesthesia care and patient homeostasis (including vasoactive drugs) monitoring, and immediate postoperative management. Attendance is required at all departmental didactic sessions and special student lectures. This course is oriented to the student who is seriously considering Anesthesiology as a specialty. (One (1) student each month. Available all months except July and August unless special permission granted by course director.)

ANES 652. PAIN MANAGEMENT.  The purpose of this course is for medical students to develop an understanding of the knowledge and skills related to the practice of pain management and to facilitate a greater understanding of the contributions of pain management in the health care system. Students will participate in all aspects of pain management: acute, chronic and cancer pain. Students will learn the concept of pain as a multidimensional experience. They will participate in the evaluation and treatment of complex pain patients. This rotation is for any medical student with an interest in chronic pain management regardless of planned specialty. (One (1) student each month unless special permission granted by course director. Available all months.)

ANES 653. ANESTHESIOLOGY AND PERI-OPERATIVE MEDICINE.  A one-month elective that will provide a broad overview of all aspects of peri-operative medicine and is equally applicable to the students interested in anesthesiology and those pursuing other specialties. The course is divided into 4 one-week phases, which include general adult anesthesiology, pediatric anesthesia, obstetrical anesthesia, and pain management. Techniques of airway management, invasive line placement, EKG interpretation, general and regional anesthesia techniques, cardiac output measurement, and concepts of pain management will all be extensively reviewed. (Six (6) students each month unless special permission granted by course director. Available all months except May, July and August.)

ANES 851 AND 852. ANESTHESIA EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)
BIOCHEMISTRY
John J. Correia, PhD, Professor and Interim Chair

FACULTY

Professors Emeriti:
Steven Thomas Case, PhD
Connie McCaa, MD, PhD
Mona Trempe Norcum, PhD

Professors:
Azzedine Atfi, PhD
Jonathan P. Hosler, PhD
David T. Brown, PhD
Sharon Lobert, PhD
Michael D. Hebert, PhD

Associate Professor Emeritus:
Charles Leon Woodley, PhD

Associate Professors:
Wael ElShamy, PhD
Radhika Pochampally, PhD
Luis Martinez, PhD
Julie P. Wyatt, MD

Assistant Professors:
Gene L. Bidwell, PhD
Eric George, PhD
Ingrid Espinoza, PhD

FIRST YEAR

BIOCH 610. BIOCHEMISTRY. Comprehensive course in human biochemistry including protein and nucleic acid structure, enzyme function and regulation, cellular membranes, molecular genetics and protein synthesis, signal transduction and hormonal control mechanisms, vitamins, the metabolism of carbohydrates, fats and protein, cellular bioenergetics and the synthesis of lipids, carbohydrates, proteins and nucleic acids.

DERMATOLOGY
Robert T. Brodell, MD, Professor of Pathology and Professor and Chair, Department of Dermatology

FACULTY

Professors:
Robert T. Brodell, MD
Kimberley H.M. Ward, MD

Associate Professors:
William H. Black, MD
Julie P. Wyatt, MD

Assistant Professors:
Anna C. Asher, MD
Gary G. Bolton, MD
James M. Brock, MD

Affiliate Faculty:
Ralph C. Daniel, MD
Jennifer Schulmeier, MD
Billy Walker, MD

THIRD YEAR

DERM 640. DERMATOLOGY. During this two-week rotation, third-year medical students will gain experience in the evaluation and treatment of the 20 most common dermatologic conditions encountered in an academic clinic setting and less common "classic" entities. The student will participate in "team-based" patient care involving dermatology residents, primary care residents, and a full-time attending dermatologist. Over the course of two weeks they will be awarded increasing responsibility for taking histories, describing patients using dermatologic terminology, and synthesizing an initial differential diagnosis and will learn to perform a KOH preparation and scabies preparation. (Two (2) students each rotation. Available all rotations.)

FOURTH YEAR

DERM 664. DERMATOLOGY. The student will become familiar with the scope of Dermatology and the integration of Dermatology with other medical and surgical specialties. The student will gain exposure to pediatric, general and surgical dermatology. The emphasis is on ambulatory components of the specialty, and aims to help students gain a basic understanding of the diagnosis and management of common dermatologic problems. As part of the rotation, students will be expected to submit 2 short written case reports and attend any conferences offered. (One (1) student each month. Available all months.)

DERM 665. DERMATOLOGY RESEARCH. Individualized programs for four weeks are arranged with the Chairman’s approval for senior students who would like to participate in dermatologic research or other special activities as determined by the Program Director’s office in the Department of Dermatology. This rotation will allow each student to gain experience in research endeavors. (One (1) student each month. Available all months.)
DERM 851 AND 852. DERMATOLOGY EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

EMERGENCY MEDICINE
Alan Jones, MD, Professor and Chair

FACULTY

Professors:
Robert D. Cox, MD, PhD
Richard W. Finley, MD
Robert L. Galli, MD
Loretta Jackson-Williams, MD, PhD
James C. Kolb, MD
Richard Summers, MD
LouAnn H. Woodward, MD

Associate Professors:
Andrew Anderson, MD
Jonathan Jones, MD
L. Kendall McKenzie, MD
Risa Morariety, MD
Jeffery Orledge, MD
Chester Shermer, MD
James Thompson, MD
Brian Tollefson, MD

Assistant Professors:
Allison Barrett, MD
Eric Bell, MD
Damon Darsey, MD
Erin Dehon, PhD
John McCarter, MD
Trey Nichols, MD
Michael Puskarich, MD
John Pettiey Sandifer, MD
Sarah Sterling, MD

THIRD YEAR

EM 630. LIFE-SAVING SKILLS. The purpose of this course to prepare students to master the rapid assessment and management of emergency medical conditions. The first week of the rotation is simulation-based. Skill training modules teach basic and advanced airway management, arterial and central vascular access, lumbar puncture, key resuscitative concepts. These modules include on-line self-directed learning and hands-on instruction using task trainers. Students will also manage patients in life threatening conditions using high fidelity adult simulators. The students will form code teams and develop the cognitive and hands on skills necessary to successfully participate in a team resuscitative effort. Emphasis is placed on urgent patient assessment, situational awareness, application of ACLS protocols, skilled and timely execution of life-saving interventions, useage of equipment (code cart, defibrillator), team work and communication. During the second week of the rotation the students participate in patient care in three to four, 8-hour long shifts in the Emergency Department. Evaluations include pre-and post-tests, check-list of simulated patient management scenarios and assessment of clinical performance during shifts in the Emergency Department. (Six (6) students each rotation. Available all rotations September through May.)

FOURTH YEAR

EM 680. EMERGENCY MEDICINE. This course is designed to give senior medical students a relevant experience in adult emergency medicine. Students function as an acting intern and work under the direct supervision of the emergency medicine attending physicians. They take part in the initial evaluation and subsequent management of patients presenting with emergent and urgent problems of various organ systems. Students are fully supported by emergency medicine residents and attending physicians, but the student is the patient’s primary care giver. Students are expected to formulate thorough differential diagnoses, treatment plans and perform any needed procedures. A series of didactics are presented to the students during the course of the month including small group discussions, lectures and procedural skills practice. Students also learn to manage critically ill patients through the use of advance simulation. Final evaluations are based on demonstration of competency in clinical duties, completion of skills and simulation labs, formal case presentation, and performance on written mid-term and post clinical assessments. Opportunities are provided to work with the AirCare flight team while working in the Emergency Department. (Six (6) UMMC students each month in July through October, with preference given to students interested in applying for emergency medicine residencies. Students interested in taking the rotation in July through October must first contact Sherry Ford (sford2@umc.edu) or (601) 984.5584. Nine (9) UMMC students in November through May.)

EM 682. MEDICAL TOXICOLOGY. During this rotation senior medical students will serve as a member of the Medical Toxicology consult team at the University of Mississippi Medical Center. The purpose of the rotation is to learn the basics of medical management of the poisoned patient and the acute and chronic effects of toxic exposures. The student will work approximately 4 hours per day at the Mississippi Poison Control Center (PCC) and spend the remaining time as a member of the Medical Toxicology Consult Service. The student will be responsible for evaluating patients for whom toxicology consults have been requested in the adult or Pediatric Emergency Department or hospital inpatients at the University of Mississippi Medical Center, in conjunction with residents and the Medical Toxicology Facility. The student will also see patients during scheduled outpatient clinics. The student will participate in patient rounds, toxicity conferences, and will meet as scheduled with the faculty and residents. (Two (2) students each month. Available August, September, November, February, March and April.)

EM 683. EMERGENCY MEDICINE RESEARCH ELECTIVE. This senior medical student course is a research elective designed to include instruction in research methodology and medical literature. The student may participate in original research under faculty supervision or in on-going research projects with the faculty. There are opportunities for clinical studies as well as transitional bench work. (Two (2) students each month. Available all months.)
EM 851 AND 852. EMERGENCY MEDICINE EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

FAMILY MEDICINE
Diane K. Beebe, MD, Professor and Chair

FACULTY

Professor Emeriti:
Wilfred Reginald Gillis, MD

Professors:
Chris A. Rodgers Arthur, PhD, MPH, CHES
Robert Cowan Forbes, MD

Associate Professors:
Molly S. Clark, PhD, ABPP
James A. Cloy, MD
Penny S. Foster, PhD

Assistant Professors:
Kelly M. Bishop, MD
Christopher D. Boston, MD
Jennifer J. Bryan, MD

Affiliate Faculty:
George E. Abraham, MD
Andrew Adams, MD
Michael H. Albert, MD
Timothy Alford, MD
Jeffrey Anderson, DO
Carla Armstrong, MD
William Ray Arnette, MD
V. Isaac Altman, MD
Michael Bagwell, DO
David A. Ball, MD
Pamela Banister, MD
Jean Barker, MD
Kyle S. Bateman, MD
Berthold Beisel, MD
Bruce Black, MD
Jason Blalock, MD
Arturo Blanco, MD
Phillip Blount, MD
Charles Borum, MD
Krista Boyette, MD
Steven C. Brandon, MD
G. Andy Brien Jr., MD
Charles F. Brock, MD
Annie Brooks, DO
David J. Brooks, MD
Greg Browning, MD
Karen Bruce, MD
Edward Bryant, MD
Walter M. Burnett, MD
Charles Ronald Cannon, MD
D. Timothy Cannon, MD
Winston Caple, MD
Troy Cappelleman, MD
Scott Carlson, MD
Sheree Carney-Melton, MD
Thomas Carter, MD
Mona Castle, MD

Warren A. Jones, MD
Judith Gore Gearhart, MD
William Harry Replogle, PhD
Natalie W. Gaughf, PhD, ABPP
Ann M. Butler Kemp, MD
Shannon Pittman Moore, MD
Deborah S. O’Bryan, MD
Sonya Clemmons Shipley, MD

Deirdre M. Phillips, MD
Patrick O. Smith, PhD, ABPP
Thais Brown Tomore, MD
Holly H. Peeples, MD
Janet P. Ricks, DO

Ginger Pace-Hearndon, MD
Wilson Parry, MD
Katherine Patterson, MD
Steven Patterson, MD
Paul M. Pavlov, MD
Christy Nohra, MD
T. Ray Perrine, MD
Doug Perry, MD
James Glenn Peters, MD
Billy M. Pickering, MD
Katrina Poe-Johnson, MD
T. Ray Perrine, MD
James Polk, MD
Richard Price, MD
Mal Riddell, DO
Reginald Rigsby, MD
James M. Riser, MD
David Roberts, MD
Walter Rose, MD
Louis Rubenstein, MD
Keith Rushing, MD
Patrick Scanlon, MD
Reagan Schiefer, MD
Steven Schepens, MD
Michael Schrock, MD
Brad Scott, DO
Heath Scott, MD
THIRD YEAR
FM 631. FAMILY MEDICINE PRECEPTORSHIP. This clerkship is designed to introduce the third-year medical student to the concepts of family medicine. The six-week experience includes a four-week preceptorship based in the office of a family physician in private practice within the state. There is a one-to-one student preceptor teaching arrangement, the preceptor being an affiliate faculty with the Department of Family Medicine. Students are matched with preceptors outside the Jackson metropolitan area. Housing can be arranged for students. There is a one and a half day orientation and instruction period by departmental faculty to prepare the student for the preceptorship. During the remaining two weeks, the students work with family medicine department faculty and residents at either Mississippi Baptist Medical Center, University Medical Center, Flowood Family Medical Center or Lakeland Family Medical Center. The final day is reserved for block review and testing.

FOURTH YEAR
FM 651. FAMILY MEDICINE PRECEPTORSHIP. The student spends four weeks with a preceptor from the family medicine affiliate faculty in private practice within the state. Emphasis is placed upon student responsibility for patient care and developing treatment and management plans. The student is provided with first-hand exposure to clinical, administrative, financial and social aspects of the private sector of Family Medicine. The student is evaluated by the preceptor. Students must register in the departmental office as well as the Registrar. (Four [4] students each month. Available all months.)

FM 652. FAMILY MEDICINE CLERKSHIP. The senior student is assigned to a resident-faculty team of physicians at one of the department's two Family Medical Clinics where he/she sees ambulatory patients and participates in department conferences. The student is evaluated by the preceptor team. Seniors must register in the departmental office as well as the Registrar's Office. (Two [2] students each month. Available all months except July.)

FM 654. COMMUNITY MEDICINE CLERKSHIP. The student will spend four weeks with a family physician and allied health professionals in a rural area of the state or in an urban underserved setting. Emphasis is placed on community health needs, health delivery systems, and environmental, occupational, and industrial health hazards. The student will have supervised responsibility for patient care and community health assessment. The student will meet with district officers of the Health Department and with Home Health agencies. (Two [2] students each month. Available all months.)

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
FM 656. FAMILY MEDICINE IN-PATIENT SERVICE. The student will spend one month working with a team of family medicine residents and faculty and serving as an acting intern. The student will be under the direct supervision of a senior family medicine resident and an attending faculty member. The student, with resident and faculty supervision, will evaluate patients in the emergency room for diagnosis, treatment and possible admission, admit patients for continuing care, and assume the primary responsibility for hospital care of patients to include coordination of consultation as appropriate. (Two (2) students each month. Available all months.)

FM 657. RESEARCH IN FAMILY MEDICINE. A primary care research opportunity, this course includes instruction in research methodology and medical writing. The students may do original research under faculty supervision or participate in on-going research generated by faculty. Arrangements with the student division should be made three months in advance of the block. (Three (3) students each month. Available all months.)

FM 658. MEDICAL ETHICS. The senior student is assigned to a Department faculty member and spends four weeks participating in patient care in a community hospital and one of the residency training clinics. Emphasis is placed on ethical issues as they arise in the clinical setting. The student may have assigned reading in ethics and will attend departmental residents’ conferences. The student will present discussions on ethical topics each week. (Two (2) students each month. Available all months.)

FM 851 AND 852. FAMILY MEDICINE EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. This rotation should be done at another institution or in another state. (Available for senior medical students only. Available all months.)

MEDICINE
William Little, MD, Professor and Chair

FACULTY

Professors Emeriti:
James Achord, MD
John Bower, MD
Stanley W. Chapman, MD
Eduardo Gaitan, MD
Richard Hutchinson, MD
John Jackson, MD
Joe Norman, MD
Marcy Petrini, MD
Roland Robertson, MD
Helen Turner, MD, PhD

Professors:
Bryan Barksdale, MD
Kenneth Bennett, MD
Carolyn Bigelow, MD
George Bock, MD
G. Douglas Campbell, MD
Adolfo Correa, MD.
Julius Cruse, MD, PhD
Richard deShazo, MD
Ralph Didlake, MD
Tawfig Khansur, MBBS
Sharon Douglas, MD
Bernard Dreiling, MD
Stephanie Elkins, MD
Joe C. Files, MD
Richard W. Finley, MD
Ervin Fox, MD
Tibor Fulop, MD
Robert Galli, M.D.
Celso Gomez-Sanchez, MD
Elise Gomez-Sanchez, DVM
Joey P. Granger, PhD
Michael Griswold, PhD
Kenneth Hardy, MD, PhD
Richard Haw, MD
Levi H. Jackson, MD
Vincent Herrin, MD
Gillian Swink Hicks, MD
Stephen Hindman, MD
Terry Jackson, MD
Daniel W. Jones, MD
Luis Juncos, MD
Stephen Kemp, MD
Kent Kirchner, MD
Christian A. Koch, MD
Kenneth Kokko, MD, PhD
Lillian Lien, MD
Willam Little, MD
Joseph Maher, MD
Vikas Majithia, MD
Angel K. Markov, MD
Gailen D. Marshall Jr., MD, PhD
Larry McDaniel, PhD
Michael McMullan, MD
W. Mark Meeks, MD
Ralph Vance, MD
Risa Webb, MD
James Wilson, MD
Michael Winniford, MD
Douglas Wolfe, MD
Marion Wofford, MD
Sharon Wyaat, PhD

Associate Professor Emeritus:
William Nicholas, MD

Associate Professors:
Ashraf Abdo, MD
Myrna Alexander, MD
Kimberly Harkins, MD
Demondes Haynes, MD
Daniel Riche, PharmD
Robin Rockhold, PhD
<table>
<thead>
<tr>
<th>Assistant Professors:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>George Abraham, MD</td>
<td>Maria Ventura-Homan, PhD</td>
</tr>
<tr>
<td>Mohit Agarwal, MD</td>
<td>Dena Jackson, MD</td>
</tr>
<tr>
<td>Shema Ahmad, MD</td>
<td>Shahid Jameel, MD</td>
</tr>
<tr>
<td>Svenja Albrecht, MD</td>
<td>Dana Jones, MD</td>
</tr>
<tr>
<td>Linda Allee, MD</td>
<td>Susan Shands-Jones, JD</td>
</tr>
<tr>
<td>Fred Asher, MD</td>
<td>Sajneet Khangura, MBBS</td>
</tr>
<tr>
<td>Ken Ball, MD</td>
<td>Geoffrey Kitzman, MD</td>
</tr>
<tr>
<td>Anita Basu, MD</td>
<td>Eric Lirio, MD</td>
</tr>
<tr>
<td>Laura Beauchamps, MD</td>
<td>Robert Long, MD</td>
</tr>
<tr>
<td>Jericho Bell, MD</td>
<td>Seema McKenzie, MD</td>
</tr>
<tr>
<td>Tondre Buck, MD</td>
<td>Lindsey McMullan, MD</td>
</tr>
<tr>
<td>Andree Burnett, MD</td>
<td>Carter Milner, MD</td>
</tr>
<tr>
<td>Saira Butt, MD</td>
<td>Divya Monga, MBBS</td>
</tr>
<tr>
<td>William Campbell, MD</td>
<td>Linda Monroe, MD</td>
</tr>
<tr>
<td>Jerry Clark, PhD</td>
<td>Lindsey McMullan, MD</td>
</tr>
<tr>
<td>Alycia Kleinman, MD</td>
<td>Linda Monroe, MD</td>
</tr>
<tr>
<td>Jasmina Craici, MD</td>
<td>Solomon Musani, PhD</td>
</tr>
<tr>
<td>Frank Criddle, MD</td>
<td>Andrew Ouzts, MD</td>
</tr>
<tr>
<td>John Cross, MD</td>
<td>Elizabeth Paine, MD</td>
</tr>
<tr>
<td>Jennifer Frost, MD</td>
<td>Jason Parham, MD</td>
</tr>
<tr>
<td>Gregory Gordon, MD</td>
<td>Chere Peel, MD</td>
</tr>
<tr>
<td>Pamela Graham, MD</td>
<td>Rachel Peery, MD</td>
</tr>
<tr>
<td>Nitin Gupta, MD</td>
<td>Raymond Portis, MD</td>
</tr>
<tr>
<td>Michael Hall, MD</td>
<td>Joe Pressler, MD</td>
</tr>
<tr>
<td>Jo L. Harbour, MD</td>
<td>Taylor Pruett, MD</td>
</tr>
<tr>
<td>Susan Harrington, MD</td>
<td>Naseem Qureshi, MD</td>
</tr>
<tr>
<td>Jan Hausmann, MD</td>
<td>Kristina Rehm, PhD</td>
</tr>
<tr>
<td>Zeb Henson, MD</td>
<td>Eric Reiners, MD</td>
</tr>
<tr>
<td>Demarc Hickson, PhD</td>
<td>Troy Rhodes, MD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructors:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeanette Arnold, NP</td>
<td>Samira Grifoni</td>
</tr>
<tr>
<td>Angela Boleware, CFNP</td>
<td>Sylvia Henry, PhD</td>
</tr>
<tr>
<td>Bonnie Carminati, NP</td>
<td>Ardell Hinton, MS</td>
</tr>
<tr>
<td>Ruby Denson, NP</td>
<td>Kelly Land, NP</td>
</tr>
<tr>
<td>Judith Dial, FNP</td>
<td>Deyin Lu, PhD</td>
</tr>
<tr>
<td>Mary Gibson, NP</td>
<td>Abulkhair Mamoon, PhD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Affiliate Faculty:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas L. Abell, MD</td>
<td>Carlton Gorton II, MD</td>
</tr>
<tr>
<td>Joseph Adams, MD</td>
<td>Amit Gupta, MD</td>
</tr>
</tbody>
</table>
THIRD YEAR

MED 631. MEDICINE CLERKSHIP. This clerkship includes subject matter basic to the practice of caring for the adult patient in Internal Medicine. Students are assigned to hospital services at The University of Mississippi Medical Center and the Veterans Affairs Medical Center. Students learn to sharpen their assessment skills, record detailed histories, perform physical examinations and participate in clinical evaluations and therapy of patients as an integral member of the treatment team, working closely with the house staff. Full-time and clinical faculty provide instruction on ward rounds seven days a week. Both faculty and house staff evaluate the student’s performance. Students must successfully complete all components in order to receive credit for the clerkship.

MED 633. CLINICAL ENDOCRINOLOGY. This elective is provided for third-year students in order to develop a reasonable approach to the broad spectrum of endocrine disorders. (One (1) student each rotation. Available all rotations.)

MED 634. OUTPATIENT CARE OF THE GERIATRIC PATIENT. This elective provides third-year students with the opportunity to care for geriatric patients. (Two (2) students each rotation. Available all rotations.)

MED 635. HEMATOLOGY/ONCOLOGY. During this elective students will be exposed to a wide variety of patients with malignancies of solid organs as well as benign and malignant diseases of the blood. (Three (3) students each rotation. Available all rotations.)

MED 636. INFECTIOUS DISEASE. This elective provides third-year students with the opportunity to develop history taking and physical exam skills pertinent to the evaluation of patients with an infectious disease. (One (1) student each rotation. Available all rotations.)

MED 637. PULMONARY MEDICINE. This course provides exposure to patients with pulmonary disorders in a combined in/outpatient educational experience. (Two (2) students each rotation. Available all rotations.)
MED 638. RHEUMATOLOGY. This elective provides third-year students with the opportunity to care for patients with rheumatic disorders in the combined in/outpatient setting. (Two (2) students each rotation. Available all rotations.)

MED 640. AMBULATORY INTERNAL MEDICINE CLERKSHIP. The students will be exposed to a variety of pathologic conditions commonly encountered in the outpatient setting. (Two (2) students each rotation. Available August through November and January through May.)

MED 641. CARDIOLOGY. This M3 elective provides a combined inpatient/outpatient educational experience for junior medical students. Students will see patients with cardiology faculty and assist in obtaining medical histories, performing physical examinations, formulating differential diagnoses and ordering appropriate diagnostic studies and therapeutic plans. Students will also spend time participating in interpretation/observation of selected cardiology imaging studies to include cardiac catheterization and echocardiography and will undergo focused training on electrocardiographic interpretation under the supervision of Cardiology faculty. This elective will provide a basic understanding of the diagnosis, treatment and prevention of common cardiac diseases. Student responsibilities will include approximately 40 hours of participation per week. (One (1) student each rotation. Available all rotations.)

FOURTH YEAR

MED 651. GENERAL MEDICINE CLERKSHIP. This required senior rotation in medicine will be an extension of the Junior Medicine Clerkship. Students will be assigned to the Veterans Affairs Medical Center or the Medical Center. Students will elicit histories, perform physical examinations and carry out appropriate diagnostic and therapeutic procedures under the supervision of the house staff and attending staff. Assignments will be made at the discretion of the Department of Medicine. (All students/required block. Scheduled in equal number of students from July through May.)

MED 652. AMBULATORY MEDICINE. In this course students will concentrate on the evaluation, diagnosis, and treatment of the ambulatory patient. Each student will spend time in a variety of ambulatory clinics, including general medicine and certain medicine subspecialties. This approach allows the student to gain a breadth of knowledge regarding ambulatory medicine and the various subspecialties associated with Internal Medicine. (Two (2) students each month. Available all months except July and December.)

MED 653. SPECIAL MEDICINE. Individualized programs for four weeks or longer can be arranged with the Chairman’s approval for students who are interested in obtaining experience in research or other areas of interest. (Five (5) students each month. Available all months.)

MED 654. CARDIOLOGY. Students assigned to the Medical Center will work with the faculty and staff of the Division of Cardiology, participating in the work-up and care of patients admitted to the Cardiology services. There will be continuing patient responsibility and students will be expected to become familiar with the uses and indications for cardiac catheterization and other procedures, including echocardiography, electrocardiography and activities of the Cardiac Unit. Students will obtain experience in consultative cardiology. They will be expected to attend Cardiac Clinic and Cardiac Conferences. (Two (2) students each month. Available all months.)

MED 655. GASTROENTEROLOGY. In this elective, the student will be assigned three patients per week for complete evaluation and current literature search. The student participates in the divisional activities, including twice daily rounds, weekly teaching rounds, reviews of biopsy specimens, and attends all procedures such as endoscopy, liver biopsy, esophageal motility, percutaneous cholangiogram, etc. The student will meet weekly with the director of the division or senior fellow to review specific subjects in gastroenterology about which he or she has read during the week. (Four (4) students each month. Available all months.)

MED 656. HEMATOLOGY. This elective will provide the student the opportunity to develop competence in the evaluation of patients with a wide range of hematologic diseases as well as general medical problems. Emphasis will be on: 1) clinical manifestations of disease; 2) the interpretation of laboratory results; 3) pathophysiology. The student will be responsible for the initial evaluation and formulation of appropriate laboratory studies. These will be reviewed by a fellow and/or faculty member. Formal staff teaching rounds is held three times weekly. A slide morphology conference, case review conference, and didactic teaching conference are held weekly. A case study file with illustrative materials is available to supplement clinical material. (Two (2) students each month at VA. If more than 2 students, they will be at UMMC. Available all months.)

MED 657. INFECTIOUS DISEASES. Diagnosis and therapy of a variety of infectious disease entities will be reviewed in detail with the student, who will be assigned to the infectious disease service of the University Medical Center or the VA Medical Center. The student will evaluate and follow consultation patients. The student will round daily with the service and attend and participate in weekly clinics and conferences at the VA Medical Center or UMMC. (Two (2) students each month. Available all months.)

MED 659. PULMONARY DISEASES/Critical Care Medicine. Students are assigned to the Pulmonary and Critical Care Medicine services at either UMMC or VAMC. At the University Hospital, the student will actively participate in the work-up and care of patients whose illnesses range from various respiratory diseases to the critically ill. At the Veterans Hospital the students will be assigned to the Medical Intensive Care Unit and work closely with the Internal Medicine resident in the care of critically ill patients. Formal teaching rounds are held daily. Conferences and didactic lectures are held three times weekly. Students are introduced to pulmonary function testing, fiber optic bronchoscopy, hemodynamic monitoring, including invasive monitoring. (Eight (8) students each month, 4 at UMMC and 4 at the VA Medical Center. Available all months.)

MED 660. NEPHROLOGY. The objective of this elective is to familiarize the student with the evaluation, diagnosis, medical management, and follow-up of patients with diseases of the kidney. The student will be seeing patients on inpatient consult service.
and will participate in decision-making and care related to these patients. In addition, the student will receive a series of lectures covering different aspects of the kidney. Students are encouraged to attend one half day a week outpatient clinic at the Jackson Medical Mall. (Two (2) students each month. Available all months.)

MED 661. GERIATRICS/GERONTOLOGY. The goal of this elective will be to acquire experience and instruction in a multi-disciplinary approach to medical care of the older patient. The student will care for patients in multiple settings at UMMC including outpatient, in-hospital primary care, in-hospital consultation, and the Lakeland Nursing Center. The focus will be on common geriatric problems such as functional assessment, thyroid disease, osteoporosis, delirium, dementia, falls, urinary incontinence, geriatric pharmacology and perioperative management. Additional emphasis will be directed towards a review of the physiologic changes of aging that impact on disease manifestations in the elderly. (Two (2) students each month. Available all months.)

MED 663. AMBULATORY MEDICINE IN THE AMAZON JUNGLES OF PERU. This course consists of two weeks spent at UMMC and two weeks spent in Peru. During the first two weeks, students review tropical medicine with emphasis on parasitology, infectious diseases and dermatology. During the last two weeks, students work with UMMC faculty to provide primary care to underserved residents of the province of Loreta in Peru. (Twelve (12) students per month. Available in February only.)

MED 666. ENDOCRINOLOGY. This elective is designed to demonstrate the application of basic endocrinology to patient care. The student participates in the care of patients, attending endocrine clinics at UMMC and VA Medical Centers, and the diabetic clinic and hypertension clinic at UMMC. In addition, the student sees consultations at both hospitals, participates in the supervised reading, and attends the endocrine conference. Research opportunities are available. (Two (2) students each month. Available all months.)

MED 667. MEDICAL CONSULT SERVICE ELECTIVE. This elective gives the student an opportunity to be part of the medical consult team consisting of a senior house officer and a member of the Division of General Internal Medicine. This team is asked to see a wide variety of medical problems that occur in patients in other services throughout the Medical Center. The assessment of surgical risk, common medical problems and unusual medical complications will be reviewed on daily rounds. The student will have an opportunity to assess patients on his own and jointly with the house officer. A practical approach to patient management in consultation will be provided, with ample opportunity for personal study in General Internal Medicine. (One (1) student each month. Available all months.)

MED 668. RHEUMATOLOGY. This program will provide the student with experience in the clinical and laboratory assessment of patients with rheumatic diseases at UMMC and VAMC. Students take an active role in the management of both ambulatory and hospitalized patients. The student will assume supervised primary care for those patients admitted to members of the rheumatology staff and will attend daily teaching rounds where the clinical, radiological and laboratory aspects of patients’ diseases are discussed. Students will assume supervised primary care for patients that are being followed in the arthritis and lupus clinics at UMMC. At the VAMC, the student will assume supervised primary care for arthritis patients on the service of the rheumatology staff will attend the arthritis clinic at the hospital and will assist in providing consultations. At both hospitals, the students will receive instruction in performing joint injection, aspiration, and in synovial fluid analyses. (Two (2) students each month. Available all months.)

MED 670. MEDICAL ONCOLOGY. The objective of this elective is to familiarize the student with the evaluation, medical management, and follow-up of patients with cancer in both the inpatient and outpatient setting. The student will work closely with the inpatient attending and fellow to answer consults and will participate in decision-making and care related to these patients. In addition, the student will participate in the daily outpatient clinics with fellows and faculty for a broader exposure to patients with different malignancies. Self-assessment test material will be provided for the student’s use. (Three (3) students each month. Available all months.)

MED 673. AMBULATORY INTERNAL MEDICINE IN ECONOMICALLY UNDERSERVED AREAS OF MISSISSIPPI. This course will concentrate on the evaluation, diagnosis, and treatment of the ambulatory patient in an underserved area in the state of Mississippi. Each student will spend time with a selected physician practicing primary care in an economically underserved area to obtain knowledge and experience in ambulatory medicine typical of primary care in these regions. Emphasis will be placed on arranging appropriate follow-up for each patient in the outpatient and inpatient settings. The training is focused on establishing a quality educational experience for the students in order to enhance recruitment of these future physicians into practice in these particular areas within our state. (Four (4) student each month. Available all months.)

MED 674. HOSPITAL MEDICINE The Division of Hospital Medicine provides an in-patient educational experience for all M-4 students as an elective. Students will work directly with the hospitalist on a non-resident service. Students will perform history and physicals on new admissions and will write daily notes on select patients. Students will also be responsible for recommending daily orders, communicating with patients and family, communicating with consulting services, assisting with procedures and developing therapeutic plans. In addition to usual admissions typical to internal medicine (congestive heart failure, pneumonia, DVT/PE, DKA, acute renal failure, sepsis, GI bleed), students will also get to experience co-management of orthopedic, interventional radiology, and neurosurgical patients (intracranial hemorrhage, preoperative and postoperative management of hip fracture). (Two (2) students each month. Available all months except July.)

MED 851 AND 852. INTERNAL MEDICINE EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)
MICROBIOLOGY
Richard Joseph O’Callaghan, PhD, Professor and Chair

FACULTY

Professors Emeriti:
Marvin Augusta Cuchens, PhD
Glenn Aden Gentry, PhD
Craig J. Lobb, PhD
William Burton Lushbaugh, PhD
Norman Miller, PhD

Professors:
Eva Bengten, PhD
Julius Major Cruse Jr., MD, PhD
Larry S. McDaniel, PhD
Victor Gregory Chinchar, PhD
Alan Jones, MD
Melanie R. Wilson, PhD

Associate Professors Emeriti:
Jean LeBlanc Arceneaux, PhD
Joseph Lincoln Arceneaux, PhD
Michael D. Lundrigan, PhD

Associate Professors:
Brian J. Akerley, PhD
Mary Elizabeth Marquart, PhD
D. Ashley Robinson, PhD
Bo Huang, MD, PhD
J. Christopher Meade, PhD

Assistant Professors:
Stephen J. Stray, PhD
Edwin Swiatlo, MD, PhD
James G. Wilson, MD
Donna C. Sullivan, PhD
Ritesh Tandon, PhD

Instructors:
Aihua Tang, PhD
Sandy Wong, PhD

SECOND YEAR

MICRO 611. MEDICAL MICROBIOLOGY. The fundamentals of microbial physiology, genetics and immunology are presented with important bacterial, viral, parasitic and mycotic infections correlated from the standpoint of etiology, epidemiology, pathogenesis and laboratory diagnosis. Extends through the first and second quarters of the second year.

NEUROBIOLOGY AND ANATOMICAL SCIENCES

Michael N. Lehman, PhD, Professor and Chair

FACULTY

Professors Emeriti:
Duane E. Haines, PhD
Norman A. Moore, PhD
John P. Naftel, PhD

Professors:
Roger B. Johnson, DDS, PhD
James C. Lynch, PhD
Allan R. Sinning, PhD
Rick C. S. Lin, PhD
Paul J. May, PhD
Susan Warren, PhD

Associate Professor Emeritus:
March D. Ard, PhD

Associate Professors:
Ranjan Batra, PhD
Adel Maklad, MD, PhD
Douglas E. Vetter, PhD
Bela Kanicska, PhD
Kimberly L. Simpson, PhD

Assistant Professors:
Marianne Conway, MD
Bernadette Grayson, PhD
Ian Webb, PhD
Dongmei Cui, MS, MD (Hon.)
Yuefeng Jordan Lu, PhD
Kathleen T. Yee, PhD
Ryan Darling, PhD
Andrew Notebaert, PhD

Instructor:
Chrys Fergani, PhD

FIRST YEAR

ANAT 611. MEDICAL GROSS ANATOMY. A study of the human body, including dissection, with an emphasis on clinical applications.

ANAT 613. MEDICAL HISTOLOGY AND CELL BIOLOGY. A study of the structure and function of cells, tissues and organs.

ANAT 615. MEDICAL NEUROBIOLOGY. A study of the human nervous systems using lecture presentations, clinical correlations and laboratory material/demonstrations with case diagnosis.

ANAT 616. MEDICAL DEVELOPMENTAL ANATOMY. A study of human development utilizing congenital defects as a basis for understanding normal development from conception to birth.
FOURTH YEAR
ANAT 651. REVIEW OF HUMAN ANATOMY. Permission of the course director required. (Twenty (20) students each month. Available July, January, February, March, and April unless special permission granted by course director.)

ANAT 652. REVIEW OF HUMAN NEUROBIOLOGY. Intensive review of regions and systems with particular emphasis on clinical neurosciences. Permission of the course director required. (Ten (10) students each month. Available July through November and January.)

ANAT 653. REVIEW OF HISTOLOGY with CLINICAL CORRELATIONS. Microscopic review of tissues and organ systems emphasizing the integration of principles of histology and pathology with associated clinical cases. Permission of the course director required. (Fifteen (15) students each month. Available November, January, February and March)

ANAT 654. RESEARCH. Limited to students who wish to participate in relatively advanced research programs. Permission of the course director required. (Four (4) students each month. Available all months except December, April and May.)

ANAT 657. ADVANCED PROJECTS. Non-research projects designed in relation to the student’s interest and amount of available time. Permission of the course director required. (Four (4) students each month. Available September, November and January.)

NEUROLOGY
Alexander P. Auchus, MD Professor and McCarty Chair

FACULTY
Professor Emeritus:
Duane Haines, PhD.

Professors:
Huziefa Abubakr, MD
Omar A. Abdulrahman, MD
James John Corbett, MD
Thomas L. Eby, MD
Robert M. Herndon, MD
Huziefa Abubakr, MD
James C. Lynch, PhD
Edward L. Manning, PhD
Paul J. May, PhD
Thomas Mosley, PhD
John Westbrook Norton, MD

Associate Professors:
Majid A. Khan, MD
Gustavo D. Luzardo, MD

Assistant Professors:
Mark D. Anderson, MD
Gene L. Bidwell III, PhD
Ethel S. Rose, MD
Angela Chandler, MD
Ruth K. Fredericks, MD
Rebecca M. Sugg, MD
Amanda L. Witt, MD
Jimmy Wolfe, MD
Michael C. Graeber, MD
J. Larry Parker, MD

THIRD YEAR
NEUR 632. CLINICAL NEUROSCIENCE. The Neuroscience Clerkship is a cooperative effort involving six departments: Neurobiology and Anatomical Sciences, Neurology, Neurosurgery, Pediatrics, Psychiatry and Radiology. The clerkship is administratively managed by Neurology. During this clerkship, students will expand their clinical knowledge of neuroanatomical principles discussed during the M1 curriculum and learn how medical problems that affect the nervous system are diagnosed and treated. Students will be assigned to clinics and hospital services at the UMMC and the VAMC. Emphasis will be placed on the neurologic history and clinical examination in patients with acute and chronic neurological diseases. Students will also be required to attend and participate in multidisciplinary conferences.

FOURTH YEAR
NEUR 651. CLINICAL NEUROLOGY. This block may be set up to the student’s preference. (651) Student may work with private neurologist, (651a) have a clinic or primarily outpatient rotation e.g. Muscular Dystrophy, Seizure, (651b) Neuro-ophthalmology or (651c) assist with answering inpatient consults at either VA or UMMC. (Two (2) students each month. Available all months.)

NEUR 652. CLINICAL NEUROLOGY ACTING INTERNSHIP. Students will work under the supervision of house staff and attending staff on the inpatient Neurology service. (Two (2) students each month. Available all months except December.)

NEUR 658. NEUROSCIENCE CRITICAL CARE. This course is designed for the student considering neuroscience critical care or a closely related field as a discipline. This clerkship was established to give future health providers a unique insight into the overlap of Neurology, Internal Medicine and Surgery. In this clerkship students will experience the impact of medical illness on the nervous system in patients with certain medical risk factors that have led to a neurological illness such as stroke, CNS infection or CNS tumor. It will also explore special circumstances that necessitate alteration in the usual management of medical problems as a result of a
patient’s underlying neurological or neurosurgical problems/procedures as compared to the patients in a general ICU setting. Students will experience all inpatient critical care aspects of neuroscience with emphasis on developing understanding of the management of the critically ill patient in general and the neuroscience, neurological patient specifically. (Two (2) students each month. Available all months.)

NEUR 851 AND 852. NEUROLOGY EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

NEUROSURGERY
H. Louis Harkey III, MD, Professor and Chair

FACULTY

Professors:
Andrew D. Parent, MD

Associate Professors:
Gustavo D. Luzardo, MD
Robert A. McGuire, MD

J. Carlos Pisarello, MD
Hartmut Uschmann, MD

Assistant Professors:
Jared J. Marks, MD
Roberto Rey Dios, MD

James Mason Shiflett, MD
Rebecca Sugg, MD

Affiliate Faculty:
Jorge Alvernia, MD

FOURTH YEAR
NS 655. NEUROSURGERY. Four-week rotation to be served at one of the Medical Center neurological services and will consist of patient care, diagnostic studies, surgery, as well as joint conferences and clinics. Independent study projects in areas of specific student interest will be assigned. (Four (4) students each month. Available all months.)

NS 851 AND 852. NEUROSURGERY EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

OBSTETRICS AND GYNECOLOGY
James M. Shwayder, MD, JD, Professor and Chair

FACULTY

Professors Emeriti:
Helen Barnes, MD
Richard C. Boronow, MD

Professors:
James A. Bofill, MD
Sheila D. Bouldin, MD

Harriette L. Hampton, MD
Rick W. Martin, MD

James M. Shwayder, MD, JD
James Tate Thigpen, MD

Associate Professors:
Jermaine E. Gray, MD
John Isaacs, MD
Christopher Lahr, MD

B. Babette LaMarca, PhD
Michelle Y. Owens, MD
Sandip Sawardecker, MD

Amber Shiflett, MD
Victoria Mary Sopelak, PhD

Assistant Professors:
Chris Ball, MD
Kyle Ball, MD
Charlene Collier, MD
Mary Kinney L. Corley, MD

Joseph Hudgens, MD
Elizabeth A. Lutz, MD
Paul Moore, MD
Sarah A. Novotny, MD

J. Preston Parry, MD
Mildred Ridgway, MD
Kedra Wallace, PhD

Instructors:
Penni L. Smith, PhD

Affiliate Faculty:
Sydney Bondurant, MD
Shannon Carroll, MD
Arthur D. Cromartie, MD

Emily Johnson, MD
William L. Kahlstorf, MD
Roy B. Kellum, MD

D. Paul Seago, MD
Shane Sims, MD
J. Martin Tucker, MD
THIRD YEAR

OB/GYN 631. OBSTETRICS AND GYNECOLOGY. The third-year clerkship in obstetrics-gynecology is designed to provide a strong clinical base in normal and abnormal obstetrics and gynecology along with exposure to the subspecialties and health maintenance strategies for women. Students rotate in small groups through labor and delivery the high risk obstetric service, the women’s urgent care center, gynecology, urogynecology and/or gynecologic oncology over a 6-week time frame. Students participate in all aspects of outpatient and inpatient care. They also assist during selected surgical cases. Obstetrical delivery experience is provided with supervision by attending faculty and residents. An interactive didactic lecture series is supplemented by weekly tutorial clinical problem solving sessions with faculty preceptors. Students actively participate in resident and faculty teaching rounds and attend all departmental conferences, including grand rounds, preoperative conference, morbidity and mortality, and all resident didactics.

FOURTH YEAR

OB/GYN 653. HIGH-RISK OBSTETRICS. The student will actively participate in the hospital management of high-risk obstetric patients under the supervision of the Maternal-Fetal Medicine faculty and fellows. The student will also be involved with patients receiving genetic counseling and undergoing antenatal diagnosis. In addition to the clinical experience, tutorial sessions with perinatal faculty and fellows will provide the student with an understanding of current literature and an opportunity to explore a specific topic in-depth. (One [1] student each month. Available all months.)

OB/GYN 655. LABOR AND DELIVERY. Under the supervision of an obstetric resident and the faculty, the acting student will participate in the management of patients admitted to labor and delivery. In addition, the student intern will learn to recognize antepartum, intrapartum, and postpartum complications as well as recognize and manage obstetric emergencies. (Two [2] students each month. Available all months.)

OB/GYN 656. OPERATIVE GYNECOLOGY. Students will spend one calendar month with either the GYN A (benign gynecology) or the GYN B (urogynecology) service. They will participate in all activities undertaken by the respective service, including ambulatory clinics, operative experiences, conferences/didactics, small group sessions, and care for unscheduled hospital admissions. The student will work closely with the residents and faculty as a vital member of the team, carrying the same patient load that is expected of a PGY-1. This should prepare the student for this level of service activity upon graduation. (Two [2] students each month. Available all months.)

OB/GYN 658. GYNECOLOGIC ONCOLOGY. The student will actively participate in the management of gynecologic oncology patients. This includes preoperative and postoperative management as well as assisting in radical surgery and medical admissions. An emphasis is placed on allowing an increased level of clinical responsibility and faculty interaction. (One [1] student each month. Available all months.)

OB/GYN 659. OB/GYN AMBULATORY CARE. Students are responsible for seeing new and return patients in the OB-GYN ambulatory care setting. On the first visit, a complete history is taken. On return patient visits, an interval note is recorded. All examinations, diagnoses and suggested treatments are supervised by the attending physician. (One [1] student each month. Available all months.)

OB/GYN 661. OB/GYN RESEARCH. This course is designed to teach M4 students research tools and their application to answering medically relevant research questions, specifically of interest to those specializing in Obstetrics & Gynecological research. (Ten [10] students each month. Available October only.)

OB/GYN 663. OB/GYN FUNDAMENTALS OF GYNECOLOGIC AND MINIMALLY INVASIVE SURGERY. The course is designed for students pursuing a surgical career who are interested in increasing their knowledge of pelvic anatomy and fundamental surgical skills with an emphasis in minimally invasive surgery. The student will complete a structured curriculum that includes pelvic anatomy, surgical instrumentation, surgical energy, and fundamental laparoscopic skills. The student will participate in clinical activities including observation in the operating room one and one half days a week and will be involved in direct patient care two half days in outpatient gynecology clinics. The remainder of the time will be in self-directed study and surgical simulation skills. The student will be assigned a mentor from the Gynecology Division to supervise the completion of the course. (Two [2] students each month. Available all months except for November and December.)

OB/GYN 851 AND 852. OBSTETRICS AND GYNECOLOGY EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)
OPHTHALMOLOGY
Ching J. Chen, MD, Professor and Chair

FACULTY

Professor Emeritus:
Connie S. McCaa, MD, PhD

Professors:
James J. Corbett, MD
James Randall Jordan, MD
Richard J. O’Callaghan, PhD
William Replogle, MD

Associate Professor Emeritus:
Warren Woodrow Johnson, MD

Associate Professors:
Kimberly Crowder, MD
Bo Huang, MD
James Carlyle Lynch, PhD
Nils K. Mungan, MD

Assistant Professors:
Rosanna Bahadur, MD
Siva Iyer, MD
Jay Craddock, MD
Omolola “Lola” Idowu, MD
Heather Hancock, MD
Kyle Lewis, MD
William Watkins, MD

Affiliate Faculty
William Magnum Aden, MD
Victor John Ford III, MD
Alan David Penman, MD
William Clay Ashford, MD
Ronald Glenn Herrington, MD
John Vernon Petro, MD
Richard Lamar Blount, MD
Maurice James, MD
Charles David Richardson, MD
Michael J. Borne, MD
Delors Edgar Magee Jr., MD
David Ronald Segrest, MD
Littleton Stacy Davidson Jr., MD
Don Edward Marascalco, MD
Curtis Dan Whittington Jr., MD
Thurman Keith Everett, MD
Frederick Lee McMillan, MD
Albert Terrel Williams, MD
Donald C. Faucett, MD
John H. McVey, MD
James Douglas Fly, MD
Larry Parker, MD

THIRD YEAR
OPHTH 630. INTRODUCTION TO OPHTHALMOLOGY. The purpose is to give M-3s a brief overview of the clinical and surgical practice of ophthalmologists. This will include teaching students very basic eye examination techniques and diagnoses, geared toward a primary care physician. (One (1) student in August. Two (2) students each rotation September through May.)

FOURTH YEAR
OPHTH 659. OPHTHALMOLOGY I. The material covered includes ophthalmology for non-ophthalmologists, especially as related to family practice, internal medicine and pediatrics. Areas covered include ophthalmology in systemic disease, neuro-ophthalmology, visual field testing, motor field testing, pediatric ophthalmology, strabismus, external disease, glaucoma screening and tonometry. This rotation will include the University and Veterans eye programs, with time spent in both clinics. Course content can be modified to meet the specific requirements of a given student. (Two (2) students each month. Available all months October through May.)

OPHTH 660. OPHTHALMOLOGY II. Survey of ophthalmology as a specialty is primarily for those students considering it as a career. This course consists of office practice, slit lamp microscopy, refraction, contact lens fitting, glaucoma screening, tonometry, indirect binocular ophthalmoscopy and surgical ophthalmology as assistant in the operating room. (Two (2) students each month. Available July through September)

OPHTH 851 AND 852. OPHTHALMOLOGY EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)
ORTHOPEDIC SURGERY
George Vance Russell, MD, Professor and Chair

FACULTY

Professors Emeriti:
James Langston Hughes Jr., MD
Alan Edward Freeland, MD

Professors:
Hamed A. Benghuzzi, PhD
William Bennett Geissler, MD
Feng Zhang, MD, PhD

Associate Professors:
Gene Barrett, MD
Douglas Eric Parsell, PhD
Michelle A. Tucci, PhD
Lawrence Lee Haber, MD
Aaron Puckett Jr., PhD
E. Frazier Ward III, MD
Sheila G. Lindley, MD
John Marvin Purvis, MD
M. Stanton Ward, MD
William Patrick McCluskey, MD
Kenneth Raymond St. John, PhD

Assistant Professors:
Jennifer S. Barr, MD
Hyung Kim, MD
Benjamin M. Stronach, MD
Patrick Bergin, MD
Rick Psonak, MS
Brian J. Tollefson, MD
Kendall Blake, MD
Henry L. Sherman, MD
Patrick Wright, MD
Matthew L. Graves, MD
Clay Spitler, MD

Instructors:
Lane Laken, MD
Melissa Powell, RN, MSN, FNP
Hollis L. Purviance III, RN, C, MSN, FNP-C
Bradford S. Martin, RN, MSN, FNP-C
Cynthia Anne Pulliam, RN, MN, FNP

THIRD YEAR
ORTHO 630. ORTHOPEDIC SURGERY. This course will give medical students the opportunity for exposure to the care of orthopedic patients through operative, clinical, and emergency room assignments. Students will become familiar with and gain a basic understanding of musculoskeletal orthopedic problems. (Two (2) students each rotation. Available November through May.)

FOURTH YEAR
ORTHO 657. ORTHOPEDIC SURGERY. This is a four-week rotation designed for students considering a residency in orthopedic surgery. The student will be exposed to outpatient, inpatient and surgical aspects of orthopedics as a specialty. Total care of the orthopedic patient, children and adults, represents the focal point of this rotation. Preoperative care, as well as experience in the operating room, will receive emphasis. (Three (3) students each month. Available July through October)

ORTHO 658. OUTPATIENT ORTHOPEDIC SURGERY. Course to provide knowledge and skills necessary to diagnose and manage varying types of orthopedic problems likely to be encountered in outpatient settings and the ability to recognize problems requiring emergent orthopedic surgical referral. Students should contact the Orthopedic Department 8 weeks prior to the start of the block. (Three (3) students each month. Available November through April.)

ORTHO 851 AND 852. ORTHOPEDIC SURGERY EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

OTOLARYNGOLOGY AND COMMUNICATIVE SCIENCES
Scott P. Stringer, MD, MS, Professor and Chair

FACULTY

Professor Emeritus:
Winsor V. Morrison, MD

Professors:
Jeffrey D. Carron, MD
William Mustain, PhD
John M. Schweinfurth, MD
Thomas L. Eby, MD, FACS
Thomas J. Payne, PhD
Wu Zhou, PhD
J. Randall Jordan, MD, FACS
J. Mark Reed, MD
Hong Zhu, MD, PhD

Associate Professor Emeritus:
James E. Peck, PhD

Associate Professors:
Charles Bishop, AuD
Lewis Chen, PhD
Lana L. Jackson, MD.
**Assistant Professors:**
- Rachel A. Cooper, AuD
- Issam Eid, MD
- Alex Elkins, AuD
- Lauren Gebeher, AuD
- Vicki Gonzalez, AuD
- Mary Frances Johnson, AuD
- Christopher E. Lee, MD
- Andrea F. Lewis, MD
- Lauren McNichol, AuD
- Tammy Sanders, MD
- Grace Sturdivant, AuD
- Katie Weeks, MA, PhD
- Issam Eid, MD
- Christopher E. Lee, MD
- Grace Sturdivant, AuD
- Katie Weeks, MA, PhD
- Alex Elkins, AuD
- Andrea F. Lewis, MD
- Lauren McNichol, AuD
- Vicki Gonzalez, AuD
- Denise Pouncey, AuD
- Meagan Allen, MS
- Caroline Hunter, MS
- Lara Monico, MCD
- Josie Alston, MS
- Ashley Legate, MS
- Jenna Nassar, MS
- Angie Brunson, MS
- Candace Logan, MS
- Kristen Palmer, MS
- LaQuisha Burks, MS
- M. Andrea Lowrie, MS
- Mary Lou Sorey, MS
- Kimbrell Evans, MS
- Jane Malphurs, MEd
- Susan Stringer, MS
- Kara Gibson, MA
- Laura McCarty, MS
- April Webb, MS
- Tristen Harris, PA-C
- Jesus Monico, MPH
- Kathleen Wentland, MA

**Instructors:**
- Ranjan Batra, PhD
- Carolyn Wiles Higdon, PhD
- Clarence M. Osborne, MD
- Charles R. Cannon, MD
- James Robert House III, MD
- Holly Peeples, MD
- Michael H. Carter Jr., MD
- Harold Kolodney, DMD.
- Mohammed Qaisi, DMD
- Lin Chen, BS
- Jinghe Mao, MD, PhD
- J. George Smith, MD
- Kyle F. Gordon, MD
- Luis Martinez, PhD
- William F. Sneed, MD
- R. Darryl Hamilton, MD
- James R. McAuley, MD

**Affiliate Faculty:**
- Steven Bigler, MD
- Jonathan D. Fratkin, MD
- William D. Hughson, MD
- Holly H. Hobart, PhD
- Ayman Asfour, MD
- Holly H. Hobart, PhD
- Ayman Asfour, MD
- Holly H. Hobart, PhD
- Kenneth L. Muldrew, MD
- Ayman Asfour, MD
- Holly H. Hobart, PhD
- Kenneth L. Muldrew, MD

**THIRD YEAR**

**OTO 630. OTOLARYNGOLOGY.** Students will become familiar with the integration of otolaryngology with other medical and surgical specialties and gain hands on exposure to the subspecialties of otolaryngology. (Three (3) students each rotation. Available all rotations.)

**FOURTH YEAR**

**OTO 661. OTOLARYNGOLOGY – SURGICAL.** This course is designed for students considering a residency in otolaryngology. The student will be exposed to all outpatient, inpatient and surgical aspects of otolaryngology. Emphasis will be placed on developing an understanding of diagnosis and management of head and neck disorders. (Four (4) students in July and August. Three (3) students in September and October. One (1) student November through May.)

**OTO 662. PRIMARY CARE OTOLARYNGOLOGY.** This course is designed for those students pursuing primary care fields to gain a better understanding of basic ear, nose, and throat problems. Emphasis will be placed on recognition of and first line treatment of common head and neck diseases and proper consultation guidelines. (One (1) student each month. Available November through May.)

**OTO 663. OTOLARYNGOLOGY – RESEARCH.** The student will participate in clinical and/or laboratory research. The student will be assigned a research mentor to facilitate the learning of research design, research techniques, data collection, statistical analysis, manuscript development, and presentation skills. Students may join an existing project or submit original ideas. (Two (2) students each month unless course director makes exception. Available all months.)

**OTO 851 AND 852. OTOLARYNGOLOGY EXTRAMURAL.** Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

**PATHOLOGY**

Janice Lage, MD, Professor and Chair

**FACULTY**

**Professors Emeriti:**
- Steven Bigler, MD
- Jonathan D. Fratkin, MD
- William D. Hughson, MD
- Holly H. Hobart, PhD
- Ayman Asfour, MD
- Holly H. Hobart, PhD
- Kenneth L. Muldrew, MD

**Professors:**
- Mithra Dange Baliga, MBBS
- Kim R. Geisinger, MD
- Josephine Wyatt-Ashmed, MD
- Julius Major Cruse Jr., MD, PhD
- Robert Edwin Lewis, PhD
- William P. Daley, MD
- Charulochana Subramony, MBBS

**Associate Professors:**
- Israh Akhtar, MD
- Holly H. Hobart, PhD
- Kenneth L. Muldrew, MD
- Ayman Asfour, MD
- Patrick Kyle, PhD
- James Neill, MD
SECOND YEAR

PATH 621. GENERAL AND SYSTEMIC PATHOLOGY. Concepts of disease. This course extends over winter and spring semesters of the second year and is designed to give the student a broad conceptual understanding of disease processes as they relate to the ill patient. This course primarily deals with disease processes from the perspective of anatomic and clinical pathology, with pathophysiologic principles emphasized throughout. Students are also introduced to the principles of appropriate utilization of the anatomic and clinical pathology laboratories, as well as to the proper interpretation of laboratory results. Self-study and small-group seminar teaching are emphasized as part of the case study approach, along with study of gross and microscopic surgical and autopsy material.

THIRD YEAR

PATH 630. PATHOLOGY: ANATOMIC ELECTIVE. Students will be introduced to surgical pathology, autopsy, cytopathology and subspecialties. (One (1) student each rotation. Available all rotations. MUST BE SCHEDULED IN ADVANCE.)

PATH 631. PATHOLOGY: CLINICAL ELECTIVE. The student will develop a working knowledge of how the laboratory functions in providing results and the interpretation of results in clinical practice. (Two (2) students each rotation. Available all rotations. MUST BE SCHEDULED IN ADVANCE.)

FOURTH YEAR

PATH 651. PATHOLOGY, ANATOMIC. This elective is for students with an interest in anatomic pathology. The student will be introduced to the various disciplines in anatomic pathology, including general surgical pathology, autopsy, cytopathology, and subspecialties such as hematopathology, dermatopathology, neuropathology, and pediatric pathology to name a few. The student will learn the gross and microscopic pathology of surgical specimens and assist in performing an autopsy, including a review of history, examination of microscopic sections, and correlation of the pathologic findings with the clinical picture. This learning experience will be enhanced by attendance at conferences, where the student will review, as well as present interesting and unusual material. The student will be expected to complete all assignments for the month, including glass slide and digital image case studies, autopsy presentation, and review of pertinent and current literature. (Three (3) students each month. Available all months except July. MUST BE SCHEDULED IN ADVANCE.)

PATH 652. PATHOLOGY, CLINICAL. An elective designed to introduce the student to the practice of Clinical Pathology through participation in activities of each section including Chemistry, Transfusion Medicine (Blood Bank), Microbiology, and Hematology. The student will develop a working knowledge of how the laboratory functions in providing laboratory results, and the interpretation of results in clinical practice. (Two (2) students each month. Available all months except July. MUST BE SCHEDULED IN ADVANCE.)

PATH 654. COMMUNITY PRACTICE PATHOLOGY. The student will develop a working knowledge of how a community practice pathology setting operates, and how community pathologists interact with their clinician colleagues. Students will be exposed to a broad range of pathology expertise including surgical pathology, cytopathology and clinical laboratory management. (One (1) student per month. Available July through May.)

PATH 851 AND 852. PATHOLOGY EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)
PEDIATRICS
Frederick E. Barr, MD, MSCI, Professor and Chair

FACULTY

Professors Emeriti:
Blair E. Batson, MD
Zhengwei Cai, PhD
Owen B. Evans, MD
Sandor Feldman, MD
Rathi V. Iyer, MD
William A. Long, MD
Suzanne T. Miller, MD
Howard H. Nichols, MD

Professors:
Omar Abdul-Rahman, MD
Istvan Arany, PhD
Bettina Beech, DrPH
Scott Benton, MD
Phyllis Bishop, MD
Uwe Blecker, MD
W. Richard Boyte, MD
Susan L. Buttross, MD
Elizabeth Christ, MD
Jeffrey Crot, MD
Benjamin Dillard, MD
Mehul P. Dixit, MD
Naznin Dixit, MD
Istvan Arany, PhD
Ivonne Galarza, MD
Taysir Abusaa, MD
Kim Adcock, PharmD
Abhay Bhatt, MD
Tami Brooks, MD
Magnolia Castilla, MD
Anderson Collier, MD
Mobolaji Famuyide, MD
Lir-Wan Fan, PhD
Catherine Cooley Faulk, MD
Yangzheng Feng, MD

Associate Professors:
Taysir Abusaa, MD
Kim Adcock, PharmD
Abhay Bhatt, MD
Tami Brooks, MD
Magnolia Castilla, MD
Anderson Collier, MD
Mobolaji Famuyide, MD
Lir-Wan Fan, PhD
Catherine Cooley Faulk, MD
Yangzheng Feng, MD
Ivonne Galarza, MD
Craig Hallstrom, MD
Betsy Herrington, MD
Suvankar Majumdar, MD
Norma Ojeda, MD
Kim Paduda, MD
Ruth Patterson, MD
Twila Rawson, MD
Linda Ray, MD

Assistant Professors:
Sabahat Afshan, MD
Avichal Aggarwal, MD
Mueed Ashraf, MD
Sarosh Bativala, MD
Kathleen Berg, MD
Steven Bondi, JD, MD
Ahmad Charaf Eddine, MD
Puja Craddock, MD
Michael Dallman, MD
Nina Dave, MD
Lamar Davis, MD
Holly Dawson, MD
Eric Deck, MD
Lisa Didion, MD
Kara Driver, MD
Rana El Feghaly, MD
Robert Eubanks, MD
Cynthia O. Field, MD
Craig Flowers, MD
Michael Foster, MD
Nan Frascogna, MD
Salwa Gendi, MD
David Gilliam, MD
Claire Nettles Gilliam, MD
Fernando Gomez, MD
Cathy Gordon, MD
Austin Harrison, MD
Whitney Herring, MD
Kelly Hersey, MD
Jennifer Hong, MD
John Brad Ingram, MD
David Josey, MD
Simon Karam, MD
Cynthia Karlson, MD
Jarrod Knudson, MD
Sophie Lanciers, MD
Marcus Lee, MD
Jessica Lilley, MD
Hua Liu, PhD
Elizabeth May, MD
Sharon McDonald, MD
Billy Edwin Mink Jr., MD

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER


**Instructors:**

- Monica Aycock, NP
- Teresa Hill, NP
- Lisa Schell, NNP
- Wendy Blethen, NP
- Penni Lowery, RNC, BSN
- Tanya Willis, NP
- Tobi Breland, NP
- Beth Mullins, NNP
- Holly Zimmerman, MS
- Amy Forsythe, NP
- Becky Russell, CNNP
- Laura Freeman, NNP
- Nick Rutledge, LCSW

**Affiliate Faculty:**

- Rana Aadia, MD
- Shamika Hudson, MD
- Audrey Robertson, MD
- Michael Adam Adcock, MD
- Rebecca James, MD
- Michael Rogers, MD
- Laura Barron, MD
- Leslie L. Jones, MD
- Kristie Rohman, MD
- David Braden, MD
- Sarah Hasler Jones, MD
- Dennis W. Rowlen, MD
- Dana Carbo-Bryant, MD
- Brian Kirmse, MD
- R. Joseph Russell, MD
- Steven P. Chevalier, MD
- Bettie Knight, MD
- Manisha Sethi, MD
- Courtney L. Convertino, MD
- Bettie Dixon Knight, MD
- Amy Shepherd, MD
- Amanda Cook, MD
- Louisa A. Lawson, MBCHB
- Tammy L. Sims, MD
- Leslie Delaney, MD
- Ann M. Lee, MD
- S. Anthony Smith, MD
- Sam J. Denney Jr., MD
- Leigh Campbell, MD
- William H. Smith, MD
- Joseph D. Edwards, MD
- Lynda Jackson-Assad, MD
- James H. Stewart, MD
- Parker Ellison, MD
- Gordon H Meador Jr., MD
- Joanna M. Storey, MD
- Erwyn E. Freeman Jr., MD
- Tim Mitchell, MD
- Robert Harvey Thompson, MD
- Michelle J. Gibson, MD
- Laura B. Mullins, MD
- William Bradley Troutman, MD
- Dana L. Grant, MD
- Jennifer K. Myers, MD
- K. Michele Van Norman, MD
- Kaisha Griffin, MD
- Jennifer D. O’Sullivan, MD
- Alisha S. Vaughn, MD
- Mitchell J. Gruiich Jr., MD
- William D. Payne, MD
- Vibha Vig, MBBS
- Jason B. Hicks, MD
- Amanda Penny, MD
- Paul Burl Welch, MD
- Samuel P. Hopper, MD
- Catherine P. Philippi, MD
- Yolanda Wilson, MD

**Third Year**

**PED 631. JUNIOR PEDIATRICS.** Students work as clerks on inpatient services of the Children’s Hospital and in ambulatory settings. Ward rounds, conferences and lectures are regularly scheduled. Emphasis is placed on developing the skill of each student in history-taking and the physical examination of infants and children, particularly those with disorders that are most commonly seen in this age group. This course is required of all third-year students.

**PED 632. CHILD DEVELOPMENT AND BEHAVIORAL PEDIATRICS** This elective is comprised of a two-week block of outpatient child development and behavioral pediatrics. It will focus on the pediatrician’s part in a multidisciplinary approach to the evaluation and treatment of children and teens with developmental and behavioral disorders including ADHD, learning disabilities, Tourette’s Syndrome, autism spectrum disorders, behavioral disorders, and intellectual disabilities. (One (1) student each rotation. Available all rotations.)

**PED 633. PEDIATRIC GASTROENTEROLOGY.** This course is an introduction to the evaluation and diagnosis of common pediatric gastrointestinal complaints in the outpatient setting. The primary goal will focus on history taking and physical exam as a means for formulation of a differential diagnosis given a chief complaint. Treatment plans will be formulated with the student to introduce them to nuances of developing patient-specific therapy. (One (1) student each rotation. Available all rotations.)

**PED 634. MEDICAL GENETICS.** This two-week outpatient elective focuses on the evaluation, diagnosis, management, and counseling of patients and families with a variety of genetic diseases as well as the important role medical genetics plays in the morbidity and mortality associated with birth defects and human disease. In the first week, students will observe several genetic outpatient clinics (adult, pediatric, and/or prenatal) and multidisciplinary clinics (22q11 and/or craniofacial) as well as inpatient consults. We invite students to take on 2-4 cases in the second week. During that week, students work with a genetic counselor to review records and create a differential/management plan. Students will then interact directly with each patient and chart their history and plan. Outside of clinical work, students are invited to present a genetics-related topic of their choice to the division at the end of the rotation. (One (1) student each rotation. Available all rotations.)

**PED 635. PEDIATRIC PALLIATIVE MEDICINE.** Students will, under supervision, become a member of the interdisciplinary team overseeing health care management of acutely, chronically and terminally ill children. The student, in the ambulatory and inpatient setting, will have an opportunity to learn a holistic approach to pain and symptom management and end-of-life care. Communication skills are emphasized in the difficult situations that arise in the specialty of palliative medicine. (One (1) student each rotation. Available all rotations.)
PED 636. PEDIATRIC ALLERGY/IMMUNOLOGY. This course is an introduction to common allergic disorders, including allergic rhinitis, asthma, atopic dermatitis, food allergy, and evaluation for possible immune deficiency. Emphasis will be on developing an understanding of the diagnosis and management of the allergic disorders, physical exam skills, and lab testing for common immune defects in the outpatient setting. (One (1) student each rotation. Available all rotations.)

PED 637. PEDIATRIC NEUROLOGY. During this two-week clinical rotation medical students rotate with UMMC child neurologists with exposure to pediatric patients with epilepsy, headaches, static encephalopathy, tic disorders and neuromuscular disease. Although primarily a clinic rotation, there is potential for inpatient exposure. The process will include participation in history taking and physical exams (with a focus on neurological exam) as well as exposure to neurological procedures, including lumbar puncture, electroencephalography, video electroencephalography, and electromyography/nerve conduction studies. Available all months except July and December. One (1) student per 2 week block.

FOURTH YEAR

PED 651. PEDIATRIC AMBULATORY CARE. The student works as a clerk in the general and subspecialty clinics of the Pediatric Department. (Five (5) students each month. Available all months.)

PED 652. PEDIATRIC EXTERNSHIP. The extern functions as a first year house officer under the supervision of the resident and the attending staff. (Four (4) students each month. Available all months.)

PED 653. NEONATAL MEDICINE. Study and management of disorders which occur in the first 28 days of life. Experience is directed particularly toward the management of acute problems in the immediate postnatal period such as resuscitation, acid base-balance, ventilator management, and nutrition. Students will function as an acting intern with a limited number of patients. Students will have four night calls during their month. Night call will end at 10 p.m. (Four (4) students each month. Available all months.)

PED 654. CHILD DEVELOPMENT CLINIC. The student participates as part of the clinic team and evaluates patients referred to this clinic, follows some patients through psychological testing, speech and hearing evaluation, biochemical screening, and final disposition and counseling. Designed for those interested in pediatrics, neurology, family practice and/or psychiatry. (One (1) student each month. Available all months.)

PED 655. PEDIATRIC CARDIOLOGY. Student functions as an extern seeing patients in cardiac clinic and making rounds on cardiac inpatients including surgical and nursery patients; reads electrocardiograms and may be a member of the pediatric cardiac catheterization team. (One (1) student each month. Available all months.)

PED 656. PEDIATRIC HEMATOLOGY-ONCOLOGY. Consists of training in normal and abnormal peripheral blood and bone marrow morphology and participation in the inpatient and outpatient care of pediatric patients with hematology-oncology problems. (One (1) student each month. Available all months.)

PED 657. PEDIATRIC ENDOCRINOLOGY. The student functions as an extern, seeing outpatients and inpatients, and gains knowledge in related function studies. (One (1) student each month. Available all months.)

PED 658. PEDIATRIC NEUROLOGY. The student functions as an extern with training involving normal development and care of acute and chronic neurologic problems in both inpatient and outpatient clinics. The student is also required to research a topic related to the nervous system and give an oral presentation. (One (1) student each month. Available all months.)

PED 659. PEDIATRIC ALLERGY-IMMUNOLOGY. The student serves as an extern with training in the diagnosis and management of patients with allergic and congenital immunodeficiency disorders. (One (1) student each month. Available all months.)

PED 660. PEDIATRIC GASTROENTEROLOGY. The student will serve as an extern evaluating patients with digestive disorders. The emphasis of this elective will be to develop a practical, logical approach to the diagnosis and management of children with gastrointestinal dysfunction. (One (1) student each month. Available all months.)

PED 662. SPECIAL PEDIATRICS. Individualized programs for four weeks or longer can be arranged with the chairman of the department for students who are interested in obtaining experience in clinical blocks not offered at UMMC or who wish to engage in individualized Pediatric programs at UMMC or other medical schools. (One (1) student each month. Available all months.)

PED 663. PEDIATRIC INFECTIOUS DISEASES. Primary objective is to provide an understanding of the fundamentals of infectious diseases and infection control. The student will function as a house officer, i.e. answering consultations and attending I.D. conferences and journal club. Additional experiences will include microbiology laboratory rounds and instruction in the pharmacokinetics of antibiotics. (One (1) student each month. Available all months.)

PED 664. PEDIATRIC NEPHROLOGY. The student functions as an extern and participates in the evaluation and care of children with kidney disease in Inpatient and Outpatient Settings. Emphasis is placed on the interpretation of diagnostic tests, natural history, and treatment of acute and chronic disorders of the kidney. Students also participate in management of children with end stage renal disease undergoing dialysis or transplantation. (One (1) student each month. Available all months.)

PED 665. PEDIATRIC EMERGENCY ROOM. The student functions as an extern seeing patients in the emergency department. Experience is directed at the management of acute pediatric illnesses and injuries. Students will perform an equal number of shifts as a pediatric intern (13-15/month). (Two (2) students each month, except the months of July, December and May, which take one (1) student. Available all months.)
PED 667. PEDIATRIC RHEUMATOLOGY. The student functions as an extern evaluating patients with rheumatologic disorders. Special emphasis is placed on evaluation of history, physical findings and specific lab tests in order to develop a practical, logical approach to management of autoimmune disorders. (One (1) student each month. Available all months.)

PED 668. PEDIATRIC INTENSIVE CARE. The student functions as an extern and participates in the daily care of patients in the Pediatric Intensive Care Unit. The student will develop an approach to complex patients with multi system problems. Special emphasis is placed on respiratory, hemodynamic, and fluid management. (One (1) student each month. Available all months.)

PED 669. PEDIATRIC PHYSICAL MEDICINE AND REHABILITATION. The student functions as an extern seeing inpatients in the Children’s Rehab Center. Experience is directed toward children with physically handicapping conditions and the rehabilitation of acute and chronic disabling diseases. (One (1) student each month. Available all months.)

PED 672. PEDIATRIC HOSPITALIST. This course will allow 4th year students to work with pediatric hospitalists. The hospitalist’s service co-manages patients with the different pediatric surgical specialties as well as seeing general pediatric inpatients. The student will function as an extern in seeing patients with the pediatric resident and attending. (One (1) student each month. Available all months.)

PED 673. PEDIATRIC PULMONOLOGY. This elective will allow fourth-year students to obtain training in the management of pediatric patients with pulmonary disorders, both in the inpatient and outpatient settings. Special emphasis is placed on the interpretation of diagnostic testing modalities, natural history and treatment of common pulmonary conditions. Student may also function as part of the bronchoscopic team. (One (1) student each month. Available all months.)

PED 851 AND 852. PEDIATRICS EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

PHARMACOLOGY AND TOXICOLOGY
Richard J. Roman, PhD, Professor and Chair

FACULTY

Professors Emeriti:
Rodney C. Baker, PhD
Jerry Michael Farley, PhD
Susan Elizabeth Wellman, PhD

Professors:
Roy J. Duhe, PhD
Yin-Yuan Mo, PhD
Jia Long Zhuo, MD, PhD
Elise Gomez-Sánchez, DVM, PhD
Ian Paul, PhD
Robin William Rockhold, PhD
Robert E. Kramer, PhD

Associate Professors:
George Booz, PhD
Sean P. Didion, PhD
Birdie Babette LaMarca, PhD
Jian-Xiong Chen, MD
Albert W. Dreisbach, MD

Robert Cox, MD, PhD
Michael R. Garrett, PhD

Assistant Professors:
Sydney Murphy, PhD
Jennifer Sasser, PhD
Kayla R. Stover, PharmD, BCPS
M. Reddy Pabbidi, DVM, PhD
Stanley V. Smith, PhD
Jan M. Williams, PhD

Affiliate Faculty
Mazen Kurdi, PhD

SECOND YEAR

PHARM 620. INTRODUCTION TO PHARMACOLOGY AND THERAPEUTICS. Students are introduced to the principles underlying the use of pharmacological agents in medical practice. Concepts related to drug distribution, drug-receptor interaction and drug metabolism are considered. In addition, the mechanism of action, therapeutic effects, adverse side-effects and common clinical applications of various drugs and drug classes are presented through a combination of lectures and clinical correlations. This course is given during the winter and spring semesters.

FOURTH YEAR

PHARM 652. PHARMACOLOGY. This is an independent study course in which students are expected to (1) identify a topic in pharmacology and therapeutics; (2) retrieve pertinent basic and clinical data from the scientific literature; and (3) prepare a written report in which those data are discussed in relation to the presentation of a disease, future directions for disease management and overcoming the limitations of existing (accepted) pharmacotherapy. The topic of the report should be a novel aspect of pharmacotherapy including, but not limited to, a discrepancy they have encountered in the clinical use of a drug/drug class, a novel therapy(ies) for a disease for which current drugs might not fully prevent disease progression (e.g., congestive heart failure; diabetes mellitus, renal failure) or are otherwise limited (e.g., MRSA and other bacterial resistances), or an emerging field of pharmacotherapy (e.g., gene therapy, individualized medicine, molecular-targeted drugs). Pharmacology 620 is a prerequisite, and it is expected that students will have fundamental working knowledge of other basic and clinical sciences. Inquiries concerning the
course can be made with the department chair, director of the second year medical pharmacology course or any other pharmacology faculty. Arrangements for taking the course must be made in advance of registration. (Unlimited students each month. Available August, September, October, January, February, and March.)

PHYSIOLOGY AND BIOPHYSICS
John E. Hall, PhD, Arthur C. Guyton Professor and Chair

FACULTY:

Professors Emeriti:

Thomas G. Coleman, PhD
Terry M. Dwyer, MD, PhD
Thomas E. Lohmeier, PhD
R. Davis Manning Jr., PhD

Professors:

Thomas H. Adair, PhD
Joey P. Granger, PhD
Robert L. Hester, PhD
Luis A. Juncos, MD
Merry L. Lindsey, PhD

Barbara T. Alexander, PhD
Thomas G. Coleman, PhD
Lique M. Coolen, PhD
David J. Dzieliak, PhD

Associate Professors:

Alejandro Chade, MD
Heather A. Drummond, PhD
Michael W. Griswold, PhD
James C. Lynch, PhD

Thomas H. Adair, PhD
Joey P. Granger, PhD
Luis A. Juncos, MD

David J. Dzieliak, PhD
Merry L. Lindsey, PhD

PHYSIOLOGY AND BIOPHYSICS
John E. Hall, PhD, Arthur C. Guyton Professor and Chair

FACULTY:

Professors Emeriti:

Thomas G. Coleman, PhD
Terry M. Dwyer, MD, PhD
Thomas E. Lohmeier, PhD
R. Davis Manning Jr., PhD

Professors:

Thomas H. Adair, PhD
Joey P. Granger, PhD
Robert L. Hester, PhD
Luis A. Juncos, MD
Merry L. Lindsey, PhD

Barbara T. Alexander, PhD
Thomas G. Coleman, PhD
Lique M. Coolen, PhD
David J. Dzieliak, PhD

Associate Professors:

Alejandro Chade, MD
Heather A. Drummond, PhD
Michael W. Griswold, PhD
James C. Lynch, PhD

Thomas H. Adair, PhD
Joey P. Granger, PhD
Luis A. Juncos, MD

David J. Dzieliak, PhD
Merry L. Lindsey, PhD

PHYSIOLOGY AND BIOPHYSICS
John E. Hall, PhD, Arthur C. Guyton Professor and Chair

FACULTY:

Professors Emeriti:

Thomas G. Coleman, PhD
Terry M. Dwyer, MD, PhD
Thomas E. Lohmeier, PhD
R. Davis Manning Jr., PhD

Professors:

Thomas H. Adair, PhD
Joey P. Granger, PhD
Robert L. Hester, PhD
Luis A. Juncos, MD
Merry L. Lindsey, PhD

Barbara T. Alexander, PhD
Thomas G. Coleman, PhD
Lique M. Coolen, PhD
David J. Dzieliak, PhD

Associate Professors:

Alejandro Chade, MD
Heather A. Drummond, PhD
Michael W. Griswold, PhD
James C. Lynch, PhD

Thomas H. Adair, PhD
Joey P. Granger, PhD
Luis A. Juncos, MD

David J. Dzieliak, PhD
Merry L. Lindsey, PhD

PHYSIOLOGY AND BIOPHYSICS
John E. Hall, PhD, Arthur C. Guyton Professor and Chair

FACULTY:

Professors Emeriti:

Thomas G. Coleman, PhD
Terry M. Dwyer, MD, PhD
Thomas E. Lohmeier, PhD
R. Davis Manning Jr., PhD

Professors:

Thomas H. Adair, PhD
Joey P. Granger, PhD
Robert L. Hester, PhD
Luis A. Juncos, MD
Merry L. Lindsey, PhD

Barbara T. Alexander, PhD
Thomas G. Coleman, PhD
Lique M. Coolen, PhD
David J. Dzieliak, PhD

Associate Professors:

Alejandro Chade, MD
Heather A. Drummond, PhD
Michael W. Griswold, PhD
James C. Lynch, PhD

Thomas H. Adair, PhD
Joey P. Granger, PhD
Luis A. Juncos, MD

David J. Dzieliak, PhD
Merry L. Lindsey, PhD

FIRST YEAR

PHYSIO 611. MEDICAL PHYSIOLOGY. Study of the functions of the body with special emphasis on the relationships of the different organs to each other. This course is given in the winter and spring semesters of the first year.

FOURTH YEAR

PHYSIO 651. PHYSIOLOGY SENIOR ELECTIVE. A course of study synthesized from available resources of the department along the lines of interest indicated by the student. The elective consists of a thorough review of pertinent literature, participation in ongoing projects, attendance at seminars, and a final examination and/or prepared thesis and required. (Five (5) students each month. Available all months.)

PSYCHIATRY AND HUMAN BEHAVIOR
Scott Rodgers, MD, Professor and Chair

FACULTY:

Professor Emeritus:

Edgar Draper, MD

Professors:

Scott Franklin Coffey, PhD
Dirk Dhossche, MD, PhD
Thomas David Elkin, PhD
Kim Gratz, PhD

John Norton, MD
Ian Paul, PhD
Grazyna Rajkowska, PhD
Roy Reeves, DO

James Rowlett, PhD
Howard Roffwarg, MD
Craig Stockmeier, PhD

Associate Professors

Jeffrey Ali, MD
Leilani Greening, PhD
Faiza Qureshi, MD
Allen Richert, MD

Donna Rowlett, PhD
James Shaffery, PhD
Shashidar Shettar, MD
Julie Schumacher-Coffey, PhD

Matthew Tull, PhD
Liu, Xi, PhD
Eric Vallender, PhD
David Walker, MD

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER


**Assistant Professors:**

- Courtney Bagge, PhD
- John Beddingfield, MD
- James C. Brister, MD
- Nancy Bryant, MD
- Randy Burke, PhD
- Susan Buttross, MD
- Kevin Connolly, PhD
- Crystal Lim, PhD
- Gregory Gordon, MD
- Jon Corey Jackson, MD
- Mark Ladner, MD
- Javier Jose Miguel-Hidalgo, PhD
- Jefferson Parker, PhD
- John Pruett, MD
- Andres Viana, PhD
- Daniel Williams, PhD

**Instructors:**

- Susan Anand, ATR
- Lindsay Avent, MS
- Kevin Freeman, PhD
- Gloria Elaine Hardin, MSW
- Sally Huskinson, PhD
- Kerry L. Kokaisel, MN, FPMHNP, PhD
- Daniela Rueedi-Bettschen, PhD
- Mohaddetheh Moulana, PhD
- Dorota Maciag, PhD
- Zhiqiang Meng, PhD

**Affiliate Faculty:**

- Namita Khanna Arora, MD
- Kelly Buckholdt, PhD
- Molley Clark, PhD
- Brian Crabtree, PharmD
- Srivalli Ganne, MD, MPH
- Deborah Gross, MD
- Donald Guild, MD
- James Irby Jr., MD
- Sudhakar Madakasira, MD
- Naira Maruqi, PhD
- John Montgomery, DO
- Elizabeth Nosen, PhD
- Gerald C. O’Brien, PhD
- Michael Rack, MD
- Benjamin Allen Root Jr., MD
- Phillip Louis Scurria, MD
- Margaret E. Tidd, MD
- Cynthia Undesser, MD
- Lydia E. Weisser, MD
- John E. Wilkaitis, MD
- John Noel Young, PhD

---

**FIRST YEAR**

**PSYCH 611. PSYCHIATRY.** Introduction to the biopsychosocial model of medicine and the concept of the doctor-patient relationship. Teaching formats include lectures and in-class patient interviews. The lecture material underscores the contribution of psychological and social variables to health and reviews normal human development, the behavioral examination of medical patients, psychosocial theories of normal and abnormal behavior, neurologic correlates of behavior, the DSM-V-TR, anxiety disorders, mood disorders and schizophrenia.

**SECOND YEAR**

**PSYCH 621. INTRODUCTION TO CLINICAL PSYCHIATRY.** This course introduces students to the disorder-based diagnostic system underlying the Diagnostic and Statistical Manual of Mental Disorders (DSM). The course also reviews selected DSM diagnostic categories.

**THIRD YEAR**

**PSYCH 631. JUNIOR CLERKSHIP IN PSYCHIATRY.** The junior clerkship in psychiatry is a four-week rotation during which students spend two weeks on two services, which includes an inpatient service, consult service and outpatient service. Assignments are divided between the University Hospital, Veteran’s Administration Medical Center and the Jackson Medical Mall. The clerkship offers the opportunity to gain experience in caring for patients with psychiatric illnesses in a multidisciplinary treatment team approach guided by biopsychosocial principles. Attendings and residents of the department closely supervise students. Faculty provide four hours per week of lectures that focus on evaluation and management of psychiatric disorders. Students are also introduced to psychiatric procedures with the opportunity to observe and participate in ECT.

**FOURTH YEAR**

**PSYCH 653. GENERAL PSYCHIATRY.** Students may propose their own plan of study which must be approved by the Department prior to the start of the block. Opportunities are available for students to design, with guidance, a clinical elective that meets their specific needs, e.g., combining inpatient and outpatient work, or participating in ongoing clinically relevant basic research projects within the department. Such projects can be supervised by faculty members in any of the disciplines (psychiatry, psychology and research) represented within the department. (Three (3) students each month. Available all months.)

**PSYCH 658. SLEEP DISORDERS.** The senior student spends four weeks assigned to the Sleep Disorders Center at UMMC. The rotation exposes the student to the evaluation, differential diagnosis and treatment of sleep disorders. Under close faculty supervision, the student participates in initial patient evaluations, follow-up appointments and reviewing polysomnograms. (One (1) student each month. Available all months except December and January.)

**PSYCH 851 AND 852. PSYCHIATRY EXTRAMURAL.** Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)
RADIATION ONCOLOGY
Srinivasan Vijayakumar, MD, DMRT, DABR, FACR, Professor and Chair, Director, UMMC Cancer Institute

FACULTY:

Professor:
Shankar P. Giri, MD

Associate Professor:
Claus Chunli Yang, PhD

Assistant Professor:
Robert M. Allbright, MD
Sophy H. Mangana, MD
Satyaseelan Packianathan, MD

Instructors
William Neil Duggar, MS
Rui He, MS
William C. “Trey” Woods, MSN, CFNP

Affiliate Faculty:
Roy J. Duhe’, PhD
Chindo Hicks, PhD
Christian Gomez, PhD

FOURTH YEAR

RAD 651. SENIOR RADIATION ONCOLOGY. This course is designed to introduce the student to basic concepts of radiotherapy, not only for those considering radiation oncology as a career, but also for those who are going to pursue medical or surgical oncology as their residencies. Students will participate in evaluation of patients with a wide variety of physical findings, under direct supervision of several faculty radiation oncologists. Ambulatory patients in treatment or follow-up clinics will be seen in addition to new consultations. Students will follow at least one new patient each week through simulation, administration of informed consent, patient teaching, treatment planning and implementation. Attendance at pediatric and adult tumor conferences will emphasize the importance of a multidisciplinary approach to cancer management. A reading list will be provided. (Two (2) students each month. Available all months.)

RAD 851 AND 852. RADIATION ONCOLOGY EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

RADIOLOGY
Timothy C. McCowan, MD, Professor and Chair

FACULTY

Professors Emeriti:
Bernard I. Blumenthal, MD
Philip E. Cranston, MD
R. Brent Harrison, MD

Professors:
Michael C. Doherty, MD
Ramesh B. Patel, MD
Vani Vijayakumar, MD

Associate Professors:
Erick Blaudeau, MD
Edward D. Green, MD
Bruce N. Schlakman, MD

Henry W. Giles, MD
Majid A. Khan, MD
Anson L. Thaggard, MD

Assistant Professors:
Mohammad A. Ali, MD
William “Kirk” Haney, MD
Akash M. Patel, MD
Cyrillo R. Araujo, MD
Daniel T. Hanksins, MD
Chris D. Reed, DO
Garth Campbell, MD
Kathleen H. Hardin, MD
Andrew Rivard, MD
Bhavika R. Dave, MD
Jennifer B. Johnson, MD
Manohar S. Roda, MD
Vidivel Devaraju, PhD
David Joyner, MD
Krystal Smith, MD
E. Patrick Farley, MD
Monica Koplas, MD
Andrew D. Smith, MD, PhD
John M. Faust, MD
Gustavo Luzardo, MD
Frederico F. Souza, MD
Maxime F. Freire, MD
Kristen Miller, DO
Michael A. Steiner, MD
Angela D. Graeber, MD
Todd A. Nichols, MD
Judd Storrs, PhD

Nurse Practitioners:
Mark Duncan, CFNP
Barbara Tolleson, CFNP

THIRD YEAR

RADIO 631. INTRODUCTION TO DIAGNOSTIC AND INTERVENTIONAL RADIOLOGY. This course is for all students, including those targeting radiology as a career as well as those who plan to enter other medical specialties. The two-week course is designed to introduce students to all major imaging modalities and equip students with practical knowledge regarding imaging anatomy,
advantages and disadvantages of each imaging modality, safety issues related to medical imaging, and a basic approach to image interpretation. (Six (6) students each rotation. Available all rotations except December.)

FOURTH YEAR

RADIO 651. SENIOR RADIOLOGY. This elective is for ALL students, including students pursuing a career in radiology as well as students seeking to become more sophisticated, better-informed users of imaging services. Completion of the third-year course, RADIO 631, is NOT a pre-requisite. All students will sharpen their skills in selecting appropriate imaging studies and in recognizing and communicating the most important findings on those studies. One of the goals of this expanded elective is to prepare students for their remaining senior clerkships and for on-call duties during internship. Toward this end, critical imaging findings and typical emergency imaging work-ups are reviewed and emphasized. In addition to improving proficiency in the interpretation of chest radiographs, the student will also learn a basic approach to the interpretation of cross-sectional imaging studies, with an emphasis on CT. The student spends four weeks rotating through the various subspecialties of radiology: Body CT (where CT’s of the chest, abdomen and pelvis are read), Breast Imaging (Mammography), Cardiovascular Imaging, Chest Radiography, Neuroradiology, Nuclear Medicine, Pediatric Radiology, Ultrasonography, and Vascular & Interventional Radiology. The student will work at least one day in each subspecialty, with other days of the rotation being elective (including the option to rotate on part of an after-hours emergency radiology shift. (Eight (8) students each month. Available all months except May and December).

RADIO 656. SPECIAL RADIOLOGY ELECTIVE. A self-designated rotation in radiology clinical areas in which the student will rotate through one or two subspecialty areas of interest. Attendance is required and must be appropriately recorded to pass this block. The student will also present an interesting case observed during their rotation (15-20 minutes in length) at a departmental conference (as scheduled, or to the course director or his designate). Additional requirements may vary based on chosen subspecialty area. Completion of RADIO 651 is a pre-requisite. At the discretion of the course director, this pre-requisite may be waived in certain circumstances. (Four (4) students each month. Available all months except May and December.)

RADIO 851 AND 852. RADIOLOGY EXTRAMURAL. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

SURGERY

Christopher D. Anderson, MD, Interim Chair and Associate Professor

FACULTY

Professors Emeriti:
James Bigbee Grogan, PhD
John B. McCraw, MD
Norman C. Nelson, MD
Seshadri Raju, MD
William Lamar Weems, MD

Professors:
Giorgio M. Aru, MD
Steven A. Bigler, MD
Christopher J. Blewett, MD
Ricky P. Clay, MD
Ralph Didlake, MD
Ali Dodge-Khatami, MD
David J. Dzielak, PhD
Edwin Harmon, MD
Thomas S. Helling, MD
James Edward Keeton, MD
Larry Martin, MD
Marc E. Mitchell, MD
Martin H. Mc Mullan, MD
Charles O’Mara, MD
John Porter, MD
Charles Pound, MD
Fred W. Rushton Jr., MD
Gregory Timberlake, MD
Patrick Smith, MD
Gregory Timberlake, MD
Marcus Walkinshaw, MD
Michael Winniford, MD
Feng Zhang, MD, PhD

Associate Professors Emeriti:
Wendell Douglas Godfrey, MD
Thomas Kennon Williams Jr., MD
Jesse Lucius Wofford, MD

Associate Professors:
Naveed A. Ahmed, MD
Christopher D. Anderson, MD
Peter B. Arnold, MD, PhD
A. Bradley Boland, MD
Lawrence L. Creswell, MD
Lonnie W. Frei, MD
Drew A. Hildebrandt, PhD
Christopher J. Lahr, MD
Gerald McKinney, MD
Shawn McKinney, MD
Harry V. Precheur, DMD
David Sawaya, MD
Jay Shake, MD
Alan Simeone, MD
Kenneth Vick, MD

Assistant Professors:
Shuntaye Batson, MD
Christopher Bean, MD
Barry R. Berch, MD
Clinton W. Collins, MD
Wanda Dorsett-Martin, DVM
Michael Friel, MD
Bhawna Gupta, PhD
Sebron Harrison, MD
Theresa Robertson, MD
Sumova V. Smith, MD
David C. Snyder, MD
Gregory Stanley, MD

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
SURG 631. SURGERY. The basic comprehensive course in surgery includes case studies, conferences, quizzes, ward rounds, outpatient clinic, and operating room time for eight weeks. Didactic and clinical experiences include material from all surgical specialties. Application of anatomy and physiology to the recognition, evaluation, and operative treatment of common surgical disease is emphasized along with pre and postoperative care of surgical patients. Students are assigned patient care responsibilities under faculty and house staff supervision including participation as part of an in-hospital on-call team. Students are required to participate in all aspects of patient care and to attend student centered and Departmental core conferences.

SURG 632. UNIVERSITY HOSPITAL GENERAL SURGERY. Students will participate in the diagnosis and treatment of patients with common general surgery problems. Students may be assigned to one of four General Surgery services (Surgery A, Surgery B, Acute Care Surgery, and Veterans Administration), at the discretion of the Course Director, depending upon total number of students enrolled. (Four (4) students each rotation. Available all rotations.)

SURG 633. VETERANS ADMINISTRATION GENERAL SURGERY. Students will participate in the diagnosis and treatment of a broad spectrum of general surgery problems. (Two (2) students each rotation. Available all rotations.)

SURG 634. CARDIOTHORACIC SURGERY. This elective is designed for students with interests in adult or pediatric cardiothoracic disease. Students will be able to choose between two weeks on either the Pediatric or Adult Cardiothoracic services. (Two (2) students each rotation. Available all rotations.)

SURG 635. PEDIATRIC SURGERY. The student will participate in the surgical management of pediatric patients with a variety of surgical problems. (Two (2) students each rotation. Available all rotations.)

SURG 636. PLASTIC AND RECONSTRUCTIVE SURGERY. Students will be introduced to the basics of plastic surgery, including skin and tissue grafts, vascularized flaps and free flaps, craniofacial procedures, and microsurgery. (Two (2) students each rotation. Available all rotations.)

SURG 637. SURGERY CRITICAL CARE. The student will be an integral part of the team participating in the daily care of trauma and general surgery patients in the surgery intensive care unit. (One (1) student each rotation. Available all rotations.)
SURG 638. SURGICAL RESEARCH. This elective is designed for students who have had previous and ongoing research experience with a Department of Surgery faculty member to allow dedicated time to continue their research endeavors. A letter of ongoing research is required from the Department of Surgery faculty member prior to approval into this two week elective. (Variable number of students each rotation. Available all rotations.)

SURG 639. TRANSPLANT SURGERY. Students will be introduced to the basics of transplant surgery, including kidney, pancreas and liver transplantation, as well as participate in the care of hepatobiliary patients. (One (1) student each rotation. Available all rotations.)

SURG 640. TRAUMA SURGERY. Students will focus on the initial evaluation and management of the trauma patient by becoming a member of the trauma team and responding to trauma activations. Students will have the choice of participating in daytime trauma service or our “on-call” night float working 5 nights per week for two weeks. (Two (2) students each rotation. Available all rotations.)

SURG 641. UROLOGY. Emphasis is placed on common urologic problems with initial evaluations in the clinic or hospital setting during this elective. Students will participate in preoperative patient care, assist with urologic tests, procedures, and surgeries in clinic and in the operating room. (Two (2) students each rotation. Available all rotations.)

SURG 642. VASCULAR SURGERY. Students will focus on the medical and surgical management of peripheral and central vascular disease in the inpatient and outpatient setting, as well as the operating room. (Two (2) students each rotation. Available all rotations.)

FOURTH YEAR

SURG 652. GENERAL SURGERY. This course allows the medical student to spend one month on an adult general surgery service functioning as a sub-intern. The student will be assigned significant patient care responsibilities with faculty and senior house staff supervision. Students will be allowed to choose between four general surgery services (Surgery A, Surgery B, Acute Care Surgery, and Veterans Administration), and will be given priority to a service on a first come, first serve basis. (Four (4) students each month. Available all months.)

SURG 653. CARDIOTHORACIC SURGERY. Particularly stressed is major heart surgery, and the pre- and post-operative care of these patients. Angiography, cardiac catheterization and other diagnostic testing are emphasized. Congenital heart diseases and their therapy is part of the course as well. The student will also be exposed to a broad spectrum of thoracic surgical problems related to pulmonary, esophageal and chest wall abnormalities. Ward rounds, patient management, cardiac conferences, chest conferences, clinic follow-up and surgical assistance compromise the spectrum of duties. Ambulatory CT surgery will consist of all clinics, consults and operations performed during the daytime. Students will be able to choose between a month on either the Pediatric or Adult Cardi thoracic services. Research opportunities are available. (Two (2) students each month. Available all months.)

SURG 654. SURGICAL CRITICAL CARE. The student will be an integral part of the team participating in the daily management of patients in the Surgical Intensive Care Unit of the University Hospital. Emphasis will be placed on cardiopulmonary physiology, ventilator management, nutrition and critical care management. Ethical and medical legal issues pertaining to critical care medicine will be discussed. Participation will be under the guidance of the ICU faculty. (Three (3) students each month. Available all months.)

SURG 655. PEDIATRIC SURGERY. The student will assume, with close senior resident and faculty supervision, a significant role in the total management of pediatric surgical patients. The student will have the opportunity to integrate fetal physiology and embryology knowledge into clinical care. The student will elect either an ambulatory or inpatient focus, and the didactic and clinical expectations will be specific to the focus chosen. Most Pediatric surgery has become ambulatory in nature in terms of operations and clinic as well as daytime consultations. Departmental core conference attendance is required for all students. (Two (2) students each month. Available all months.)

SURG 656. VASCULAR SURGERY. The student will have the opportunity to participate in the management and work-up of patients with vascular disease. The settings will include the VAMC and University Hospital clinics and ORs. The students will understand the physiology and anatomy of the circulatory system in health and disease and will learn to take an appropriate history and physical exam. Ambulatory focus will revolve around endovascular interventions, clinics and outpatient or daytime surgery. (Two (2) students each month. Available all months.)

SURG 657. TRAUMA SURGERY. Students will participate in the care of injured patients in the ER and the OR and understand the principles of ATLS teaching. In addition, the students will have the opportunity to follow patients in an outpatient setting to understand the outcomes of trauma. The ambulatory focus will be limited to the clinics at the Jackson Medical Mall and daytime emergency room consults, especially those seen and subsequently either discharged or admitted to another service. Students will have the choice of participating in the daytime trauma service with nighttime call, or our “on-call” night float team working 5 nights per week for the month. (Two (2) students each month. Available all months.)

SURG 658. UROLOGY. Emphasis is placed upon clinical experience and responsibility. Students will participate in patient care in the hospital, operating rooms and clinics. Independent reading is encouraged and time is provided for formal teaching sessions. Research projects, such as chart reviews and case reports, are supported and encouraged. (Two (2) students each month. Available all months.)

SURG 659. SURGICAL RESEARCH. This elective is designed for students who have had previous and ongoing research experience with a Department of Surgery faculty member to allow dedicated time to continue their research endeavors. A letter of ongoing
research is required from the Department of Surgery faculty member prior to approval into this four-week elective. (Variable number of students each month. Available all months.)

**SURG 660. PLASTIC AND RECONSTRUCTIVE SURGERY.** The objectives of this course include introduction to the elements of plastic surgery (grafts, flaps, craniofacial procedures and microsurgery) and their application to traumatic wounds, infection, cancer, reconstruction and congenital abnormalities. Participation by the student in clinical services allows for understanding of the planning, perioperative and overall management of these patients. Ambulatory care is based in the clinics and outpatient surgery. The student is expected to participate in all conferences and educational opportunities to expose the student to academic and research concepts in plastic surgery. Student projects and presentations will be strongly encouraged. (Two (2) students each month. Available all months.)

**SURG 665. BREAST SURGERY.** This course is focused on surgical diseases of the breast. Students will assist with the initial evaluation of patients with breast pathology and learn the diagnostic skills required to treat breast disease, determine when surgery is indicated and assist with the postoperative care. Students will also participate in the operating room, and ward rounds when patients are hospitalized. (Two (2) students each month. Available all months.)

**SURG 666. OUTPATIENT SURGERY CLINIC.** This course is designed to expose fourth-year students to outpatient surgical patients across a variety of subspecialties. Students will evaluate surgical patients preoperatively determining the indications for surgical intervention and postoperatively to distinguish a normal versus a complicated postoperative course. Clinic schedule will be assigned by Course Director, taking into account student’s areas of interest, when possible. (Three (3) students each month. Available all months.)

**SURG 668. TRANSPLANT SURGERY.** Students will participate in the care of kidney, pancreas and liver transplant patients as well as hepatobiliary patients. Participation in at least one organ donor recovery procedure is strongly encouraged. (One (1) student each month. Available all months.)

**SURG 851 AND 852. SURGERY EXTRAMURAL.** Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

**CONJOINT COURSES**

The following courses are independent of any one department in the School of Medicine:

**FIRST YEAR**

**CONJ 623. CORE CONCEPTS IN MEDICINE.** This course will develop a framework that students will build upon as they embark on their study of medical sciences. During the course of the year, students are expected to develop the ability to critically analyze scientific data and place it in the context of pre-existing knowledge. Students will also be introduced to the best practices associated with interacting with patients in a professional manner. Lectures, small group discussions, and directed patient/student interactions will be used.

**CONJ 624. POPULATION HEALTH, DISEASE PREVENTION AND HEALTH PROMOTION.** This course is an introduction to the epidemiology and prevention of the major diseases, conditions, and health risk behaviors of public health importance in Mississippi and the United States. Students will learn to acquire a population health perspective and understand the relevance of public health and epidemiology to clinical practice. Students will also have an opportunity to practice basic disease prevention and health promotion in the community.

**CONJ 625. FUNDAMENTALS OF EPIDEMIOLOGY AND BIOSTATISTICS; INTERPRETING THE MEDICAL LITERATURE.** This course is an introduction to the methods, measures, and statistics used in epidemiologic studies and clinical trials. Emphasis is placed on understanding concepts and interpreting the results of statistical tests and epidemiologic studies. The goal of the course is to teach students how to interpret epidemiologic studies and clinical trials that are published in the medical literature.

**SECOND YEAR**

**CONJ 621. INTRODUCTION TO CLINICAL MEDICINE.** Second-year medical students are introduced to clinical experience by means of a series of lectures and demonstrations. Members of all departmental faculties participate in a course designed as an introduction to clinical medicine, bridging the gap between the basic sciences and their clinical application. Classroom instruction in history taking and physical examination is supplemented by weekly tutorial sessions conducted by members of the faculty in a ratio of one tutor to two students. Instruction is correlated with that in clinical laboratory diagnosis.

**THIRD YEAR**

**CONJ 631. CLINICAL SKILLS ASSESSMENT.** Medical students will be evaluated by Clinical Skills Assessment (CSA) during each third-year clinical rotation and will have a summative exam at the end of the third year. The exam is conducted in an Objective Structured Clinical Exam (OSCE) format to teach and evaluate students’ clinical skills, including verbal communication, history and physical examination, diagnosis and management, and written communication. Professionalism is a major component of evaluation.

**CONJ 632. INDEPENDENT STUDY.** Independent Study (IS) in the SOM is a self-paced course which allows students in the third-year curriculum to complete academic requirements or projects for the year without distracting from the clerkship schedule. It allows students to remain in their assigned M3 group with the intent to rejoin the group at the completion of the course. Independent Study is scheduled for two weeks in the third-year curriculum. This time frame can be extended up to, but not exceed, 10 weeks
within the third year. Approval for the extension must be given by the Associate Dean for Academic Affairs. Students who request an extension of the time in independent study will be required to submit a plan of study to demonstrate good time management. There will be no grade at the completion of this course.

**CONJ 633. M3 MEDICAL STUDENT RESEARCH PROGRAM.** A two-week research block required by students who are in the Medical Student Research Program (MSRP). During this rotation, third-year medical students will gain experience in designing a research project, conducting experiments, analyzing data, preparing a manuscript for submission, and preparing a poster for presentation. Students in the MSRP will work with their assigned mentor for the duration of the rotation. At the end of the M3 year, all third-year MSRP students are expected to present their research in a poster format at the MSRP Research Day or similar activity.

**CONJ 634. EVOLUTION IN HEALTH AND DISEASE.** This elective provides third-year medical students the opportunity to explore the relevance of concepts and principles from evolutionary biology and human evolution to medical practice and research, and to gain a deeper understanding of health and disease in populations. (Two (2) students each rotation. Available all rotations except June and July.)

**CONJ 636. PUBLIC HEALTH.** This elective provides third-year students the opportunity to work with the Mississippi State Department of Health to learn the broader scope of public health as it relates to the individual and the community. Activities will include restaurant and wastewater inspections, TB outreach activities to the homeless, and disease intervention investigations. Additional activities, such as disease outbreak investigations, disaster preparedness involvement and other public health experiences, will be included as opportunities arise. There will also be opportunities for direct patient care in the health department clinics. (Two (2) students each rotation. Available all rotations except the second rotation in May.)

**FOURTH YEAR**

**CONJ 652. SENIOR SEMINAR.** This required course consists of a series of assignments through Blackboard, including online group discussions. Students explore a number of important topics, including approach to clinical ethics, end-of-life issues, medical malpractice and other legal issues, the physician-patient relationship, cultural issues and selected social issues related to medical practice. (25 clock hours. Given online September-November and January-March.)

**CONJ 653. BIOETHICS, PERSPECTIVE ON CURRENT ISSUES IN MEDICINE AND SOCIETY.** The fourth-year elective course in bioethics is multifaceted and interactive. It is designed to acquaint students with various philosophical, ethical, and religious systems of thought and explore how they relate to complex ethical issues in the practice of medicine. This will help students develop critical thinking skills that can be used in the clinical setting and in future healthcare policy.

The course seeks to develop an integrated or holistic approach to patient care that combines an understanding of the core principles of the belief, faith, and spirituality of the patient with sound clinical judgment and ethical decision making in light of advancing medical technology. This is facilitated by providing students with tools and insights to further develop as compassionate healers with a deeper foundation and understanding of the complexities of ethical decision-making. Utilizing an interactive format of lecture, discussion, practical on site experience, and case analysis helps students to integrate this understanding into their own clinical practice. A diverse faculty provides instruction for the course including physicians, theologians, philosophers, chaplains, nurses, attorneys and bioethicists. (Fourteen (14) students each month. Available in February only.)

**CONJ 655. COMMUNITY SERVICE.** This course is intended to promote an awareness of the importance of volunteer community service by the physician and to organize and document an extraordinarily high degree of volunteer service by the student. Credit for the course requires a minimum number of documented hours of volunteer service in pre-approved activities and maintenance by the student of a personal journal recording these activities. All students must pre-enroll with approval by course directors and the Community Service Board. (Twenty-five students (25) each month. Available all months except May.)

**CONJ 658. ORAL-MAXILLOFACIAL SURGERY.** This four- to six-week rotation will provide a unique educational experience for medical students as they rotate on the Oral and Maxillofacial Surgery Service. Students will be exposed to oral pathology and oral manifestations of systemic diseases. They will see the effects of oral health on the patient’s overall state of health. Students will spend time in both the outpatient clinic setting where ambulatory surgery is performed and in the OR where they will assist in the care of patients. They will observe how the oral and maxillofacial surgeon manages complex facial trauma, temporomandibular joint disorders, cosmetic and functional dental problems, and oral pathology. This elective is recommended for those interested in otolaryngology-head and neck surgery or plastic and reconstructive surgery. (One (1) student each month. Available all months except July.)

**CONJ 659. M4 to M2 TEACHING TRACK.** This longitudinal elective provides senior medical students interested in academic medicine an opportunity to acquire a better understanding and appreciation of the art of clinical education. The student will gain proficiency in teaching history and physical examinations skills and giving feedback to assigned sophomore ICM students. Senior medical students taking this course will be better prepared for the teaching responsibilities of residency. A standardized curriculum will consist of didactic and online sessions, assigned reading and online video resources in performance of the physical exam. (This rotation can accommodate 50 students over the course of the year. Students will be able to enroll in any month, July-May, but will mentor their M2s throughout the year. Teaching responsibilities will be greatest during November-April. A final grade will not be given until May.) Students interested in participating will be required to submit a nomination form signed by any member of the pre-clinical or clinical faculty stating your interest and commitment as a student in teaching. Nomination forms may be obtained from Chastity Carney in L436, Deborah Newell in the Clinical Skills Assessment Center, or by emailing Dr. David Norris. Forms should be submitted to Chastity, Deborah or Dr. Norris.
CONJ 660. M4 MEDICAL STUDENT RESEARCH PROGRAM. A one-month research block required by students who are in the Medical Student Research Program (MSRP). During this rotation, fourth year medical students will gain experience in designing a research project, conducting experiments, analyzing data, preparing a manuscript for submission, and preparing a platform presentation. Students in the MSRP will work with their assigned mentor for the duration of the rotation. At the end of the M4 year, all fourth-year MSRP students are expected to present their research in a platform presentation at the MSRP Research Day or similar activity.

CONJ 667. DEAN’S FELLOWSHIP IN HEALTHCARE ADMINISTRATION. This non-clinical elective provides the student with a structured, faculty-mentored experience to explore many facets of healthcare leadership including academic medicine, hospital administration and models of healthcare delivery. It draws upon the expertise of leaders for the various departments within the University Hospitals’ administrative departments. Prior to acceptance, student must provide a copy of his/her CV to the course director, along with a cover letter explaining his/her interest in doing this elective and what he/she hopes to gain from the experience. (One (1) student each month. Available all months except November, December and May.)

CONJ 668. CLINICAL CAPSTONE. The goal of this M4 elective course is to provide a unique educational opportunity for individual students and to present topics that are crucial for a smooth transition to internship. It will be a multidisciplinary, integrated course that will use a combination of required podcasted lectures, small group sessions, medical simulations and internet research. Given online. (This rotation can accommodate a flexible number of students. Available in February, March and April.)

CONJ 669. INTRODUCTION TO CLINICAL ETHICS. This course is designed to expose medical students to the ethical issues found in clinical medicine as well as to endow them with critiquing and evaluation skills to recognize ethical dilemmas, work through the problems and attempt to find resolution. (Twenty (20) students each month. Available September and January.)
MISSISSIPPI’S ONLY
HEALTH SCIENCES
GRADUATE PROGRAM
### 2015-2016 ACADEMIC CALENDAR

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>13</td>
<td>Monday</td>
<td>Registration begins for 2015-2016 summer term and fall semester</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>Friday</td>
<td>Last day to submit an application for August degree</td>
</tr>
<tr>
<td>May</td>
<td>22</td>
<td>Friday</td>
<td>2015 Commencement</td>
</tr>
</tbody>
</table>

#### SUMMER TERM

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>26</td>
<td>Tuesday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>June</td>
<td>5</td>
<td>Friday</td>
<td>Last day to register</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Monday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Friday</td>
<td>Deadline for completion of all requirements for August degree</td>
</tr>
<tr>
<td>July</td>
<td>3</td>
<td>Friday</td>
<td>Independence Day Holiday observed</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td></td>
<td>20-27</td>
<td>Monday-Monday</td>
<td>Course evaluations</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>Friday</td>
<td>Last day of summer term</td>
</tr>
</tbody>
</table>

#### FALL SEMESTER

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>5</td>
<td>Wednesday</td>
<td>General Orientation and Graduate School Orientation</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Friday</td>
<td>Last day to register for fall semester</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>Friday</td>
<td>Last day to add a course</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>Friday</td>
<td>Last day to submit an application for December degree</td>
</tr>
<tr>
<td>September</td>
<td>1</td>
<td>Tuesday</td>
<td>Last day to withdraw from school or from a course without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Monday</td>
<td>Labor Day Holiday observed</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>October</td>
<td>2</td>
<td>Friday</td>
<td>Deadline for completion of all requirements for December degree</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Friday</td>
<td>Research Day School of Graduate Studies in the Health Sciences</td>
</tr>
<tr>
<td>November</td>
<td>9</td>
<td>Monday</td>
<td>Registration begins for spring semester</td>
</tr>
<tr>
<td></td>
<td>16-23</td>
<td>Monday-Monday</td>
<td>Course evaluations</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>Wednesday</td>
<td>Thanksgiving Holiday begins at 5 p.m.</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>December</td>
<td>7-18</td>
<td>Monday</td>
<td>Fall Semester Examinations</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Saturday</td>
<td>End of fall semester</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Tuesday</td>
<td>Last day to submit grades</td>
</tr>
</tbody>
</table>

#### SPRING SEMESTER

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>11</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Friday</td>
<td>Last day to register for spring semester</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Monday</td>
<td>Martin Luther King’s Birthday Holiday observed</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Friday</td>
<td>Last day to add a course</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Friday</td>
<td>Last day to submit an application for May degree</td>
</tr>
<tr>
<td>February</td>
<td>1</td>
<td>Monday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Wednesday</td>
<td>Student Financial Wellness Seminar</td>
</tr>
<tr>
<td>March</td>
<td>4</td>
<td>Friday</td>
<td>Spring Holiday begins at 5 p.m.</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>March</td>
<td>25</td>
<td>Friday</td>
<td>Deadline for completion of all requirements for May degree</td>
</tr>
<tr>
<td>April</td>
<td>11</td>
<td>Monday</td>
<td>Registration begins for 2016-2017 summer term and fall semester</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Friday</td>
<td>Last day to submit an application for August 2016 degree</td>
</tr>
<tr>
<td></td>
<td>18-22</td>
<td>Monday-Monday</td>
<td>Course evaluations</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>Thursday</td>
<td>Honors Day</td>
</tr>
<tr>
<td>May</td>
<td>2-6</td>
<td>Monday-Friday</td>
<td>Final examinations</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Friday</td>
<td>Last day of semester</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Tuesday</td>
<td>Last day to submit grades</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Friday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>
SCHOOL OF GRADUATE STUDIES IN THE HEALTH SCIENCES

Joey P. Granger, PhD, Dean
Michael J. Ryan, PhD, Associate Dean of Student Affairs
Lique Coolen, PhD, Associate Dean of Postdoctoral Studies
Sydney Murphy, PhD, Assistant Dean of Academic Affairs

HISTORY
The School of Graduate Studies in the Health Sciences at the University of Mississippi Medical Center in Jackson was established in 2001 by the Board of Trustees of State Institutions of Higher Learning. The Graduate Programs in the Health Sciences previously operated under the auspices of the Graduate School of The University of Mississippi.

PROGRAMS
The School of Graduate Studies in the Health Sciences offers programs leading to Master of Science (MS) and Doctor of Philosophy (PhD) degrees. A listing of the graduate degree programs offered at the Medical Center follows.

Master of Science Degree Programs
- Master of Science in Biomedical Materials Science
- Master of Science in Biomedical Sciences
- Master of Science in Clinical Anatomy
- Master of Science in Clinical Health Sciences (Program no longer accepting new graduate students)

Doctor of Philosophy Degree Programs
- Doctor of Philosophy in Anatomy
- Doctor of Philosophy in Biochemistry
- Doctor of Philosophy in Biomedical Materials Science
- Doctor of Philosophy in Clinical Health Sciences (Program no longer accepting new graduate students)
- Doctor of Philosophy in Medical Pharmacology
- Doctor of Philosophy in Microbiology and Immunology
- Doctor of Philosophy in Neuroscience
- Doctor of Philosophy in Nursing
- Doctor of Philosophy in Pathology
- Doctor of Philosophy in Physiology and Biophysics

Additional information about specific programs, application procedures, and the Graduate Student Handbook are available at our website: http://www.umc.edu/graduateschool/

MISSION STATEMENT
The mission of the School of Graduate Studies in the Health Sciences is to (1) train highly qualified researchers who will make significant contributions to the scientific literature; (2) educate those who will train the next generation of biomedical scientists and health care professionals; (3) foster the spirit of scientific inquiry; and (4) promote an environment that embraces diversity and cultural differences.

ADMISSION TO THE SCHOOL OF GRADUATE STUDIES
GENERAL REQUIREMENTS - Selection of applicants is made on a competitive basis, without regard to race, creed, sex, color, religion, marital status, sexual orientation, age, national origin, disability or veteran status. A student with a baccalaureate degree from a regionally accredited institution may apply for study in areas in which competence has been demonstrated by scholastic performance.

Prospective students must submit an online application for admission to the Office of Student Records and Registrar an official transcript of undergraduate and graduate (if applicable) grades, and an official statement of scores (verbal, quantitative and analytical) received on the Graduate Record Examination (GRE), three letters of recommendation for PhD programs, and a personal statement. With the exception of those students applying for admission directly from a Master’s Degree program, the GRE examination must be taken within five years of application. Information regarding the GRE may be obtained from the Educational Testing Service, Princeton, NJ 08540. International applicants must have transcripts evaluated in a course-by-course report from World Education Services (WES) at or Educational Credential Evaluators (ECE).

Prerequisites are required by certain programs, and these may be determined by contacting the specific program to which the applicant desires admission.

Initial evaluation of applicants for admission to graduate programs is made on the basis of undergraduate (and graduate, if applicable) scholastic performance, letters of recommendation and scores received on the GRE. Those applicants for whom the initial evaluation indicates the scholastic competence necessary to successfully pursue a graduate degree may be further evaluated by personal interview.
PhD applicants will be evaluated based on the following:
- Baccalaureate degree in a relevant scientific discipline
- GPA (3.0 or better for PhD programs, 3.0 preferred for MS programs)
- Three letters of recommendation (see MS Biomedical Sciences exception below)
- A personal statement
- A GRE score ≥300 on the combined verbal and quantitative scores is preferred
- Students whose combined verbal and quantitative scores are ≥ 300 (preferred for tests taken after 8/1/11) or ≥1000 (for tests taken before 8/1/11) will be granted full admission to the School of Graduate Studies. Students whose combined verbal and quantitative scores are < 300 (new GRE) or < 1000 (old GRE) will be considered for conditional admission based on the recommendation of the program director. To be removed from conditional status the student must, within three academic semesters of admission, attain a GPA of ≥3.0, or retake the GRE and score ≥300 (new GRE). Conditional students who fail to meet the criteria listed above will be dismissed from the program. Notwithstanding the above, individual programs may set higher minimum standards than those required by the School of Graduate Studies.

MS applicant requirements are similar to those seeking the PhD degree with the listed exceptions:
- A GRE score ≥295 on the combined verbal and quantitative scores,
- Or a DAT score ≥15,
- Or an MCAT score ≥20
  is also acceptable for those applying to the MS-Biomedical Sciences and MS-Clinical Anatomy programs.

For both MS and PhD programs, individual programs may set higher minimum standards than those required by the School of Graduate Studies. In view of that, students are requested to consult the director of their intended program of study and ascertain program-specific requirements.

Applicants whose native language is not English and/or who have completed their tertiary education primarily outside of the USA must submit official scores of the Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS) or Pearson Test of English-Academic (PTE-A) as evidence of English language proficiency.

- TOEFL-Internet Based Test (IBT): 79 or higher
- TOEFL-Paper Based Test (PBT): 550 or higher
- IELTS: 6.5 overall band score or higher
- PTE-A: 53 or higher

However, this requirement may be waived for students who are currently enrolled at a college or university in the United States and/or who demonstrate a proficiency in written and spoken English following a personal interview. Admission of a student to a graduate program must be approved by the program director and by the dean of the Graduate School. No individual may enroll in graduate level courses without proper approval and notification from the School of Graduate Studies in the Health Sciences.

Conditional Acceptance- Acceptance to the School of Graduate Studies is conditional; the Admission Committee may rescind an offer of acceptance at any time before matriculation if an applicant fails to maintain expectations upon which the acceptance was based. Examples include, but are not limited to, a significant decline in academic performance, failure to complete prerequisites or other course work and degrees in progress, patterns of unprofessional behavior and incidents discovered in a criminal background check.

Criminal Background Checks (CBCs) - Any preadmission agreement executed by the health care program with a student shall be void if there is a disqualifying incident or pattern of unprofessional behavior in the CBC prior to enrollment.

Fingerprint-Based CBC - Effective July 1, 2004, Section 37-29-232 of the Mississippi Code requires that students enrolled in a health care professional academic program undergo fingerprinting and CBC. All accepted applicants must call the School of Graduate Studies to schedule an appointment with UMMC Human Resources prior to enrollment so that a set of digital fingerprints and photograph can be required. Fingerprints will be submitted to the Mississippi Public Safety Commission and Department of Justice Federal Bureau of Investigation for a criminal background check. If any potentially disqualifying event is reported, Human Resources will mail to the Graduate School applicant a letter (such as Determination of Non-suitability for Employment in a Healthcare Facility) indicating that a potentially disqualifying event(s) has been reported and a copy of the criminal history report record. Copies will be sent to the Dean of the School of Graduate Studies. Currently, there is no charge to the applicant for this service.

TECHNICAL STANDARDS FOR ADMISSION

Technical Standards are non-academic requirements essential for meeting the academic requirements of the programs in the School of Graduate Studies in the Health Sciences. Within any area of specialization, students must demonstrate competence in those intellectual and physical tasks that together represent the fundamentals of research in their chosen discipline.

The PhD degree programs and some of the MS degree programs at The University of Mississippi Medical Center School of Graduate Studies in the Health Sciences require a dissertation or thesis based on independent research. Granting of those degrees implies the recipient has demonstrated a base of knowledge in their chosen field of study and the ability to independently apply that knowledge to form hypotheses, design and conduct experiments, interpret experimental results, and communicate these findings to the scientific community. Thus, a candidate for the PhD or MS degree in the health sciences must possess abilities and skills that allow for observation, intellectual and conceptual reasoning, motor coordination, and communication. The use of a trained intermediary is not acceptable.
The following technical skills are required of a successful PhD student:

**Observation**
The candidate must be able to acquire knowledge by direct observation of demonstrations, experiments, and experiences within the research and instructional setting.

**Intellectual/Conceptual Abilities**
The candidate must be able to measure, calculate, analyze, reason, integrate and synthesize information to solve problems.

**Motor Skills**
The candidate must possess motor skills necessary to perform procedures required for experimentation within the chosen discipline. Those individuals with physical challenges are encouraged to contact the appropriate administration to determine their educational options within the chosen discipline.

**Communication**
The candidate must be able to communicate and discuss his or her experimental hypotheses and results to the scientific community.

**Behavioral and Social Attributes**
The candidate must possess the emotional and mental health required for full utilization of his or her intellectual abilities, the exercise of good judgment, the prompt completion of responsibilities inherent in managing a scientific setting, the ability to function under the stress inherent in research, and the ability to understand and comply with ethical standards for the conduct of research.

**APPLICATION PROCEDURE**
The application may be obtained online from the School of Graduate Studies website. If problems are encountered, please contact the graduate school office for assistance (601-984-1195).

All transcripts and documents submitted to the Office of Student Records and Registrar in support of an application become the property of The University of Mississippi Medical Center and will not be returned to an applicant or forwarded to another school or individual. Contact information: Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216, 601-984-1080, 601-984-1079 (Fax).

**DEADLINES FOR APPLICATIONS** - The SGSHS accepts applications throughout the calendar year. However, applications for a specific academic term must be received by the Office of Student Records and Registrar by the deadlines below:

- **Summer Term:** April 1
- **Fall Semester:** June 1
- **Spring Semester:** October 1
- **Prospective PhD students who wish to attend the Graduate School Spring Recruitment Day must have applications submitted by December 15.**
- **MS Programs:** June 1

Students wishing to be considered for a graduate stipend for the upcoming Fall semester should apply for admission prior to April 1. Stipends are assigned on a competitive basis. An applicant is considered for the enrollment period designated on the application. If the applicant is accepted and fails to enroll, or is not accepted, a new application must be submitted if consideration for a subsequent enrollment date is desired.

**APPLICATION FEE** - A nonrefundable fee of $25 must accompany the initial application.

**REGISTRATION** - Registration for classes is not permitted unless the applicant has received notification of acceptance to a specific graduate program from the School of Graduate Studies in the Health Sciences. Registration for courses must be approved by the graduate program director and advisor. No credit is given for any course for which a student is not officially registered.

**NON-DEGREE SEEKING STUDENTS** - UMMC employees who wish to take graduate courses but are not members of a University of Mississippi Medical Center graduate program may apply as non-degree seeking students. Applicants must first complete an Approval to Register Form. The form and instructions for the Non-Degree Student are located on the Graduate School website. Non-degree students may not earn more than 9 semester hours. Furthermore, successful completion of courses taken does not in itself qualify the individual for subsequent admission to a graduate program.

**TUITION AND REQUIRED FEES**
Tuition and fees for the 2015-2016 academic year can be found on the institutional website. Non-resident PhD students will pay in-state tuition. Tuition is subject to change pending information from the Institutions of Higher Learning (IHL).

**PREDOCTORAL FINANCIAL ASSISTANCE**

**STIPENDS AND LOANS**
Financial support in the form of stipends may be available in some programs. Academic excellence, maturity, and research experience are the main qualifications considered in the appointment of trainees and assistants. Inquiries should be addressed to the director of the graduate program in which the applicant wishes to undertake study. Students receiving a stipend are assessed in-state fees. Stipends are not tax exempt and tuition is paid from the stipends. Information on the Graduate School Stipend Policy can be found at
the website. Graduate Students may also apply for additional funding through various loan mechanisms. Students should contact the Office of Student Accounting and Financial Aid to determine if they qualify for these loan programs.

SCHOLARSHIPS AND AWARDS

DEAN'S SCHOLARSHIP. The Dean’s Scholarship is a full-tuition recruitment scholarship which is awarded to students for outstanding academic achievement. All students on stipends or extramural support are eligible for the Dean’s Scholarship.

DEAN’S SERVICE AWARD. Presented to the graduate student who exemplifies the outstanding attributes of leadership, community outreach and service.

DR. L. WILLIAM CLEM ENDOWED MEMORIAL AWARD. This award, endowed by a generous gift from Dr. Wei Yu and wife Dr. Fei Lu, provides funds for student travel to scientific meetings and for other allowable student expenses. The award is available to Microbiology and Immunology students who are in good academic standing. Recipients will be selected by the Microbiology Graduate Faculty and approved by the Dean of the School of Graduate Studies in the Health Sciences.

HELEN REEVES TURNER, MD, PHD AWARD. Established in 2013 and is awarded each year to a deserving student from one of the Medical Center Schools. The recipient of this award, selected by the dean or his designee, exemplifies Dr. Turner’s outstanding attributes of leadership, education and service.

RANDALL-TRUSTMARK GRADUATE RESEARCH AWARD. This award is made in memory of Dr. Charles C Randall, the first chair of microbiology at UMMC and an early director of Graduate Studies at UMMC. Dr. Randall set a high standard for scholarship and directed graduate studies during its formative years at UMMC. The Randall-Trustmark Graduate Research Award and cash prize are presented in recognition of outstanding research accomplishments and scientific contributions by a Graduate Student.

REGIONS GRADUATE RESEARCH AWARD. The Regions Graduate Research Award and cash prize are presented in recognition of outstanding research accomplishments by a Graduate Student.

ROBERT A. MAHAFEEY JR., MEMORIAL AWARD. It was the first research award established at UMMC for the recognition, encouragement, and promotion of superior scientific capability of young investigators. Established in 1976 in memory of the late Robert Mahaffey Jr., a UMMC graduate student in immunopathology, this award consists of a cash prize and certificate, signed by the Vice-Chancellor, awarded to each recipient in recognition of exceptional research potential in basic or clinical biomedical science. In addition, the recipient’s name is engraved on a permanent plaque displayed in the Medical Center.

REGULATIONS AND OTHER INFORMATION

SCHOLASTIC REQUIREMENTS - It is the responsibility of the student to ascertain the general and specific requirements for the degree program in which they are enrolled. Students can obtain all relevant information from the program director, their advisor, or the Office of the Dean, School of Graduate Studies in the Health Sciences.

GRADING POLICY - In order to be in Good Academic Standing, a Ph.D. student must maintain a grade point average (GPA) of 3.0 or higher based on a four point grading scale or an 80% weighted numerical average as stated in the SGSHS Grading Policy. Individual programs may have specific academic requirements in addition to those stated here.

Under such a scale a grade of A is assessed 4 points, a B 3 points, a C 2 points, and an F 0 points. A grade of F is not acceptable for graduate credit but is included in the calculation of the student’s GPA. A grade of C is acceptable for graduate credit, but an overall GPA of 3.0 must be maintained. Students whose GPA falls below 3.0 or an 80% weighted numerical average after the first year, will be placed on academic probation and have 3 continuous semesters to raise their GPA to an acceptable level. Individual programs may have specific academic requirements in addition to those stated here. Repeating a course must be recommended by the student’s advisor and approved by the program director and course director. When a course is repeated, the second grade will be used in determining the student’s overall weighted average, however the first grade will remain on the transcript. A course may be repeated only once.

In certain courses a mark of P is given to indicate that a student has received graduate credit but has been assigned no point grade in the course. For example, official credit for satisfactory scholastic performance in seminars, journal clubs, research, and preparation of the dissertation or thesis may be recorded as P. However, in courses approved for the P mark, course directors may assign the grade of F. An Incomplete (I) may be assigned with the approval of the dean when the student has not completed a course within the enrollment period. Graduate students receiving the mark of I must complete the course work within 12 months from the time the grade was assigned, unless the course director requires an earlier completion date.

A course instructor may change a reported grade only if the original grade was incorrectly assigned due to clerical or computational error, or if a student meets the requirements for the removal of an I grade.

ADD OR DROP A COURSE - The request form to add or drop a class is found on the SGSHS website under forms. Classes may be added until the day specified by the academic calendar. Registration for a course makes the student responsible for attending that class until the course is completed or until the program director and dean of the Graduate School authorize withdrawal from that course. Approved withdrawals from a course, if completed on or before the day specified by the academic calendar, will not be recorded on the student’s record. Withdrawals authorized after that date will be recorded as W. A student can withdraw from a course and receive a W at any time up to the submission of the final grade. Once the final grade has been submitted, withdrawal is not permitted. Students may challenge grades within 30 days of issuance of final grades by the Office of Student Records and Registrar; otherwise, grades will stand as recorded.
ACADEMIC PROBATION – If at any time during an academic year the progress of a student is considered unsatisfactory, the student may be placed on academic probation or dismissed from the program. Students who are placed on academic probation because their GPA has fallen below 3.0 (PhD) or an 80% weighted numerical average or below 2.8 (MS) or a 75% weighted numerical average will have 3 semesters to raise their GPA to 3.0 (PhD) or 2.8 (MS) or higher. Failure to do so will result in dismissal. Dismissal of a graduate student can only occur after review by the dean of the Graduate School and, if necessary, by a hearing before a subcommittee of the Graduate Council at which the student has the opportunity to explain any unsatisfactory performance. The details of this process are described below.

DISMISSAL FROM THE SCHOOL OF GRADUATE STUDIES – Graduate students may be dismissed from the graduate program for cause. This may include unsatisfactory academic performance, failure to pass qualifying examinations, poor research performance, breaches of scientific integrity, i.e., plagiarism, falsification of data, etc., or personnel issues, i.e. harassment. Dismissal of a student from graduate school is initiated by the program director of the student’s program, and approved by a vote of the faculty or executive committee of that program. A recommendation for dismissal is then submitted in writing to the Dean of the Graduate School. Following his approval, the Dean of the Graduate School will notify the student in writing of the intention to dismiss. Further information on the policy can be found on the SGSHS website.

TRANSFER OF GRADUATE CREDIT FROM ANOTHER INSTITUTION - With the approval of the program director and the Dean of the Graduate School, academic credit equal to no more than half the number of hours required for graduation may be transferred from a previous graduate program. However, credit from another institution will be accepted only when it is clearly relevant to the student’s current program. Acceptance of transfer credit does not reduce the residency requirement. Forms for transfer of credit hours are available online. There is no credit given for experiential learning. Grades received in transfer courses are not used to calculate the student’s GPA, but are counted toward the hours required for a given graduate degree. Transfer courses are indicated on the student’s transcript by the designation T, to indicate credit has been given.

WITHDRAWAL FROM THE GRADUATE SCHOOL - A student who withdraws from the Graduate School must submit a Request for Withdrawal Form to the SGSHS office. This form is found on the SGSHS website. Failure to officially withdraw will result in a grade of F for each course in which the student is registered.

LEAVE OF ABSENCE - Leave of absence from graduate school may be granted by the dean or his/her administrative designee who meet the conditions listed in the Graduate Handbook.
  a. To students in good academic standing, leaves of absence will be granted for periods for up to 12 months to pursue training at another institution,
  b. To students in good academic standing, leaves of absence for generally no more than one academic semester will be allowed for personal, financial, or medical reasons, and
  c. To students not in good academic standing, leaves of absence will be given at the discretion of the program director and Dean of the School. Such students will be permitted the option of withdrawal.

Forms are available online.

DEGREES AND COMMENCEMENT - Degrees earned in a graduate program are awarded at the end of each semester. A student must complete all degree requirements and complete an Application for Graduation through the MyU Portal by the dates designated in the academic calendar. All graduates are encouraged to participate in spring commencement exercises.

COURSE LOAD - A full-time course load in the School of Graduate Studies is 9 credit hours per semester. Student and advisor must complete required registration approval form.

ENROLLMENT POLICY – Once students are accepted into a program, they must be continuously enrolled in classes until the degree is completed or have been granted a leave of absence. Leave of absence forms can be obtained from the SGSHS website.

COUNSELING
Professional and career counseling are available from each program director, the Graduate School deans, and other appropriate professionals at The University of Mississippi Medical Center. Personal counseling services related to life, relationships, work, money, legal, family and everyday issues, UMMC students my contact UMMC’s Student and Employee Assistance Program, LifeSynch, username: UMMC, password: UMMC, or 866-219-1232

STUDENT GOVERNMENT
The Graduate Student Body constitutes the student government executive organization of the students enrolled in the graduate programs at the UMMC. Elected officers and representatives serve in various student government capacities.

GRADUATE PROGRAMS
A range of circumstances and conditions determines the number of admissions to the various graduate programs. Therefore, students interested in a particular program of study are strongly urged to contact the director of that program prior to completing an application to determine whether openings exist for the current academic year and to ascertain specific program requirements.

MASTER OF SCIENCE
The School of Graduate Studies in the Health Sciences offers Master of Science degrees in Biomedical Sciences, Clinical Anatomy, Clinical Health Sciences, and Biomedical Materials Science. Within the Biomedical Sciences program are two tracks: Biomedical
Sciences and Maternal-Fetal Medicine (MD degree required). Information about each of these two tracks can be obtained from the program director or from the relevant section of the Bulletin.

**RESIDENCE REQUIREMENTS** - A minimum of one academic year must be spent in continuous residence as a full-time student at The University of Mississippi Medical Center to qualify for a Master's degree.

**ACADEMIC REQUIREMENTS (NUMBER OF CREDITS/MINIMUM GRADE POINT AVERAGE)** - A minimum of 30 (semester) credit hours is required for the MS degree. The minimum GPA for a MS degree is 2.8 (on the 4 point scale) or a weighted numerical average (WNA) of 75%. These requirements notwithstanding, individual MS programs can establish more stringent criteria for graduation.

**TIME LIMIT** - The time limit for completing all requirements for a Master of Science degree is six years from the date of first registration.

**THESIS** - Some programs may require a thesis as a requirement for graduation. The thesis should show evidence of original investigation. Thesis must be approved by the advisory committee and the SGSHS dean. An oral examination and thesis defense is mandatory in programs requiring a thesis. The candidate's Advisory Committee will conduct the examination.

**DOCTOR OF PHILOSOPHY**

The degree of Doctor of Philosophy is offered by the University of Mississippi Medical Center in Anatomy, Biochemistry, Biomedical Materials Science, Medical Pharmacology, Microbiology and Immunology, Neurosciences, Nursing, Pathology, and Physiology and Biophysics. In addition, a combined MD/PhD program is offered to highly qualified students who wish to pursue a career as physician-scientist (see below). Prospective students interested in any of these programs are invited to contact the specific program in which they wish to study or the School of Graduate Studies in the Health Sciences, University of Mississippi Medical Center, Jackson, Mississippi 39216-4505.

The Doctor of Philosophy degree is a research degree and is not conferred solely as a result of formal course work, no matter how superior and extensive. The program leading to the PhD degree represents more than the sum of time in residence, and the plans of study listed below are only a minimum. To receive the doctoral degree, the candidate must demonstrate evidence of proficiency and distinctive attainment in a special field, and a recognized ability for independent investigation as presented in a dissertation based upon original research. The following requirements for the PhD degree are the minimal requirements and apply to all students seeking the doctoral degree. Because individual programs may have additional specific requirements, the student is urged to clearly identify them before beginning a course of study. A description of program-specific policies is available from the relevant program director.

**ADMISSION REQUIREMENTS** - The previously listed general requirements for admission to a graduate program apply to the doctoral programs.

**RESIDENCE REQUIREMENTS** - A minimum of one academic year must be spent in continuous residence as a full-time student at the University of Mississippi Medical Center to qualify for a PhD degree.

**TIME LIMITS** - Completion of a PhD degree generally requires five to six years, but must take no more than five years following admission to candidacy.

**FULL-TIME STUDENT** - The University of Mississippi Medical Center graduate student is considered a full-time student if he/she is enrolled in 9 credit hours/semester. Complete required Approval to Register form online.

**ACADEMIC REQUIREMENTS (NUMBER OF CREDITS/MINIMUM GRADE POINT AVERAGE)**

**COURSE WORK** - All doctorate degrees require a minimum of 60 credit hours beyond a baccalaureate degree (or 30 credit hours beyond a master's degree). Credits representing research and preparation of the dissertation are to be earned as directed by the student’s Advisory Committee. Credit hour requirements may differ for other programs so the student should consult the relevant program director for specific details. **MINIMUM GRADE POINT AVERAGE** - The minimum GPA to obtain the PhD degree is a GPA of 3.0 (on a 4.0 scale) or a weighted numerical average of 80%. This requirement notwithstanding individual graduate programs may choose to set a higher standard for their program.

**LABORATORY ROTATIONS** - Laboratory rotations allow students the opportunity to discover the many different areas of research at UMMC, familiarize themselves with the lab communities, and determine whether a particular lab environment would be suitable for their dissertation research.

**QUALIFYING EXAMINATION AND ADMISSION TO CANDIDACY** - An examination to qualify students for admission to Candidacy for the PhD degree is administered by each program within the School of Graduate Studies. The Qualifying Examination is given to graduate students in good academic standing upon completion of coursework. The exact form of the examination (oral, written, comprehensive, or research based) varies from program to program. Information on the specific format used within a program may be obtained from the relevant Program Director or from the program's policy manual.

**DISSERTATION ADVISORY COMMITTEE** - PhD Advisory Committee members must be members of the graduate faculty or approved by the Dean of the Graduate School. The committee will consist of at least five members - four from the student’s major program and at least one graduate faculty member from outside the major program. The student's advisor serves as chairman of the committee. The other members of the committee are nominated by the chairman of the Advisory Committee with the approval of the graduate program director of the major program and the dean of the Graduate School. The Nomination of Advisory Committee Form found on the SGSHS website should be submitted to the Office of the Graduate School. It is the responsibility of the student to prepare and deliver the completed forms to the appropriate office or individual.
DISSEMINATION - The dissertation must show originality of thought and demonstrate the results of independent investigation. It should contribute to the advancement of knowledge, exhibit mastery of the subject literature, and be written with an acceptable degree of literary skill. The dissertation, written according to prescribed form, is prepared under the direction of the candidate’s advisor and must be approved by the candidate’s Dissertation Advisory Committee and the dean of the Graduate School. This approval must be obtained and all other requirements completed by the date given in the official academic calendar.

DISSEMINATION DEFENSE - The dissertation defense is conducted by the candidate’s Advisory Committee and consists of a public presentation and defense of the dissertation. Two weeks prior to a student’s public defense, an administrative staff member from that particular program sends announcement information to the Graduate School office. The following information should be included in the announcement: Student Name, Program, Dissertation or Thesis, Title of Dissertation/Thesis, Date of Defense, Time of Defense, and Place of Defense. In private deliberation, the Advisory Committee will determine the acceptability of the defense and dissertation. Further questioning of the candidate may be included in the committee’s deliberations. The dissertation must be submitted to the Advisory Committee at least 10 days before the examination. Five members of the Advisory Committee must be present at the final oral examination.

ADDITIONAL GRADUATION REQUIREMENTS
- Students receiving the PhD degree are required to have the results of their research accepted for publication prior to awarding of the degree. This manuscript must meet the publication requirement, i.e., the student must be listed as the sole first author on at least one publication in a national or international peer-reviewed journal. Verification of the publication requirement requires submission of the Publication Requirement Form found online.
- All students must pass ID709 (Responsible Conduct in Research) with the exception of students enrolled in the PhD in Clinical Health Science (CHS) and Doctorate of Nursing (PHN) programs who must take ID 700 (Ethics in Research). In addition, all graduates with the exception of CHS and PHN students must successfully pass ID714 (Professional Skills).

MD/PhD PROGRAM
The goal of the MD/PhD program is to train medical students to become physician-scientists. To prepare students for careers in academic medicine, the program will provide them with a broad understanding of contemporary medical knowledge and the ability to productively investigate issues related to human disease. The MD/PhD Program is a seven year program consisting of the first three years of medical school (M1-M3), three years of graduate study (G1-G3), and a final year of medicine (M4). To closely align clinical and research interests, students typically select an area for graduate study during their M3 year and maintain association with their clinical interests through interaction with clinical faculty mentors during their G1-G3 years.

Acceptance into the MD/PhD program at The University of Mississippi Medical Center requires prior admission into medical school. Moreover, in addition to completion of all medical school application materials, the applicant must also submit their GRE scores and a written personal statement indicating the reasons for choosing the MD/PhD program (see options on the School of Medicine’s Secondary Application). Since the purpose of the MD/PhD program is to train clinical researchers, each applicant should list under “Experiences” in his/her American Medical College Application Service (AMCAS) application all relevant research experience and research presentations and provide at least one letter of recommendation from an individual capable of evaluating the applicant’s research potential. All application materials should be sent to the associate dean for medical school admissions. MD/PhD applicants who are invited to interview with the Medical School Admissions Committee will also meet with one or more members of the graduate school’s MD/PhD Admissions Committee. Prior to the interview with the Graduate School, the student must complete the Graduate School application for the PhD program.

The MD/PhD program is a 3/3/1 pathway (3 years Medical School, 3 years Graduate School and the last year in Medical School). During the M1 or M2 year students may take the graduate school’s Research Ethics course (ID709). If the student’s research interests involve the use of vertebrate animals, MD/PhD students may also take “An Introduction to Animal Research” (ID704). In addition, courses taken for graduate credit during the M1 and M2 years may have additional departmental requirements. After identification of a specific department in which to pursue a PhD degree and with the Program Director’s recommendation to the dean of the Graduate School, an MD/PhD student will receive graduate credit for relevant courses taken during the M1/M2 years.

Prior to choosing a department in which to major, MD/PhD students will be required to attend specific departmental seminars in research areas of interest. When a major department has been identified, not later than April 1 of their M3 year, the MD/PhD student will select an advisor and begin to fulfill specific requirements of that PhD program.

Years G1 through G3 are devoted to research and writing and fulfilling all program requirements for the PhD. It is anticipated that some candidates may wish to continue research during their M4 year, which would be permitted, even encouraged.

Additional information can be found on the SGSHS website.

Laboratory Rotations
MD/PhD students are required to complete lab rotations in a minimum of three mentors’ labs in 2 different departments during the summer terms prior to their M1 and M2 years. The summer prior to their M1 year, the student will complete a five-week rotation in two different biomedical science programs. For the summer prior to the M2 year, the student may opt to complete the entire 10-week lab rotation in only one program or choose a new one.
FACULTY AND COURSES OF INSTRUCTION

All courses listed by programs offering graduate degrees are not available each semester. For information on availability of courses the student should access the SGSHS website for current schedules and the SGSHS Bulletin or contact the office of the specific program. Approval of the instructor is required for registration in all courses outside the major program. When approved by the dean of the graduate school and the program director, specific basic science courses required for the DMD or MD degree may be included in programs leading to graduate degrees.

For each program listed below, an outline of courses, taken during the first two years of graduate study, is presented. These plans will provide the greater part of the course work required for a PhD degree. Additional courses, needed to attain the required 60 hours are listed in the course offerings.

ANATOMY PROGRAM

Ranjan Batra, PhD, Director

FACULTY

Professor Emeritus:
Duane E. Haines, PhD

Professors:
Elise P. Gomez-Sanchez, PhD
Roger B. Johnson, DDS, PhD
Michael N. Lehman, PhD
Rick C. S. Lin, PhD

Associate Professors:
Ranjan Batra, PhD
Ron Caloss, DDS, MD
Lewis L. Chen, PhD

Assistant Professors:
Yufeng Lu, PhD
Eddie Perkins, PhD

ANAT 700. Fundamentals of Gross Anatomy. A study of the human body with an emphasis on the head, neck and trunk. This course incorporates lectures and a dissection laboratory. Although listed as a Spring Semester course, a component is taught at the start of the Fall Semester. (Lecture) (9 semester hours)

ANAT 701. Fundamental Microscopic and Developmental Anatomy. A study of the microscopic structure and function of cells, tissues and organs. (Lecture) (6 semester hours)

ANAT 703. Seminar Writing Biomedical Research Papers. Basic elements of writing, such as sentence structure, and the traditional sections of the biomedical research paper (Introduction, Materials and Methods, Results, and Discussion) are taught through the use of examples and exercises. (Lecture) (1-2 semester hours)

ANAT 711. Gross Anatomy. A study of the human body utilizing dissection. (Lecture) (12 semester hours)

ANAT 713. Histology and Cell Biology. A study of the structure and function of cells, tissues and organs. (Lecture) (3 semester hours)

ANAT 715. Neurobiology. A study of the human nervous system (Lecture) (6 semester hours)

ANAT 716. Developmental Anatomy. A study of the embryonic development of the human body. (Lecture/Lab) (2 semester hours)

ANAT 717. Introduction to Research Techniques. Discussion and laboratory experience. (Laboratory) (1-9 semester hours)

ANAT 722. Topics in Contemporary Anatomy. A seminar course in which students will take turns presenting the contents of assigned scientific papers or other readings dealing with research in anatomy or related topics. (Lecture) (1-2 semester hours)

ANAT 730. Teaching Practicum in Gross Anatomy. Advanced students will: 1) develop skills required to teach gross anatomy to professional and graduate students in a laboratory venue and 2) solidify his or her command of the subject. As part of the course, students will gain experience in the construction and administration of written and laboratory exams. Prerequisite: Anatomy 700 or 711 or equivalent. (Laboratory) (3 semester hours)

ANAT 731. Teaching Practicum in Histology and Cell Biology. Advanced students will 1) develop skills required to teach histology and cell biology to professional and graduate students in both a laboratory venue and 2) solidify his or her command of the subject. As part of the course, students will gain experience in the construction and administration of written and laboratory exams. Prerequisite: Anatomy 701 or 713 or equivalent. (Laboratory) (1-3 semester hours)

ANAT 733. Teaching Practicum in Neurobiology. This course provides the advanced student with a mechanism for (1) developing the skills necessary to teach neurobiology to professional and graduate students and (2) solidifying his or her knowledge of neurobiology. Students receive instruction in current educational approaches, and engage in interactive learning activities with students enrolled in ANAT 615/715. Students in ANAT 733 gain experience in guiding group discussions, and obtain training in content delivery in a
The course will prepare students to play a critical role in enabling professional students to bridge the foundations in basic science to the health-related professions. Prerequisite: Anatomy 715 or equivalent. (Laboratory) (3 semester hours)

**ANAT 740. Readings in Contemporary Anatomy.** A program of reading or reading and research assigned by a faculty advisor according to specific interests of the student. A written report of the work may be required of the student during or at the end of the semester. (Lecture) (1-9 semester hours)

**ANAT 742. Introductions to Problems in Clinical Anatomy.** Students will read, discuss and give presentations about papers and instructional videos related to the teaching of clinical anatomy, and will attend selected grand rounds in clinical departments participating in this program. They will visit laboratories where research in clinical anatomy is performed and will be introduced to educational scholarship. (Lecture) (1-3 semester hours)

**ANAT 743. Skills Development in Clinical Anatomy I.** Students will read, discuss and give presentations about papers on the teaching of clinical anatomy. In addition, guest lecturers will give students the opportunity to learn from anatomists who are master educators. Finally, students will practice giving lectures on topics in anatomy and will have a supervised lecturing experience to a large audience. (Lecture) (1-3 semester hours)

**ANAT 744. Skills Development in Clinical Anatomy II.** Students will read, present and discuss papers on the teaching of clinical anatomy. They may also attend grand rounds in participating clinical departments and discuss their experiences in class. Finally, as a capstone experience for their research/scholarship project (ANAT 745 Clinical Anatomy Research Project), they will present a half-hour seminar describing their project to all students and participating faculty in the Program. (Lecture) (1-3 semester hours)

**ANAT 745. Clinical Anatomy Research Project.** In consultation with their mentor and the Program Director, the student will participate in a research/scholarship project focused in an area of clinical anatomy or anatomical education. (Laboratory) (1-9 semester hours)

**ANAT 750. Thesis Research Proposal.** An advanced course in which master’s students prepare a research proposal for their thesis research project. (Thesis) (1-9 semester hours)

**ANAT 760. Dissertation Research Proposal.** An advanced course in which doctoral students will either prepare for their qualifying exams or prepare for and defend a research proposal for their dissertation research project (Independent Study) (1-9 semester hours)

**ANAT 790. Thesis and Thesis Research.** (Thesis) (1-9 semester hours)

**ANAT 798. Dissertation and Dissertation Research.** (Dissertation) (1-9 semester hours)

### PLAN OF STUDY

#### PH.D.: CLINICAL ANATOMY TRACK

<table>
<thead>
<tr>
<th>YEAR 1 - FALL</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 711</td>
<td>Gross Anatomy</td>
<td>12</td>
</tr>
<tr>
<td>ANAT 713</td>
<td>Histology &amp; Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>ANAT 716</td>
<td>Developmental Anatomy</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 1 - SPRING</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 715</td>
<td>Neurobiology</td>
<td>6</td>
</tr>
<tr>
<td>ANAT 713</td>
<td>Histology &amp; Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>ANAT 740</td>
<td>Readings in Contemporary Anatomy</td>
<td>1</td>
</tr>
<tr>
<td>ANAT 742</td>
<td>Introduction To Problems In Clinical Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>ID 709</td>
<td>Responsible Conduct in Research</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2 - SUMMER</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 740</td>
<td>Readings in Contemporary Anatomy</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2 - FALL</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 730</td>
<td>Teaching Practicum In Gross Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>ANAT 731</td>
<td>Teaching Practicum In Histology and Cell Biology</td>
<td>2</td>
</tr>
<tr>
<td>ANAT 740</td>
<td>Readings in Contemporary Anatomy</td>
<td>1</td>
</tr>
<tr>
<td>ANAT 743</td>
<td>Skills Development In Clinical Anatomy I</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2 - SPRING</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 731</td>
<td>Teaching Practicum In Histology and Cell Biology</td>
<td>1</td>
</tr>
<tr>
<td>ANAT 733</td>
<td>Teaching Practicum In Neurobiology</td>
<td>3</td>
</tr>
<tr>
<td>ANAT 744</td>
<td>Skills Development In Clinical Anatomy II</td>
<td>1</td>
</tr>
<tr>
<td>ID 714</td>
<td>Professional Skills for Graduate Students</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
### PH.D.: ANATOMICAL SCIENCES TRACK

**YEAR 1 - FALL**
- ANAT 711 Gross Anatomy 12
- ANAT 713 Histology & Cell Biology 3
- ANAT 716 Developmental Anatomy 2
- ANAT 722 Topics in Contemporary Anatomy 1

**YEAR 1 - SPRING**
- ANAT 715 Neurobiology 6
- ANAT 713 Histology & Cell Biology 3
- ANAT 722 Topics in Contemporary Anatomy** 1
- ANAT 740 Readings in Contemporary Anatomy 1
- ID 709 Responsible Conduct in Research 1

**YEAR 2 - SUMMER**
- ANAT 740 Readings in Contemporary Anatomy 9

**YEAR 2 - FALL**
- ANAT 722 Topics in Contemporary Anatomy 1
- ANAT 730 Teaching Practicum in Gross Anatomy 6
- ANAT 731 Teaching Practicum in Histology and Cell Biology* 2
- ID 740 Statistical Methods in Research I 3

**YEAR 2 - SPRING**
- ANAT 722 Topics in Contemporary Anatomy** 1
- ANAT 740 Readings in Contemporary Anatomy 1
- ANAT 731 Teaching Practicum in Histology and Cell Biology* 1
- ID 714 Professional Skills for Graduate Students 3
- Elective 5

**YEAR 3+ - FALL**
- ANAT 798 Dissertation and Dissertation Research 9
- ID 714 Professional Skills 2

**YEAR 3+ - SPRING**
- ANAT 798 Dissertation and Dissertation Research 9

---

*Anat 733, Advanced Neurobiology, may be taken rather than Anat 731

**Every other year, students take Anat 703, Seminar in Writing Biomedical Research Papers instead of Anat 722.

### MS IN CLINICAL ANATOMY

#### CORE COURSES

**YEAR 1 - FALL**
- ANAT 701 Fundamental Microscopic and Developmental Anatomy 6
- ANAT 711 Gross Anatomy 12

**YEAR 1 - SPRING**
- ANAT 715 Neurobiology 6
- ANAT 742 Introduction to Problems in Clinical Anatomy 2
- ID 715 Teaching in Higher Education 3
### YEAR 2 - SUMMER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 745</td>
<td>Clinical Anatomy Research Project</td>
<td>1/9</td>
</tr>
</tbody>
</table>

### YEAR 2 - FALL

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 743</td>
<td>Skills Development in Clinical Anatomy I</td>
<td>1</td>
</tr>
<tr>
<td>ANAT 745</td>
<td>Clinical Anatomy Research Project</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>**</td>
</tr>
</tbody>
</table>

### YEAR 2 - SPRING

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 743</td>
<td>Skills Development in Clinical Anatomy II</td>
<td>1</td>
</tr>
<tr>
<td>ANAT 745</td>
<td>Clinical Anatomy Research Project</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>**</td>
</tr>
</tbody>
</table>

### ELECTIVE COURSES (TWO OF THE FOUR ARE REQUIRED IN YEAR 2)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 730</td>
<td>Teaching Practicum in Gross Anatomy (Fall)</td>
<td>6</td>
</tr>
<tr>
<td>ANAT 731</td>
<td>Teaching Practicum in Histology and Cell Biology (Fall and Spring, 2-1)**</td>
<td>3</td>
</tr>
<tr>
<td>ANAT 733</td>
<td>Teaching Practicum in Neurobiology (Spring)</td>
<td>3</td>
</tr>
<tr>
<td>PHYSIO 725</td>
<td>Fundamental Physiology (Fall and Spring, 4-4)***</td>
<td>8</td>
</tr>
</tbody>
</table>

* Number of hours for the Research project is at least 1, and sufficient to ensure the student is enrolled full time.
* Electives are selected from the list above. Semester hours depend on the elective selected.
** Numbers in parentheses indicate approximate credit hours of work in each semester. For ANAT 731, registration is for 3 hours in Fall, but course extends through Spring. For PHYSIO 725, registration is for 4 hours in Fall and in Spring.

### BIOCHEMISTRY PROGRAM

Drazen Raucher, PhD, Director

#### FACULTY

**Professors:**

- Azzedine Atfi, PhD
- Jonathan P. Hosler, PhD
- Donald Blaine Sittman, PhD
- David R. Brown, PhD
- Wolfgang Kramer, PhD
- Parminder J. S. Vig, PhD
- John J. Correia, PhD
- Sharon A. Lobert, PhD
- Michael Hebert, PhD
- Drazen Raucher, PhD

**Associate Professors:**

- Wael Elshamey, PhD
- Luis Martinez, PhD
- Damian Romero, PhD
- Chindo Hicks, PhD
- Radhika Pochampally, PhD
- Guri Tzivion, PhD

**Assistant Professors:**

- Lee Bidwell, PhD
- Eric George, PhD
- Maureen Wirschell, PhD
- Ingrid Espinoza, PhD

#### BIOCH 704. Fundamental Biochemistry.** This course that presents a broad survey of biochemistry that is suitable for students whose major area of study is outside the discipline. Topics include the chemistry of amino acids and proteins, nucleic acids, carbohydrates and lipids; enzymology; metabolism and metabolic regulation; membrane structure and function; oxidative phosphorylation; hormonal control mechanisms; molecular biology and protein synthesis as well as aspects of oral biology and dental biochemistry (Lecture) (7 semester hours)

#### BIOCH 710. Biochemistry.** Comprehensive course in biochemistry including chemistry of amino acids and proteins, nucleic acids, carbohydrates and lipids; enzymology; metabolism and metabolic regulation; membrane structure and function; physical biochemistry; cellular energy production; hormonal control mechanisms; differentiation; molecular genetics; and protein synthesis. This course extends over two semesters and the entire course must be completed to receive credit (Lecture) (10 semester hours)

#### BIOCH 711. Mechanisms of Enzyme Action.** A study of the kinetics, mechanism of action, metabolic regulation and chemistry of enzymes. (Lecture) (2 semester hours)

#### BIOCH 715. Physical Biochemistry.** An introduction to methods in physical biochemistry: a problem solving approach including ligand binding, spectroscopy, fluorescence, circular dichroism, centrifugation, light scattering, electrophoresis, and separation techniques. (Lecture) (2 semester hours)

#### BIOCH 720. Seminar.** A course in which the student prepares and presents a research seminar on a topic of contemporary interest. (Lecture) (1-4 semester hours)

#### BIOCH 730. Special Topics.** Treatment of specific subjects not dealt with fully in other courses. (Lecture) (1-9 semester hours)
BIOCH 731. Special Topics II. Treatment of specific subjects not dealt with fully in other courses (Lecture) (1-15 semester hours)

BIOCH 740. Biochemical Methods. Primarily a laboratory course having the objective of introducing the student to various basic procedures and techniques which are tools of biochemical research. (Laboratory) (2 semester hours)

BIOCH 741. Advanced Biochemical Methods. An advanced laboratory course in which the student is involved in advanced procedures and techniques which are tools of biochemical research. (Laboratory) (1-9 semester hours)

BIOCH 742. Research Tools in Molecular Biology. A course designed to introduce students to contemporary methods in Molecular Biology including cloning, mutagenesis, transgenic animals, Genomics, Proteomics, and gene expression. (Lecture) (3 semester hours)

BIOCH 744. Cellular Biochemistry. Cellular Biochemistry will cover the structure and function of eukaryotic cells. Topics covered include: gene expression and its regulation, cell cycle, organelle function, signal transduction, intracellular transport, bioenergetics, and model genetic systems. (Lecture) (6 semester hours)

BIOCH 760. Biochemistry Research. Thesis research project under supervision of Thesis Advisor (Thesis) (1-9 semester hours)

BIOCH 798. Dissertation and Dissertation Research. (Dissertation) (1-9 semester hours)


**PLAN OF STUDY**

**YEAR 1 - FALL**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOCH 710</td>
<td>Biochemistry</td>
<td>10</td>
</tr>
<tr>
<td>BIOCH 740</td>
<td>Biochemical Methods</td>
<td>2</td>
</tr>
<tr>
<td>ID 709</td>
<td>Responsible Conduct in Research</td>
<td>1</td>
</tr>
</tbody>
</table>

**YEAR 1 - SPRING**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOCH 711</td>
<td>Mechanisms of Enzyme Action</td>
<td>2</td>
</tr>
<tr>
<td>BIOCH 715</td>
<td>Physical Biochemistry</td>
<td>2</td>
</tr>
<tr>
<td>BIOCH 741</td>
<td>Advanced Biochemical Methods</td>
<td>1</td>
</tr>
<tr>
<td>BIOCH 720</td>
<td>BIOCH Journal Club (Seminar)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**YEAR 2 - SUMMER**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOCH 760</td>
<td>Biochemistry Research</td>
<td>9</td>
</tr>
</tbody>
</table>

**YEAR 2 - FALL**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOCH 720</td>
<td>BIOCH Journal Club (Seminar)</td>
<td>1</td>
</tr>
<tr>
<td>ID 740</td>
<td>Statistical Methods in Research I</td>
<td>3</td>
</tr>
<tr>
<td>BIOCH 760</td>
<td>Biochemistry Research</td>
<td>5</td>
</tr>
</tbody>
</table>

**YEAR 2 - SPRING**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOCH 744</td>
<td>Cellular Biochemistry</td>
<td>6</td>
</tr>
<tr>
<td>BIOCH 720</td>
<td>BIOCH Journal Club (Seminar)</td>
<td>1</td>
</tr>
<tr>
<td>ID 710</td>
<td>Research Tools in Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOCH 760</td>
<td>Biochemistry Research</td>
<td>1</td>
</tr>
<tr>
<td>ID 714</td>
<td>Professional Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

**YEAR 3+ - FALL**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOCH 798</td>
<td>Dissertation and Dissertation Research</td>
<td>9</td>
</tr>
</tbody>
</table>

**YEAR 3+ - SPRING**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOCH 798</td>
<td>Dissertation and Dissertation Research</td>
<td>9</td>
</tr>
</tbody>
</table>
BIOMEDICAL MATERIALS SCIENCE PROGRAM

Kenneth R. St. John, PhD, Director

FACULTY

Professors:
Jason A. Griggs, PhD  
Aaron D. Puckett, PhD

Associate Professors:
Amol V. Janorkar, PhD  
Denise D. Krause, PhD  
Kenneth R. St. John, PhD

Assistant Professors:
Jennifer Bain, DMD, PhD  
Linda K. Fulton, DVM  
R. Scott Williamson, PhD  
Yuanyuan Duan, PhD  
Michael D. Roach, PhD

BMS 701A. Fundamentals of Materials Science A. An introductory graduate level course dealing with the fundamental concepts of bonding, crystalline structure, crystal defects and short range order as they relate to polymers, metals and ceramics. Nucleation and growth, equilibrium and non-equilibrium phase transformations and solidification on non-crystalline systems will be discussed. This will be followed by discussion of the mechanical properties of materials (fatigue, creep, elastic and plastic behavior, stress relaxation, etc.) and their relationship to structure. Alloy theory and other strengthening mechanisms, including composite theory, will be dealt with at an introductory level. The thermodynamics and kinetics of surfaces undergoing oxidation and aqueous corrosion will be discussed. Prerequisite: BMS 708 or consent of instructor. (3 Semester hours Fall) (Lecture) (3 semester hours)

BMS 701B. Fundamentals of Materials Science B. An introductory graduate level course dealing with the fundamental concepts of bonding, crystalline structure, crystal defects and short range order as they relate to polymers, metals and ceramics. Nucleation and growth, equilibrium and non-equilibrium phase transformations and solidification on non-crystalline systems will be discussed. This will be followed by discussion of the mechanical properties of materials (fatigue, creep, elastic and plastic behavior, stress relaxation, etc.) and their relationship to structure. Alloy theory and other strengthening mechanisms, including composite theory, will be dealt with at an introductory level. The thermodynamics and kinetics of surfaces undergoing oxidation and aqueous corrosion will be discussed. Prerequisite: BMS 708 or consent of instructor. (Lecture) (3 semester hours)

BMS 702A. Fundamentals of Biomaterials. A two semester course that will deal with metals, ceramics and polymers used for dental and medical applications. The physical, mechanical and biological interactions of these materials will be topics for discussion. The history of materials use in medicine, some of the pitfalls encountered and the current state of the art will be presented in detail. Tissue engineered medical products and guided tissue regeneration will also be covered. There will be an introduction to the methods used to assess the appropriateness of materials for use in contact with living tissues. Prerequisite: B.M.S. 701 or Consent of Instructor. (Lecture) (3 semester hours)

BMS 702B. Fundamentals of Biomaterials. A two semester course that will deal with metals, ceramics and polymers used for dental and medical applications. The physical, mechanical and biological interactions of these materials will be topics for discussion. The history of materials use in medicine, some of the pitfalls encountered and the current state of the art will be presented in detail. Tissue engineered medical products and guided tissue regeneration will also be covered. There will be an introduction to the methods used to assess the appropriateness of materials for use in contact with living tissues. Prerequisite: B.M.S. 701 or Consent of Instructor. (Lecture) (3 semester hours)

BMS 703A. Experimental Methods in Materials Science A. An introductory theory and laboratory course designed to acquaint students with the variety of equipment used to evaluate the structure and properties of materials. Scanning electron microscopy, mechanical testing, thermal analysis, light microscopy, x-ray scattering and other chemical and physical characterization techniques will be covered. The course will include both didactic and laboratory exercises and will meet an average of once per week for two semesters. The course will be taught simultaneously with BMS 701 and will involve the concurrent hands-on synthesis, processing, and characterization of materials and determination of the properties being taught in that course. (Lecture/Lab) (1 semester hour)

BMS 703B. Experimental Methods in Materials Science B. An introductory theory and laboratory course designed to acquaint students with the variety of equipment used to evaluate the structure and properties of materials. Scanning electron microscopy, mechanical testing, thermal analysis, light microscopy, x-ray scattering and other chemical and physical characterization techniques will be covered. The course will include both didactic and laboratory exercises and will meet an average of once per week for two semesters. The course will be taught simultaneously with BMS 701 and will involve the concurrent hands-on synthesis, processing, and characterization of materials and determination of the properties being taught in that course. (Lecture/Lab) (1 semester hour)

BMS 704. Crystallography and X-Ray Diffraction. Principles of crystallography, including point groups, space groups, stereographic projections and reciprocal lattice, will be discussed. Topics in x-ray diffraction, with special emphasis on application of x-ray diffraction techniques to materials analysis, will be covered during lecture and laboratory. Prerequisite: BMS 701 or Consent of Instructor. (Lecture) (3 semester hours)

BMS 705. Materials Thermodynamics. A graduate level course dealing with the principles of energetic equilibrium as applied to materials science. Materials thermodynamics provides a foundation for many other materials science courses. The first part of this course will introduce the apparatus of thermodynamics through classical steam engine calculations. The second part will apply that apparatus to predict the behavior of chemical solutions and mixtures. The following topics will be covered: the first, second, and third laws of thermodynamics; state functions and process variables; criteria for equilibrium; enthalpy of mixing; free energy basis for unary
and binary phase diagrams; capillarity and surface energy; electrochemistry. This course will involve intensive application of algebra and differential and integral calculus. Prerequisite: BMS 701 and BMS 708 or Consent of Instructor. (Lecture) (4 semester hours)

**BMS 708. Mathematics for Materials Study.** This introductory graduate level course is for students who have a biological science background or who have not taken didactic study for some time. This course provides or refreshes the mathematical foundation necessary to study engineering. BMS708 is a prerequisite for many courses in the Biomedical Materials Science program. This course covers the following topics: orientation to MathCAD software, precision and accuracy, vector algebra, matrix algebra, complex/imaginary numbers, polar coordinates, trigonometry, differential calculus with emphasis on applications (curve sketching, design optimization, related rates, propagation of error, successive approximations, curvilinear motion), integral calculus with emphasis on applications (calculation of irregular areas, volumes, centroids, and moments of inertia; function approximation using Taylor series; spectrum analysis using Fourier series), and a brief introduction to differential equations. (Lecture) (4 semester hours)

**BMS 710. Fundamentals of Polymer Science.** An in-depth course in polymer chemistry and physics. Areas to be covered include polymerization mechanisms, methods of polymer analysis, mechanics of amorphous and crystalline polymers (including time-dependent mechanical behavior), thermodynamics and kinetics of polymer crystallization, and thermal and optical behavior of polymers. (Lecture) (3 semester hours)

**BMS 711. Fundamentals of Ceramics.** This graduate level course provides advanced information on ceramic compositions, processing methods, material properties, and applications. The topics will mirror those already covered in BMS 701, but they will be covered in greater depth and with emphasis on practical examples, commercially available products, and quantitative prediction of material properties. Prerequisite: BMS 701 and BMS 708. (Lecture) (3 semester hours)

**BMS 712. Fundamentals of Metals.** An advanced study of the principles governing the properties of metals. Principles of structure and their relationship to mechanical, thermal, electrical, optical and surface properties will be discussed. (Lecture) (3 semester hours)

**BMS 713. Introduction to Electron Microscopy.** After participation in this course, a student should be able to understand the theories and mechanics of electron microscopy, prepare specimens for EM observation, align the column and observe specimens with the EM, and produce high quality EM photomicrographs. The use of both the Scanning Electron Microscope (SEM) and the Transmission Electron Microscope (TEM) will be included. The theory and practical aspects of performing compositional analysis and mapping using the energy dispersive and wavelength dispersive x-ray spectrometers will be covered. At completion of the course, the student should be able to use the integrated SEM/EDS/WDS system to qualitatively determine composition, as well as understand the use of calibration to produce quantitative results. Use of the system for digital image acquisition and elemental mapping will be covered. The student will learn appropriate methods for preparing samples for observation in the SEM and TEM, and learn to recognize artifacts of sample preparation. The student will select a project for analysis and prepare a portfolio of photomicrographs and/or analyses demonstrating proficiency with either microscope, and with the integrate (Lecture) (3 semester hours)

**BMS 714. Histopreparative Techniques for Biomaterials Research.** Methods for the preparation of tissues for histological analysis will be discussed. Among the topics to be presented are techniques for the preparation of bone, teeth, soft tissue, and organ tissue for research data analysis. Included will be special fixatives and processing techniques when tissue has been labeled with fluorescent tags and when histochemical analysis will be performed. Toxic chemical and biohazard safety procedures will be an integral part of this course, addressing safe use of processing chemicals and the handling of human tissues, as required. This course will meet for two lectures and one three-hour lab per week. Additional laboratory work outside scheduled hours may be required. (Lecture) (3 semester hours)

**BMS 720. Fundamentals of Wear and Tribology.** The basic mechanisms of wear and their relationships to the mechanical properties of the materials in contact will be discussed. Theoretical models of wear and lubrication processes will be presented, and the uses and pitfalls of the models will be discussed. Different types of simulation and screening devices will be presented, and the appropriate uses for each type, as well as the problems which may be encountered from misuse illustrated. Examples of the use of these models and methods to wear problems of particular interest to the students will be included. (Lecture) (3 semester hours)

**BMS 721. Polymer Processing.** Methods used to fabricate polymer biomaterials will be presented and the parameters important to each method, the equipment and control mechanisms discussed and the advantages and disadvantages of the different methods compared. Among the topics to be included are injection molding, extrusion, machining, reactive injection molding and pultrusion. (Lecture) (3 semester hours)

**BMS 722. Pathology of Implants.** The student will be exposed to histological sections of implants in various parts of the body and learn about the interpretation of biological response to these materials. He will also learn of any systemic aspect of the biological response and understand the watershed nature of the response. It is anticipated that the student will be become skilled in the examination of histological sections of various tissue types as they pertain to implants. Fluorometric staining will be discussed. (Lecture) (2 semester hours)

**BMS 723. Degradation Mechanisms in Materials.**. The student will learn the various mechanisms of environmentally induced material degradation (e.g., oxidation and hydrolysis) for the three major classes of materials (metals, polymers, ceramics). The course will focus on the unique aspects of the biological environment which can alter conventional degradation mechanisms. (Lecture) (2 semester hours)

**BMS 724. Electrochemistry & Corrosion of Implant Materials.** This course on electrochemistry/corrosion will provide a detailed description of the electrochemical kinetic and thermodynamic processes that govern corrosion. Particular attention will be given to the metals and alloys systems used in current implant devices. (Lecture) (3 semester hours)
BMS 725. Environmentally Assisted Fracture of Implant Materials. One of the principal failure mechanisms of metallic implants is environmentally assisted fracture (EAF). EAF includes the mechanisms of stress corrosion cracking (SCC) and corrosion fatigue (CF). The synergistic interaction of stress and corrosion will be discussed with particular attention to implant alloy systems. The role of EAF in the failure of other material systems (e.g., polymers) will also be discussed. (Lecture) (2 semester hours)

BMS 726. The Chemistry of Biological Materials. The student will learn about the chemistry and structure of proteins and other important molecules of the living system. Attention will be given to the methods and role of engineered biological materials in the fabrication of implants. (Lecture) (3 semester hours)

BMS 727. Surface Science. The material interface represents the single-most important aspect of a material in the determination of the host response. The student will learn about the basic elements of surface characterization and the various physio-chemical phenomena that govern their properties. The theories of surface interactions with the biological environment will be discussed. Also covered, will be methods for altering surface properties. (Lecture) (3 semester hours)

BMS 728. Failure Analysis of Medical Implants. This is an advanced graduate level course in which students will learn the protocol and will begin practicing the practical skills necessary to analyze failures of medical implants and prostheses following in vitro testing or clinical use. A brief review of structure, mechanical and electrochemical properties of materials used for biomedical applications will be provided. Methods used to determine appropriate material characteristics, such as grain structure, secondary phases, pores, inclusions, and mechanical and corrosion properties will be covered. Failures of metallic, polymeric, and ceramic materials will be analyzed with emphasis on methods for specimen cleaning and preservation, visual inspection, documentation, and optical and electron microscopy techniques. Prerequisite: BMS 701 and BMS 702 or Consent of Instructor. (Lecture) (3 semester hours)

BMS 730. Grant Writing and Management. This graduate level course provides an introduction to acquiring and managing extramural funding for sponsored projects with emphasis on NIH research grants. The following topics will be covered: searching for sponsors, including an overview of NIH funding mechanisms; grant writing, including development of specific aims and hypothesis, writing a literature review, presenting preliminary data, describing methods and timelines, and making a budget; the submission and review process; revising unsuccessful applications; starting a new laboratory; and submitting progress reports and competing continuations. Students will write and revise a grant application during this course. (Lecture) (2 semester hours)

BMS 750. Special Topics in Biomedical Materials Science. Treatment of specific subjects not dealt with fully in other courses. This course may cover any area of interest to the student(s) and at least one faculty member. (Lecture) (1-9 semester hours)

BMS 798. Dissertation and Dissertation Research. (Dissertation) (1-9 semester hours)


TYPICAL COURSE OF STUDY – MASTER OF SCIENCE (MS)

YEAR 1 - FALL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 701A</td>
<td>Fundamentals of Materials Science</td>
<td>3</td>
</tr>
<tr>
<td>BMS 703A</td>
<td>Experimental Methods in Materials Science</td>
<td>1</td>
</tr>
<tr>
<td>BMS 708</td>
<td>Mathematics for Materials Study (For students without adequate preparation in mathematics)</td>
<td>4</td>
</tr>
<tr>
<td>ID 740</td>
<td>Statistical Methods in Research I (For students who do not enroll in BMS 708)</td>
<td>3</td>
</tr>
<tr>
<td>BMS 799</td>
<td>Thesis and Thesis Research</td>
<td>1 or 2</td>
</tr>
</tbody>
</table>

YEAR 1 - SPRING

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 701B</td>
<td>Fundamentals of Materials Science B</td>
<td>3</td>
</tr>
<tr>
<td>BMS 702A</td>
<td>Fundamentals of Biomaterials A</td>
<td>3</td>
</tr>
<tr>
<td>BMS 703B</td>
<td>Experimental Methods in Materials Science B</td>
<td>1</td>
</tr>
<tr>
<td>ID 709</td>
<td>Responsible Conduct in Research</td>
<td>1</td>
</tr>
<tr>
<td>BMS 799</td>
<td>Thesis and Thesis Research</td>
<td>1</td>
</tr>
</tbody>
</table>

YEAR 2 - SUMMER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 799</td>
<td>Thesis and Thesis Research</td>
<td>9</td>
</tr>
</tbody>
</table>

YEAR 2 - FALL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 702B</td>
<td>Fundamentals of Biomaterials B</td>
<td>3</td>
</tr>
<tr>
<td>ID 740</td>
<td>Statistical Methods in Research (if not already taken)</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>TBA</td>
</tr>
<tr>
<td>BMS 799</td>
<td>Thesis and Thesis Research</td>
<td>TBA</td>
</tr>
</tbody>
</table>

9
YEAR 2 - SPRING
Electives
BMS 799  Thesis and Thesis Research  TBA

YEAR 3+ - SUMMER
BMS 799  Thesis and Thesis Research  9

YEAR 3+ – FALL
Electives
BMS 799  Thesis and Thesis Research  TBA

YEAR 3+ - SPRING
Electives
BMS 799  Thesis and Thesis Research  TBA

Elective courses will be chosen from other courses offered in the Department, courses offered by other UMMC Graduate Departments, and/or courses offered in conjunction with the School of Engineering at the main campus of the University of Mississippi. For M.S. students, these electives will usually include at least one of the material-specific courses (BMS 710, BMS 711, or BMS 712). Courses offered by other schools may be included with approval of the student’s advisor, the Director of the Graduate Program, and the Dean of the School of Graduate Studies in the Health Sciences. Upon recommendation of the student’s advisor, one or more off-campus internships may be required, for which the student will receive academic credit as BMS 750 (Special Topics in Biomedical Materials Science). Such internships will be individually arranged to meet the goals of the research and plan of study for the student.

TYPICAL COURSE OF STUDY – DOCTOR OF PHILOSOPHY (PhD)
Students in the Ph.D. program will select their coursework in consultation with the advisor and advisory committee and will usually be required to include the following in their coursework selection, if they have not previously been included in the M.S. program:
ID 715  Teaching in Higher Education
BMS 703  Experimental Methods in Materials Science
BMS 710  Fundamentals of Polymer Science
OR
BMS 711  Fundamentals of Ceramics
OR
BMS 712  Fundamentals of Metals
BMS 728  Failure Analysis of Medical Implants
BMS 730  Grant Writing and Management
Students must have taken and passed ID 714 (Professional Skills for Graduate Students and Postdoctoral Fellows), usually taken in the year prior to the awarding of the degree.

For students being admitted from another M.S. program or directly from a B.S. program, a typical course of study might be as follows (Please note that many elective courses may only be offered in alternate years):

YEAR 1 - FALL
BMS 701A  Fundamentals of Materials Science  3
BMS 703A  Experimental Methods in Materials Science  1
BMS 708  Mathematics for Materials Study (For Students without adequate preparation in mathematics)  4
ID 740  Statistical Methods in Research I (For Students not enrolled in BMS 708)  3
BMS 798  Dissertation and Dissertation Research  1 or 2
12+

YEAR 1 - SPRING
BMS 701B  Fundamentals of Materials Science  3
BMS 702A  Fundamental of Biomaterials A  3
BMS 703B  Experimental Methods in Materials Science  1
ID 709  Responsible Conduct in Research  1
BMS 798  Dissertation and Dissertation Research  1
9

YEAR 2 - SUMMER
BMS 798  Dissertation and Dissertation Research  9
Similar courses taken at other universities in pursuit of the MS may be considered for substitution on a case-by-case basis. Students entering the program having received an MS degree at another university or who have taken graduate level courses as a part of a BS degree program may submit information about coursework that may be eligible for transfer to partially fulfill requirements for coursework toward the PhD. The courses may complement or substitute for courses in the BMS program. Up to 15 semester hours may be transferred with the approval of the student’s advisor, the Director of the Graduate Program and the Dean of the School of Graduate Studies in the Health Sciences.

Students entering directly from the MS program in the department will have taken a majority of their core courses previously and will rather begin taking elective courses in the area of specialization in their first semester.

For students being admitted after having completed their MS degree at UMMC, a typical course of study might be as follows (Please note that many elective courses may only be offered in alternate years):

**YEAR 1 - FALL**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives</td>
<td></td>
<td>TBA</td>
</tr>
<tr>
<td>BMS 798</td>
<td>Dissertation and Dissertation Research</td>
<td>TBA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**YEAR 1 - SPRING**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID 715</td>
<td>Teaching in Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>TBA</td>
</tr>
<tr>
<td>BMS 798</td>
<td>Dissertation and Dissertation Research</td>
<td>TBA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**YEAR 2 - SUMMER**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 798</td>
<td>Dissertation and Dissertation Research</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**YEAR 2 - FALL**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives</td>
<td></td>
<td>TBA</td>
</tr>
<tr>
<td>BMS 798</td>
<td>Dissertation and Dissertation Research</td>
<td>TBA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**YEAR 2 - SPRING**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives</td>
<td></td>
<td>TBA</td>
</tr>
<tr>
<td>ID 714</td>
<td>Professional Skills for Graduate Students and Postdoctoral Fellows</td>
<td>3</td>
</tr>
<tr>
<td>BMS 798</td>
<td>Dissertation and Dissertation Research</td>
<td>TBA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>
## BIOMEDICAL SCIENCES PROGRAM

### MASTERS OF SCIENCE IN BIOMEDICAL SCIENCES

The School of Graduate Studies in the Health Sciences at the University of Mississippi Medical Center offers a Master of Science degree in Biomedical Sciences. The degree program is designed to meet the needs of several groups of students:

- Those seeking to broaden their scientific background prior to application to, or entry into, professional or graduate school,
- Those interested in teaching at the high school or junior college level,
- Those interested in improving their knowledge base prior to entering into governmental service,
- Those interested in developing their technological skills with the aim of working in industry or an academic laboratory.

The MS in Biomedical Sciences (MS/BMS) program requires a minimum of 30 credit hours beyond a BS or BA degree. Sixteen of those hours must be taken in the core courses listed below, whereas the remaining 14 hours are selected from course offered by the various graduate programs at UMMC. To be eligible for graduation, students must maintain a GPA of 2.8 or higher or a weighted numerical average greater than or equal to 75%.

### CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID 770</td>
<td>Evidence Based Clinical Research</td>
<td>3</td>
</tr>
<tr>
<td>ID 767</td>
<td>Integrated Anatomy &amp; Histology or Biomedical</td>
<td>4</td>
</tr>
<tr>
<td>ID 727</td>
<td>Current Issues in Biomedical Research</td>
<td>2</td>
</tr>
<tr>
<td>BIOCH 704</td>
<td>Fundamental Biochemistry</td>
<td>7</td>
</tr>
</tbody>
</table>

### BIOMEDICAL SCIENCES TRACK:

**Gregory V Chinchar, PhD, Program Coordinator**

Faculty: Current members of the graduate faculty.

### PLAN OF STUDY

#### FALL

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIOCH 704</strong></td>
<td>Fundamental Biochemistry</td>
<td>7</td>
</tr>
<tr>
<td>PHYSIO 725</td>
<td>Fundamental Physiology</td>
<td>4</td>
</tr>
<tr>
<td><strong>ID 767</strong></td>
<td>Integrated Anatomy &amp; Histology</td>
<td>4</td>
</tr>
</tbody>
</table>

#### SPRING

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICRO 741</td>
<td>Fundamental Microbiology</td>
<td>6</td>
</tr>
<tr>
<td>PHYSIO 725</td>
<td>Fundamental Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>
**Core courses required for graduation**

For students wishing additional study in a particular discipline, elective courses may be substituted in place of non-core courses. These students should consult the director of the relevant graduate program for alternative study plans. In addition, students interested in professional or graduate school should consult the admissions officer of that school to determine if this program is appropriate for their needs.

**Program prerequisites:**

- Although a BS or BA degree in Biology, Chemistry, or another natural or physical science is preferred, graduates in other disciplines who have an interest in Biomedical Science are encouraged to apply. However, because of the rigorous nature of the curriculum, all applicants are encouraged to take General Chemistry, Organic Chemistry, General Physics, General Biology, college-level Algebra and Trigonometry, or Calculus, and at least one advanced Biology course (e.g., Genetics, Biochemistry, Comparative Anatomy, etc.)

- Admission is competitive and based on letters of support, your personal statement, academic record (GPA), and performance on the GRE, MCAT, or DAT. Preference is given to students with an overall GPA ≥ 3.0 on a 4-point scale and to those with a combined score ≥ 295 on the Verbal + Quantitative sections of the Graduate Record Examination (GRE), or who score 20 or higher on the MCAT or ≥ 15 on the DAT.

- Applicants to the MS BMS degree program who are participants in the Professional Portal Program must be recommended by, and meet criteria established by, the Admissions Committee of either the UMMC School of Medicine (SOM) or School of Dentistry (SOD).

- Note: Because of space constraints, this program is limited to legal residents of Mississippi, US citizens, and permanent residents of the US (Green Card Holders).

**Application Deadline and Requirements:** Applications must be received by June 1 for those wishing to enroll in the Fall semester; classes begin early to mid-August. Because of the nature of this program, admission as a new student for the Spring semester is not available. Access to an online application form is available on the School of Graduate Studies website. Students are encouraged to apply early and may apply prior to receiving their Bachelor’s degree. In those cases, a partial transcript reflecting previous undergraduate classwork should be submitted. Based on that, Conditional Admission may be granted. However, Full Admission will not be conferred until the complete undergraduate transcript is received.

- Likewise, students may apply without a GRE/MCAT/DAT score, but must take the examination prior to July 1 of the year in which they enroll. Lastly, at least one letter of reference from a faculty member familiar with you and your academic achievements should be submitted with your application. However if you have been recommended for this program by an Admissions Officer in either the UMMC School of Dentistry or School of Medicine, a letter from them supporting your application meets this requirement.

**MATERNAL-FETAL MEDICINE TRACK**

Michelle Y. Owens, MD, Director

**FACULTY**

*Professors:*

Rick W. Martin, MD

*Associate Professors:*

Michelle Y. Owens, MD Sandip Sawardecker, MD

*Assistant Professors:*

Kedra Wallace, PhD

A special course of study has been created to enable completion of a Master’s degree by obstetrician-gynecologists admitted to the UMC Department of Obstetrics and Gynecology’s maternal-fetal medicine subspecialty fellowship program. Admission to the Master’s degree program is limited strictly to OB-GYN physicians accepted to undertake this three-year American Board of Obstetrics and Gynecology-certified fellowship program located within the Division of Maternal-Fetal Medicine at the University of Mississippi Medical Center. It is the first program of its kind in the United States, begun in 1997. A minimum of 30 semester hours of study is undertaken during the three years of the fellowship program, culminating in the successful completion of a thesis presentation and defense. In addition to completion of two courses in biostatistics (ID 717) and genetics (MFM 717), fellows will complete the following:

**MFM 606. ANTENATAL DIAGNOSIS-FETAL THERAPEUTICS & SEMINAR IN MATERNAL-FETAL MEDICINE I.** (5 semester hours) This is a supervised course with extensive instruction in the utilization of basic and advanced targeted sonography for the evaluation of fetal and maternal pregnancy disorders. Included is an introduction to basic invasive fetal evaluation via amniocentesis, chorion villus sampling, placental biopsy, and percutaneous umbilical blood sampling. Limited to MD postgraduates who have completed a residency in obstetrics and gynecology and are presently fellows in the maternal-fetal medicine fellowship training program. A weekly tutorial/seminar is conducted on topics in maternal-fetal medicine. (Lecture/Laboratory)
MFM 607. ANTENATAL DIAGNOSIS-FETAL THERAPEUTICS & SEMINAR IN MATERNAL-FETAL MEDICINE II. (5 semester hours) This is an advanced course of continuing supervised instruction in advanced obstetric ultrasound. Enrollment is limited to MFM fellows as are all courses in this program. It includes seminar/tutorial systematically reviewing one half of the major topical areas in maternal-fetal ultrasound. A weekly tutorial/seminar is conducted on topics in maternal-fetal medicine. (Lecture/ Laboratory)

MFM 608. ANTENATAL DIAGNOSIS-FETAL THERAPEUTICS & SEMINAR IN MATERNAL-FETAL MEDICINE III. (5 semester hours) This is a continuation of the two other antenatal diagnosis courses with other topics in maternal-fetal medicine discussed over a 3 year curriculum. The same limitation of enrollment to fellows currently in the maternal-fetal medicine training program is applied to this and all courses in this degree program. Supervised instruction with expansion of expertise and knowledge into all fetal organ systems and fetal therapy via intrauterine transfusion or drug therapy is addressed. (Lecture/ Laboratory)

MFM 609. ANTENATAL DIAGNOSIS-FETAL THERAPEUTICS & SEMINAR IN MATERNAL-FETAL MEDICINE IV. (5 semester hours) The fourth course in this series continues seamlessly with the other three in the series, limited to MFM fellows in our postgraduate program. Major topical areas in maternal-fetal ultrasound are considered with continuing supervised clinical instruction. A weekly tutorial/seminar is conducted on topics in maternal-fetal medicine (3 year curriculum to topics and readings). (Lecture/ Laboratory)

MFM 610. THESIS WORK & SEMINAR IN MATERNAL-FETAL MEDICINE V (1 semester hour) Closely directed supervision of thesis research project and weekly participation in MFM seminar series that is part of the three-year curriculum in the subspecialty. Limited to MFM fellows enrolled in our postgraduate program. (Thesis/Dissertation)

MFM 611. THESIS WORK & SEMINAR IN MATERNAL-FETAL MEDICINE VI (1 semester hour) Closely directed supervision of thesis research project and possibly other with weekly participation in the MFM seminar tutorial series that is part of the three-year curriculum in the subspecialty. Limited to MFM fellows enrolled in our postgraduate program. (Thesis/Dissertation)

MFM 612. MFM RESEARCH METHODS & PROJECTS II (3 semester hours) This is a continuation of MFM611 which is a prerequisite with enrollment likewise limited to fellow enrolled in the maternal-fetal medicine training program. (Laboratory)

MFM 613. MFM RESEARCH METHODS & PROJECTS III (3 semester hours) Closely directed supervision of research projects that is limited to OB/GYN fellows enrolled in the maternal-fetal medicine fellowship program. (Laboratory)

MFM 700. CLINICAL & BASIC RESEARCH METHODS & PROJECTS (3 semester hours) This is an introduction to the concepts necessary for the design, implementation, writing and presentation of quality clinical and basic science research projects. The focus is supervised undertaking of basic bench research techniques or a clinical research project necessary to undertake completion of the MFM fellow’s these project for the Master’s degree and for satisfying requirements for board certification. It is limited to fellows enrolled in the maternal-fetal medicine. (Laboratory)

ID 709. RESEARCH ETHICS (1 semester hours) An interactive lecture course designed to provide an understanding of ethics in scientific research and the basic skills important for both oral and written scientific communication. (Lecture)

MFM 710. FUNDAMENTAL RESEARCH TOOLS AND METHODS. (3 semester hours) A course designed to introduce Maternal Fetal Medicine fellows to contemporary methods in molecular biology research. (Lecture)

MFM 717. SPECIAL PROBLEMS IN MEDICAL GENETICS. (3 semester hours) This is an advanced course emphasizing human biochemical genetics. Lectures cover topics such as isoenzymes, enzyme variation, hemoglobin (structure, chemical function, mutation, etc.), membrane and transport defects, inborn errors, etc. Students will be required to present one or two descriptive and critical seminars. Students will be expected to attend selected genetics lectures presented to the first and second year medical students in addition to other topics selected for MFM practitioners. Lecture and seminar (3 semester hours in the fall-General Requirement for all MFM Fellows). (Lecture)

ID 740. STATISTICAL METHODS IN RESEARCH 1. (3 semester hours) This is an introduction to basic statistical methods for research and is designed to enable students to develop their data analysis and interpretation skills. In this course students will learn about experimental design, estimation, hypothesis testing, and how to apply statistical techniques such as point and interval estimation, tests of statistical significance, correlation, linear and non-linear regression, ANOVA, and longitudinal data (repeated measures) analysis. Analysis of small data sets (using non-parametric methods) is also covered. The emphasis will be on applied rather than theoretical statistics, and on understanding and interpreting the results of statistical analyses. Datasets will be analyzed using the statistical package STATA. This is a “hands-on” class – in the computer lab. Datasets will be analyzed under the supervision of instructors. (3 semester hours; Dr. M Griswold, Course Coordinator; General Requirement for all Master of science candidates and MFM fellows). (Lecture/ Laboratory)

MFM 799. THESIS AND THESIS RESEARCH (hours and credit TBA) (Thesis/Dissertation)

**PLAN OF STUDY**

**YEAR 1 - FALL**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFM 611</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MFM 710</td>
<td>Fundamental Research Tools and Methods</td>
<td>3</td>
</tr>
<tr>
<td>ID 717</td>
<td>Special Topics Biostatistics, Bioinformatics, &amp; Epidemiology</td>
<td>1</td>
</tr>
</tbody>
</table>

**THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER**
SCHOOL OF GRADUATE STUDIES IN THE HEALTH SCIENCES • 2015-2016 BULLETIN

YEAR 1 - SPRING
MFM 700 Clinical & Basic Research Methods 3
MFM 606 Antenatal Diagnosis-Fetal Therapeutics & Maternal-Fetal Medicine Seminar I 3

YEAR 2 - FALL
ID 740 Statistical Methods in Research I 3
MFM 607 Antenatal Diagnosis-Fetal Therapeutics & Maternal-Fetal Medicine Seminar II 3

YEAR 2 - SPRING
MFM 608 Antenatal Diagnosis-Fetal Therapeutics & Maternal-Fetal Medicine Seminar III 3
MFM 612 MFM Research Methods & Projects 3

YEAR 3 - FALL
MFM 609 Antenatal Diagnosis-Fetal Therapeutics and Seminar In Maternal-Fetal Medicine IV 5

YEAR 3 - SPRING
MFM 610 Thesis Work & Seminar In Maternal-Fetal Medicine V 1
MFM 613 MFM Research Methods & Projects III 3
MFM 799 Thesis and Thesis Research 1
ID 709 Responsible Conduct in Research 1

CLINICAL HEALTH SCIENCES PROGRAM
(The Clinical Health Sciences Program is no longer accepting new graduate students.)
Hamed A. Benghuzzi, PhD, Director
Jessica Bailey, PhD, Associate Director

FACULTY

Professors:
Adah Felix, PhD  Lisa Haynie, PhD  Robin W. Rockhold, PhD
Jessica Bailey, PhD  Kim W. Hoover, PhD  Libby M. Spence, PhD
Kaye Bender, PhD  Ray Holder, DMD  Donna Sullivan, PhD
Hamed A. Benghuzzi, PhD  Min Huang, PhD  Mark D. Weber, PhD
David Dzielak, PhD  John C. Hyde, PhD  William R. Woodall, EdD
Fazlay Faruque, PhD  Tina Martin, PhD
David G. Fowler, PhD  Anne Norwood, PhD

Associate Professors:
Elgenaid Hamadain, PhD  Ann Peden, PhD  Amy Sullivan, PhD
Stacy Hull-Vance, PhD  LaToya Richards-Moore, PhD
Denise Krause, PhD  Michelle Tucci, PhD

Assistant Professors:
Ellen Jones, PhD  Mary G. Tan, PhD

CHS 701. Biostatistics. General introduction to descriptive and inferential statistics: techniques and principles for describing data, designing research, a nalyzing data and principles of statistical analysis. This course covers basic statistical methods such as relative risk, number needed to treat, chi-square, t-tests, and linear regression. An emphasis is placed on describing treatment effects with 95% confidence intervals. (Lecture) (3 semester hours)

CHS 702. Biostatistical Modeling. This course expands on topics covered in the first modeling course. This class also covers other topics such as survival analysis and factor analysis and addresses problems that arise during research including dissertation research. (Lecture) (3 semester hours)

CHS 703. Clinical Decision Making. This course expands on topics covered in the first modeling course. This class also covers other topics such as survival analysis and factor analysis and addresses problems that arise during research including dissertation research. Prerequisite: Permission of Instructor. (3 Semester hours) (Lecture) (3 semester hours)

CHS 704. Research Methods I. This course is a survey of qualitative, quantitative and clinical research methodology including techniques and procedures for research design, data collection, data analysis, and data presentation. Prerequisites: CHS 601/701 Biostatistics or Permission of Instructor. Prerequisite: CHS 701 (Lecture) (3 semester hours)
CHS 705. Research Methods II. A continuation of CHS 704 Research Methods I. The main focus of this course is to provide practical exposure to hypothesis or question driven research, literature reviews, tools needed to write a dissertation proposal, and organization of the research report. Prerequisites: CHS 704, CHS 701, CHS 702, CHS 720, CHS 706 or Permission of Instructor. (Lecture) (3 semester hours)

CHS 706. Philosophy of Science. A survey of general research design principles and methods related to health services research; philosophy of science method, language of research, evaluation of existing scientific literature, empirical research methodologies, experimental approaches, and qualitative research designs. (Lecture) (3 semester hours)

CHS 709. Qualitative Research Designs. An examination of qualitative designs most applicable to the study of health care. The course focuses on essential aspects of qualitative research designs, including identification of researchable questions, subject protection, interviewing and transcribing, and analysis methods. (Lecture) (3 semester hours)

CHS 716. Advanced Laboratory Diagnostics. The course is designed as a general overview of new and developing advanced laboratory techniques. The major areas are: advanced chromatography (GC and HPLC), immunology techniques (ELISA, Western Blot), nucleic acid and amplification protocols (PCR, RT-PCR, Northern/Southern Blot Hybridization, restriction enzyme digest analysis, etc.) and a discussion of clinical virology as it applies to the development of diagnostics in the laboratory. The course is intended to offer students expertise in emerging techniques in the laboratory and an understanding of the rapid technical changes occurring in clinical, research, and industrial laboratory settings. (Laboratory) (3 semester hours)

CHS 717. Directed Research. The objective of this course is provide the students with specific research skills not available in track required courses. This course may cover any area of interest to the student(s). It is intended for students in post qualifying exam phase and Program Recommendation Required (Lecture) (1-9 semester hours)

CHS 720. Essentials of Pathophysiology. An introduction in the physiology and biological manifestations of diseases. Topics to be covered will include organ dynamics, inflammation, healing and repair, immunity, and neoplasia. (Lecture) (3 semester hours)

CHS 721. Advanced Pathophysiology. This course is designed to study how alterations in structure (anatomy) and function (physiology) disrupt the human body as a whole. Emphasis will be placed on how the human body uses its adaptive powers to maintain steady state.. Prerequisite: CHS 720 Essentials of Pathophysiology. (Lecture) (3 semester hours)

CHS 722. Problems in Pathophysiology. A course designed to acquaint students with field-oriented problems in pathophysiology. Prerequisite: CHS 720 Essentials of Pathophysiology (Lecture) (1-9 semester hours)

CHS 723. Pathophysiological Phenomena. A focused review of specific pathophysiological phenomena (e.g. pain, inflammation, wound healing) and evaluative criteria used to answer research questions. Students present and evaluate current research on selected topics. Required for the biological/physiological focus. Prerequisite: CHS 720 and CHS 701 (Lecture) (3 semester hours)

CHS 724. Pharmacological Considerations in Health. An overview of the reactions of the body to medications introduced under selected conditions encountered by health practitioners (Lecture) (3 semester hours)

CHS 725. Basic Biomedical Microbiology. Emphasis and content to be arranged. (Lecture) (3 semester hours)

CHS 726. Health Care Professions in Underserved Areas. This course provides an in depth analysis of health care management, delivery and recruitment of practitioners for rural and underserved communities. The focus will be on issues unique to Mississippi in the areas of economics, policy decision, practice management and psychosocial aspects of rural health practice. (Lecture) (1-9 semester hours)

CHS 728. Histopathology. A study of the microscopic and functional changes in selected tissues and organ systems due to injuries and/or diseases, incorporating a review of the normal structure and functions of eukaryotic cells, the four basic tissues and the relevant organ systems. The proposed etiologies and pathogenesis of the selected diseases will be considered. (Lecture) (3 semester hours)

CHS 729. Health Systems Phenomena. A focused review of specific health systems phenomena and evaluative criteria used to answer research questions. Students present and evaluate current research on selected topics. Prerequisite: CHS 701 and CHS 720 (Lecture) (3 semester hours)

CHS 740. Biomedical Ethics and Health Law in Clinical Health Sciences. An introduction to morality, ethics, and the law. Principles of biomedical ethics and health law resources are used to analyze current problems and dilemmas arising between patients and the health care system. Promotion of quality of health care, patient access to care, and liability of health care professionals and institutions form the basis for reading and writing assignments and group discussions. (Lecture) (3 semester hours)

CHS 741. Medical Sociology. This course will examine how socio-cultural and demographic factors influence utilization of health care resources. Specifically, this course will deal with ethical issues surrounding access and care; barriers to quality care; and variations in definitions of what it means to be ill and healthy (e.g., epidemic of health). This will include multi-cultural issues associated with access to quality care. In addition to the above, this course will explore various sociological theories and methodologies used in the analysis of health care data. (Lecture) (3 semester hours)

CHS 750. Health Systems Management. Designed to provide an analysis of the health care delivery system including organizational, delivery, financing, and integrative aspects among the various delivery/policy sectors. Major concepts and topics will include managerial, social, behavioral, and economics. Utilization of case studies will be a major course direction. (Lecture) (3 semester hours)

CHS 759. Geographic Information Systems (GIS) in Healthcare & Epidemiology. This course combines an overview of the general principles of GIS and analytical use of spatial information technology applicable for healthcare professionals. (Lecture) (3 semester hours)
CHS 761. Topics in Health Informatics. Health informatics topics, including the electronic health record, clinical information systems, healthcare policy analysis and development, technology and data standards, health information exchange and consumer health informatics. Course includes extensive reading and critical discussion of relevant professional research literature. (Independent Study) (3 semester hours)

CHS 762. Data Exchange & Manipulation in Health Systems. A study of database and systems through which to accomplish the exchange of data between computer systems. Course will focus on the process of data extraction, format, and manipulation for the upload, download, and transfer of data between heterogeneous systems. Topics will include a study of database tools and query languages, format standards, and communication protocols. (Lecture) (3 semester hours)

CHS 763. Alternative and Complementary Therapies. This course will answer questions about kinds of alternative and complementary therapies, alternative healthcare providers, efficacy of various treatments, legalities and economics involved, and different cultural systems of healthcare. (Lecture) (3 semester hours)

CHS 764. Biostatistical Computer Applications in Health Care. This is a three hour lecture/lab course, which introduces the use of biostatistical computer packages available within the academic/clinical settings. The course covers the theory of biostatistical software package such as SPSS, SAS, MINITAB, and EXCEL. It provides students with skills needed to understand data management, manipulation and analysis. Students will acquire hands-on training and learn how to analyze, describe, visualize, and present data using statistical software. (Lecture) (3 semester hours)

CHS 765. Decision Support Systems. Design and development of decision support systems, with emphasis on use of knowledge management applications and decision analysis techniques. Design of artificial intelligence systems will be addressed. Online discussion and submission of assignments occurs weekly, with onsite class meetings at the beginning and end of the term. (Lecture) (3 semester hours)

CHS 767. Clinical Vocabulary & Classification Systems. Addresses standardized clinical terminology, medical vocabulary standards, data mapping and natural language processing. Course covers classifications used for statistical reporting, as well as terminologies required for interoperability standards. Online discussion and submission of assignments occurs weekly, with onsite class meetings at the beginning and end of the term. (Lecture) (3 semester hours)

CHS 775. Health Care Disparity. This class will examine issues related to disparity in healthcare. Topics in this class will focus on disparity issues ranging from access to care, to quality of care, to differential health outcomes and treatment of vulnerable populations at both national levels and within the state of Mississippi. Education (e.g., skills training related to racial and ethnic health disparities), community issues, and research associated with disparate treatment will form the foundation for discussion and coursework. (Lecture) (3 semester hours)

CHS 776. Rural Health Care. This class will focus on the special needs rural healthcare providers face in providing care. Specific topics will focus on the use of technology (e.g., telehealth and telemedicine), recruitment of healthcare professionals, service delivery models, and policy (National and State) directed at improving care in rural areas. (Lecture) (3 semester hours)

CHS 780. Special Topics. Treatment of specific subjects not dealt with fully in other courses. This course may cover any area of interest to the student(s) and at least one faculty member. (Lecture) (1-9 semester hours)

CHS 781. Special Problems. This course offers special laboratory research projects on specific problems in clinical health sciences for advanced students. The didactic portion of the course will emphasize central concepts in the research area. (Lecture) (1-9 semester hours)

CHS 782. Seminar. This course is designed to provide the students with skills in how to survey the literature in areas of biomedical, biological, and outcomes research. Students are expected to select recent publications and be able to show mastery in presentation. (E) (1-9 semester hours)

CHS 790. Thesis Research Proposal. An advanced course in which masters degree students prepare a research proposal for their thesis research project. (Thesis) (1-9 semester hours)

CHS 791. Dissertation Research Proposal. An advanced course in which doctoral students prepare a research proposal for their dissertation research project. (Dissertation) (1-9 semester hours)

CHS 798. Dissertation and Dissertation Research. (Dissertation) (1-9 semester hours)


PLAN OF STUDY*

Two tracks in Clinical Health Sciences are available. Students in the Clinical Health Systems Track must complete the following courses: CHS 703 Clinical Decision Making, CHS 709 Qualitative Research Designs, CHS 741 Medical Sociology, CHS 750 Health Systems Management, CHS 763 Alternative and Complementary Therapies, CHS 764 Biostatistical Computer Applications in Health Care. Students enrolled in the Clinical Laboratory Sciences Track must complete the following courses: CHS 703 Clinical Decision Making, CHS 716 Advanced Laboratory Diagnostics, CHS 721 Advanced Pathophysiology, CHS 724 Pharmacological Considerations in Health Practice, CHS 728 Histopathology, CHS 763 Alternative and Complementary Therapies.
### YEAR 1 - FALL
- CHS 701 Biostatistics 3
- CHS 706 Philosophy of Science 3
- CHS 720 Essentials of Pathophysiology 3

### YEAR 1 - SPRING
- CHS 702 Biostatistical Modeling 3
- CHS 704 Research Methods I 3
- CHS 723 Pathophysiological Phenomena OR
- CHS 729 Fundamentals of Health Systems Research 3

### YEAR 2 - SUMMER
- CHS 705 Research Methods II 3
- CHS Elective 3

### YEAR 2 - FALL
- Clinical Health Systems Track Courses (choose any 4 courses) 12
- OR
- Clinical Laboratory Systems Track Courses (choose any 4 courses) 12

### YEAR 2 - SPRING
- CHS 740 Biomedical Ethics and Health Law in the Clinical Health Sciences 3
- CHS Elective 3
- Clinical Health Systems Track Course 3
- OR
- Clinical Laboratory Systems Track Course 3

### YEAR 3+ - SUMMER
- CHS Elective 3
- CHS 791 Dissertation Research Proposal 3

### YEAR 3+ - FALL
- CHS 798 Dissertation and Dissertation Research 6

### YEAR 3+ - SPRING
- CHS 798 Dissertation and Dissertation Research 6

*Although the plan of study is designed by the individual student and a faculty member with closely matching research interests, this is a typical course of study for a full-time student in the Doctor of Philosophy in Clinical Health Sciences. A typical plan of study would differ for part-time students.*

### MEDICAL PHARMACOLOGY
Robert E. Kramer, PhD, Director
Jennifer M. Sasser, PhD, Assistant Director

### FACULTY

**Professors:**
- Roy J. Duhe, PhD
- Yin-Yuan Mo, PhD
- Jia Long Zhuo, MD, PhD
- Elise Gomez-Sanchez, DVM, PhD
- Robin W. Rockhold, PhD
- Robert E. Kramer, PhD
- Richard J. Roman, PhD

**Associate Professors:**
- George Booz, PhD
- Albert W. Dreisbach, MD
- Anait S. Levenson, MD, PhD
- Jian-Xiong Chen, MD
- Michael R. Garrett, PhD
- Sean P. Didion, PhD
- Birdie Babette Lamarca, PhD
Assistant Professors:
Sydney Murphy, PhD  
Jennifer M. Sasser, PhD  
Angela Subauste, MD  
M. Reddy Pabbidi, DVM, PhD  
Stanley Smith, PhD  
Jan M. Williams, PhD

Affiliate Faculty:
Mazen Kurdi, PhD

A prerequisite for all courses is approval by the course director and the program director of the Department of Pharmacology and Toxicology. Graduate students outside the pharmacology program must also have approval of the program director of the program in which they are enrolled.

PHARM 701. SEMINAR. Students are required to (1) attend presentations by others (both faculty and students) participating in the course and (2) make an oral presentation on their own research or an assigned topic. Students in the pharmacology program participate in seminar as partial requirement for PHARM 702 (Required, 1 semester hour) (Lecture)

PHARM 702. RECENT ADVANCES IN PHARMACOLOGY AND TOXICOLOGY. This course comprises reading, informal presentation and discussion of topics in pharmacology, toxicology and related disciplines from the current scientific literature. Critical evaluation of experimental design, data analysis and interpretation are emphasized. For students in the pharmacology program, participation in departmental seminar is a requirement for this course. (Required; 1 semester hour) (Lecture)

PHARM 722. PHARMACOLOGY AND THERAPEUTICS. Students are introduced to the principles underlying the use of pharmacological agents in medical practice. Concepts related to drug distribution, drug-receptor interaction and drug metabolism are considered. In addition, the mechanism of action, therapeutic effects, adverse side-effects and common clinical applications of various drugs and drug classes are presented through a combination of lectures and clinical correlations. (Required, 12 semester hours, 6-6) (Lecture)

PHARM 723. MECHANISMS OF DRUG ACTION. This course comprises assigned readings, in-class discussions, written assignments and student presentations. Selected aspects of pharmacology are presented with emphasis on the mechanisms of drug action. (Required; 8 semester hours, 4-4) (Lecture)

PHARM 726. FUNDAMENTAL PHARMACOLOGY. A basic pharmacology course in which principles underlying the actions of drugs are presented, including pharmacokinetics, drug-receptor interactions, and drug metabolism. In addition, mechanisms of action, therapeutic effects, adverse effects and therapeutic indications are noted for major classes of drugs and for commonly used drugs within each class. (Elective, 6 semester hours) (also listed as Dental 626). (Lecture)

PHARM 785. PRINCIPLES OF MODERN DRUG DESIGN. This course addresses the basic principles of the modern drug discovery and validation process, with emphasis on applications in cancer therapy. The course begins with the identification and characterization of disease-specific molecular targets using genetic and biochemical techniques. The second section describes the selection of lead drugs through high-throughput screening assays, combinatorial chemistry, and computer-assisted rational drug design. The final section covers preclinical and clinical trials and the potential use of database analysis to ensure that the drugs are safe and effective, and that the chosen therapeutic regimen will yield the best outcome for any given patient. (Elective; 2 semester hours) (Lecture)

PHARM 790. SPECIAL TOPICS IN PHARMACOLOGY AND TOXICOLOGY. This course may cover any area of interest to at least one student and one faculty member. (Elective; Hours/credit TBA) (Laboratory)

PHARM 792. RESEARCH IN PHARMACOLOGY AND TOXICOLOGY. Students perform research in the laboratory of a faculty member. Students are also required to submit a brief written report and make a 15-20 minute presentation concerning the rotation [including the general premise, experimental approach and results; the latter two may be actual or anticipated] to the general departmental faculty at the completion of the rotation. (Required; 3 semester hours unless otherwise arranged; Summer, Fall, Spring) (Laboratory)

PHARM 798. DISSERTATION AND DISSERTATION RESEARCH (Required; Hours/credit TBA) (Thesis/Dissertation)

PLAN OF STUDY

YEAR 1 - SUMMER
Pharm 792  Research Rotation  1

YEAR 1 - FALL
BIOCH 704  Fundamental Biochemistry  7
PHARM 701  Seminar  1
PHARM 792  Research Rotation  3
PHYSIO 725  Fundamental Physiology  4
ID 740  Statistical Methods in Research  3

YEAR 1 - SPRING
ID 709  Responsible Conduct in Research  1
ID 710  Research Tools in Molecular Biology  3
PHARM 702  Recent Advances in Pharmacology  1

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHARM 792</td>
<td>Research Rotation</td>
<td>3</td>
</tr>
<tr>
<td>PHYSIO 725</td>
<td>Fundamental Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

**YEAR 2 - SUMMER**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHARM 792</td>
<td>Research Rotation</td>
<td>9</td>
</tr>
</tbody>
</table>

**YEAR 2 - FALL**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHARM 701</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PHARM 722</td>
<td>Pharmacology &amp; Therapeutics</td>
<td>6</td>
</tr>
<tr>
<td>PHARM 723</td>
<td>Mechanisms of Drug Action</td>
<td>4</td>
</tr>
<tr>
<td>PHARM 792</td>
<td>Research Rotation</td>
<td>3</td>
</tr>
</tbody>
</table>

**YEAR 2 - SPRING**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID 714</td>
<td>Professional Skills</td>
<td>3</td>
</tr>
<tr>
<td>PHARM 702</td>
<td>Recent Advances in Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>PHARM 722</td>
<td>Pharmacology &amp; Therapeutics</td>
<td>6</td>
</tr>
<tr>
<td>PHARM 723</td>
<td>Mechanisms of Drug Action</td>
<td>4</td>
</tr>
<tr>
<td>PHARM 792</td>
<td>Research Rotation</td>
<td>3</td>
</tr>
</tbody>
</table>

**YEAR 3+ - SUMMER**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHARM 798</td>
<td>Dissertation and Dissertation Research</td>
<td>9</td>
</tr>
</tbody>
</table>

**YEAR 3+ - FALL**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHARM 798</td>
<td>Dissertation and Dissertation Research</td>
<td>8</td>
</tr>
<tr>
<td>PHARM 701</td>
<td>Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**YEAR 3+ - SPRING**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHARM 798</td>
<td>Dissertation and Dissertation Research</td>
<td>8</td>
</tr>
<tr>
<td>PHARM 702</td>
<td>Recent Advances in Pharmacology and Toxicology</td>
<td>1</td>
</tr>
</tbody>
</table>

**MICROBIOLOGY AND IMMUNOLOGY PROGRAM**

Eva M. Bengten, PhD, Director  
Richard O’Callaghan, PhD, Co-Director

**FACULTY**

**Professors:**
- Eva M. Bengten, PhD  
- Victor Gregory Chinchar, PhD  
- Larry McDaniel, PhD  
- Richard O’Callaghan, PhD  
- Donna C. Sullivan, PhD  
- Edwin Swiatlo, MD, PhD  
- Melanie R. Wilson, PhD

**Associate Professors:**
- Brian J. Akerley, PhD  
- Bo Huang, MD/PhD  
- Mary Marquart, PhD  
- D. Ashley Robinson, PhD  
- J. Christopher Meade, PhD

**Assistant Professors:**
- Stephen Stray, PhD  
- Ritesh Tandon, PhD

**MICRO 701. Medical Microbiology.** The fundamentals of microbial physiology, genetics and immunology are presented with important bacterial, viral, parasitic and mycotic infections discussed from the standpoint of etiology, epidemiology, pathogenesis and laboratory diagnosis. Participation in laboratory exercises and small group sessions is required. (Lecture/Laboratory) (6 semester hours)

**MICRO 702. Molecular and Cellular Virology.** The students will learn fundamentals of viral replication and pathogenesis with emphasis on pertinent aspects of molecular biology. Prerequisites: Microbiology 701, or Microbiology 760 and Biochemistry 710. (Lecture) (3 semester hours)

**MICRO 703. Seminar in Microbiology.** Graduate students will prepare, present and attend weekly seminars. (Lecture) (1-9 semester hours)

**MICRO 704. Research in Microbiology.** Students participate in an on-going research project under the direction of a graduate faculty member. (Laboratory) (1-9 semester hours)
**MICRO 707. Microbiology Laboratory Rotation.** This course is designed to acquaint the student with ongoing research and research methodologies within the department. To accomplish this, the student will actively take part in ongoing research projects in one or two laboratories during the quarter. (Laboratory) (1-9 semester hours)

**MICRO 708. Preparation-Instruction in Microbiology.** The student will participate in the preparation of microbiological cultures and assist faculty in the teaching of the medical microbiology laboratory course. (Lecture) (3 semester hours)

**MICRO 715. Special Topics in Microbiology.** The course is designed to meet the special needs of individual students. Students who wish to learn more about a particular topic can arrange this course by discussing their need with their mentor. (Lecture) (1-9 semester hours)

**MICRO 725. Bacterial Structure and Function.** A study of bacterial physiology, anatomy and regulatory mechanisms. (Lecture) (3 semester hours)

**MICRO 733. Exprimental Immunochemistry & Immunobiology.** Theoretical and experimental applications of immunochemistry and immunobiology with major emphasis on in vivo and in vitro techniques used in investigating various aspects of humoral and cell-mediated immune responses. (Lecture) (3 semester hours)

**MICRO 734. Advanced Immunology.** An advanced course in which students discuss and critically review new research findings in various aspects of human and comparative immunology. Prerequisites: MICRO 701, MICRO 733. (Lecture) (1-9 semester hours)

**MICRO 735. Advanced Virology.** An advanced course in which students study, discuss and critically review new research findings, concepts and laboratory techniques in the areas of viral biochemistry, molecular biology, tumor virology and medical virology. Prerequisites: MICRO 701, BIOCH 710 and MICRO 702. (Lecture) (1-9 semester hours)

**MICRO 741. Fundamental Microbiology.** Basic concepts in microbiology and immunology are presented and correlated with disease processes having a bacterial, viral, mycotic or parasitic etiology. The relevance of microbial pathogens in both general and dental medicine is discussed. NOTE: This course is also listed as Dental 641 and is not offered to microbiology graduate students. (Lecture) (6 semester hours)

**MICRO 747. Advanced Bacteriology.** This course will offer small group sessions that address the mechanisms of infection and host defense. This will include lectures, case presentations, laboratory exercises, etc. Prerequisite: MICRO 701 and MICRO 725. (Lecture) (2 semester hours)

**MICRO 750. Research Proposal in Microbiology.** An advanced course in which doctoral students prepare and defend a research grant proposal focused on their dissertation research. (Lecture) (1-9 semester hours)

**MICRO 760. Medical Virology.** This course is a section of the larger MEDICAL MICROBIOLOGY course (MICRO 701). Students OUTSIDE THE DEPARTMENT OF MICROBIOLOGY interested in virology may register for this course after contacting the course director. (Lecture) (3 semester hours)

**MICRO 761. Medical Immunology.** This course is a section of the larger MEDICAL MICROBIOLOGY course (MICRO 701). Students OUTSIDE THE DEPARTMENT OF MICROBIOLOGY interested in Immunology may register for this course after contacting the course director. (Lecture) (3 semester hours)

**MICRO 762. Medical Bacteriology.** This course is a section of the larger MEDICAL MICROBIOLOGY course (MICRO 701). Students OUTSIDE THE DEPARTMENT OF MICROBIOLOGY interested in bacteriology may register for this course after contacting the course director. (Lecture) (6 semester hours)

**MICRO 763. Medical Parasitology/Mycology.** This course is a section of the larger MEDICAL MICROBIOLOGY course (MICRO 701). Students OUTSIDE THE DEPARTMENT OF MICROBIOLOGY interested in parasitology/mycology may register for this course after contacting the course director. (Lecture) (1 semester hour)

**MICRO 798. Dissertation and Dissertation Research.** (Dissertation) (1-9 semester hours)

**MICRO 799. Thesis and Thesis Research.** (Thesis) (1-6 semester hours)

**PLAN OF STUDY**

**YEAR 1 - FALL**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICRO 701</td>
<td>Medical Microbiology</td>
<td>6</td>
</tr>
<tr>
<td>BIOCH 710</td>
<td>Biochemistry</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

**YEAR 1 - SPRING**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICRO 701</td>
<td>Medical Microbiology</td>
<td>6</td>
</tr>
<tr>
<td>MICRO 702</td>
<td>Viruses</td>
<td>3</td>
</tr>
<tr>
<td>MICRO 703</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MICRO 725</td>
<td>Bacterial Structure and Function</td>
<td>3</td>
</tr>
<tr>
<td>ID 709</td>
<td>Responsible conduct of Research</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>YEAR 2 - SUMMER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>MICRO 704</td>
<td>Research in Microbiology</td>
<td>6</td>
</tr>
<tr>
<td>MICRO 707</td>
<td>Laboratory Rotation</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2 - FALL</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MICRO 708</td>
<td>Preparation for Instruction in Microbiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ID 740</td>
<td>Statistical Methods in Research I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MICRO 704</td>
<td>Research in Microbiology</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2 - SPRING</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MICRO 703</td>
<td>Seminar</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MICRO 704</td>
<td>Research in Microbiology</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MICRO 733</td>
<td>Experimental Immunochemistry and Immunobiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

## NEUROSCIENCE PROGRAM

Michael N. Lehman, PhD, Director

### FACULTY

#### Professors:
- Alexander Auchus, MD.
- Lique Coolen, PhD
- Jonathan Fratkin, MD
- Elise Gomez-Sanchez, PhD, DVM
- Kim Gratz, PhD
- Michael N. Lehman, PhD
- Rick C. S. Lin, PhD
- James Lynch, PhD
- Paul May, PhD
- Edward Manning, PhD
- Thomas Mosley, PhD
- Ian A. Paul, PhD
- Grazyna Rajkowska, PhD
- Rob Rockhold, PhD
- James Rowlett, PhD
- Craig Stockmeier, PhD
- Parminder Vir, PhD
- Wu Zhou, PhD

#### Associate Professors:
- Adel Maklad, PhD
- Ranjan Batra, PhD
- Lewis Chen, PhD
- Sean Didion, PhD
- Heather Drummond, PhD
- David Elkin, PhD
- Laree Hiser, PhD
- Anna Lerant, MD
- Xiu Liu, M.D., PhD
- Donna Platt, PhD
- Jim Shaffery, PhD
- Kimberly Simpson, PhD
- Douglas Vetter, PhD
- Eric Vallender, PhD
- Junming Wang, PhD
- Susan Warren, PhD
- Hong Zhu, MD, PhD

#### Assistant Professors:
- Lee Bidwell, PhD
- Charles Bishop, PhD
- Lir-Wan Fan, PhD
- Kevin Freeman, PhD
- Bernadette Grayson, PhD
- Jose Miquel-Hidalgo, PhD
- Kenneth Oswalt, MD
- Yi Pang, MD, PhD
- Ian Webb, PhD

#### Instructors:
- Ryan Darling, PhD
- Kedra Wallace, PhD

### SUMMARY.
The Program in Neuroscience is a course of study leading to a PhD degree. It is an interdepartmental degree program with collaborating faculty from both basic and clinical departments at the University of Mississippi Medical Center. The objectives for the Program in Neuroscience are to educate and train individuals to become independent research investigators, teachers and mentors with a broad understanding of the neurosciences as well as focused training within a subset of the areas of study which comprise neuroscience. These objectives apply whether the individual’s ultimate career goal is to work in academic, government, industrial or administrative settings.

### CORE COURSES.
During the first year of study, students are required to take Foundations in Neuroscience (NSCI 701) which is an intensive overview of neuroscience coupled with analysis of relevant primary literature, Special Topics in Neuroscience course (NSCI 708) focusing on current issues of interest in neuroscience, and Fundamental Biochemistry (BIOC 704). They also engage in a series of up to six 4-5 week surveys of different research laboratories affiliated with the Program (NSCI790). During the second year of study, students are required to take Biostatistics (ID 740). Finally, in the second year of study, students engage in intensive Senior Laboratory Rotations (NSCI 791) which typically focus with the students' planned dissertation laboratories.

Throughout the first two years of study, students engage in professional skills development with courses in Neuroscience Journal Club (NSCI 720), Scientific Writing (NSCI 721), Responsible Conduct in Research (ID 709).

### REQUIREMENTS FOR DISSERTATION CANDIDACY.
In addition to the Core Courses described above, students must successfully pass a Qualifying Examination which consists of developing and defending a research proposal selected from 8-10 potential topics. This is normally completed in the summer between the first and second years in order to be admitted to candidacy for a dissertation.
COURSE DESCRIPTIONS. While the coursework listed is intended for graduate students in the Program in Neuroscience, it is open to qualified students in other departments with the approval of the program Director and the individual course director.

**NSCI 701. Foundations of Neuroscience.** This course provides a thorough overview of neuroscience over two semesters. It systematically covers neuroscience in an integrated fashion covering the following main topics: 1) the cell and molecular biology of neurons; 2) principles of synaptic transmission; 3) neurobiological basis of cognition and cortical function; 4) sensory perceptions; 5) movement; 6) CNS pharmacology; 7) neural information processing; 8) developmental neuroscience and; 9) behavioral neuroscience. The course includes both didactic and primary literature-based content and is the first required course in the Program in Neuroscience. (6-6 semester hours, Fall and Spring semesters). (Lecture) (6 semester hours)

**NSCI 708. Topics in Neuroscience Elective.** A small group faculty-led discussion course on selected topics in neuroscience. Course topics are offered each Summer semester by groups of faculty and students and faculty will discuss primary literature (Lecture) (3 semester hours)

**NSCI 710. Tutorials in Neuroscience.** Tutorials cover specialized topics in neuroscience in depth in a one-on-one or very small group setting. Courses consist of intensive, directed reading and discussion to conclude with a review paper and presentation to Program in Neuroscience. (Lecture) (1-9 semester hours)

**NSCI 711. Dissertation Background Literature Tutorial.** This is a guided literature review intended for students to prepare an in-depth critical analysis of background literature relevant to their planned dissertation. (Lecture) (3 semester hours)

**NSCI 720. Neuroscience Journal Club.** A review of significant issues in neuroscience including literature review and discussion of recent data and news. (Lecture) (1-9 semester hours)

**NSCI 721 A. Scientific Writing in Neuroscience (A).** An introduction to scientific writing that includes preparation of abstracts for scientific meetings, presentations at meetings, preparation of a scientific manuscript for publication and, finally, preparing a grant proposal for extramural funding in the NIH style (Lecture) (3 semester hours)

**NSCI 790. Neuroscience Laboratory Survey.** A survey of up to six active research laboratories in the Program in Neuroscience. Weekly meetings in NSCI 790 discuss and compare different laboratory environments and experience and help students prepare Individual Development Plans to guide their training as scientist. (Lecture) (3 semester hours)

**NSCI 791. Senior Laboratory Rotations.** These are intensive laboratory rotations for second year students in the Program in Neuroscience. They are intended for students to begin research in their planned dissertation laboratories. Thus, all three rotations can be within the same laboratory. However, they may also be conducted in up to three different laboratories, depending on the student’s training needs and interests. (Laboratory) (6-9 semester hours)

**NSCI 798. Dissertation Research in Neuroscience.** (Dissertation) (9 semester hours)

### PLAN OF STUDY

<table>
<thead>
<tr>
<th>YEAR 1 - FALL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NSCI 701</td>
<td>Foundations in Neuroscience</td>
</tr>
<tr>
<td>BIOC 704</td>
<td>Fundamental Biochemistry</td>
</tr>
<tr>
<td>NSCI 720</td>
<td>PIN Journal Club</td>
</tr>
<tr>
<td>NSCI 790</td>
<td>Laboratory Rotation Surveys</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 1 - SPRING</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NSCI 701</td>
<td>Foundations in Neuroscience</td>
</tr>
<tr>
<td>NSCI 790</td>
<td>Laboratory Rotation Surveys</td>
</tr>
<tr>
<td>NSCI 720</td>
<td>PIN Journal Club</td>
</tr>
<tr>
<td>ID 709</td>
<td>Responsible Conduct in Research</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2 - SUMMER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NSCI 791</td>
<td>Senior Laboratory Rotation</td>
</tr>
<tr>
<td>NSCI 707</td>
<td>Special Topics in Neuroscience</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2 - FALL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NSCI 721</td>
<td>Scientific Writing in Neuroscience</td>
</tr>
<tr>
<td>NSCI 791</td>
<td>Senior Laboratory Rotation</td>
</tr>
<tr>
<td>NSCI 720</td>
<td>PIN Journal Club</td>
</tr>
<tr>
<td>ID 740</td>
<td>Biostatistics</td>
</tr>
</tbody>
</table>
The PhD in Nursing program provides a strong foundation in theoretical and methodological content essential for the scholarly investigation of health care problems encountered in the practice of nursing. The program is designed to develop nurse researchers to generate and translate knowledge toward improving the health of individuals, families, communities, and populations through the conduct of biologic, physiologic, or experiential research in health and illness. The program of study and research are foundational to understanding client-centered health problems and developing the theoretical and experiential foundation necessary to initiate and coordinate clinical outcomes research. UMMC offers two entry points to the PhD in Nursing program: the post-BSN and post-masters. Individuals seeking admission to the PhD in Nursing program must meet the general admission requirements and technical standards for admission for the School of Graduate Studies (SGSHS), as well as those determined by the School of Nursing. Please contact the program director for specific program requirements.

This is a collaborative program between the University of Mississippi Medical Center (UMMC) and the University of Southern Mississippi (USM). Each institution grants its own degree; however, there are similar admission requirements and core courses (ethics, philosophy, research methods, theory). Students may take any of the core courses at either University. Courses successfully completed at one institution will be accepted without reservation at the other and will not count as transfer credits. Each school offers its own selected fields of study. UMMC offers two tracks: biological/physiological research (basic sciences) and human experiences in health care (clinical) research. USM prepares scholars with a leadership focus. Students will receive their degrees from the institution that offers the area of study selected by the students.

PHN 701. Seminar (Journal Club). Serves as a forum for nursing scholars to both enhance and affirm individual scholarly activities. Includes opportunities for individual students to present a variety of research articles and proposals. (Lecture) (1-9 semester hours)

PHN 702. Pathophysiological Phenomena. A focused study of specific nursing phenomena in pathophysiological nursing care. Students present and evaluate current research on selected topics. (Lecture) (2 semester hours)

PHN 705. Writing Proposals. Preparatory course for the PhD comprehensive examination that examines development of the problem statement through analyses of quantitative and qualitative research methodologies under the guidance of a faculty mentor. (Lecture) (4 semester hours)

PHN 706. Philosophy of Science. Focuses on the development of science in the Western world. The nature of what constitutes science and ways of knowing and thinking as they relate to the development of science will be addressed. Emphasis is placed on the process of analysis. (Lecture) (3 semester hours)

PHN 707. Phenomena in Nursing Research. This course is a focused review of specific nursing phenomena (e.g., caring, coping, clinical outcomes). Students present and evaluate current research on selected topics. (Lecture) (2 semester hours)
PHN 708. Quantitative Research Designs. This course examines quantitative designs most applicable to the discipline of nursing. The course emphasizes the practice issues related to the conceptual, empirical and analytical components of research plans as they are influenced by sample size, setting, number and time of measurements. (Lecture) (3 semester hours)

PHN 709. Qualitative Research Designs. Examines the qualitative research designs most applicable to the discipline of nursing. Issues and critical analysis of traditional and emerging designs are discussed. Emphasizes the practice of qualitative research. (Lecture) (3 semester hours)

PHN 710. Research Practicum. Allows the student to focus on individual area of study which supports the development of the dissertation proposal. (Practicum/Internship) (1-6 semester hours)

PHN 711. Data Collection and Analysis. Focuses on methods of data collection and analysis. Selected data collection methods will be examined. Selected analyses for various data sets will be studied and the graduate student will carry out an analysis of data sets. (Lecture) (3 semester hours)

PHN 712. Writing for Funding. Examines the essential components of a funding/grant proposal and identifies sources of funding. Graduate student will identify potential private or government funding sources appropriate for their research interests. (Lecture) (2 semester hours)

PHN 713. Laboratory Methods. Focuses on methods of data collection and analysis in the biological/physiological lab setting. (Laboratory) (3 semester hours)

PHN 714. Theory Construction and Testing. This course focuses on the analysis of existing theories as the basis for synthesis, construction, and testing of middle range theory for expanding the scientific base of the discipline of nursing. (Lecture) (3 semester hours)

PHN 717. Directed Research. Allows the student, under faculty direction, to focus on areas of study in specific areas of research. Supports the student’s efforts to clarify individual research focus. (Lecture) (1-4 semester hours)

PHN 733. Research Design & Methods for Advanced Nursing Practice. (Online and Hybrid) Focuses on understanding research designs and methods as they impact research utilization. Students will explore issues related to data collection, sampling, statistical versus clinical significance and outcomes evaluation. (Lecture) (3 semester hours)

PHN 737. Advanced Physiology/Pathophysiology. (Hybrid) This course provides an understanding of human physiological and pathophysiological processes. A human body systems approach is used applying concepts in biochemistry and cell biology as they influence health and illness. Topics include Cell Biology, Cancer Immunity and Inflammation, Genetics and the Integumentary, Musculoskeletal, Reproductive, Pulmonary, Renal, Cardiovascular, Endocrine, Gastrointestinal and Nervous Systems. (Theory) (Lecture) (2 semester hours)

PHN 766. Clinical Pharmacotherapeutics. (Online) This course provides a foundation and clinical application of pharmacotherapeutic interventions commonly prescribed for healthy and ill individuals across the life span. Emphasis is placed on pharmacokinetic and pharmacodynamic principles along with integration of the use of these products including variations for selected special populations specific to the clinical track of study and client characteristics. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

PHN 777. Advanced Health Assessment. This course focuses on the theoretical basis of performing a physical assessment on the individual throughout the life span. Students will acquire advanced knowledge and skills necessary to perform physical assessments. The emphasis is on mastering interviewing, history taking, and advanced physical assessment skills. (Lecture) (3 semester hours)

PHN 780. Special Topics. Elective course to provide the student with additional study to support research topic development. (Lecture) (1-4 semester hours)

PHN 791. Dissertation Research Proposal. In consultation with their mentors and advisory committees, students will write and successfully defend a PhD dissertation proposal in which they describe the problem and research question(s), the background and significance, and the research design. (Dissertation) (1-3 semester hours)

PHN 798. Dissertation and Dissertation Research. In consultation with their mentors and advisory committees, students will write a PhD dissertation in which they describe the findings and importance of their research project. (Dissertation) (1-9 semester hours)

OUTSIDE EMPLOYMENT
Students are advised to limit outside employment to 20 hours a week. Information about financial aid including, stipends and scholarship, is available. Students who receive stipends must have permission from the SGSHS Dean to engage in outside employment.

POST-BSN ENTRY

PLAN OF STUDY

<table>
<thead>
<tr>
<th>Year 1 - Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHN 777</td>
<td>Advanced Health Assessment</td>
</tr>
<tr>
<td>DNP 720</td>
<td>Biostatistics I</td>
</tr>
<tr>
<td></td>
<td>Elective*</td>
</tr>
<tr>
<td>PHN 701</td>
<td>Seminar</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>YEAR 1 - SPRING</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>---</td>
</tr>
<tr>
<td>PHN 737</td>
<td>Advanced Physiology/Pathophysiology</td>
</tr>
<tr>
<td>PHN 733</td>
<td>Research Design and Methods for ANP</td>
</tr>
<tr>
<td>DNP 721</td>
<td>Biostatistics II</td>
</tr>
<tr>
<td>PHN 701</td>
<td>Seminar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2 - SUMMER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHN 701</td>
<td>Seminar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2 - FALL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ID 715</td>
<td>Teaching in Higher Education</td>
</tr>
<tr>
<td>PHN 706</td>
<td>Philosophy of Science</td>
</tr>
<tr>
<td>PHN 701</td>
<td>Seminar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2 - SPRING</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHN 714</td>
<td>Theory Construction and Testing</td>
</tr>
<tr>
<td>PHN766</td>
<td>Clinical Pharmacotherapeutics</td>
</tr>
<tr>
<td>ID 716</td>
<td>Teaching Practicum (1-9 hours; minimum 5)</td>
</tr>
<tr>
<td>PHN 701</td>
<td>Seminar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 3 - SUMMER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ID 716</td>
<td>Teaching Practicum</td>
</tr>
<tr>
<td>PHN701</td>
<td>Seminar</td>
</tr>
<tr>
<td></td>
<td>Elective*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 3 - FALL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHN 708</td>
<td>Quantitative Research Designs</td>
</tr>
<tr>
<td>PHN 709</td>
<td>Qualitative Research Designs</td>
</tr>
<tr>
<td>PHN 701</td>
<td>Seminar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 3 - SPRING</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elective*</td>
</tr>
<tr>
<td>ID 700</td>
<td>Ethics in Research</td>
</tr>
<tr>
<td>PHN 701</td>
<td>Seminar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 4 - SUMMER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHN 705</td>
<td>Writing Proposals</td>
</tr>
<tr>
<td>PHN 701</td>
<td>Seminar</td>
</tr>
<tr>
<td></td>
<td>Qualifying Examinations (Written)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall+</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHN 701</td>
<td>Seminar**</td>
</tr>
<tr>
<td>PHN 791</td>
<td>Dissertation Proposal (min of 1 hour)</td>
</tr>
<tr>
<td>PHN 798</td>
<td>Dissertation Research (min of 6 hours)</td>
</tr>
</tbody>
</table>

**Total number of hours for degree:** 72

*Electives: 12 hours required for degree. Substantive support courses: e.g., (PHN 711) Data Collection and Analysis, PHN 707 (Phenomena of Nursing), PHN 712 (Writing for Funding), ID 718 (Health Policy and the Healthcare System), ID 725 (Environmental Health), ID 701 (Introduction to GIS), CHS 759 (GIS in Healthcare and Epidemiology), PHN 780 (Special Topics), PHN 717 (Directed Research), PHN 710 (Research Practicum), Advanced Statistics, Genetics, Biochemistry, Epidemiology, Anthropology, Sociology, or any other graduate or doctoral-level course approved by advisor.

**Students must enroll in PHN 701 every semester until successful dissertation proposal defense.
POST-MSN ENTRY

YEAR 1 - FALL

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNP 720</td>
<td>3</td>
</tr>
<tr>
<td>PHN 706</td>
<td>3</td>
</tr>
<tr>
<td>PHN 701</td>
<td>1</td>
</tr>
</tbody>
</table>

YEAR 1 - SPRING

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNP 721</td>
<td>3</td>
</tr>
<tr>
<td>PHN 714</td>
<td>3</td>
</tr>
<tr>
<td>PHN 701</td>
<td>1</td>
</tr>
</tbody>
</table>

YEAR 2 - SUMMER

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHN 701</td>
<td>1</td>
</tr>
<tr>
<td>Electives*</td>
<td>6</td>
</tr>
</tbody>
</table>

YEAR 2 - FALL

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHN 708</td>
<td>3</td>
</tr>
<tr>
<td>PHN 709</td>
<td>3</td>
</tr>
<tr>
<td>PHN 701</td>
<td>1</td>
</tr>
</tbody>
</table>

YEAR 2 - SPRING

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives*</td>
<td>6</td>
</tr>
<tr>
<td>ID 700</td>
<td>2</td>
</tr>
<tr>
<td>PHN 701</td>
<td>1</td>
</tr>
</tbody>
</table>

YEAR 3 - SUMMER

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHN 705</td>
<td>4</td>
</tr>
<tr>
<td>PHN 701</td>
<td>1</td>
</tr>
<tr>
<td>Qualifying Examinations (Written)</td>
<td>5</td>
</tr>
</tbody>
</table>

YEAR 3+ - FALL AND SPRING

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHN 701</td>
<td>1</td>
</tr>
<tr>
<td>PHN 791</td>
<td>1</td>
</tr>
<tr>
<td>PHN 798</td>
<td>6</td>
</tr>
</tbody>
</table>

Total number of hours for degree: 50

*Electives: 12 hours required for degree. Substantive support courses: e.g., (PHN 711) Data Collection and Analysis, PHN 707 (Phenomena of Nursing), PHN 712 (Writing for Funding), ID 718 (Health Policy and the Healthcare System), ID 725 (Environmental Health), ID 701 (Introduction to GIS), CHS 759 (GIS in Healthcare and Epidemiology), PHN 780 (Special Topics), PHN 717 (Directed Research), PHN 710 (Research Practicum), Advanced Statistics, Genetics, Biochemistry, Epidemiology, Anthropology, Sociology, or any other graduate or doctoral-level course approved by advisor.

**Students must enroll in PHN 701 every semester until successful dissertation proposal defense.

PATHOLOGY PROGRAM
Julius Major Cruse, Jr., MD, PhD, Dr. h.c., Director

FACULTY

Professors:
Julius Major Cruse, Jr., MD, PhD Dr. h.c. Janice Lage, MD Robert Edwin Lewis, PhD

Associate Professor:
Ayman Asfour, MD Christian Gomez, PhD Wael M. Elshamy, PhD
William P. Daley, MD Anait Levenson, PhD

Assistant Professors:
Elizabeth Chastain, MD Venkat K.R. Mannam, MBBS, PhD
PATH 720. General Pathologic Concepts. Focused readings and discussion on the foundational concepts of modern pathology. (Lecture) (3 semester hours)

PATH 721. General Pathology. Concepts of disease. This course extends over 2 semesters. The entire course must be completed to receive credit. (Lecture) (8 semester hours)

PATH 724. Autopsy Pathology. Techniques, interpretation and clinical correlation under close supervision of staff. Prerequisite: 721. (Lecture) (1-15 semester hours)

PATH 725. Surgical Pathology. Frozen section diagnosis, description of gross specimens, and interpretation of microscopic sections. Prerequisite: 721. (Lecture) (1-15 semester hours)

PATH 726. Cytopathology. Preparation of specimens, interpretation of smears, and attendance at cytology conferences and lectures. Prerequisite: 721. (Lecture) (1-15 semester hours)

PATH 727. Immunofluorescence Microscopy. Orientation of fluorescence microscopy, preparation and interpretation of histologic sections. Prerequisite: 721. (Lecture) (1-15 semester hours)

PATH 728. Neuropathology. Review of autopsy and surgical material from neurology-neurosurgery. A three month in depth tutorial experience in diagnostic neuropathology. Prerequisite: 721. (Lecture) (1-15 semester hours)

PATH 730. Electron Microscopy. Basic technique of electron microscopy, and interpretation of biologic ultrastructure. Prerequisite: Anatomy 713 or its equivalent (Lecture) (1-15 semester hours)

PATH 731. Research in Pathology. Specific research projects. Prerequisite: 721. (Laboratory) (1-15 semester hours)

PATH 732A. Principles of Immunology. Current concepts and experimental techniques of cellular and humoral immune phenomena in vivo and in vitro immunogenicity and immunologic unresponsiveness; immunoglobulin-mediated and cell-mediated types of hypersensitivity; mechanisms of immunologic injury to tissues and cells; and introduction to the immunologic subspecialties. (Lecture) (1-9 semester hours)

PATH 732B. Principles of Immunology. Current concepts and experimental techniques of cellular and humoral immune phenomena in vivo and in vitro immunogenicity and immunologic unresponsiveness; immunoglobulin-mediated and cell-mediated types of hypersensitivity; mechanisms of immunologic injury to tissues and cells; and introduction to the immunologic subspecialties. (Lecture) (1-9 semester hours)

PATH 733. Problems in Immunology. Advanced studies and research techniques in immunology. Prerequisite: 732 or equivalent. May be repeated for credit. (Laboratory) (1-5 semester hours)

PATH 734. Immunology Seminar. Current research topics in immunology (Lecture) (1-15 semester hours)

PATH 735. Comparative Immunology. The ontogeny and phylogeny of immunity from a broad point of view. Prerequisite: 732 or equivalent. (Lecture) (1-15 semester hours)

PATH 736. Immunogenetics. The major histocompatibility complex (MHC), generation of diversity in antibody synthesis, genetics of normal and pathological immunoglobulins, genetic antigenic variation in microorganisms and animals. Pre-requisite: Preventive Medicine 717 and Pathology 732 or equivalents (Lecture) (1-9 semester hours)

PATH 737. History of Immunology. Personalities and events in the development of immunology as a biological science. Prerequisite: 732 or equivalents (Lecture) (1-15 semester hours)

PATH 738. Transplantation and Tumor Immunology. Cellular and humoral immune responses which follow transplantation of normal and neoplastic tissues and cells in hosts of disparate origin. Prerequisite: 732 or equivalent. (Lecture) (1-9 semester hours)

PATH 739. Immunopathology. Principles of disease processes which have an immunological etiology or pathogenesis. Prerequisite: 732 or equivalent. (Lecture) (1-9 semester hours)

PATH 740. Cellular and Molecular Immunopathology. Immunologic aspects of cell and tissue changes in: hetero-, iso-, and autoimmune phenomena; neoplasia; immunodeficiency diseases affecting stem cells, B or T Lymphocytes; and immediate (immunoglobulin-mediated) and delayed (cell-mediated) hyper-sensitivity reactions. Prerequisite: 739 or equivalent. (Lecture) (1-9 semester hours)

PATH 741. Immunohematology. Blood group antigens and antibodies; their role in hemolytic disease and transfusion incompatibility reactions. Prerequisite: 732 or equivalent (Lecture) (1-15 semester hours)

PATH 742. Clinical Immunology. Clinical aspects of immunological disease processes. Prerequisite: 732, 739, 741 or equivalents. (Lecture) (1-9 semester hours)

PATH 743. Pathology Seminar. Current research topics in experimental pathology. (Lecture) (1-15 semester hours)

PATH 744. History of Pathology. Tutorial instruction and assigned readings on medical investigators who established the scientific basis of disease and their contributions. Prerequisite: PATH 721 or equivalent. (Lecture) (1-15 semester hours)

PATH 745. Translational Immunology. Examination of the burgeoning field in which findings in basic and clinical immunologic research are translated more quickly and efficiently into medical practice than previously. (Lecture) (1-9 semester hours)

PATH 746. Hematopathology. An introduction to basic principles of hematopathology including interpretation of complete blood counts, peripheral blood smears, histologic preparations, and flow cytometry in order to arrive at a specific hematologic diagnosis (Clinical Rotation) (3-15 semester hours)
PATH 747. Clinical Practice in Laboratory Medicine. Clinical Practice in Laboratory Medicine consists of areas of special topics and many include any of the core rotations (surgical pathology, autopsy, transfusion medicine, hematopathology, and cytopathology) or clinical chemistry, immunopathology, and microbiology. (Clinical Rotation) (3-15 semester hours)

PATH 798. Dissertation and Dissertation Research. (Dissertation) (1-9 semester hours)

PATH 799. Thesis and Thesis Research. (Thesis) (1-6 semester hours)

PLAN OF STUDY

YEAR 1 - SUMMER
PATH 733 Problems in Immunology  2
PATH 743 Pathology Seminar  5
PATH 731 Research in Pathology  5
12***

YEAR 1 - FALL
ANAT 713 Histology  3
BIOCH 710 Biochemistry  10
PATH 743 Pathology Seminar  1
Elective*  6
20***

YEAR 1 - SPRING
ANAT 713 Histology  3
PATH 732 Principles of Immunology  4
Elective*  6
20***

YEAR 2 - SUMMER
PATH 733 Problems in Immunology  2
PATH 743 Pathology Seminar  5
PATH 731 Research in Pathology  5
12***

YEAR 2 - FALL
PATH 721** General Pathology  8
ID 740 Statistical Methods in Research I  3
PATH 731 Research in Pathology  3
14

YEAR 2 - SPRING
PATH 721** General Pathology  8
ID 709 Responsible Conduct in Research  1
ID 714 Professional Skills  3
Elective*  6
18***

* Electives are support that focus on the final project of the student which might include: (BIOCH 742) Research Tools in Molecular Biology, (BIOCH 744) Cellular Biochemistry, (ID 721) Molecular Oncology, or any other graduate or doctoral-level course approved by advisor.

** General Pathology can be scheduled in the first year for students with medical background.

*** At least total 9 credit hours every semester.

PHYSIOLOGY AND BIOPHYSICS PROGRAM
Michael J. Ryan, PhD, Director

FACULTY

Professors:
Thomas H. Adair, PhD  Joey P. Granger, PhD  Merry L. Lindsey, PhD
Barbara T. Alexander, PhD  John E. Hall, PhD  Jane F. Reckelhoff, PhD
Lique Coolen, PhD  Robert L. Hester, PhD  James G. Wilson, MD

Associate Professors:
Alejandro R. Chade, MD  Michael J. Ryan, PhD  David E. Stec, PhD
Heather A. Drummond, PhD
### Assistant Professors:

Eric M. George, PhD

**PHYSIO 701. Medical Physiology.** A course providing an in depth study of the functions of the body with special emphasis on the relationships of the different organs to each other. (Lecture) (6 semester hours)

**PHYSIO 702. Physiological Concepts.** A course designed to provide initial exposure to laboratory research and study of literature in various areas of physiology. (Lecture) (1-9 semester hours)

**PHYSIO 704. Molecular Physiology.** A course designed to teach how state of the art approaches in molecular biology can be applied to cardiovascular and renal physiology. This course is structured as a laboratory format with some reading and lecture. (Lecture) (2 semester hours)

**PHYSIO 705. Seminar.** Graduate students will prepare, present and attend weekly seminars. (Lecture) (1-9 semester hours)

**PHYSIO 707. Research in Physiology.** A course designed to provide hands-on exposure to laboratory research prior to selection of a dissertation project. (Laboratory) (1-9 semester hours)

**PHYSIO 715. Endocrinology.** A course covering the historical, biochemical and physiological aspects of the endocrine system (Lecture) (2 semester hours)

**PHYSIO 717. Circulatory Physiology.** A reading and conference course that emphasizes regulation of cardiac output, body fluid volumes and arterial pressures (Lecture) (7 semester hours)

**PHYSIO 725. Fundamental Physiology.** A fundamental course designed to provide students with knowledge of the basic functions of the cells, tissues, organs and organ systems, and how they interrelate to accomplish the many and diverse functions of the human body. The course is intended for students whom physiology is not their primary area of study. Also listed as Dent 625 (Lecture) (4 semester hours)

**PHYSIO 727. Physiological Applications of Molecular Biology.** A course designed to introduce students to the physiological application of molecular biology approaches such as real-time PCR, Western Blot, in vivo gene transfer & knockdown, transgenic rodent production, and in vitro and in vivo imaging (Laboratory) (3 semester hours)

**PHYSIO 728. Scientific Communications in Physiology.** Scientific Communications is designed to provide students with basic tools needed for writing scientific research papers and grant proposals, and for giving effective PowerPoint presentations. (Lecture) (2 semester hours)

**PHYSIO 731. Renal and Body Fluid Physiology.** A seminar course that includes critical study of research methods, comparative renal physiology and literature on classical and cont emporary principles of renal physiology and pathophysiology. (Lecture) (7 semester hours)

**PHYSIO 734. Pathophysiology.** This course will integrate clinical and basic sciences and will include brief case presentations and discussion of the molecular and physiological basis of common human diseases. (Lecture) (2 semester hours)

**PHYSIO 735. Special Topics.** The course will consiste of any combination of lecture, one-on-one (or group) discussion, student presentation and/or written assignments on various areas of physiology (Lecture) (1-9 semester hours)

**PHYSIO 744. Simulation of Physiological Mechanisms.** Introduction to mathematical analysis of physiological phenomena. Topics include ordinary differential equations, numerical methods for solving differential equations, elements of digital computer programming in high-level languages and the use of simulation packages and appropriate demonstrations. (Lecture) (3 semester hours)

**PHYSIO 798. Dissertation and Dissertation Research.** (Dissertation) (1-9 semester hours)

**PHYSIO 799. Thesis and Thesis Research.** (Thesis) (1-9 semester hours)

### PLAN OF STUDY

#### YEAR 1 - SUMMER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSIO 702</td>
<td>Physiological Concepts</td>
<td>2</td>
</tr>
</tbody>
</table>

#### YEAR 1 - FALL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSIO 701</td>
<td>Medical Physiology</td>
<td>6</td>
</tr>
<tr>
<td>BIOCH 710</td>
<td>Biochemistry</td>
<td>10</td>
</tr>
<tr>
<td>ANAT 713</td>
<td>Histology and Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

#### YEAR 1 - SPRING

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSIO 701</td>
<td>Medical Physiology</td>
<td>6</td>
</tr>
<tr>
<td>ID 710</td>
<td>Research Tools in Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>ANAT 715</td>
<td>Neurobiology or Elective</td>
<td>6</td>
</tr>
<tr>
<td>ANAT 713</td>
<td>Histology and Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>ID 709</td>
<td>Responsible Conduct in Research</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>
YEAR 2 - SUMMER
PHYSIO 707  Research in Physiology 9

YEAR 2 - FALL
PHYSIO 717  Circulatory Physiology 7
ID 740  Statistical Methods in Research I 3
PHARM 722  Pharmacology & Therapeutics 6

YEAR 2 - SPRING
PHYSIO 727  Physiological Applications of Molecular Biology 2
PHYSIO 731  Renal Physiology 7
PHARM 722  Pharmacology & Therapeutics 6
PHYSIO 744  Simulation of Physiological Mechanisms 3
PHYSIO 728  Scientific Communications in Physiology 2

YEAR 3+ - SUMMER
PHYSIO 735  Special Topics in Physiology 9

YEAR 3+ - FALL
PHYSIO 798  Dissertation and Dissertation Research 9
ID 714  Professional Skills 2

YEAR 3+ - SPRING
PHYSIO 798  Dissertation and Dissertation Research 9
PHYSIO 705  Seminar 1

INTERDISCIPLINARY COURSES
ID 700. Ethics in Research. This online course explores issues related to ethics in healthcare research conducted in a variety of settings. Principles of philosophy of science and select ethical theories are applied as a framework for critical ethical issues in healthcare research. (Lecture) (2 semester hours)

ID 709. Responsible Conduct in Research. An interactive lecture course designed to provide an understanding of ethics in scientific research and the basic skills important for both oral and written scientific communication. (Lecture) (1-9 semester hours)

ID 701. Introduction into Geographical Information Systems. This course introduces students to fundamental concepts and applications of Geographic Information Systems (GIS). Special emphasis is given in the areas of healthcare and epidemiology. This course combines an overview of the general principles of GIS and analytical use of spatial information technology applicable for healthcare professionals. This is the first course of a series on geospatial information technology to be offered as an interdisciplinary graduate course at UMMC.

ID 710. Research Tools in Molecular Biology. A course designed to introduce students to contemporary methods in molecular biology including cloning, mutagenesis, transgenic animals, genomics, proteomics, and gene expression. (Lecture) (3 semester hours)

ID 713. Bioinformatics & Genomics. This multidisciplinary and interdepartmental course is designed to provide students in the School of Graduate Studies in the Health Sciences, and other related programs at UMMC, with sound training and knowledge in the use and application of bioinformatics tools and genomics recourses to analysis, visualization and interpretation of high-throughput "omics", genotype, proteomics, sequence, methylation and other biological data on cancer and other complex human diseases. (Lecture) (3 semester hours)

ID 714. Professional Skills. A course designed for early to late graduate students and postdoctoral fellows to acquire skills needed to be successful in a scientific work environment, with special emphasis on oral and written communication skills, grantsmanship, career choices, laboratory management, and academic teaching skills. (Lecture) (3 semester hours)

ID 715. Teaching in Higher Education. A course designed to provide practical and theoretical foundations for teaching in higher education. The course will offer experiences to explore and develop skills that promote learning as well as apply strategies for effective course design and assessment. The intended audience is graduate students and postdoctoral fellows. (Lecture) (3 semester hours)

ID 716. Teaching Practicum. The practicum enables student teachers to acquire beginning competencies for teaching in higher education in a classroom setting. (Practicum/Internship) (1-9 semester hours)
ID 717. Special Topics in Biostatistics, Bioinformatics, & Epidemiology. This course is intended to meet the special needs of individual students. Students who wish to learn more about a particular topic can select from the list of available topics and/or contact the Center of Biostatistics & Bioinformatics with their mentor to request a new topic. The structure of individual course modules is decided upon by the module's instructor. (Lecture) (1-3 semester hours)

ID 718. Health Policy and the Healthcare System. Provides students the opportunity to analyze health policies and economic issues as they relate to healthcare delivery systems. The complex arrangements and interactions among governmental, private-not-for-profit, and for profit systems are explored within a context that includes economic, legal, and socio-political and public perspectives. (Lecture) (3 semester hours)

ID 721. Molecular Oncology. The course will provide an in depth presentation of cancer biology topics including initiation, progression, metastasis, genetic instability, DNA damage response, cell cycle control, oncogenes and tumor suppressor genes, cancer immunology, and therapeutic approaches. (Lecture) (4 semester hours)

ID 725. Environmental Health. This course examines the interaction between living and working activities of people and the environment and the resulting effect on health and diseases. The content encompasses current local, national and global issues related to environmental health: air and water pollution, global climate change, ozone depletion, urban chemical hazards, waste disposal, communicable disease and epidemics, ecologically sustainable development and environmental epidemiology and research. (Lecture) (3 semester hours)

ID 727. Current Issues in Biomedical Research. This course will expose graduate students to current biomedical research from a variety of disciplines in a didactic and discussion forum. Emphasis will be placed on current technologies and areas of research, how these areas address issues of biomedical interest, and how basic research is translated into clinical practice. (Lecture) (2 semester hours)

ID 737. Research in Biomedical Sciences. An interdisciplinary course designed to acquaint students with ongoing research programs and research methodologies in the Biomedical Sciences. (Laboratory) (1-9 semester hours)

ID 740. Statistical Methods in Research I. This course is an introduction to basic statistical methods for research and is designed to enable students to develop their data analysis and interpretation skills. Students will learn about experimental design, estimation, and hypothesis testing, and how to apply statistical techniques such as point and interval estimation, tests of statistical significance, correlation, linear and non-linear regression, ANOVA, and longitudinal data (repeated measures) analysis. The emphasis will be on applied rather than theoretical statistics, and on understanding and interpreting the results of statistical analyses. Data sets will be analyzed using the statistical package STATA. This is a "hands-on" class – in the computer lab. data sets will be analyzed under the supervision of instructors.” (Laboratory) (1-3 semester hours)

ID 741. Statistical Methods in Research II. A continuation of Statistical Methods in Research I, this course introduces the student to more complicated methods than those discussed in the first course. Datasets will be analyzed using the statistical package STATA throughout the course sequence. (Lecture) (3 semester hours)

ID 767. Fundamental Integrated Anatomy and Histology. An integrated, system-based study of the macroscopic and microscopic structure and function of the human body. (Lecture) (4 semester hours)

ID 770. Evidence Based Clinical Research I. Evidence based clinical research I is a first course in methods useful for reading and evaluating the clinical literature. These include tools aimed at assessing the quality of the literature in terms of measurement, validity, reliability and interpretation of data presented in published reports as well as introduction the student to appropriate designs for observational and experimental clinical studies. (Lecture) (3 semester hours)

ID 777A. Biomedical Sciences Thesis. This course is designed to instruct students in the writing of a MS Thesis. It will involve a proposal phase in which the student maps out a research plan, and then a writing phase in which the student constructs a thesis reflecting what was done in the laboratory and its meaning. (Thesis) (3 semester hours)

ID 777B. Biomedical Sciences Thesis. This course is designed to instruct students in the writing of a MS Thesis. It will involve a proposal phase in which the student maps out a research plan, and then a writing phase in which the student constructs a thesis reflecting what was done in the laboratory and its meaning. (Thesis) (3 semester hours)
NATIONALLY RANKED SCHOOL OF NURSING
# 2015-2016 Semester Academic Calendar

<table>
<thead>
<tr>
<th>April</th>
<th>13</th>
<th>Monday</th>
<th>Registration begins for 2015-2016 summer term and fall semester</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17</td>
<td>Friday</td>
<td>Last day to submit an application for August 2015 degree</td>
</tr>
<tr>
<td>May</td>
<td>12</td>
<td>Tuesday</td>
<td>$50 late registration fee for 2015 summer term effective today</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Friday</td>
<td>2015 Commencement</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>Tuesday</td>
<td>$100 late registration Fee for 2015 summer term effective today</td>
</tr>
</tbody>
</table>

### SUMMER TERM

<table>
<thead>
<tr>
<th>May</th>
<th>12</th>
<th>Wednesday</th>
<th>Orientation and registration for new RN to BSN students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13</td>
<td>Wednesday</td>
<td>Orientation and registration for new RN to MSN, MSN, and PMN students</td>
</tr>
<tr>
<td></td>
<td>13-14</td>
<td>Wednesday and Thursday</td>
<td>Orientation and registration for new Traditional BSN students</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>Monday</td>
<td>Memorial Day holiday observed</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>Tuesday</td>
<td>First day of summer term</td>
</tr>
<tr>
<td>June</td>
<td>5</td>
<td>Friday</td>
<td>Last day to register or to add a course</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Monday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td>July</td>
<td>3</td>
<td>Friday</td>
<td>Independence Day holiday observed</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Monday</td>
<td>Last day to withdraw from a course and receive only a W grade if failing</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Monday</td>
<td>$50 late registration fee for fall semester effective today</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>Friday</td>
<td>Last day of summer term</td>
</tr>
</tbody>
</table>

### FALL SEMESTER

<table>
<thead>
<tr>
<th>August</th>
<th>4</th>
<th>Tuesday</th>
<th>Orientation and registration for Accelerated BSN students (Oxford campus)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>Wednesday</td>
<td>General orientation for PhD students</td>
</tr>
<tr>
<td></td>
<td>5-6</td>
<td>Wednesday and Thursday</td>
<td>Orientation and registration for RN to BSN students</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Thursday</td>
<td>Orientation and registration for new MSN, PMN, and DNP students</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Monday</td>
<td>First day of fall semester</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Monday</td>
<td>$100 late registration fee for fall semester effective today</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Friday</td>
<td>Last day to register for fall semester</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>Friday</td>
<td>Last day to add a course</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>Friday</td>
<td>Last day to submit an application for December 2015 degree</td>
</tr>
<tr>
<td>September</td>
<td>1</td>
<td>Tuesday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Monday</td>
<td>Labor Day holiday observed</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>October</td>
<td>16</td>
<td>Friday</td>
<td>Last day to withdraw from a course and receive only a W grade if failing</td>
</tr>
<tr>
<td>November</td>
<td>9</td>
<td>Monday</td>
<td>Registration begins for spring semester</td>
</tr>
<tr>
<td></td>
<td>23-27</td>
<td>Monday-Friday</td>
<td>Fall break</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>December</td>
<td>12</td>
<td>Saturday</td>
<td>Classes end</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Saturday</td>
<td>End of fall semester</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>Monday</td>
<td>$50 late registration fee for spring semester effective today</td>
</tr>
</tbody>
</table>
### 2015-2016 Semester Academic Calendar

#### SPRING SEMESTER

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 6</td>
<td>Wednesday</td>
<td>Orientation and registration for new MSN and PMN students</td>
</tr>
<tr>
<td>6-7</td>
<td>Wednesday-Thursday</td>
<td>Orientation and registration for new Accelerated BSN (Jackson) students and new RN to BSN students</td>
</tr>
<tr>
<td>11</td>
<td>Monday</td>
<td>First day of spring semester</td>
</tr>
<tr>
<td>11</td>
<td>Monday</td>
<td>$100 late registration fee for spring semester effective today</td>
</tr>
<tr>
<td>15</td>
<td>Friday</td>
<td>Last day to register for spring semester</td>
</tr>
<tr>
<td>18</td>
<td>Monday</td>
<td>Martin Luther King’s birthday holiday observed</td>
</tr>
<tr>
<td>19</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>22</td>
<td>Friday</td>
<td>Last day to add a course</td>
</tr>
<tr>
<td>February 1</td>
<td>Monday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td>10</td>
<td>Wednesday</td>
<td>Student Financial Wellness Seminar</td>
</tr>
<tr>
<td>March 5</td>
<td>Saturday</td>
<td>Spring holiday begins at 5:00 p.m.</td>
</tr>
<tr>
<td>14</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>25</td>
<td>Friday</td>
<td>Last day to withdraw from a course and receive only a W grade if failing</td>
</tr>
<tr>
<td>April 11</td>
<td>Monday</td>
<td>Registration begins for 2016-2017 summer term</td>
</tr>
<tr>
<td>15</td>
<td>Friday</td>
<td>Last day to submit an application for August 2016 degree</td>
</tr>
<tr>
<td>May 6</td>
<td>Friday</td>
<td>Honors Day</td>
</tr>
<tr>
<td>14</td>
<td>Saturday</td>
<td>Classes end</td>
</tr>
<tr>
<td>17</td>
<td>Tuesday</td>
<td>$50 late registration fee for 2016-17 summer term effective today</td>
</tr>
<tr>
<td>27</td>
<td>Friday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>
SCHOOL OF NURSING

Kim W. Hoover, PhD, RN, Dean
Janet Harris, DNP, RN, Associate Dean for Practice and Community Engagement and Director of DNP program
Sharon Lober, PhD, RN, Associate Dean for Research and Evaluation
Marcia M. Rachel, PhD, RN, Associate Dean for Academic Affairs
Audwin Fletcher, PhD, RN, Director of Adult-Gerontology Acute Care Nurse Practitioner and Family Nurse Practitioner Tracks
Jeanne Fortenberry, MS, RN, Director of Nursing and Health Care Administrator Track
Sherri Franklin, MSN, RN, Director of RN to BSN Program
Marilyn Harrington, PhD, RN, Director of Diversity and Inclusion
Cindy Luther, PhD, RN, Director of Adult-Gerontology (primary care) Nurse Practitioner and Psychiatric/Mental Health Nurse Practitioner Tracks
Robin MacSorley, MSN, RN, Director of Simulation
Tina Martin, PhD, RN, Director of Accelerated Bachelor of Science in Nursing Program (Jackson campus)
LaDonna Northington, DNS, RN, Director of Traditional Bachelor of Science in Nursing Program
Anne Norwood, PhD, RN, Director of Neonatal Nurse Practitioner and Primary/Acute Care Pediatric Nurse Practitioner Tracks
Christian Pruett, PhD, Director of Instructional Development and Distance Learning
Mary W. Stewart, PhD, RN, Director of Doctor of Philosophy in Nursing Program and Director of Accreditation
Robin Wilkerson, PhD, RN, Director of Oxford Campus and Director of the Accelerated Bachelor of Science in Nursing program (Oxford campus) and the RN to MSN Program
Ellen P. Williams, PhD, RN, Director of Nurse Educator Track
Tammy J. Dempsey, MSW, GSW, MACE, Director of Student Affairs and Service Learning

HISTORY
The School of Nursing was authorized as a baccalaureate program by an act of the Mississippi legislature in 1948. Established as the Department of Nursing, it achieved the status of a separate school in 1958. The graduate program in nursing was established in 1970. A doctor of philosophy (PhD) in nursing program began in 1997 and a doctor of nursing practice (DNP) program was established in 2009.

The baccalaureate, master’s and DNP programs are accredited by the Commission on Collegiate Nursing Education (CCNE). Functioning as a part of the University of Mississippi Medical Center, the School of Nursing assumes the responsibility for providing the people of Mississippi with registered nurses of high professional competence and for raising the professional and educational standards of the nurses already practicing in Mississippi. The School of Nursing is housed in the Christine L. Oglevee Building on the northwest side of the campus. The School of Nursing is a professional school functioning within the general framework and policies of the University of Mississippi Medical Center. It reflects the purpose of the parent university and the Medical Center in its educational services for the State of Mississippi.

MISSION
The mission of the School of Nursing at the University of Mississippi Medical Center is to develop nurse leaders and improve health within and beyond Mississippi through excellence in education, research, practice and service. Core values of the School of Nursing integral to this mission are respect, integrity, diversity, excellence and accountability.

PROGRAMS
The School of Nursing serves approximately 800 students in the following programs.

Bachelor of Science in Nursing
- Traditional
- Accelerated
- Registered Nurse to Bachelor of Science in Nursing

Registered Nurse to Master of Science in Nursing
- Adult-Gerontology Acute Care Nurse Practitioner
- Adult-Gerontology Nurse Practitioner (Primary Care)
- Family Nurse Practitioner
- Family Psychiatric/Mental Health Nurse Practitioner
- Nurse Educator
- Nursing and Health Care Administrator
Master of Science in Nursing
- Adult-Gerontology Acute Care Nurse Practitioner
- Adult-Gerontology Nurse Practitioner (Primary Care)
- Family Nurse Practitioner
- Family Psychiatric/Mental Health Nurse Practitioner
- Neonatal Nurse Practitioner
- Nurse Educator
- Nursing and Health Care Administrator
- Primary/Acute Care Pediatric Nurse Practitioner (Dual Role)

Postmaster in Nursing
- Adult-Gerontology Acute Care Nurse Practitioner
- Adult-Gerontology Nurse Practitioner (Primary Care)
- Family Nurse Practitioner
- Family Psychiatric/Mental Health Nurse Practitioner
- Neonatal Nurse Practitioner
- Nurse Educator
- Nursing and Health Care Administrator
- Primary/Acute Care Pediatric Nurse Practitioner

Doctor of Nursing Practice
- Post Baccalaureate
  - Adult-Gerontology Acute Care Nurse Practitioner
  - Adult-Gerontology Nurse Practitioner (Primary Care)
  - Family Nurse Practitioner
  - Family Psychiatric/Mental Health Nurse Practitioner
  - Neonatal Nurse Practitioner
  - Nurse Educator
  - Nursing and Health Care Administrator
- Post Master’s

Doctor of Philosophy in Nursing (See School of Graduate Studies in the Health Sciences)
- Post Baccalaureate
- Post Master’s

The University of Mississippi Medical Center School of Nursing offers a Traditional BSN Program on the Jackson campus at the University of Mississippi Medical Center. An Accelerated Baccalaureate Nursing Program option is offered on the Jackson campus and on the University of Mississippi campus in Oxford for applicants who hold a baccalaureate degree in another field. The RN to BSN program is offered online. The RN to MSN program, the Master of Science in Nursing Program (MSN), and the Post Master’s program are offered through distance learning in online and hybrid course delivery. The Doctor of Nursing Practice Program (DNP) utilizes online and block course delivery options. Information about the Doctor of Philosophy in Nursing Program (PhD) is included in the School of Graduate Studies in the Health Sciences section of the Bulletin.

Admissions
The selection process for admission to the School of Nursing begins in the Undergraduate and Graduate Admission and Progression Committees, composed of faculty of the School of Nursing. Recommendations are made to the dean for admission to the School of Nursing. (See admission criteria found under each specific program in the Bulletin.)

Selection of applicants is made on a competitive basis without regard to race, creed, sex, color, religion, marital status, sexual orientation, age, national origin, disability or veteran status. Preference is given to qualified applicants who are legal residents of Mississippi. For admission purposes, the School of Nursing at the University of Mississippi Medical Center gives preference to residents of Mississippi, as defined by Miss. Code §§ 37-103-7, 37-103-13 and IHL Policy 610. The Mississippi residency requirement is not applied to applicants for the Traditional and Accelerated BSN programs who are current students at the University of Mississippi. The School of Nursing currently accepts admission applications only from individuals who are U.S. citizens or lawful permanent residents. The School of Nursing may choose to not accept applications from students who cannot demonstrate residency as defined by Miss. Code § 37-103-7 and 37-103-13.

Application Procedure
Undergraduate and graduate applicants must apply online.

All correspondence regarding admission should be addressed to the Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505. A nonrefundable application fee of $25 must accompany each application. All transcripts and documents submitted in support of an application become the property of the University of Mississippi Medical Center and cannot be returned or forwarded to another school or individual. Applications are accepted for most programs beginning July 1 of the year prior to the desired year of enrollment. Applications for the Accelerated BSN program on the Jackson campus are accepted beginning January 1 each year.

Applications are reviewed by the Admissions Committee during the month following the deadline.
Undergraduate Programs
Admission is contingent upon successful completion of prerequisite courses. If the applicant is accepted and fails to enroll or is not accepted, a new application must be submitted for consideration in the next application cycle. Accepted applicants who wish to defer enrollment due to unplanned or unavoidable circumstances must petition the associate dean for a deferral of enrollment.

Deadlines for applications to the undergraduate programs are:

Traditional BSN – Summer admission – January 15
Accelerated BSN –
  • Fall admission - Oxford campus – February 15
  • Spring admission - Jackson campus – September 1
RN to BSN –
  • Fall admission – May 1
  • Spring admission – October 15
  • Summer admission – February 15

Graduate Programs
Deadlines for applications to the graduate programs are:

RN to MSN – Summer admission – February 15

MSN -
  • Fall admission* – March 31
  • Spring admission* – October 15
  • Summer admission* – February 15

*NOTE: AGACNP, FNP, NNP and PNP tracks only accept admissions for the fall semester.

PMN – Deadlines same as MSN

DNP - Fall admission – March 31

PhD - Information about application to the PhD in Nursing program is included in the School of Graduate Studies in Health Sciences section of the Bulletin.

OTHER TYPES OF ADMISSIONS

Freshman Early Entry Program
The Freshman Early Entry program is a joint offering of the University of Mississippi Medical Center School of Nursing, University of Mississippi and other participating senior colleges/universities in the Jackson-Metropolitan area to provide an early entry route into the Traditional Baccalaureate Nursing program. Applications to the Freshman Early Entry program are accepted in the fall semester of the freshman year until the November 1 deadline date. For detailed information regarding this program and participating colleges and universities, please contact the School of Nursing Office of Recruitment.

Admission Criteria for Freshman Early Entry Program
The minimum requirements for admission to the Freshman Early Entry program are:
1. A complete application;
2. A cumulative high school GPA of at least 3.5 on a 4.0 scale;
3. An enhanced ACT score of 24 or above;
4. A personal interview and a writing sample may be required.

In order to retain status in the Freshman Early Entry program, the following conditions must be met.

   a. Continuous enrollment as a full-time student at the University of Mississippi or other participating institutions in each regular semester session must be maintained.
   b. All required courses must be taken at the University of Mississippi or other participating institutions in the sequence defined by the curriculum. Elective courses may be taken at other institutions.
   c. A minimum overall GPA of 3.0 on all courses AND minimum overall GPA of 3.0 on all required courses through the fall semester prior to the scheduled summer enrollment in the upper division nursing program must be maintained.
   d. A minimum grade of “C” in each prerequisite course is required.

RN to MSN Early Entry Program
The RN to MSN Early Entry program (RN to MSN EE) is a joint offering of the University of Mississippi Medical Center (UMMC) School of Nursing and participating community college associate degree nursing (ADN) programs. For detailed information regarding this program and participating community colleges, please contact the School of Nursing Office of Recruitment.

There are two application cycles for the RN to MSN EE program. Students are accepted after the first semester of their ADN program. The application deadline for students who started their nursing program in the fall is February 15. The application deadline for students who started their nursing program in the spring is August 31.
Admission Criteria for the RN to MSN Early Entry Program

Early entry into the RN to MSN Early Entry program is offered to associate degree nursing students through a competitive selection process. Applicants who wish to be considered for early entry status must be enrolled in a participating community college and meet the following minimum criteria:

1. A complete application;
2. An enhanced ACT score of 21 or above (unless the applicant holds a master’s degree);
3. A minimum overall grade point average (GPA) of 3.0 on all undergraduate courses AND a minimum overall GPA of 3.0 on all nursing courses through the first semester of full-time study in the ADN program;
4. A minimum grade of C in each prerequisite course;
5. Endorsement from the community college nursing program director or designee attesting to the applicant’s potential for graduate study;
6. Fall admits to the ADN program must be currently enrolled in or have already completed 42 semester hours – 14 hours of which must be math and science courses - of the total of 62 hours of RN-MSN prerequisite coursework.
7. Spring admits to the ADN program must be currently enrolled in or have already completed 25 semester hours - 7 hours of which must be math and science courses - of the total 62 hours of RN-MSN prerequisite coursework.

Progression and Retention Criteria for Students in the RN to MSN Early Entry Program

In order to retain status as an RN to MSN Early Entry student, the following conditions must be met:

1. Must maintain continuous full-time enrollment in the participating ADN program;
2. Must take all required prerequisites at the participating ADN program in the sequence defined by the plan of study;
3. Must maintain an overall cumulative GPA of 3.0 AND an overall nursing GPA of 2.5 or higher;
4. Must have a minimum grade of "C" in each required prerequisite course and nursing course.

Failure to adhere to each of these conditions will result in dismissal from the RN to MSN EE program.

Matriculation into Master's Program for RN to MSN Early Entry applicants

Upon completion of the ADN program and receiving the associate degree in nursing, students who meet the additional admission criteria for the RN to MSN program listed below will be directly admitted into the RN to MSN program. Additional admission criteria include:

1. Completion of all prerequisite courses with a minimum grade of "C" in each course;
2. Minimum cumulative GPA of 3.0 on a 4.0 scale;
3. Minimum score of 3.5 on the analytical portion of the Graduate Record Examination (GRE);
4. New ADN graduates must successfully complete the NCLEX-RN® examination and become licensed as a registered nurse (RN) by the end of their first semester of RN to MSN course work.

DNP Early Entry Program (Post-Master's)

The DNP Early Entry (DNP EE) option permits students admitted to the UMMC SON MSN program to progress to the DNP program. Students progress seamlessly into the DNP course work upon completion of the MSN. The DNP course work can be completed in full-time study over a minimum of two years or in about three years of part-time study. Admission into the Post Master’s DNP Early Entry program can occur after completion of all first semester courses of the MSN program. The DNP Early Entry deadline for students who have completed their first semester MSN courses is February 15.

Admission Criteria for the DNP Early Entry Program

Early entry into the DNP program is offered to outstanding MSN students through a competitive selection process. Applicants who wish to be considered for early entry status must meet the following minimum criteria:

1. A complete application;
2. An acceptable Graduate Record Examination (GRE) Score, including a score of 3.5 or higher on the analytical section;
3. A minimum overall GPA of 3.2 through the first semester of full-time study in the MSN program;
4. Three letters of recommendation, at least one from a practice supervisor and at least one from a doctoral-prepared faculty member attesting to the applicant’s potential for doctoral study;
5. Pre-admission interview with DNP faculty at UMMC.

Progression and Retention Criteria for Students in the DNP Early Entry Program

To retain status as a DNP EE student, the following conditions must be met:

1. Maintain continuous enrollment in the UMMC MSN program;
2. Maintain an overall cumulative GPA of 3.2. Any grade less than a “C” in the MSN program will result in dismissal from the DNP EE program.

Matriculation into Post Master’s DNP Program for DNP EE Applicants

Upon completion of the MSN program and receiving the MSN degree, DNP EE students who meet the admission criteria for the DNP program listed below will be directly admitted into the DNP program:

1. Minimum cumulative GPA of 3.2 on a 4.0 scale;
2. Satisfactory scores on the GRE, including a score of 3.5 or higher on the analytical section;
3. Approval by the DNP director
Non-Degree Seeking Students (NDSS)
Individuals who have not been admitted to a program in the School of Nursing may be admitted to the University of Mississippi Medical Center as a student with non-degree status for enrollment in course work. A maximum of nine semester hours of credit may be taken in this status, and courses with a minimum grade of B may be applied to a School of Nursing program. Individuals may also enroll in a course in the School of Nursing if they desire to take courses for personal or professional development. A written request for enrollment in the specified course must be submitted to the associate dean in order to be considered and the applicant must complete all NDSS admission requirements prior to enrollment. Enrollment as a NDSS does not guarantee admission into a School of Nursing program. All NDS students are required to complete the full student health packet with all required immunizations and a physical, including a two-step TB skin test or two consecutive years of TB skin test results.

Conditional Admit Students (CAS)
Applicants who do not meet all requirements for admission to a School of Nursing program may be considered for conditional admission. Students admitted in this category must earn a “B” or higher in the first two courses in the approved plan of study at UMMC.

Visiting Scholars
Applicants holding terminal degrees or who are engaged in thesis or dissertation research may apply to the University of Mississippi Medical Center School of Nursing for admission as visiting scholars rather than students. Visiting scholars must be approved by the program in which research is to take place. Scholars may use the library and research facilities and sit in on classes with the consent of the instructor. Although fees may be charged for use of computers or laboratory items, tuition and other fees are not assessed. Applications will be reviewed by the associate dean. Applicants will be accepted based on availability of space in the course and permission of the instructor. Students enrolled as visiting scholars will not be considered candidates for a degree. Students wishing to pursue a degree candidacy should consult the appropriate section of the Bulletin.

TRANSFER OF CREDIT
Students in the School of Nursing may request transfer of credits from other academic institutions to meet some specified program requirements. Transfer of credit requires approval from the Associate Dean for Academic Affairs. The transfer of credit process begins in the Office of Student Records and Registrar. Students must complete the transfer of credit process, including receipt of approval(s), by the posted deadline date. The transcript must be received in the Office of Student Records and Registrar no later than the last day of classes in a semester for transfer credits to be used toward graduation requirements. Courses transferred to the School of Nursing must have been taken at a college accredited by one of the regional accrediting agencies and, if the courses are from another school of nursing, the school must be accredited by CCNE or ACEN.

Academic Residency Requirements for the BSN Degree
At least 25 percent of the semester credit hours required for an undergraduate degree must be taken in residence in the School of Nursing. The Traditional BSN program requires a minimum of 44 semester hours of residence. The Accelerated BSN program requires all semester hours of credit in nursing to be earned in residence in the School of Nursing. The RN to BSN program requires a minimum of 30 semester hours in residence.

Baccalaureate Nursing Transfer Students
Students who wish to transfer to the School of Nursing from other baccalaureate nursing programs must contact the Associate Dean for Academic Affairs. Students must meet the prerequisite course requirements for the baccalaureate nursing program, must meet degree and residence credit hour requirements, and must spend the equivalent of one academic year in residence. Placement in the program will be determined after review of course syllabi by the Undergraduate Curriculum Committee in collaboration with the Undergraduate Admission and Progression Committee. Only nursing courses with a minimum grade of “B” or higher are considered for transfer. The associate dean notifies the registrar and the applicant of the decision.

RN to MSN Transfer Students
Students must meet the prerequisite course requirements for the respective MSN track, must meet degree and residence credit hour requirements, and must spend the equivalent of one academic year in residence. Students may transfer a maximum of 13 semester hours with approval from the associate dean. Only courses with a grade of “B” or higher are considered for transfer.

Master’s in Nursing and Doctor of Nursing Practice Transfer Students
MSN and DNP students may transfer up to 50% of the total credit hours required for the DNP program or for the specific track in which the student is enrolled for the MSN degree with a minimum grade of “B” in each course and with the approval of the associate dean. Students must take the equivalent of one academic year of full time course work in the School of Nursing.

PhD in Nursing Transfer Students
PhD in Nursing students who wish to transfer to UMMC must contact the director of the PhD Nursing program.

AMERICANS WITH DISABILITY ACT (ADA)
The School of Nursing’s ADA policy is found in the Student Handbook on the SON web site.

DEGREE REQUIREMENTS
All candidates for a baccalaureate degree from the University of Mississippi Medical Center School of Nursing must meet the following core requirements: 6 hours of English composition, 3 hours of college algebra, quantitative reasoning or higher level math, 6 hours of natural science, 9 hours of humanities and fine arts; and 6 hours of social or behavioral science.
Candidates for the degree of Bachelor of Science in nursing must have completed the prescribed curriculum with an overall School of Nursing GPA of 2.0 or better on a 4.0 scale and have successfully completed prescribed standardized exams administered at the end of the program. Students are certified for graduation by the dean. A Bachelor of Science in Nursing degree cannot be granted unless the student has spent the equivalent of at least one full academic year in residence, has earned a minimum of 31 semester hours of residence credits (30 semester hours for RN to BSN students), and has completed the required course of study in the School of Nursing. Transfer students who spend only one year in residence must attend the year in which the degree requirements are completed. The School of Nursing reserves the right to withhold a degree of any student deemed unsuitable for the practice of nursing.

Candidates for a master’s or doctorate degree must complete the approved plan of study with an overall School of Nursing GPA of 3.0 or better on a 4.0 scale.

GRADUATION WITH HONORS
The School of Nursing awards baccalaureate degrees in nursing with honors for excellence in academic achievement. A graduating Accelerated or Traditional BSN student must have completed all nursing coursework at the UMMC School of Nursing in order to be eligible to graduate with honors. A graduating RN to BSN student must have completed a minimum of 30 semester hours at the UMMC School of Nursing in order to be eligible for consideration to graduate with honors. Degrees are awarded: summa cum laude (3.90-4.0); magna cum laude (3.75-3.89); and cum laude (3.50-3.74). For Traditional and Accelerated BSN graduates, the GPA is determined only on the work completed in the School of Nursing. For RN to BSN graduates, the GPA is determined using a combination of the GPA for entering coursework and for work completed in the School of Nursing.

MSN students achieving the top three cumulative grade point averages will be selected for graduation with honors each year: summa cum laude, magna cum laude and cum laude.

The Sally McDonnell Barksdale Honors College (SMBHC), offered on the University of Mississippi Oxford campus, allows highly motivated students to develop their own scholarly research interests. Students in the baccalaureate nursing program enrolled in the Honors College at the University of Mississippi have the opportunity to become involved with the research pursuits of the School of Nursing faculty and may complete their research project while completing their BSN program requirements. Students who successfully complete the requirements of the Honors College are honored at a commissioning ceremony before the spring commencement. Detailed information about the Barksdale Honors College can be found on the University of Mississippi website.

Ambassador Program
The Ambassador Program provides opportunities for undergraduate students who demonstrate high academic achievement to serve as official student representatives of the School of Nursing. Selected during the third semester of the BSN program, these student leaders participate in recruitment events, provide campus tours to prospective students, lead orientation groups and serve as mentors to incoming students. Through their activities and assignments, Ambassadors meet course requirements for a leadership elective and receive special recognition at the school’s annual Honors Day.

ACADEMIC POLICIES AND REGULATIONS
All students in the School of Nursing should be aware of the provisions in the Student Handbook which detail practices, procedures and provisions of the school pertaining to academic progress, professional expectations and related matters. The faculty and administration reserve the right to make changes in curricula and regulations when such changes are determined to be in the best interest of the student and the school. Accreditation requirements and other factors may necessitate some variations from program descriptions contained therein. Applicants, prospective students, and currently enrolled students must maintain communication with the School of Nursing concerning their individual goals, curricula, and requirements.

Orientation
All students must complete orientation prior to attending any course. Failure to attend orientation may result in dismissal from the program. Under extraordinary circumstances students may be excused from orientation with prior approval from the associate dean. Under such circumstances, a revised orientation plan will be developed.

Registration
To participate in, attend, and receive credit for any course, a student must be registered for that course in the Office of Student Records and Registrar. Students meet with their academic advisors prior to registration to select courses. The academic advisor’s approval verifies that the student meets all the criteria to take the course. Students who are not registered for any course work and who are not on an official leave of absence will be withdrawn from the program and must reapply for admission. Exceptions may be made for students on an alternate plan of study.

Admission and Annual Compliance
Physical Examination/TB Skin Test
All applicants must complete a physical exam prior to admission which includes a tuberculin skin test and evidence of immunity to certain communicable diseases (i.e. MMR). The student is responsible for all costs involved. Forms for the physical examination are provided by the Office of Student Records and Registrar. Once admitted to the School of Nursing, annual tuberculin skin tests are required and may be obtained from UMMC Employee and Student Health. If a tuberculin test is obtained from another health care provider, the student must provide evidence of valid test results to UMMC Employee and Student Health annually.
Hepatitis B
Students admitted to the School of Nursing must initiate at least the first injection in the Hepatitis B immunization series prior to registering for the first course taken. Evidence of immunization is submitted to the Office of Employee and Student Health upon admission. The remaining immunizations in the series are available from Employee and Student Health at the Medical Center. The student must complete the series as prescribed to continue enrollment in the program. The student must also provide Employee and Student Health at the Medical Center evidence of complete Hepatitis B immunization if the series is completed by another health care provider.

CPR Certification
Students are required to submit evidence of Cardiopulmonary Resuscitation certification (CPR) as a BLS Healthcare Provider (American Heart Association) to the Office of Academic Affairs in the School of Nursing. Students in the Traditional and Accelerated BSN programs must show evidence of CPR certification by orientation preceding the first semester of the program. Students in the RN to BSN, RN to MSN, and MSN programs must show evidence of CPR certification prior to beginning any clinical, practicum or residency courses. This certification must be maintained throughout enrollment in the School of Nursing. Note: This requirement is program specific and students enrolled in the MSN Nursing and Health Care Administrator track, Post-Master’s DNP or the PhD in Nursing program are NOT required to meet this requirement.

Health Insurance
Health insurance is mandatory for all students enrolled in the School of Nursing. Health Insurance and disability insurance are available through the University of Mississippi Medical Center.

Liability Insurance
Professional liability insurance is required for all students. All students other than nurse practitioner students are required to have student liability insurance in place during all clinical, practicum and residency experiences. Please note: All nurse practitioner students must purchase nurse practitioner insurance and must have it in place during all clinical, practicum and residency experiences.

Licensure
All students, except students enrolled in the pre-licensure undergraduate nursing program, are required to hold a current, unrestricted RN license in Mississippi or in one of the Compact States. Out-of-state students in non-Compact States who are not practicing in Mississippi must also hold current, unrestricted licensure in the state in which they are practicing. Verification of current unrestricted licensure is required annually. Students must notify the School of Nursing of any licensure restrictions or changes. Failure to do so in a timely manner may result in dismissal.

Background Checks
Mississippi law requires all health care workers, including students, to have completed criminal history background checks through UMMC or another approved health care facility. Contact Human Resources for approval of non-UMMC background checks. All School of Nursing students will be required to successfully complete a criminal history background check, including fingerprinting, prior to final acceptance into the program and are required to notify the Associate Dean of Academic Affairs immediately of any arrests or convictions that occur after admission to the School of Nursing. A felony conviction may affect a graduate’s eligibility to be licensed or certified.

IRB Certification
The Institutional Review Board (IRB) at the University of Mississippi Medical Center requires that all faculty, staff and students involved in human subjects’ research complete an IRB tutorial. The tutorial is designed to meet national, state and institutional requirements for training in human subjects’ protection. It is a self-directed web-based educational program in the ethics of human subjects’ research and IRB procedures. All students in the School of Nursing are required to complete the IRB Tutorial and to maintain certification.

Service Learning
The University of Mississippi Medical Center School of Nursing values service learning as a necessary aspect of education and development. Service projects provide opportunities for faculty, staff and students to demonstrate the professional values through value-based behavior. School of Nursing students complete eight hours of service learning in community settings annually and submit verification of these hours to the Office of Student Affairs and Service Learning.

Other Compliance Requirements
The University has additional compliance requirements that students must meet on an annual basis.

Students who fail to maintain School of Nursing compliance requirements will not be allowed to participate in clinical, practicum or residency activities, which will result in an unexcused absence.

Course Audit
To audit a course, a student must obtain approval from the course coordinator and the associate dean. The student must pay associated tuition, fees and expenses prior to the beginning of the course.

Attendance/Excessive Absence
Attendance is required at all scheduled classes, laboratories, conferences, seminars, clinical experiences, testing situations and other course activities. Excessive absence, defined as absence greater than 15 percent of the hours within any one course, regardless of the cause, will be sufficient reason to consider a student as academically deficient. Students who have excessive unexcused absences in a class/clinical will receive a grade of “F” for the course. Registration for a course makes the student responsible for attending class until
the course is completed or until, with the associate dean’s permission, the registrar authorizes withdrawal from that course. Attendance for online courses is determined by participation in required course activities as specified in the course syllabus.

**Excused Absences**

Students may be excused from class for personal illness, a death in the immediate family or other extenuating circumstances, which are individually evaluated by the course coordinators. When a student must be absent from a required experience, arrangements should be made with the course coordinator prior to the scheduled experience. Should prior arrangements not be made, the absence will be considered unexcused. Following any absence, the student is responsible for contacting all course coordinators the day of return to school. Each student is responsible for the content presented in class, for obtaining course related materials, for any information obtained through course requirements and for being informed about announcements made or posted. Requirements for attendance in specific classes and clinical experiences are at the discretion of the faculty and clearly stated in the course syllabi. In the event that absences are permitted, the following policy applies: If a student is permitted to have an excused absence from a required experience, the course coordinator determines if a make-up experience is needed for the student to meet the course objectives. In the event that an unexcused absence occurs, failure to attend clinical experiences or classes does not constitute an official withdrawal.

**Release Following Illness**

Students returning to school following illness may be required to submit verification from the health care provider permitting them to engage in clinical and class activities without limitations. Students who miss three or more consecutive days will be required to obtain a release from the treating health care provider to return to clinical and course work and submit it to the office of the Associate Dean for Academic Affairs.

**Lateness to Class**

It is a professional expectation that students arrive to class and are seated at the time class begins to avoid interruption to the learning environment. The consequences for late arrivals to class are determined by the course faculty.

**Examinations**

Undergraduate students must have a weighted test average and an overall course average of 76 or higher to pass the course. All students will take tests at the time and place designated by the instructor. Books or other written materials are not allowed during testing unless specifically permitted by the instructor. In the event a student is unable to take the examination at the time designated, the student must notify the course coordinator prior to test administration or the absence may be unexcused and the course faculty may elect not to give a make-up examination. The student must contact the course coordinator within 24 hours after return to reschedule the exam. The rescheduling and the testing method are at the discretion of the course faculty. If the student fails to contact the course coordinator within 24 hours, the student may receive a zero for the exam.

**Standardized Examinations**

Students in the Traditional and Accelerated Baccalaureate Programs are required to take nationally normed tests throughout the curriculum in order to progress in the program. Any student who fails to achieve the minimum required score on any of these standardized examinations within any semester (except the last) may be required to register for and complete a one-semester hour remediation course during the next semester and may be required to enroll in the Academic Achievement program (AAP) through the Office of Academic Affairs. In the last semester of the curriculum, students are required to make a satisfactory score on a comprehensive exam prior to being certified for graduation. Students are responsible for the costs of these examinations.

**UNDERGRADUATE STANDARDS FOR SCHOLASTIC PERFORMANCE**

To be eligible for progression, a baccalaureate student must achieve a grade of not less than 76 in each course, and must have a cumulative GPA of 2.0 or higher. Undergraduate students must have a cumulative UMMC School of Nursing GPA of 2.0 or higher in order to graduate. Recommendations regarding promotion, graduation, required remedial work or dismissal are made by the associate dean.

**Grading**

The School of Nursing employs a numerical grading system based on 0-100. Evaluation will be expressed according to this letter system listed below.

<table>
<thead>
<tr>
<th>BSN</th>
<th>Letter Grade</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>100-92</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>91-84</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>83-76</td>
</tr>
<tr>
<td>D</td>
<td>Less than</td>
<td>75-70</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>70</td>
</tr>
<tr>
<td>P</td>
<td>Pass</td>
<td>(Credit given but no quality points awarded)</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Audit</td>
<td></td>
</tr>
</tbody>
</table>

A student must achieve a grade of 76 or higher in each course and must satisfactorily complete all requirements stated in the syllabus for each course to become eligible for progression. A grade of “I” is reported when the student has not fulfilled the course requirements. A grade of “I” is not an expectation but rather a privilege that is extended in unusual circumstances by the course coordinator. The course coordinator determines the time allowed for the student to remove the “I” grade. The “I” grade is converted to an “F” if not removed within 12 months from the time it was assigned.

The grade “F” is given if the student has failed based on the evaluation of required work and course objectives. Any required course in which the student has received a grade that is less than satisfactory (“D” or “F”) must be repeated either at the University of
Mississippi Medical Center or, with permission of the dean, at another college or university. A minimum grade of “B” is required on any course repeated at another college or university. Both the first grade and the grade received when the course was repeated are calculated in the School of Nursing overall grade point average (GPA) for BSN students.

Change of Grade
A course instructor may change a reported grade only if the original grade was incorrectly assigned due to clerical or computational error, or if a student meets the requirements for the removal of an “I” grade.

GRADUATE STANDARDS FOR SCHOLASTIC PERFORMANCE
Graduate students must achieve a cumulative grade point average of 3.0 in order to graduate. Recommendations regarding promotion, graduation, required remedial work or dismissal are made by the associate dean.

Grading
The School of Nursing employs a numerical grading system based on 0-100. In certain courses, a mark of “P” is given to indicate that a student has received graduate credit, but has been assigned no quality point grade in the course. However, in courses approved for a mark of “P,” instructors may assign the quality point grade of “F.” The instructor issues a final grade, based on the evaluation of the student’s work and achievements of the course objectives. Evaluation will be expressed according to this letter system listed below.

**MSN and DNP**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent 100-90</td>
</tr>
<tr>
<td>B</td>
<td>Good 90-89</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory 79-70</td>
</tr>
<tr>
<td>F</td>
<td>Failure below 70</td>
</tr>
<tr>
<td>P</td>
<td>Pass (Credit given but no quality points awarded)</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
</tr>
<tr>
<td>X</td>
<td>Audit</td>
</tr>
</tbody>
</table>

A student must achieve a grade of 70 or higher in each graduate course and must satisfactorily complete all requirements stated in the syllabus for each course to become eligible for progression. A grade of “I” is reported when the student has not fulfilled the course requirements. A grade of “I” is not an expectation but rather a privilege that is extended in unusual circumstances by the course coordinator. The course coordinator determines the time allowed for the student to remove the “I” grade. The “I” grade is converted to an “F” if not removed within 12 months from the time it was assigned.

Change of Grade
A course instructor may change a reported grade only if the original grade was incorrectly assigned due to clerical or computational error, or if a student meets the requirements for the removal of an “I” grade.

UNDERGRADUATE and GRADUATE PROGRESSION POLICIES
Final grades in completed courses will be available through the Office of Student Records and Registrar at the end of each academic semester. The associate dean will notify students of actions taken after grades are reviewed. The registrar reserves the right to withhold grades or transcripts until library books and supplies have been returned and all tuition/fees are paid.

Leaves of Absence (LOA)
The School of Nursing requires that all students be enrolled every semester or be on an approved Leave of Absence unless there is no course offered in the student’s plan of study for the semester. Students who do not meet this requirement will be academically withdrawn. Students may be granted a leave of absence for a period of time not to exceed one year for legitimate health, personal, military or other appropriate reasons.

In case of a request for a medical leave of absence, the School of Nursing may obtain an independent verification through referral from Employee and Student Health at the Medical Center. Prior enrollment in the School of Nursing is required for a student to be granted a leave of absence. Accepted students who have signed the letter of intent but who have never enrolled are not eligible for a leave of absence.

Because of the intensity of the curricula, the phasing of the courses and the rapid changes in nursing knowledge, a student may be required to restart courses from the beginning upon returning from leave. Traditional and Accelerated students are required to complete a Re-entry Skills Validation upon return from Leave of Absence.

To be granted a leave of absence, the student must:
1. be in good academic standing,
2. notify the associate dean in writing of the request for leave of absence,
3. obtain approval from the associate dean, and
4. inform the associate dean, in writing, of intentions regarding future enrollment.

Students who fail to return to the academic program within the specified time will be automatically withdrawn from the program. If the student has courses in progress at the time the leave of absence is granted, a letter grade of F may be assigned to these courses.

A student on leave of absence will not be assigned any academic or clinical responsibilities. Upon return from leave of absence, the student will re-enroll and will pay all tuition and fees appropriate for the period of re-enrollment. No leave of absence will be granted without all appropriate prior approvals.
Withdrawal
Registration for a course makes the student responsible for attending the class until the course is completed or until the student withdraws from the course, with the permission of the program director and the associate dean and approval of the dean. Failure to comply will result in the recording of failing grades in all courses in which the student is registered. Approved withdrawals, if completed on or before the last day specified by the academic calendar, will not be recorded on the student’s record. Withdrawal authorized after this date will be recorded as a “W” through the 10th week of the fall and spring semesters and the sixth week of the summer semester. Withdrawals authorized after this date will be recorded as “W” if the student is passing the course at the time of withdrawal; a grade of “F” will be recorded if the student is failing.

No withdrawals will be granted during exam week. A maximum of two course withdrawals are allowed in the baccalaureate program.

Progression
Grades and progress of each student are reviewed by the associate dean at the end of each grading period. Students who do not meet the established criteria will be notified. Progression in the baccalaureate program requires a minimum cumulative GPA of 2.0 in all required nursing courses at the upper division. Graduate students must have a minimum cumulative overall GPA of 3.0 on a 4.0 scale in order to graduate.

- If a student makes a grade of “D” or “F” in a nursing course, the course may be repeated once provided the overall GPA is a 2.0. Graduate students who receive a grade of “C” or better in a course are not permitted to repeat the course.
- If a student repeats a failed nursing course and does not make a grade of “C” or better, the student will be dismissed from the program. Students dismissed from the program will be notified by the dean of the School of Nursing.
- Only one nursing course may be repeated. If a student receives a “D” or “F” in a second nursing course, the student will be dismissed from the program.
- Traditional and Accelerated students who are on an Alternate Plan of Study due to grades are required to complete a Re-entry Competency Evaluation of skills prior to enrollment in a clinical course.
- Graduate students who receive one “F” grade in a clinical course will be automatically withdrawn from the program.
- Students who have more than two incomplete grades will not be allowed to progress until the incompletes are removed.
- A grade of Unsatisfactory (“U”) will be assigned for any clinical day during which the student fails to meet minimum professional expectations for the day. If the student receives two unsatisfactory grades in the same clinical course, she/he will receive an “F” for the course. Clinical faculty reserve the right to assign a “U” to the student for failure to meet any portion of the required clinical expectations.

Probation
A baccalaureate student is placed on probation when the nursing cumulative GPA at the end of any semester is less than 2.0. Students in the BSN Program may not be on probation for more than 15 semester hours of required course work. A remedial plan of study is initiated by the academic advisor for any student placed on probation. Graduate students are placed on probation when the cumulative GPA is less than 3.0.

Dismissal
A student may not be permitted to continue enrollment when:

Undergraduate programs:
- The student receives a second failing grade (“D” or “F”) in a nursing course; or
- The student has received a grade of “F” and the student’s overall GPA is less than 2.0 on all course work completed in the School of Nursing; or
- Any behavior is determined to be unprofessional, unethical, unsafe, illegal or when performance is unsuitable for the practice of nursing; or
- The student violates UMMC code of conduct or compliance policies which are subject to disciplinary action, up to and including dismissal.

Graduate programs:
- The student receives a second failing grade (“D” or “F”) in a nursing course; or
- The student receives a grade of “F” and the student’s overall GPA is less than 3.0 on all course work completed in the School of Nursing; or
- The student receives one “F” grade in a clinical course
- Any behavior is determined to be unprofessional, unethical, unsafe, illegal or when performance is unsuitable for the practice of nursing; or
- The student violates UMMC code of conduct or compliance policies which are subject to disciplinary action, up to and including dismissal.

A student may be dismissed from school without having been placed on probation. Students dismissed from the program for academic and/or unprofessional behavior may appeal the dismissal by submitting a written request to the dean. The specific appeals procedure for academic and disciplinary action dismissals is found in the SON Student Handbook. In the event of an appeal, the student may continue to attend class until the appeal process has been concluded. If the dismissal appeal is denied, the student may then appeal to the vice chancellor of academic affairs as a final appeal.
Re-admission
A student who has been dismissed from the School of Nursing may petition the Undergraduate or Graduate Admissions and Progression Committee to be considered for re-admission. Any student dismissed within the previous 12 months is ineligible for re-admission consideration. Re-admission is considered on a case-by-case basis. A written letter requesting consideration for re-admission must be submitted to the associate dean. If re-admitted, the associate dean, program director or admissions committee will design a plan of study based upon the applicant’s individual needs.

OFFICE OF STUDENT AFFAIRS AND SERVICE LEARNING
The School of Nursing Office of Student Affairs and Service Learning provides information, resources and support to nursing students and prospective students through non-academic advisement, career guidance, enrollment management, orientation, recruitment, tutorial information, student leadership programs, community outreach and special events.

Counseling
Academic and career counseling is available through the School of Nursing faculty, Student Affairs, administrative staff and the University of Mississippi Medical Center Office of Academic Support Services. Mental health counseling is available through appropriate professionals at the University of Mississippi Medical Center and through contracts with other agencies through the Life Synch Student Assistance program. Associate deans, program directors and the director of student affairs can assist students in locating such services as needed.

STUDENT ORGANIZATIONS
Associated Student Body
The Associated Student Body is composed of designated administrators, student body officers and presidents of other student organizations who meet to exchange information and plan activities affecting student life.

Nursing Student Body Government
The Nursing Student Body Government is composed of students elected by their peers in accordance with the Nursing Student Body (NSB) constitution. The NSB Government plans student activities, fundraisers and philanthropic activities for students in the School of Nursing with the guidance of the faculty advisor and director of student affairs.

Professional Student Organization
University Chapter, Mississippi Association of Student Nurses, is affiliated with the National Student Nurses’ Association and gives the student an opportunity to participate in the professional activities of the organization.

TUITION AND FEES
Note: Tuition and fees listed below are for the 2015-2016 academic year. All amounts are subject to change pending information from the Institutions of Higher Learning (IHL). Please contact the Department of Student Accounting for more information.

Undergraduate Programs*
Tuition and fees for the Undergraduate Programs is $3,672 per semester, based on enrollment of 12 or more hours. The hourly rate is $306 per semester hour. An additional $6,615 per semester is charged to non-residents. Non-resident students taking less than a full-time load will pay a non-resident fee of $551.25 per semester hour, in addition to tuition and required fees.

HESI standardized testing fee package will be approximately $650 for students entering the Traditional and Accelerated BSN programs. This fee will be assessed as a one-time non-refundable fee. A lab fee of $200 is charged with tuition for the second semester of the Traditional program and the first semester of the Accelerated BSN program. A one-time activity fee of $250 is assessed to Oxford Accelerated BSN students.

Graduate Programs*
Tuition for the Graduate Programs is $3,672 per semester, based on enrollment of 9 or more hours. The hourly rate is $408 per semester hour. An additional $6,615 per semester is charged to non-residents. Non-resident students taking less than a full-time load will pay a non-resident fee of $735 per semester hour, in addition to tuition and required fees. Out-of-state graduate students may request a waiver of the non-resident fee (out-of-state tuition). Decisions to grant a waiver will be based on available resources.

*Tuition and fees are subject to change pending information from the Institutions of Higher Learning (IHL). Please contact the department of Student Accounting at (601) 984-1060 for further information.

Expenses
In addition to tuition, students should be prepared to spend a minimum of $1,500 per academic year for necessary books, instruments, uniforms, malpractice insurance and travel. Students are responsible for transportation and living expenses during the course of study. Each student must have a computer and software which meets program specifications. The computer and software are covered in the financial aid package for qualifying students. Laptop computers are required in the traditional and accelerated BSN, RN to MSN, MSN and post-MSN programs. Standardized exams are administered throughout the BSN program to assess students’ strengths and comprehension. Costs for the first take of these exams are included in the standardized testing fee package. Students are required to pay the additional cost for any retakes of the standardized exams. For an overview of the total cost of attendance, please visit the financial aid web page.
Refunds
See schedule for refunds in the General Information section of the Bulletin. For the most up-to-date information on tuition and fees, please visit the Office of Student Accounting website.
For information regarding billing, payment, tuition refund and financial aid refund, please visit the website.

Financial Aid
The Office of Student Financial Aid encourages students to complete the required application(s) as early as possible to ensure they receive maximum consideration for financial aid. For more information, please visit the website.

SCHOLARSHIPS and AWARDS*
The Thomasson Family Nursing Scholarship, established in 2004, is awarded to a junior student with demonstrated academic excellence and financial need who plans to work in Mississippi upon graduation. Preference is given to students who have responsibility to care for a young family or who have a family member deployed in the military.

The Nursing Education Loan/Scholarship Program (NELS) makes scholarships available to BSN, RN to BSN, RN to MSN, MSN, DNP and PhD students who wish to advance their academic status. Applicants must be residents of Mississippi or have resided in the state for at least a year. Loan to service obligation can be discharged on the basis of one year’s service in professional nursing for one year of loan received. Applications are available beginning in January and are awarded on a first come basis for the following fall. Further information may be obtained from the Board of Trustees of State Institutions of Higher Learning, P.O. Box 2336, Jackson, MS 39225-2336. IHL website.

The E. H. Sumners Foundation Scholarships were established in 1977 by Mrs. E. H. Sumners of Eupora, MS, to provide scholarship assistance for students from Webster, Montgomery, Attala, Carroll and Choctaw counties who are enrolled at the University of Mississippi Medical Center. For more information about this scholarship, please contact the UMMC Office of Student Financial Aid website.

The Alma O. Brothers and Dr. Virginia L. Cora Endowed Scholarship in Nursing, established in 2013 to honor in perpetuity the late Alma O. Brothers, nurse and mother of Dr. Virginia Cora, a PhD, UMMC School of Nursing alumna and Emeritus Professor, and to provide a scholarship to deserving nursing students at the University of Mississippi Medical Center. This scholarship is reserved for graduate students in the Adult-Gerontology Nurse Practitioner or Psychiatric/Mental Health Nurse Practitioner tracks within the Master of Science in Nursing program.

The L.P. Whitehead Scholarship was established by the Lettie Pate Whitehead Foundation. These awards are available to Christian female full-time undergraduate, both traditional and advanced standing, students who show evidence of financial need. For more information about this scholarship, please contact the UMMC Office of Student Financial Aid.

Mattie D. Jones Clifton Memorial Scholarship Fund was established by Mrs. Clifton’s family in 1987. A native of Raleigh, NC, Mrs. Clifton earned a diploma in nursing at the Mississippi State Charity Hospital Training School for Nurses in 1920. She worked as a registered nurse for a while, then married and left nursing to raise a family. After her husband’s death, she re-entered the field and from 1955 until her retirement in 1972, was the director of nursing at King’s Daughters Hospital in Yazoo City. Preference for recipients of the Clifton Scholarship is given to older qualified students enrolled in the baccalaureate programs who are seeking to reenter the work force and/or to graduate students in the Nursing and Healthcare Administrator Track.

The Dean’s Scholarship is awarded annually to an incoming doctoral student to recruit individuals who demonstrate distinguished potential for improving the health of Mississippians through nursing at the highest level of scholarship.

The Mississippi Baptist Hospital/Gilfoy School of Nursing Scholarship, established in 2000, is awarded to a doctoral nursing student who is in good standing and has a grade point average of 3.0 or higher.

The Leigh Anne Ward and Bobbie G. Ward Endowed Scholarship in Nursing, established in 2011 to honor in perpetuity, University of Mississippi Medical Center School of Nursing alumna Bobbie G. Ward and her daughter, Leigh Anne Ward (deceased), provides financial assistance to deserving students preparing for a career in nursing. It is awarded to a senior or Accelerated BSN student with an interest in pediatrics or medical surgical nursing.

The Regions Bank Scholarship, established in 1968, is awarded annually to a junior student with excellence in academic, clinical and overall performance and with documented financial need.

The Hearin Scholarship Fund, established in 1988, offers full tuition scholarships to outstanding undergraduate students selected on the basis of academic record and documented financial need. This is a service scholarship and requires the student serve 30 months to five years (depending on length of the scholarship) as a full-time nurse in Mississippi immediately following graduation.

The Dr. Jeff Hollingsworth Memorial Scholarships are awarded to traditional undergraduate nursing students who are selected on the basis of academic record and have financial need. Preference is given to students from Hinds, Rankin, Madison and Lauderdale counties.

The Pearl & Otis Walters Scholarship is presented annually to nursing student(s) with outstanding academic achievement who intend to practice in smaller Mississippi towns and communities.

The Edwin N. Rubenstein Scholarship, established in 1998, is awarded annually to a senior student who has demonstrated the most overall improvement from the junior to senior year.
The Ottile Schillig Memorial Scholarship Fund was established in 1984 through a gift to the Medical Center from the Schillig Trust. Miss Schillig, a native of Port Gibson, was a noted concert singer. At least one scholarship is available each year to an undergraduate student in the School of Nursing. All recipients must be in good academic standing, and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

The Trustmark National Bank Scholarship, established in 1988, is presented to an undergraduate student with outstanding performance in nursing of children as demonstrated by excellence in academic, clinical and overall performance.

Vicki Randle Bee Student Nurse of the Year Scholarship was established in 2006 by Alon Bee in memory of his wife, Vicki Randle Bee. The recipient is chosen by fellow senior students, and selection is based on the individual exhibiting nursing qualities valued by the School of Nursing.

J. R. Scribner Scholarship was established in 2002. This scholarship is given to a full-time undergraduate nursing student based on academic excellence and who resides north of Highway 82. The recipient agrees to work or live in Mississippi for 24 months. Students may apply through the office of Student Financial Aid.

The William Randolph Hearst Endowment Scholarship Fund, established in 2010 by the William Randolph Hearst Foundation, is an endowed scholarship awarded as a recruitment scholarship to an ethnic minority student who is a U.S. citizen and Mississippi resident seeking a traditional undergraduate nursing degree in the School of Nursing who has demonstrated financial need and has a pre-entry GPA of 3.0 or above. Although a recruitment scholarship, it is awarded upon successful completion of the first semester in the School of Nursing.

The Orr-Russwurm Memorial Scholarship Fund was established in 1993 in memory of Dr. and Mrs. William Robert and Helene Mays Orr, Helen Pearsall Orr, Stuart Pearsall Orr, Dr. and Mrs. William Clark and Florence Russwurm. The scholarship is designated for a student in the School of Medicine, School of Nursing, School of Health Related Professions, School of Dentistry or any other school that may be created in the future at the University of Mississippi Medical Center. The recipient must be planning a full- or part-time career in Christian missionary work. For more information about this scholarship, please contact the UMMC Office of Student Financial Aid.

The Frances Marie Dean Scholarship in Nursing was established in 2006 by the Estate of Frances Marie Dean. The recipient is a nursing student at the University of Mississippi Medical Center.

The McCarty Company Scholarship Fund was established in 2011 by the Create Foundation. The scholarship is awarded to a third-semester student in the School of Nursing who is 22 years of age or older, who demonstrates financial need and community and volunteer involvement.

The Jessie Lynn Bidwell Memorial Scholarship was established in 2011 by Josie and Gene Bidwell in memory of their infant daughter. This scholarship is awarded to an undergraduate student who has successfully completed his/her junior year, and exemplifies caring, compassion and respect for children and their families. The recipient must also be in good academic standing in the School of Nursing.

The Amber M. Arnold Nursing Scholarship was established in 2010 by Amber Arnold. This scholarship is awarded to an undergraduate in the School of Nursing who is a single parent, demonstrates financial need, is a Mississippi resident and a citizen of the United States with a minimum GPA of 3.0.

The UMMC 50th Anniversary Scholarship was established in 2005 and derived from the UMMC "Promises Kept" campaign. This scholarship is centered on academics, character and performance. It rotates annually amongst the schools.

The Susanne Marie Pruett Memorial Scholarship in Nursing was established in 2009 to honor the late Susanne Marie Pruett, a University of Mississippi Medical Center research and PICU/ICU staff nurse, by providing financial assistance to deserving students pursuing a career in the area of intensive care nursing.

The Laura C. Blair Endowed Scholarship in Nursing was established in 2009 to honor in perpetuity Laura C. Blair, a University of Mississippi Medical Center alumna, by providing scholarships to nursing students. The recipient must be a U.S. citizen and Mississippi resident and seeking a nursing degree in the School of Nursing.

The Patricia Dyre Kimble Scholarship in Nursing, established in 2008, is an academic scholarship awarded to a student in the School of Nursing who demonstrates financial need, is in good academic standing and has a genuine desire to pursue a rewarding and challenging career in nursing. The recipient must be a U.S. citizen and a Mississippi resident.

Florence E. King Endowed Scholarship in Nursing, established in 2013, is awarded to a student enrolled in the Master of Science in Nursing and Health Care Administrator track. The student must be a U.S. citizen, have financial need and be pursuing excellence in academic performance. The student awarded must plan to pursue a career in hospital administration immediately upon completion of the MSN degree requirements.

The Christine L. Oglevee Memorial Award, sponsored by the Nursing Alumni Chapter and the School of Nursing, is presented annually at commencement to a graduating senior from the traditional BSN program who is chosen by the faculty as the most outstanding student in the class. The recipient's name is engraved on a plaque which hangs in the School of Nursing.

The Yvonne Pressgrove Bertolet Award was established in 1986 with a gift from Yvonne and Bob Bertolet of Natchez. Mrs. Bertolet is an alumna of the School of Nursing. Junior students or those who have completed the junior year, who are from Mississippi or any other SREB state, who have a minimum grade point average of 3.50, who actively participate in extracurricular school and campus activities, and who demonstrate those qualities of caring and commitment which exemplify the ideal nurse, are eligible for consideration of the scholarship.
The James T. Baird Memorial Scholarship, established in 2000, offers full tuition scholarship each year to an undergraduate Accelerated Program student in the School of Nursing. All recipients must be in good academic standing and have financial need. Students must have a commitment to practice in Mississippi.

The Allie Mae Fletcher Memorial Scholarship Award was established in 2004 in memory of the grandmother of Dr. Audwin B. Fletcher. This book award is presented to a nurse practitioner student who is of African-American descent. The recipient must be in good standing and preference is given to those students who intend to practice in smaller Mississippi towns or communities.

The Bernice M. Gamblin Memorial Scholarship was established in 2007 in memory of Bernice M. Gamblin, the aunt of Dr. LaDonna Northington, Dr. Monica Northington and Hiawatha Northington II. This scholarship is presented to an undergraduate student in good academic standing, with a caring attitude and an interest in working with adult clients with cancer.

The Richard N. Graves Award is presented at commencement to the registered nurse senior who is chosen by the faculty as the most outstanding registered nurse student in the class.

The Doris W. Gray Award, established in 1985, is awarded annually to the undergraduate student with outstanding performance in maternity nursing as demonstrated by excellence in academic, clinical and overall performance.

The Eliza Pillars Registered Nurses Association Annual Award recognizes African-American undergraduate nursing student(s) with outstanding academic achievement.

The Class of 1965 Award, established in 2000, is presented annually to a third-semester junior or first-semester senior who is full time, in good academic standing and demonstrates financial need.

The Duncan McCormac Memorial Scholarship award, established in 2004, is presented annually to a third-semester junior or first-year graduate student who is full time, in good academic standing and demonstrates the characteristics most admired in the conduct of the art and science of nursing.

Mississippi Blood Services Award is available to a full-time student in the graduate nursing program. Students must have a 3.0 GPA or higher.

The F.A. Davis Undergraduate Book Award, established in 1998, is presented to a junior nursing student in recognition of his/her scholastic excellence.

The Mississippi Hospital Association Nurse Executive Award, established in 1998, is presented to the graduate student who demonstrates outstanding academic achievement and creativity in developing the nurse executive role in the health delivery system.

The Bess C. Blackwell Nurse Executive Award, established in 1996, is presented to the graduate student who demonstrates overall excellence as a nurse executive.

The Bess C. Blackwell Scholarship in Nursing, established in 2008, is presented annually to an ethnically-diverse undergraduate nursing student, based on GPA, letters of recommendation, and personal statement on desire to pursue a career in nursing.

The Janet Y. Harris Scholarship in Nursing, established in 2008, is presented annually to a graduate (master’s or doctoral) nursing student whose focus of study/role is nurse administrator or nurse executive. The student must be an active member of local, state or national professional nursing associations and demonstrate excellence in coursework and practicum.

The Rosie Lee Calvin Nurse Educator Award, established in 1996, is presented to the graduate student who displays overall excellence as a nurse educator.

The Elizabeth Ann Coleman Nurse Clinician Award, established in 1996, is presented to a graduating nurse clinician student with the highest academic GPA and who proves overall excellence as a nurse practitioner.

The Minta Uzodinma Community Nurse Award, established in 1998, is presented annually to the graduate student who demonstrates outstanding commitment to improve the health of the public.

The Jay Waits Graduate Student of the Year Award was established in 1986. The School of Nursing and the Nursing Alumni Chapter co-sponsor this award and present it annually to a graduate student who, in the judgment of the graduate faculty, exhibits leadership, clinical and academic excellence.

The Rene Reeb Research Award, established in 1998, is presented to a doctoral student who is in good academic standing, enrolled in the human experiences health care track and demonstrates interest in qualitative research.

Sigma Theta Tau Outstanding Academic Performance Awards, established in 1986, are presented annually to a graduate student and undergraduate student in recognition of superior academic achievement and activities reflecting the purposes of Sigma Theta Tau.

Sigma Theta Tau Carraway Family Scholarship, established in memory of Charles Morgan Carraway, is awarded to an outstanding undergraduate student selected by the Theta Beta Chapter of the International Nursing Honor Society.

The University of Mississippi Medical Center Student Nurses Association Outstanding Junior Award is presented to the most active junior member of the University Chapter of MASN.

The University of Mississippi Medical Center Student Nurses Association Outstanding Senior Award is presented to a senior student who has been active in MASN and has been a member of the University Chapter of MASN for two years.
Lippincott Undergraduate Book Award, established in 1998, is presented to an undergraduate student in recognition of scholastic excellence.

Lippincott Advanced Standing Book Award, established in 1998, is presented to an advanced standing student in recognition of scholastic excellence.

The Elsevier Science Graduate Book Award, established in 1998, is presented to a graduate student in recognition of scholastic excellence.

The Elsevier Science Doctoral Book Award, established in 1998, is presented to a doctoral student in recognition of scholastic excellence.

The Natural Medicines Comprehensive Database Recognition Award, established in 2001, is presented to the graduating MSN student who demonstrates promise in improving patient care, and shows an appreciation for scientific inquiry, and an evidence-based approach to natural medicine. (This student is one who plans on completing a terminal degree in nursing or a related field.)

The Lorea May Honorary Nurse Award was established in 2009 by Dr. Marilyn May Harrington in honor of her mother, Lorea May, who always desired to become a nurse but due to lack of finances was unable to attend nursing school. It is awarded to an African-American senior traditional student or an accelerated student who desires to enter the field of pediatrics.

Master Preceptor Recognition Award recognizes a preceptor who has demonstrated outstanding performance in her/his role as a preceptor for a nursing student(s). The preceptor functions as a resource person, facilitator, clinical role model, educator and consultant to the student. A Master Preceptor is one that has made extraordinary effort to help nursing students bridge the gap between classroom theory and clinical practice.

The Helen Reeves Turner, MD, PhD Scholarship, established in 2013, is awarded each year to a deserving student from one of the Medical Center Schools. The recipient of this award, selected by the dean or his designee, exemplifies Dr. Turner’s outstanding attributes of leadership, education and service.

* Students must meet specific scholarship and award criteria and may need to complete an application. Eligibility does not guarantee scholarship or award. Scholarships are awarded as funds allow.

LOANS

The Caldwell Loan Fund, established in 1962 by Mrs. Annie C. Caldwell of Hazlehurst, provides interest-free loans to undergraduate nursing students on the basis of need.

The Federal-State Loan Programs, in which the Medical Center participates, are administered through the UMMC Office of Student Financial Aid. Application information is outlined in the Student Financial Aid Disbursement Policies section under General Information. For more information about this loan program, please contact the UMMC Office of Student Financial Aid.

The George C. and Laura B. McKinstry Scholarship/Loan Fund was established in 1973 by Dr. McKinstry in memory of his father and mother to provide low-interest loans to full-time needy students in the School of Nursing.

The Christine L. Oglevee Memorial Loan Fund, supported by gifts from alumni, is a source for loans available on an as-needed basis. Funds are available to students with good scholastic records in the graduate and undergraduate programs of the School of Nursing. Please contact the Office of Student Affairs for more information.

Mississippi Resident Tuition Assistance Grant (MTAG) application should be mailed directly to the college or university where the student will be attending. All recipients must be enrolled in a full-time plan of study and in good academic standing. Information can be obtained by writing the Mississippi Office of State Student Financial Aid, 3825 Ridgewood Road, Jackson, MS 39211-6453, or by visiting its website.

Nursing Teacher Stipend Program (NTSP) is available to licensed registered nurses who are enrolled in the Master of Science in Nursing, DNP or PhD in Nursing program. All recipients must be in good academic standing. Priority is given to nursing faculty within 12 months of earning a doctoral degree. Loan-to-service obligation can be discharged on the basis of two years’ teaching service in professional nursing for one year of loan received. For more information, please visit the website.

WORK STUDY

Students who wish to participate in a work-study program should contact the UMMC Office of Student Financial Aid located in the Verner S. Holmes Learning Resource Center.

HONORS

The Marshal of the Class for Commencement is a graduating senior selected by the faculty based on GPA, commitment and service to the senior class, the School of Nursing and the University of Mississippi Medical Center.

The Dean’s List is recognition for undergraduate students who demonstrate superior academic achievement. Eligibility is based on successful completion of all required courses in a regular plan of study in the preceding semester in the School of Nursing with a semester average of 3.50 or above.

The Who’s Who Among Students in American Universities and Colleges listing is a national compendium which recognizes seniors and graduate students for outstanding achievement.
Sigma Theta Tau, Theta Beta Chapter, is the School of Nursing Honor Society, established in 1982, and chartered as the Theta Beta Chapter of Sigma Theta Tau, International Honor Society of Nursing, on January 20, 1986. Membership in the society is by invitation extended to undergraduate and graduate nursing students, nursing faculty and professional nurses who have shown superior scholarship, leadership and nursing achievement.

Phi Kappa Phi Chapter is the National Honor Society of Phi Kappa Phi was founded in 1897, and the University of Mississippi Chapter was chartered in May 1959. To qualify for membership, undergraduates must be seniors with high standards of scholarship and character. Graduate students and students in professional schools must have distinguished records.

THE NURSING ALUMNI GUARDIAN SOCIETY

The society is a special organization sponsored by the nursing alumni at the University of Mississippi Medical Center to encourage extraordinary giving by nursing alumni, friends and faculty of the School of Nursing. The gifts, representing either current or deferred contributions, may be restricted or undesignated. The membership of the society holds the responsibility of ensuring that available funds are distributed to the School of Nursing as well as serving as trustee for specially designated charitable programs.

BACCALAUREATE PROGRAM

Three options are available for students wishing to pursue the Baccalaureate of Science in Nursing degree: the Traditional BSN program, the Accelerated BSN program, and the RN to BSN program.

Purpose

The purpose of the baccalaureate program is to prepare nurses for entry-level professional practice and provide a solid foundation for graduate study.

BACCALAUREATE PROGRAM OUTCOMES

1. Integrate knowledge and skills from the liberal arts, sciences, nursing and other disciplines into professional nursing practice.
2. Apply knowledge and skills of organizational and systems leadership, quality improvement and patient safety to improve patient care outcomes in diverse populations and health care settings.
3. Integrate current evidence from nursing research and other credible sources into professional nursing practice.
4. Integrate information management and patient care technologies into the delivery and evaluation of high-quality, safe patient-centered care in a variety of health care settings.
5. Apply knowledge of health care policy, finance and regulatory environments to professional nursing practice.
6. Demonstrate effective inter- and intra-professional communication and collaboration skills in the delivery of evidence-based, patient-centered care across health care environments.
7. Implement strategies to facilitate health promotion, disease prevention and health restoration of individuals, families and populations across the lifespan.
8. Assume accountability for professional values and behaviors.
9. Deliver comprehensive patient- and population-centered care that reflects baccalaureate generalist nursing practice across the health-illness continuum and health care environments.

ADMISSION CRITERIA

The minimum criteria to be considered for admission to the baccalaureate nursing program are outlined under each specific program option. Admission consideration to the undergraduate program is made by the Undergraduate Admission and Progression Committee based on evaluation of application data.

TRADITIONAL BACCALAUREATE PROGRAM

Admission Criteria

1. A complete application;
2. An enhanced ACT score of 21 or above;
3. A cumulative GPA of at least 2.5 on a 4.0 scale. (Hours from all previously attempted undergraduate course work are used in calculating the cumulative GPA.) The GPA in required prerequisite course work will also be considered in the admission process;
4. Completion of required prerequisite courses with a minimum of grade “C” in each course. Applicants may apply for admission when the number of prerequisite courses completed, plus those on the plan of study, equals 62 semester hours. All prerequisite courses (62 semester hours) must be completed before beginning the nursing program;
5. A personal interview and an on-site writing sample may be required.

In unusual instances, the Undergraduate Admission and Progression Committee may consider applicants who do not meet the admission criteria.

PREREQUISITE COURSES

The lower division is comprised of the following courses, which are prerequisites for the upper division of the baccalaureate program. The 62 semester hours of prerequisite courses include:

Natural Sciences and Mathematics: (26 semester hours) Science survey courses or courses for non-science majors are not acceptable for transfer credit. Anatomy and Physiology courses taken more than 10 years ago will not be accepted for transfer credit.
Required Courses
General Chemistry I with lab (4 semester hours)
Science with lab – Suggested courses: Biological Science with lab, Chemistry II with lab, Genetics (4 h), Environmental Science with lab
Microbiology – One course with a laboratory (4 semester hours)
Human Anatomy and Physiology – Two courses in sequence with labs which include the study of structure and function of the human body (8 semester hours)
College Algebra or higher level math (3 semester hours)
Statistics – Must include an introduction to descriptive and inferential statistics, including measures of central tendency, variability, correlation, t tests, z tests, ANOVA, chi-square, hypothesis testing, p levels and confidence intervals (3 semester hours)

Psychosocial Sciences: (18 semester hours)
Required Courses
General Psychology (3 semester hours)
Introductory Sociology (3 semester hours)
Human Growth and Development through the Life Cycle (3 semester hours):
   a. In a senior college, Developmental Psychology, to include development from infancy through old age,
   b. In a junior or community college, Human Growth and Development, to include development from infancy through old age.
Nutrition (3 semester hours)
Psychosocial Science electives (6 semester hours)

Suggested Elective Courses
Abnormal Psychology
History
Anthropology
Political Science
Economics
Social Problems
Geography

Humanities And Fine Arts: A minimum of six courses (18 semester hours)
Required Courses
English Composition (6 semester hours) 
Humanities and Fine Arts Electives (9 semester hours)
Speech (3 semester hours)

Suggested Elective Courses
Art
Drama Music
Philosophy
Survey of Religion
Literature
Foreign Languages
History
Journalism

Unacceptable Courses
None of the required courses listed, described or recommended above may be met by the following: courses in physical training, military science, dogmatic religion; mathematics or science designed for non-science majors or course credit granted without college level testing.

TRADITIONAL BSN PROGRAM PLAN OF STUDY
The following plan of study is for students who are admitted to the Traditional BSN Program. Plans of study may differ based on faculty and clinical resources and necessary curriculum changes. Students will be given the most recent plans of study by their academic advisor upon enrollment. Traditional BSN students are limited to six (6) semester hours of electives during their tenure at UMMC SON, excluding N409 (Clinical Nursing Elective) and N322 (Strategies for Success), if required.

<table>
<thead>
<tr>
<th>SEMESTER I - SUMMER</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N302</td>
<td>Health Assessment Throughout the Life Span</td>
</tr>
<tr>
<td>N307</td>
<td>Pathophysiology</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>SEMESTER II - FALL</td>
<td></td>
</tr>
<tr>
<td>N300</td>
<td>Introduction to Health Promotion</td>
</tr>
<tr>
<td>N303</td>
<td>Introduction to Pharmacotherapeutics</td>
</tr>
<tr>
<td>N304</td>
<td>Introduction to Professional Nursing and Evidence-Based Practice</td>
</tr>
<tr>
<td>N309</td>
<td>Foundations of Nursing Practice</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>SEMESTER III - SPRING</td>
<td></td>
</tr>
<tr>
<td>N444</td>
<td>Adult Health I</td>
</tr>
<tr>
<td>N427</td>
<td>Child-Adolescent Nursing</td>
</tr>
<tr>
<td>N428</td>
<td>Nursing Research</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### ACCELERATED BACCALAUREATE NURSING PROGRAM

The purpose of the Accelerated Baccalaureate Program is to prepare nurses at an accelerated pace for entry-level professional practice and to provide a solid foundation for graduate study. The accelerated program is a continuous curriculum designed for students who have a prior baccalaureate degree in another field. Students complete a continuous three (3) semester, 12-month curriculum. Students on the Oxford campus program are admitted annually for fall semester entry. Students on the Jackson campus program are admitted annually for spring semester entry. All students must complete 62 hours of prerequisite course credits prior to entering the program. Students in the accelerated program may integrate with students in the traditional BSN program for some learning activities. A dominant problem-based learning methodology is used for course delivery in the Accelerated BSN program option.

### Admission Criteria

Admission to the Accelerated Baccalaureate Program is based on evaluation of the following by the Undergraduate Admission and Progression Committee:

1. a complete application;
2. baccalaureate degree from an accredited university (applicants must hold the degree before beginning the Accelerated BSN program);
3. an enhanced ACT score of 21 or above;
4. a cumulative overall GPA of 3.0 or above on a 4.0 scale (Hours from all previously attempted undergraduate course work are used in calculating the cumulative GPA.)

Applicants who are admitted to the Accelerated BSN Program must complete pre-admission counseling with School of Nursing faculty. Students must enroll in full-time study in the Accelerated BSN program option. Because of the accelerated pace of the curriculum, students are strongly encouraged NOT to work while in the program.

### PREREQUISITES

The prerequisite courses are the same as listed for the Traditional BSN program.

### ACCELERATED BSN PROGRAM OPTION PLAN OF STUDY

The following plans of study are for students admitted to the Accelerated BSN Program. The curriculum design utilizes a problem-based learning methodology for course delivery. Plans of study may differ based on faculty and clinical resources and necessary curriculum changes. Students will be given the most recent plan of study upon enrollment.

### FALL ADMISSION PLAN OF STUDY – OXFORD CAMPUS

<table>
<thead>
<tr>
<th>Semester I - Fall</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N412-1</td>
<td>Professional Nursing Role Development I</td>
</tr>
<tr>
<td>N413-1</td>
<td>Health and Illness Across the Lifespan I</td>
</tr>
<tr>
<td>N434-1</td>
<td>Clinical Practicum I*</td>
</tr>
<tr>
<td>N405</td>
<td>Basic Health Assessment*</td>
</tr>
<tr>
<td>N527</td>
<td>Health Promotion in Populations</td>
</tr>
<tr>
<td>N433-1</td>
<td>Interprofessional Education I</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II - Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N413-2</td>
<td>Health and Illness Across the Lifespan II</td>
</tr>
<tr>
<td>N434-2</td>
<td>Clinical Practicum II*</td>
</tr>
<tr>
<td>N538</td>
<td>Healthcare Leadership and Collaboration</td>
</tr>
<tr>
<td>N436</td>
<td>Scholarship for Evidence Based Practice</td>
</tr>
<tr>
<td>N433-2</td>
<td>Interprofessional Education II</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>
RN to BSN PROGRAM (Post-RN and Dual Enrollment Program)

Purpose
The purpose of the RN to BSN program is to provide associate degree and diploma RNs a flexible program of study that will allow them to continue to meet work and other obligations while pursuing baccalaureate education. The program of study consists of 62 semester hours of lower division prerequisites and 30 semester hours of upper division nursing courses. All prerequisite hours must be completed prior to entering the program. After successful completion of N421 (Transitions and Trends in Professional Nursing), students will be awarded 34 semester hours of validation credit, applicable toward hours required for the BSN degree, for other nursing courses (taken in an associate or diploma program) equitable to UMMC School of Nursing courses. Students must complete 30 hours as a student enrolled in the School of Nursing. Graduates of the RN to BSN program will meet the standards and program outcomes for baccalaureate nursing education and receive the BSN degree.

A RN to BSN Dual Enrollment Program (DEP) is available to students enrolled in a participating community college. This program provides the opportunity for students pursuing the associate degree in nursing to simultaneously pursue the BSN from UMMC through a dual enrollment route. Only students from partnering community colleges are eligible to participate. Admission to the DEP is competitive. Admission to the DEP is currently on hold.

Prerequisite Courses (62 semester hours)
The lower division is comprised of the following courses, which are prerequisites for the upper division of the baccalaureate program.

Natural Sciences and Mathematics: (26 semester hours) Science survey courses or courses for non-science majors are not acceptable for transfer credit. Anatomy and Physiology courses should be taken within the last 10 years. However, applicants who have been in continuous nursing practice may request a waiver of this requirement from the associate dean.

Microbiology-(4 semester hours) one course with a laboratory

Human Anatomy and Physiology-(8 semester hours) two courses in sequence with labs which include the study of structure and function of the human body.
College Algebra or higher level math -(3 semester hours)

Statistics -(3 semester hours) must include an introduction to descriptive and inferential statistics, including measures of central tendency, variability, correlation, t tests, z tests, ANOVA, chi-square, hypothesis testing, p levels, and confidence intervals.

Natural Science or Math electives (8 semester hours) Courses in nutrition or in computer science may be used as Natural Science/Math electives.

**Psychosocial Sciences:** (18 semester hours)

General Psychology -(3 semester hours)
Introductory Sociology -(3 semester hours)

**Human Growth and Development through the Life Cycle (3 semester hours):**

a. In a senior college, Developmental Psychology, to include development from infancy through old age, and
b. In a junior or community college, Human Growth and Development, to include development from infancy through old age.

**Psychosocial Science Electives -(9 semester hours)**

**Suggested Courses for Psychosocial Science Electives**

<table>
<thead>
<tr>
<th>Abnormal Psychology or other psychology courses</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>Political Science</td>
</tr>
<tr>
<td>Economics</td>
<td>Social Problems or other sociology courses</td>
</tr>
<tr>
<td>Geography</td>
<td>Nutrition</td>
</tr>
</tbody>
</table>

**Humanities And fine Arts:** (18 semester hours)

**English Composition -(6 semester hours)**

Speech -(3 semester hours)

**Humanities and Fine Arts electives -(9 semester hours)**

**Suggested Courses for Humanities and Fine Arts Electives**

<table>
<thead>
<tr>
<th>Art</th>
<th>Literature</th>
<th>Drama</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre</td>
<td>Music</td>
<td>Foreign Languages</td>
</tr>
<tr>
<td>Philosophy</td>
<td>History</td>
<td>Survey of Religion</td>
</tr>
<tr>
<td>Journalism</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Unacceptable Courses**

None of the required courses listed, described, or recommended above may be met by the following: courses in physical training, military science, or dogmatic religion: courses in mathematics or science designed for non-science majors; course credit granted without college level testing.

**RN to BSN (Post-RN) Admission Criteria**

1. A completed application;
2. Completion of required prerequisite courses with a minimum grade of C in each course;
3. An associate degree or diploma in nursing from an accredited program (ACEN [formally NLNAC] or CCNE), which included clinical practice courses in nursing;
4. A minimum cumulative GPA of 2.5 on a 4.0 scale (Hours from all previously attempted undergraduate course work are used in calculating the cumulative GPA);
5. Evidence of current unrestricted licensure (RN) to practice in the United States and eligibility for licensure in Mississippi; and/or privilege to practice in a state in which the student will have clinical practice;
6. New associate degree graduates must successfully complete the NCLEX-RN® examination and become licensed as a registered nurse (RN) by the end of their first semester of course work; and,
7. Official transcripts from all schools attended.

**RN to BSN (Dual Enrollment Program) Admission Criteria**

1. Currently enrolled in a participating ADN school;
2. Submission of a complete application:
   a. Students who have completed 42 of the 62 semester hours of required prerequisite courses will be eligible to apply one time during their second semester of enrollment in the ADN program.
   b. Students who have completed all 62 semester hours of prerequisite courses are eligible to apply one time during their first semester in the ADN program.
3. Enhanced ACT score of 21 or above or previous bachelor’s degree in any field from an accredited university;
4. Minimum overall GPA of 3.0 on all college courses AND on all nursing courses through the first semester of full time study in the ADN program;
5. Minimum grade of C in each prerequisite course;
6. Completion of or currently enrolled in at least 42 of the 62 semester hours of required prerequisite courses for the BSN degree, including the following required courses:
   a. Human Anatomy and Physiology I and II with labs (8 semester hours)
   b. English Composition I and II (6 semester hours)
   c. College Algebra (3 semester hours)
   d. Human Growth and Development (3 semester hours)

All prerequisite courses must be completed prior to enrolling in any BSN-level nursing courses.

SUGGESTED RN TO BSN PLAN OF STUDY

The following core and elective courses comprise the RN to BSN Plan of Study. Plans of study may differ based on faculty and clinical resources and necessary curriculum changes. Students will be given the most recent plan of study upon enrollment. All students must take N421 during their first semester and must take N461 during their final semester of study.

<table>
<thead>
<tr>
<th>Core Courses (23 semester hours) plus Electives (7 semester hours)</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N421-Transitions and Trends in Professional Nursing</td>
<td>3</td>
</tr>
<tr>
<td>N408-1 -Health Promotion in Populations</td>
<td>2</td>
</tr>
<tr>
<td>N406-Health Assessment</td>
<td>2</td>
</tr>
<tr>
<td>N407-Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>N462-Professional Role Enactment</td>
<td>2</td>
</tr>
<tr>
<td>N428-Nursing Research</td>
<td>3</td>
</tr>
<tr>
<td>N528-Leadership and Management</td>
<td>3</td>
</tr>
<tr>
<td>N431-Patient Safety and Quality Improvement</td>
<td>2</td>
</tr>
<tr>
<td>N461-Management and Leadership Practicum</td>
<td>3</td>
</tr>
<tr>
<td>Approved Electives</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS1 (300 and 400-level courses)

1Courses of instruction and hours are subject to change. The School of Nursing reserves the right not to offer some courses because of low enrollment.

The School of Nursing employs a numerical grading system for most courses. Courses which are not assigned numerical grades are Pass/Fail.

N 300. Introduction to Health Promotion. A didactic course which focuses on health promotion, risk reduction, teaching/learning, and disease prevention across the lifespan. Emphasis is placed on current major determinants of health. Global healthcare issues are examined as they relate to nursing care. (Lecture) (3 semester hours)

N 302. Health Assessment Throughout the Life Span. An introductory course focusing on health assessment across the life span. Students will acquire the requisite knowledge and skills necessary to perform health assessments. The emphasis is on developing interviewing, history taking, and basic physical assessment skills. (Lecture) (3 semester hours)

N 303. Introduction to Pharmacotherapeutics. A didactic course designed to present principles of pharmacology and pharmacotherapeutics. Characteristics and uses of major drug groups and safe medication administration are discussed with emphasis on nursing management. Consideration is given to individual, age related, and generic responses with specific drugs. (Lecture) (3 semester hours)

N 304. Introduction to Professional Nursing & Evidence Based Practice. This beginning professional course focuses on professional nursing roles, values, ethics and legal issues. It incorporates an introduction to evidence based practice as well as emphasizing professional writing skills. (Lecture) (2 semester hours)

N 307. Pathophysiology. This didactic course builds on concepts and principles from the basic sciences. The emphasis of the course is on pathological responses to illness/disease. Physical, biochemical, microbial and genetic factors that alter homeostasis are examined. (Lecture) (4 semester hours)

N 309. Foundations of Nursing Practice. A didactic, laboratory, and clinical course that begins preparing the student to function as a provider of care. (Lecture/Lab) (5 semester hours)

N 310. Behavioral Nursing. A didactic and clinical course that focuses on the nursing care of clients with acute, chronic and complex mental health problems across the life span. Current trends, ethical and legal issues, political, economic and social issues that influence the health care of mental health clients and families are examined. Clinical practice is provided in a variety of settings including acute and community facilities. (Lecture/Lab) (4 semester hours)

N 405. Basic Health Assessment. This course focuses on assessing the health of the individual. Students acquire basic knowledge and skills necessary to perform health assessments. Emphasis is placed on developing interviewing history taking, development of pedigrees, foundational assessment skills across the lifespan, and documentation. (Lecture/Lab) (2 semester hours)

N 406. Health Assessment. This web-based course focuses on the theoretical basis of performing an assessment on the individual throughout the life span. Students acquire knowledge and skills necessary to perform health assessments. Emphasis is placed on developing skills in interviewing, history taking, and health assessment. (Lecture) (2 semester hours)

N 407. Pathophysiology. This didactic web-based course builds on concepts and principles from the basic sciences. Emphasis is placed on normal and pathological responses to illness. A human body systems approach is used, applying concepts from cellular biological
processes. (Lecture) (3 semester hours)

N 408-1. Health Promotion in Populations. The course focuses on understanding the forces shaping community and global health patterns and the impact of these global processes on societies. Students will review strategies to assess, plan, implement and evaluate population-focused programs for health promotion and disease prevention of individuals, families, groups, communities and populations. (Lecture) (2 semester hours)

N 412-1. Professional Nursing Role Development I. This is a two part didactic course series addressing professional nursing development, which is designed to provide a foundational and conceptual context for provision of nursing care. The first course includes basic content on selected concepts for professional nursing practice. The second course expands on the concepts presented in the first course, allowing students the opportunity to apply concepts to embody the role of the professional nurse. (Lecture/Lab) (2 semester hours)

N 412-2. Professional Nursing Role Development II. This is a two part didactic course series addressing professional nursing development, which is designed to provide a foundational and conceptual context for provision of nursing care. The first course includes basic content on selected concepts for professional nursing practice. The second course expands on the concepts presented in the first course, allowing students the opportunity to apply concepts to embody the role of the professional nurse. (Lecture/Lab) (1 semester hour)

N 413-1. Health & Illness Across the Lifespan I. This three part didactic course series examines health and illness across the lifespan from infancy through senescence, including the childbearing cycle and mental health. Each course is taught using a conceptual approach and problem based learning methodology. (Lecture) (5 semester hours)

N 413-2. Health & Illness Across the Lifespan II. This three part didactic course series examines health and illness across the lifespan from infancy through senescence, including the childbearing cycle and mental health. Each course is taught using a conceptual approach and problem based learning methodology. (Lecture) (5 semester hours)

N 413-3. Health & Illness Across the Lifespan III. This three part didactic course series examines health and illness across the lifespan from infancy through senescence, including the childbearing cycle and mental health. Each course is taught using a conceptual approach and problem based learning methodology. (Lecture) (3 semester hours)

N 421. Transitions and Trends in Professional Nursing. This bridge course between basic nursing education and advanced practice nursing education examines the following professional roles: provider of care, designer, manager, or coordinator of care and member of the profession. Within these roles, specific role components inherent to professional nursing practice are further explored; altruism, autonomy, human dignity, and integrity. This course must be taken during the first semester of the RN-BSN plan of study. (Lecture) (3 semester hours)

N 426. Maternal-Newborn Nursing. A didactic and clinical course focusing on nursing care for childbearing clients and their families. Emphasis is on health patterns occurring during pregnancy, birth, and the newborn period. Clinical practice experience is provided in a variety of settings. (Lecture/Lab) (5 semester hours)

N 427. Child-Adolescent Nursing. A didactic and clinical course focusing on nursing care of infants, children and adolescents within the context of the family. Clinical learning experiences occur in a variety of settings including acute and ambulatory settings. (Lecture/Lab) (5 semester hours)

N 428. Nursing Research. An introductory course to the research process focusing on the study of the research process as a base for nursing practice. Emphasis is on critical analysis of published research studies with regard to implications for clinical nursing practice. Ethical concepts related to research are explored. (Lecture) (3 semester hours)

N 431. Patient Safety and Quality Improvement. This course provides an introduction to patient safety and health care quality improvement. Emphasis is placed on the role of the professional nurse in improving the quality of health care through designing, implementing, and evaluating evidence-based patient safety interventions and strategies. (Lecture) (2 semester hours)

N 433-1. Interprofessional Education I. This interprofessional course is a three part series addressing the four interprofessional (IP) collaborative practice competency domains: values/ethics for interprofessional practice, roles/responsibilities, interprofessional communication, and teams and teamwork. (Lecture) (2 semester hours)

N 433-2. Interprofessional Education II. This interprofessional course is a three part series addressing the four interprofessional (IP) collaborative practice competency domains: values/ethics for interprofessional practice, roles/responsibilities, interprofessional communication, and teams and teamwork. (Lecture) (1 semester hour)

N 433-3. Interprofessional Education III. This interprofessional course is a three part series addressing the four interprofessional (IP) collaborative practice competency domains: values/ethics for interprofessional practice, roles/responsibilities, interprofessional communication, and teams and teamwork. (Lecture) (1 semester hour)

N 434-1. Clinical Practicum I. This three part clinical practice course series is designed to provide the opportunity to acquire knowledge, skills, and attitudes required to apply the nursing process to the delivery of patient centered nursing care across the lifespan and in a variety of settings. Clinical across the series includes care of the adult, the neonate, the pediatric and adolescent, childbearing families and the patient with psychiatric/mental health concerns. (Clinical Rotation) (6 semester hours)

N 434-2. Clinical Practicum II. This three part clinical practice course series is designed to provide the opportunity to acquire knowledge, skills, and attitudes required to apply the nursing process to the delivery of patient centered nursing care across the lifespan and in a variety of settings. Clinical across the series includes care of the adult, the neonate, the pediatric and adolescent, childbearing families and the patient with psychiatric/mental health concerns. (Clinical Rotation) (6 semester hours)

N 434-3. Clinical Practicum III. This three part clinical practice course series is designed to provide the opportunity to acquire
knowledge, skills, and attitudes required to apply the nursing process to the delivery of patient centered nursing care across the lifespan and in a variety of settings. Clinical across the series includes care of the adult, the neonate, the pediatric and adolescent, childbearing families and the patient with psychiatric/mental health concerns. (Clinical Rotation) (5 semester hours)

N 435. Nursing Synthesis and Practicum. This didactic and clinical practicum focuses on refinement of students' clinical and leadership skills. Students synthesize knowledge and skills in client management with multiple clients in collaboration with an assigned preceptor. Emphasis is on refinement of clinical reasoning skills and decision making skills. (Lecture/Lab) (4 semester hours)

N 436. Scholarship for Evidence Based Practice. This is an introductory course focusing on the research process and scholarship as the basis for evidence based practice. Emphasis is placed on critical analysis of published research studies regarding credibility, quality, and implications for clinical nursing practice. Ethical concepts related to the research process are integrated throughout the course. (Lecture) (3 semester hours)

N 439. Population-Based Nursing. Global trends for health promotion and disease prevention are examined. Students analyze healthcare policy issues and paradigmatic cases of ethical dilemmas in world health. Emphasis is on collaboration with others to advocate for improvement in the health of vulnerable populations and elimination of health disparities. (Lecture) (3 semester hours)

N 444. Adult Health I. A didactic and clinical course that focuses on the nursing care of adults and elders with chronic and long-term health care problems. Emphasis is placed on the role of provider of care in acute and community settings. Professional nursing values are integrated in theory and clinical learning experiences. (Lecture/Lab) (6 semester hours)

N 449. Nursing Management in Health Care System. This course focuses on preparing students to acquire skills in nursing management. Application of leadership and management principles will be demonstrated within a variety of healthcare environments. (Lecture/Lab) (4 semester hours)

N 460. Adult Health II. A didactic and clinical course that builds on the theoretical and clinical learning experiences of Adult Health I and focuses on the nursing care of adults and elders with complex health care problems. Emphasis is placed on the learner's developing role of provider and manager of care in acute and community settings. (Lecture/Lab) (6 semester hours)

N 461. Management and Leadership Practicum. This clinical laboratory course focuses on the development of the nurse as a manager of care. In the clinical laboratory, the learner applies theoretical concepts of management to the nurse manager's role in the actual work setting. The clinical experience provides the learner opportunities to demonstrate skills in using patient care technologies, information systems and communication devices that support safe nursing practices. The learner will evaluate data from many relevant sources to inform the delivery of care. Emphasis is placed on strategies to facilitate implementation of management role functions in a variety of organization environments. This course must be taken during the last semester of the RN-BSN plan of study. (Practicum/internship) (3 semester hours)

N 462. Professional Role Enactment. This course focuses on the synthesis of professional nursing knowledge at the baccalaureate level. Emphasis is placed on continued professional development, and the accountability for professional values and behaviors. Students will develop and demonstrate skills that reflect self-reflection in the pursuit of practice excellence, lifelong learning, and professional engagement. Content is designed to enhance the development of the nurse as a member of the professional. (Lecture) (2 semester hours)

N 471. Leadership and Management in Nursing. This didactic and clinical course in the accelerated program focuses on preparing students to acquire leadership and management skills in health care systems. The student will synthesize management theory and research pertaining to management processes in a variety of health care settings. Application of leadership and management principles will be demonstrated within a variety of health care environments. Professional nursing values are integrated into the didactic and clinical nursing experiences. (Lecture/Lab) (4 semester hours)

N 472. Mental Health Nursing. This didactic and clinical course in the accelerated program addresses mental health issues throughout the life span. Pertinent historical, political, social and economic aspects of mental health and mental illness are explored as well as legal, cultural and ethical issues. The roles of the nurse as provider of care, coordinator of care and member of the profession are examined in relationship to the promotion of mental health, the prevention of mental illness, and the care of the mentally ill. (Lecture/Lab) (4 semester hours)

N 473. Nursing Capstone and Practicum. This didactic and clinical practicum course in the accelerated program focuses on refinement of the student's clinical and leadership skills. The clinical immersion experience provides opportunities for the senior student to synthesize knowledge and skills in patient management of multiple clients with complex health care needs, including multi-system dysfunction in collaboration with an assigned preceptor. Emphasis is placed on refinement of clinical reasoning and decision-making skills for baccalaureate generalist nursing practice. (Lecture/Lab) (5 semester hours)

N 482. Seminar. The emphasis of this course is the application of critical thinking for effective test taking to enhance performance on the NCLEX-RN. (Lecture) (2 semester hours)

N 497. Nursing Capstone. This course focuses on refinement of the student's clinical and leadership skills for practice as a nurse generalist. Emphasis is placed on clinical reasoning and decision-making. (Lecture) (2 semester hours)
UNDERGRADUATE PROGRAM ELECTIVES*

N 301. Gerontological Nursing. An independent web-based nursing elective which focuses on the care of older adults with acute chronic health problems. The focus is on preventive care, acute care and long term care in the community and institution settings. (Lecture) (3 semester hours)

N 319. Special Topics in Nursing and Healthcare. This elective course enables the student to use learning experiences focused on selected topics in special and healthcare nursing to satisfy individual learning needs and interests. (Independent Study) (1-3 semester hours)

N 320. Individualized Study. An elective course enabling the student to use individually designed learning experiences focused on selected topics in nursing to satisfy individual learning needs and interests. (Lecture) (1-3 semester hours)

N 320C. Individualized Study: Primary Care Nursing Practice. An elective course designed to enhance student’s understanding of normal and pathologic somatic processes and gain experience in application of skills and knowledge in a primary care setting. (Lecture/Lab) (3 semester hours)

N 321. Directed Clinical Practice Elective. A clinical elective course designed to augment the student’s existing knowledge and skills in a specific area of clinical nursing practice. Learning activities are tailored to meet student needs and areas of interest. (Independent Study) (1-6 semester hours)

N 322. Strategies for Success. This elective course is designed to assist the student in strengthening knowledge of nursing theory and critical thinking skills related to content included in the undergraduate curriculum. Emphasis will be placed on the development of effective study and test taking skills, utilizing personal and preferred learning styles. Test anxiety and other barriers to effective test performance will be identified and discussed. Students will develop and implement, in collaboration with faculty, an individualized plan of content remediation based on identified needs. (Independent Study) (1-2 semester hours)

N 409. Clinical Nursing Elective. A clinical elective course focusing on expanded application of the nursing process in a variety of settings. A limited number of students may be eligible for specialty experiences working with clinical preceptors in the Student Nurse Externship Program. (Clinical Rotation) (3 semester hours)

N 419. Special Topics in Nursing and Healthcare. This elective course enables the student to use learning experiences focused on selected topics in special and healthcare nursing to satisfy individual learning needs and interests. (Independent Study) (1-3 semester hours)

N 420. Independent Study. This elective course enables the student to use individually designed learning experiences focused on selected topics in nursing to satisfy individual learning needs and interests. (Independent Study) (1-3 semester hours)

N 432. Introduction to Professional Writing. This elective course provides students an opportunity to master basic written communication skills necessary to express themselves professionally. The principles and practices examined in this course provide practice in the composition of traditional writing forms such as letters, memorandums, professional papers, and formal proposals. (Lecture) (1-3 semester hours)

N 453. Exploration in Culture. An elective web-based course which surveys cultural phenomena common to various ethnic groups. (Lecture) (3 semester hours)

N 454. Interpreting Lab Values & Common Clinical Tests. Interpreting Lab Values and Common Clinical Tests is an independent nursing elective, which focuses on the care of adult clients. This course is a study of the background, meaning, and nursing implications of laboratory test results. The course will provide the student with the opportunity to understand the interrelationships between clinical laboratory test results and the disease process occurring in the patient. Laboratory values from hematology, clinical chemistry and urinalysis, and microbiology/immunology will be interpreted for infectious diseases, liver diseases, kidney diseases hematologic disorders, and metabolic disorders. Appropriate case studies will be used to illustrate clinical significance. This online course is delivered utilizing asynchronous distance learning modalities. (Lecture) (2-3 semester hours)

N 463. Ambassador Elective. An elective course designed to nurture leadership development in academically talented students who are selected to participate in the Ambassador program. Students participate in a variety of SON and community service activities that foster personal and professional development, communication and peer mentoring skills. (Lecture/Lab) (1 semester hour)

N 466. Legal Issues in Nursing. A didactic web-based elective course designed to assist the learner in exploring the influence of law, legal issues and ethics on professional nursing practice. Content includes basic liability concepts, professional standards of care, legal doctrines, legal documentation of the medical record and the Health Insurance Portability and Accountability Act. (Lecture) (1-3 semester hours)

N 498. Directed Study in Research. The course provides students practical knowledge of the components of the research process and the opportunity to participate in components of the research process under the direction of a graduate faculty member. Students enrolled in the Sally Barksdale Honors College may enroll in N498 to complete research and thesis hour requirements. (Lecture) (1-3 semester hours)

N 499H. Honors Research and Thesis. This course provides the student enrolled in the Sally McDonnell Barksdale honors College the opportunity to conduct and defend thesis research in collaboration with a thesis advisor and committee members in the School of Nursing. The student will gain practical knowledge of the research process and the opportunity to participate in research under the direction of a nursing faculty member. May be repeated for a total of 6-9 hours. (Thesis) (1-3 semester hours)

*These courses are offered pending faculty availability and sufficient student interest.
RN to MSN PROGRAM

Purpose
The purpose of the RN to MSN program is to provide associate degree and diploma RNs a flexible program of study that will allow them to continue to meet work and other obligations while pursuing graduate education. Graduates of the RN to MSN program will meet the standards and program outcomes for baccalaureate and master’s nursing education and receive the MSN degree. After successful completion of N521-1 (Concepts of Professional Nursing Practice), students will be awarded 34 semester hours of validation credit, applicable toward hours required for the MSN degree, for other nursing courses (taken in an associate or diploma program) equitable to UMMC School of Nursing courses. The courses for most tracks are online or hybrid. The Family Nurse Practitioner and the Adult-Gerontology Acute Care Nurse Practitioner tracks may have some specialty courses that require meeting on the Jackson campus a maximum of four times during each semester. Graduates of all nurse practitioner tracks meet eligibility requirements for advanced practice certification by national certifying organizations and by the Mississippi Board of Nursing.

Prerequisite Courses (62 semester hours)
The lower division is comprised of the following courses, which are prerequisites for the upper division of the RN to MSN program.

Natural Sciences and Mathematics: (26 semester hours) Science survey courses or courses for non-science majors are not acceptable for transfer credit. Anatomy and Physiology courses should be taken within the last 10 years. However, applicants who have been in continuous nursing practice may request a waiver of this requirement from the associate dean.

Microbiology-(4 semester hours) one course with a laboratory
Human Anatomy and Physiology-(8 semester hours) two courses in sequence with labs which include the study of structure and function of the human body.
College Algebra or higher level math-(3 semester hours)
Statistics-(3 semester hours) must include an introduction to descriptive and inferential statistics, including measures of central tendency, variability, correlation, t tests, z tests, ANOVA, chi-square, hypothesis testing, p levels, and confidence intervals.
Natural Science or Math electives (8 semester hours may be natural science or math electives). Courses in nutrition or in computer use may be used as Natural Science/Math electives.)

Suggested Courses for Natural Science/Math Electives
- Any math higher than College Algebra
- Biology (for science majors)
- Chemistry (for science majors)
- Genetics

Psychosocial Sciences: (18 semester hours)
General Psychology-(3 semester hours)
Introductory Sociology-(3 semester hours)

Human Growth and Development through the Life Cycle (3 semester hours):
a. In a senior college, Developmental Psychology, to include development from infancy through old age, and
b. In a junior or community college, Human Growth and Development, to include development from infancy through old age.

Psychosocial Science Electives-(9 semester hours)

Suggested Courses for Psychosocial Science Electives
- Abnormal Psychology or other psychology courses
- Anthropology
- Economics
- Geography
- History
- Political Science
- Social Problems or other sociology courses
- Nutrition

Humanities and Fine Arts: (18 semester hours)
English Composition-(6 semester hours)
Speech-(3 semester hours)
Humanities and Fine Arts electives-(9 semester hours)

Suggested Courses for Humanities and Fine Arts Electives
- Art
- Drama
- Music
- Philosophy
- Survey of Religion
- Literature
- Theatre
- Foreign Languages
- History
- Journalism

Unacceptable Courses
None of the required courses listed, described, or recommended above may be met by the following: courses in physical training, military science, or dogmatic religion: courses in mathematics or science designed for non-science majors; course credit granted without college level testing: courses taken from an unaccredited college or university.
Admission Criteria
1. A completed application;
2. Completion of required prerequisite courses with a minimum grade of C in each course;
3. An associate degree or diploma in nursing from a program that includes clinical practice courses in nursing, that is accredited by one of the regional accrediting bodies, and that holds professional accreditation by CCNE or ACEN;
4. A minimum cumulative GPA of 3.0 on a 4.0 scale;
5. Specialty clinical experience (one year) as a registered nurse is required for the Adult-Gerontology Acute Care Nurse Practitioner track;
6. Evidence of current unrestricted licensure (RN) to practice in the United States and eligibility for licensure in Mississippi; and/or privilege to practice in a state in which the student will have clinical practice;
7. New associate degree graduates must successfully complete the NCLEX-RN® examination and become licensed as a registered nurse (RN) by the end of their first semester of course work;
8. Preadmission Counseling (completed after the application is reviewed by the Graduate Admissions and Progression Committee);
9. Satisfactory scores on the Graduate Record Examination (GRE), including a score of 3.5 or higher on the analytical section; and,
10. Official transcripts from all schools attended.

SUGGESTED PLANS OF STUDY
FAMILY NURSE PRACTITIONER
RN to MSN PLAN OF STUDY

<table>
<thead>
<tr>
<th>SUMMER 1</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N521-1</td>
<td>Concepts of Professional Nursing Practice</td>
</tr>
<tr>
<td>N533</td>
<td>Portal to Research Design and Methods</td>
</tr>
<tr>
<td>N526</td>
<td>Portal to Advanced Health Assessment</td>
</tr>
<tr>
<td>N538</td>
<td>Healthcare Leadership and Collaboration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FALL 1</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N524</td>
<td>Portal to Advanced Physiology/Pathophysiology</td>
</tr>
<tr>
<td>N527</td>
<td>Health Promotion in Populations</td>
</tr>
<tr>
<td>N610</td>
<td>Reproductive Health for Advanced Nursing Practice</td>
</tr>
<tr>
<td>N633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
</tr>
<tr>
<td>N677</td>
<td>Advanced Health Assessment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING 1</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N637</td>
<td>Advanced Physiology/Pathophysiology</td>
</tr>
<tr>
<td>N666</td>
<td>Clinical Pharmacotherapeutics</td>
</tr>
<tr>
<td>N531-1</td>
<td>Health IT and Patient Safety</td>
</tr>
<tr>
<td>N612</td>
<td>Therapeutic Management of the Pediatric Patient</td>
</tr>
<tr>
<td>N685-1</td>
<td>Practicum in Primary Care I (90 clinical hours)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUMMER 2</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID630</td>
<td>Health Care Quality Improvement</td>
</tr>
<tr>
<td>N617</td>
<td>Informatics and Health Care Technology</td>
</tr>
<tr>
<td>N682-1</td>
<td>Therapeutic Management in Primary Care I</td>
</tr>
<tr>
<td>N685-2</td>
<td>Practicum in Primary Care II (135 clinical hours)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FALL 2</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N632</td>
<td>Discipline of Nursing</td>
</tr>
<tr>
<td>N682-2</td>
<td>Therapeutic Management in Primary Care II</td>
</tr>
<tr>
<td>N685-3</td>
<td>Practicum in Primary Care III (180 clinical hours)</td>
</tr>
<tr>
<td>N669</td>
<td>Role Development and Role Enactment for Advanced Role Practice in Nursing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING 2</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N607-1</td>
<td>Health Policy and Population Health</td>
</tr>
<tr>
<td>N652-1</td>
<td>Finance and Leadership in Health Care Systems</td>
</tr>
<tr>
<td>N682-3</td>
<td>Therapeutic Management in Primary Care Management III</td>
</tr>
<tr>
<td>N685-4</td>
<td>Practicum in Primary Care IV (225 clinical hours)</td>
</tr>
</tbody>
</table>

Total Hours: 66
# Nurse Educator

## RN to MSN Plan of Study

### Semester Hours

#### Summer 1
- **N521-1**: Concepts of Professional Nursing Practice  
  - 4
- **N533**: Portal to Research Design and Methods  
  - 1
- **N538**: Healthcare Leadership and Collaboration  
  - 3

#### Fall 1
- **N524**: Portal to Advanced Pathology/Pathophysiology  
  - 2
- **N527**: Health Promotion in Populations  
  - 2
- **N613**: Foundations of Nurse Educator Role and Teaching Methods  
  - 3
- **N632**: Discipline of Nursing  
  - 2
- **N633**: Research Design and Methods for Advanced Nursing Practice  
  - 2

#### Spring 1
- **N531-1**: Health IT and Patient Safety  
  - 3
- **N614-1**: Nurse Educator Practicum (Practicum I) (90 clinical hours)  
  - 2
- **N637**: Advanced Physiology/Pathophysiology  
  - 3
- **N666**: Clinical Pharmacotherapeutics  
  - 3

#### Summer 2
- **ID630**: Health Care Quality Improvement  
  - 3
- **N626**: Portal to Advanced Health Assessment  
  - 1
- **N607-1**: Health Policy and Population Health  
  - 2
- **N615-1**: Educational Technology and Health Care Informatics  
  - 3
- **N620-1**: Direct Care Role of the Nurse Educator (Practicum II) (90 clinical hours)  
  - 2

#### Fall 2
- **N616-1**: Curriculum and Program Development and Evaluation  
  - 3
- **N625**: Nurse Educator Practicum III (180 clinical hours)  
  - 4
- **N652-1**: Finance and Leadership in Health Care Systems  
  - 3
- **N677**: Advanced Health Assessment  
  - 3

**Total Hours**: 54

---

# Adult-Gerontology Acute Care Nurse Practitioner

## RN to MSN Plan of Study

### Semester Hours

#### Summer 1
- **N521-1**: Concepts of Professional Nursing Practice  
  - 4
- **N533**: Portal to Research Design and Methods  
  - 1
- **N526**: Portal to Advanced Health Assessment  
  - 1
- **N538**: Healthcare Leadership and Collaboration  
  - 3

#### Fall 1
- **N524**: Portal to Advanced Physiology/Pathophysiology  
  - 2
- **N527**: Health Promotion in Populations  
  - 2
- **N600**: Application and Interpretation of Adult-Gerontology Acute Care Diagnostic Modalities  
  - 2
- **N633**: Research Design and Methods for Advanced Nursing Practice  
  - 2
- **N677**: Advanced Health Assessment  
  - 3

#### Spring 1
- **N531-1**: Health IT and Patient Safety  
  - 3
- **N601-1**: Practicum in Adult-Gerontology Acute Care Nurse Practitioner I (45 clinical hours)  
  - 1
- **N637**: Advanced Physiology/Pathophysiology  
  - 3
- **N666**: Clinical Pharmacotherapeutics  
  - 3

**Total Hours**: 10
### SUMMER 2
- **ID630** Health Care Quality Improvement  
  - 3
- **N617** Informatics and Health Care Technology  
  - 1
- **N601-2** Practicum in Adult-Gerontology Acute Care Nurse Practitioner II (135 clinical hours)  
  - 3
- **N605-1** Adult-Gerontology Acute Care Assessment, Management, and Evaluation I  
  - 2

### FALL 2
- **N601-3** Practicum in Adult-Gerontology Acute Care Nurse Practitioner III (225 clinical hours)  
  - 5
- **N605-2** Adult-Gerontology Acute Care Assessment, Management, and Evaluation II  
  - 2
- **N632** Discipline of Nursing  
  - 2
- **N669** Role Development and Role Enactment for Advanced Role Practice in Nursing  
  - 3

### SPRING 2
- **N601-4** Practicum in Adult-Gerontology Acute Care Nurse Practitioner IV (225 clinical hours)  
  - 5
- **N607-1** Health, Policy and Population Health  
  - 2
- **N652-1** Finance and Leadership in Health Care Systems  
  - 3

**Total Hours**  
- 61

---

### NURSING AND HEALTH CARE ADMINISTRATOR

**RN to MSN PLAN OF STUDY**

<table>
<thead>
<tr>
<th>SEMESTER HOURS</th>
<th>SUMMER 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td><strong>N521-1</strong> Concepts of Professional Nursing Practice</td>
</tr>
<tr>
<td>1</td>
<td><strong>N533</strong> Portal to Research Design and Methods</td>
</tr>
<tr>
<td>3</td>
<td><strong>N538</strong> Healthcare Leadership and Collaboration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FALL 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUMMER 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FALL 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours**  
- 53
## ADULT-GERONTOLOGY NURSE PRACTITIONER (primary care)

### RN to MSN PLAN OF STUDY

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMER 1</td>
<td>N521-1</td>
<td>Concepts of Professional Nursing Practice</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>N533</td>
<td>Portal to Research Design and Methods</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N526</td>
<td>Portal to Advanced Health Assessment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N538</td>
<td>Healthcare Leadership and Collaboration</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>FALL 1</td>
<td>N524</td>
<td>Portal to Advanced Physiology/Pathophysiology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N610-2</td>
<td>Reproductive Health for Adult Practitioners</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N677</td>
<td>Advanced Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N527</td>
<td>Health Promotion in Populations</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>11</strong></td>
</tr>
<tr>
<td>SPRING 1</td>
<td>N637</td>
<td>Advanced Physiology/Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N666</td>
<td>Clinical Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N531-1</td>
<td>Health IT and Patient Safety</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N607-1</td>
<td>Health Policy and Population Health</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>11</strong></td>
</tr>
<tr>
<td>SUMMER 2</td>
<td>ID630</td>
<td>Health Care Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N617</td>
<td>Informatics and Health Care Technology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N627-4</td>
<td>Clinical Management of Adults and Older Adults I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N628-4</td>
<td>Practicum in Clinical Management of Adults and Older Adults I (180 clinical hours)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>10</strong></td>
</tr>
<tr>
<td>FALL 2</td>
<td>N627-5</td>
<td>Clinical Management of Adults and Older Adults II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N628-5</td>
<td>Practicum in Clinical Management of Adults and Older Adults II (180 clinical hrs.)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>N632</td>
<td>Discipline of Nursing</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N669</td>
<td>Role Development and Role Enactment for Advanced Role Practice in Nursing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td>SPRING 2</td>
<td>N652-1</td>
<td>Finance and Leadership in Health Care Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N627-6</td>
<td>Clinical Management of Adults and Older Adults III</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N628-6</td>
<td>Practicum in Clinical Management of Adults and Older Adults III (270 clinical hrs.)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>11</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>64</strong></td>
</tr>
</tbody>
</table>

## FAMILY PSYCHIATRIC MENTAL HEALTH NURSE PRACTITIONER

### RN to MSN PLAN OF STUDY

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMER 1</td>
<td>N521-1</td>
<td>Concepts of Professional Nursing Practice</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>N533</td>
<td>Portal to Research Design and Methods</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N526</td>
<td>Portal to Advanced Health Assessment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N538</td>
<td>Healthcare Leadership and Collaboration</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>FALL 1</td>
<td>N524</td>
<td>Portal to Advanced Physiology/Pathophysiology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N527</td>
<td>Health Promotion in Populations</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N677</td>
<td>Advanced Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>SPRING 1</td>
<td>N666</td>
<td>Clinical Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N637</td>
<td>Advanced Physiology/Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N531-1</td>
<td>Health IT and Patient Safety</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N607-1</td>
<td>Health Policy and Population Health</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>
MASTER OF SCIENCE IN NURSING

The University of Mississippi Medical Center School of Nursing, located on the only health science campus in Mississippi, provides an excellent environment for learning. The School of Nursing shares a 164 acre campus with five other professional schools: Medicine, Health Related Professions, Dentistry, Pharmacy and Graduate Studies in the Health Sciences. The graduate program is affiliated with more than 100 hospitals, community health centers, health departments, private practice and community clinics and schools, affording the student extensive opportunity for interdisciplinary collaboration in clinical practice and research.

Classrooms at all sites are equipped with distance learning technology. The courses for most tracks are offered online or in a hybrid format. Online courses meet synchronously or asynchronously and may require attendance at proctored examination or lab experiences. Hybrid courses require the student to be on campus up to four times during the semester. The Family Nurse Practitioner, Neonatal Nurse Practitioner, Primary/Acute Care Pediatric Nurse Practitioner, and the Adult-Gerontology Acute Care Nurse Practitioner tracks may have some specialty courses that require meeting on the Jackson campus several times during the semester, primarily on weekends. Contact the track director for information about specific courses.

The University of Mississippi Medical Center School of Nursing has eight tracks leading to the Master of Science in Nursing degree: Nurse Educator, Nursing and Health Care Administrator, Family Nurse Practitioner, Adult-Gerontology Acute Care Nurse Practitioner, Adult-Gerontology Nurse Practitioner (primary care), Family Psychiatric Mental Health Nurse Practitioner, Neonatal Nurse Practitioner, and Primary/Acute Care Pediatric Nurse Practitioner (dual role). Preparation for advanced practice roles includes core content in the following areas: research, informatics, finance and leadership, quality improvement, health policy and theoretical foundation of the discipline. In addition, each track has specialized courses appropriate for the role. Part-time study is available. Candidates who successfully complete the program are awarded the Master of Science in Nursing degree. Graduates of all nurse practitioner tracks meet eligibility requirements for advanced practice certification by national professional organizations and by the Mississippi Board of Nursing.

Purpose
The purposes of the master’s program are to: 1) prepare baccalaureate nurses for advanced practice and 2) provide a solid foundation for additional graduate study.

MASTER’S PROGRAM OUTCOMES

Background for Practice from Sciences and Humanities

Clinical Prevention and Population Health for Improving Health

Master’s Level Nursing Practice

1. Apply broad, organizational, patient-centered, ethical, and culturally responsive concepts into daily practice.
2. Demonstrate theoretical knowledge from nursing and other disciplines to advanced role practice in nursing for analysis of clinical problems, illness prevention and health promotion strategies.
3. Utilize quality processes to evaluate outcomes of aggregates and monitor trends in healthcare.

Organizational and Systems Leadership

Quality Improvement and Safety

4. Analyze the impact of systems on patient outcomes.
5. Demonstrate leadership in providing quality cost-effective care, with management of human, fiscal, and physical resources.

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
Translating and Integrating Scholarship into Practice
6. Apply translational research in the practice setting through problem identification, systematic inquiry, and continuous improvement processes.

Informatics and Healthcare Technologies
7. Utilize current technologies to deliver, enhance, and document care across multiple settings to achieve optimal outcomes.

Health Policy and Advocacy
8. Articulate change within organizational structures of various health care delivery systems to impact policy, financing and access to quality health care.

Interprofessional Collaboration for Improving Patient and Population Health Outcomes
9. Lead and coordinate interdisciplinary teams across care environments to reduce barriers, facilitate access to care and improve health outcomes.

APPLICATION PROCEDURE
All correspondence regarding admission should be addressed to the Office of Student Records and Registrar, The University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505. A nonrefundable application fee of $25 must accompany each application. All transcripts and documents submitted in support of an application become the property of the University of Mississippi Medical Center and cannot be returned or forwarded to another school or individual. Applications are accepted beginning July 1 of the year prior to the desired year of enrollment and continue until the deadline for the particular term of attendance. Applicants who are enrolled in the final semester of a baccalaureate nursing program may be considered.

ADMISSION CRITERIA
Admission to the master’s program is based on evaluation of the following by the Graduate Admission and Progression Committee.

1. A complete application;
2. Baccalaureate degree in nursing from an institution accredited by one of the regional accrediting bodies, that holds professional accreditation by CCNE or ACEN, and which included upper division theory and clinical practice courses in nursing;
3. A cumulative GPA of 3.0 or higher on a 4.0 scale;
4. Undergraduate or graduate level statistics course;
5. Clinical experience as a registered nurse for one year in intensive care is required only for the Adult – Gerontology Acute Care Nurse Practitioner track;
6. Evidence of current unrestricted licensure (RN) to practice in the United States and eligibility for licensure in Mississippi; and/or privilege to practice in a state in which the student will have clinical practice;
7. Satisfactory scores on the GRE, including a score of 3.5 or higher on the analytical section;
8. Official transcripts from all schools attended;
9. Graduates of foreign schools whose academic language is not English: The Test of English as a Foreign Language (TOEFL) exam is required to demonstrate competence in written and spoken English;
10. Pre-admission counseling, (completed after the application is reviewed by the graduate admission and progression committee).

In unusual instances, the Graduate Admission and Progression Committee may consider applicants who do not meet the admission criteria. The School of Nursing reserves the right to offer programs based upon the number of acceptable applicants admitted. When a program is not offered due to limited enrollment, the applicant will be notified and other admission options will be explored.

Residence
Depending upon the MSN track, a minimum of one academic year of course work with continuous residence is required. The total number of hours must be equivalent to a full-time plan of study for two or three semesters.

Time Limit for Degree Requirements
All requirements for the MSN degree must be completed within a six-year time span.

SUGGESTED PLANS OF STUDY
ADULT- GERONTOLOGY NURSE PRACTITIONER (primary care)
The Adult-Gerontology Nurse Practitioner track provides graduate students and/or currently practicing advanced practice nurses with specialization in the care of adults and older adults. The curriculum prepares the student to: 1) integrate the principles of aging, health, and specialized advanced practice nursing into evidence-based clinical management of adults, their families and communities of diverse cultures in rural settings; 2) demonstrate comprehensive assessments, planning and interventions with the complex health care problems of adults and older adults and their caregivers in a variety of rural health care settings; and 3) use critical thinking and decision-making skills in evidence-based clinical management of wellness, prevention, maintenance, common symptoms and syndromes, and common illnesses affecting adults and older adults and their families in rural settings. The clinical component consists of a minimum of 630 hours of guided experience in select areas under the mentorship of an advanced practice nurse or a physician.
## PLAN OF STUDY

### FALL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N632</td>
<td>Discipline of Nursing</td>
<td>2</td>
</tr>
<tr>
<td>N677</td>
<td>Advanced Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td>N652-1</td>
<td>Finance and Leadership in Health Care Systems</td>
<td>3</td>
</tr>
<tr>
<td>N610-2</td>
<td>Reproductive Health for Adult Practitioners</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

### SPRING

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N637</td>
<td>Advanced Physiology/Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>N633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
<td>2</td>
</tr>
<tr>
<td>N666</td>
<td>Clinical Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

### SUMMER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N627-4</td>
<td>Clinical Management of Adults and Older Adults I</td>
<td>2</td>
</tr>
<tr>
<td>N628-4</td>
<td>Practicum in Clinical Management of Adults and Older Adults I (180 clinical hours)</td>
<td>4</td>
</tr>
<tr>
<td>N617</td>
<td>Informatics and Health Care Technology</td>
<td>1</td>
</tr>
<tr>
<td>ID630</td>
<td>Health Care Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

### FALL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N669</td>
<td>Role Development and Role Enactment for Advanced Role Practice in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>N627-5</td>
<td>Clinical Management of Adults and Older Adults II</td>
<td>3</td>
</tr>
<tr>
<td>N628-5</td>
<td>Practicum in Clinical Management of Adults and Older Adults II (180 clinical hours)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

### SPRING

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N607-1</td>
<td>Health Policy and Population Health</td>
<td>2</td>
</tr>
<tr>
<td>N627-6</td>
<td>Clinical Management of Adults and Older Adults III</td>
<td>2</td>
</tr>
<tr>
<td>N628-6</td>
<td>Practicum in Clinical Management of Adults and Older Adults III (270 clinical hours)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

**Total Hours** 48

---

## FAMILY NURSE PRACTITIONER

The Family Nurse Practitioner track is designed to prepare nurses to deliver primary health care to adults and families. The didactic curriculum provides students with advanced knowledge and skills in biophysiological science, pharmacotherapeutics, primary care concepts, advanced assessments and diagnostic skills as a basis for clinical practice. The clinical component consists of a minimum of 630 hours of guided experience under the mentorship of an advanced practice nurse or a physician. Plans of study are designed by faculty with individual consideration given to students’ goals and geographic locations.

### PLAN OF STUDY

#### FALL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N632</td>
<td>Discipline of Nursing</td>
<td>2</td>
</tr>
<tr>
<td>N677</td>
<td>Advanced Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td>N610</td>
<td>Reproductive Health for Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

#### SPRING

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N637</td>
<td>Advanced Physiology/Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>N633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
<td>2</td>
</tr>
<tr>
<td>N612</td>
<td>Therapeutic Management of the Pediatric Client</td>
<td>2</td>
</tr>
<tr>
<td>N685-1</td>
<td>Practicum in Primary Care I (90 clinical hours)</td>
<td>2</td>
</tr>
<tr>
<td>N666</td>
<td>Clinical Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

#### SUMMER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N682-1</td>
<td>Therapeutic Management in Primary Care I</td>
<td>2</td>
</tr>
<tr>
<td>N685-2</td>
<td>Practicum in Primary Care II (135 clinical hours)</td>
<td>3</td>
</tr>
<tr>
<td>ID630</td>
<td>Health Care Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td>N617</td>
<td>Informatics and Health Care Technology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

#### FALL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N682-2</td>
<td>Therapeutic Management in Primary Care II</td>
<td>2</td>
</tr>
<tr>
<td>N685-3</td>
<td>Practicum in Primary Care III (180 clinical hours)</td>
<td>4</td>
</tr>
</tbody>
</table>
ADULT–GERONTOLOGY ACUTE CARE NURSE PRACTITIONER

The Adult-Gerontology Acute Care Nurse Practitioner track is designed to prepare nurses to deliver acute and/or critical care to adult and older adult clients in a variety of settings. The didactic curriculum will provide students with advanced knowledge and skills in biophysiological science, pharmacotherapeutics, acute and/or critical care concepts, advanced assessments and diagnostic skills as a basis for clinical practice. The clinical component consists of a minimum of 630 hours of guided experience in select areas under the mentorship of an advanced practice nurse or a physician. Plans of study are designed by faculty with individual consideration given to students’ goals and geographic locations.

PLAN OF STUDY

FALL

<table>
<thead>
<tr>
<th>COURSE</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N677</td>
<td>Advanced Health Assessment</td>
</tr>
<tr>
<td>N652-1</td>
<td>Finance and Leadership in Health Care Systems</td>
</tr>
<tr>
<td>N632</td>
<td>Discipline of Nursing</td>
</tr>
<tr>
<td>N600</td>
<td>Application and Interpretation of Adult-Gerontology Acute Care Diagnostic Modalities</td>
</tr>
</tbody>
</table>

SPRING

<table>
<thead>
<tr>
<th>COURSE</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N601-1</td>
<td>Practicum in Adult-Gerontology Acute Care Nurse Practitioner I (Clinical 45 hours)</td>
</tr>
<tr>
<td>N666</td>
<td>Clinical Pharmacotherapeutics</td>
</tr>
<tr>
<td>N637</td>
<td>Advanced Physiology/Pathophysiology</td>
</tr>
<tr>
<td>N633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
</tr>
</tbody>
</table>

SUMMER

<table>
<thead>
<tr>
<th>COURSE</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N601-2</td>
<td>Practicum in Adult-Gerontology Acute Care Nurse Practitioner II (Clinical 135 hours)</td>
</tr>
<tr>
<td>ID630</td>
<td>Health Care Quality Improvement</td>
</tr>
<tr>
<td>N617</td>
<td>Informatics and Health Care Technology</td>
</tr>
<tr>
<td>N605-1</td>
<td>Adult-Gerontology Acute Care Assessment, Management &amp; Evaluation I</td>
</tr>
</tbody>
</table>

FALL

<table>
<thead>
<tr>
<th>COURSE</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N601-3</td>
<td>Practicum in Adult-Gerontology Acute Care Nurse Practitioner III (Clinical 225 hours)</td>
</tr>
<tr>
<td>N605-2</td>
<td>Adult-Gerontology Acute Care Assessment, Management &amp; Evaluation II</td>
</tr>
<tr>
<td>N669</td>
<td>Role Development and Role Enactment for Advanced Role Practice in Nursing</td>
</tr>
</tbody>
</table>

SPRING

<table>
<thead>
<tr>
<th>COURSE</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N607-1</td>
<td>Health Policy and Population Health</td>
</tr>
<tr>
<td>N601-4</td>
<td>Practicum in Adult-Gerontology Acute Care Nurse Practitioner IV (Clinical 225 hours)</td>
</tr>
</tbody>
</table>

Total Hours: 45

NEONATAL NURSE PRACTITIONER

The Neonatal Nurse Practitioner (NNP) is prepared to deliver comprehensive care to pre-term and full-term infants. The curriculum emphasizes advanced nursing care of newborns and infants from birth through the first two years of life. The spectrum of health from promotion of wellness to management of acute and chronic illness in a variety of settings is incorporated into the program. The clinical component consists of a minimum of 630 hours of guided experience in select settings under the mentorship of an advanced practice nurse or a physician.

PLAN OF STUDY

FALL

<table>
<thead>
<tr>
<th>COURSE</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N632</td>
<td>Discipline of Nursing</td>
</tr>
<tr>
<td>N633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
</tr>
<tr>
<td>N652-1</td>
<td>Finance and Leadership in Health Care Systems</td>
</tr>
<tr>
<td>N677</td>
<td>Advanced Health Assessment</td>
</tr>
</tbody>
</table>

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
SPRING
N637  Advanced Physiology/Pathophysiology  3
N666  Clinical Pharmacotherapeutics  3
N618  Focus on Advanced Nursing Practice Specialization – Neonatal  2

SUMMER
N617  Informatics and Health Care Technology  1
ID630  Health Care Quality Improvement  3
N629-1  Advanced Neonatal Nursing I  3
N634-1  Practicum I – Neonatal Nurse Practitioner I (90 clinical hours)  2

FALL
N669  Role Development and Role Enactment for Advanced Role Practice in Nursing  3
N629-2  Advanced Neonatal Nursing II  4
N634-2  Practicum II – Neonatal Nurse Practitioner II (135 clinical hours)  3

SPRING
N607-1  Health Policy and Population Health  2
N629-3  Advanced Neonatal Nursing III  4
N634-3  Practicum III – Neonatal Nurse Practitioner III (135 clinical hours)  3

SUMMER
N634-4  Residency Program (270 clinical hours)  7

Total Hours 53

PRIMARY/ACUTE CARE PEDIATRIC NURSE PRACTITIONER (DUAL ROLE)

The dual role Primary/Acute Care Pediatric Nurse Practitioner is prepared to provide advanced care in both primary and acute care settings. The curriculum emphasizes advanced nursing care of infants, children and adolescents with acute and complex health disorders. The spectrum of health from promotion of wellness to management of acute and chronic illness in a variety of settings is incorporated into the program. The clinical component consists of a minimum of 900 hours of guided experience in select settings under the mentorship of an advanced practice nurse or a physician.

PLAN OF STUDY

FALL
N632  Discipline of Nursing  2
N633  Research Design and Methods for Advanced Nursing Practice  2
N652-1  Finance and Leadership in Health Care Systems  3
N677  Advanced Health Assessment  3
N660  Focus on Advanced Nursing Practice Specialization – Pediatrics  2

SPRING
N637  Advanced Physiology/Pathophysiology  3
N666  Clinical Pharmacotherapeutics  3
N612  Therapeutic Management of the Pediatric Client  2
N661-1  Practicum for Pediatrics I (90 clinical hours, primary care)  2

SUMMER
N617  Informatics and Health Care Technology  1
ID630  Health Care Quality Improvement  3
N612-2  Therapeutic Management of the Pediatric Client II (acute care)  2
N661-2  Practicum for Pediatrics II (180 clinical hours)  4

FALL
N669  Role Development and Role Enactment for Advanced Role Practice in Nursing  3
N612-3  Therapeutic Management of the Pediatric Client III (chronic care)  3
N661-3  Practicum for Pediatrics III (180 clinical hours)  4
FAMILY PSYCHIATRIC MENTAL HEALTH NURSE PRACTITIONER

The Family Psychiatric Mental Health Nurse Practitioner (PMHNP) is prepared to provide advanced mental health care. The curriculum assists students to develop skills for independent and interdependent decision-making and direct accountability for clinical judgment. The required skills include comprehensive physical and mental health assessment, diagnosis and psychotherapeutic and pharmacological interventions. The graduate will be able to participate in and use research, help to develop and implement health policy, be able to implement educational programs and to provide case management and consultation in his/her area of expertise.

PLAN OF STUDY

FALL
N632 Discipliue of Nursing 2
N652-1 Finance and Leadership in Health Care Systems 3
N677 Advanced Health Assessment 3

SPRING
N637 Advanced Physiology/Pathophysiology 3
N633 Research Design and Methods for Advanced Nursing Practice 2
N666 Clinical Pharmacotherapeutics 3

SUMMER
N686-1 Practicum in Clinical Assessment of Persons with Mental Health Problems I - Family (180 clinical hours) 4
N687-1 Clinical Assessment of Persons with Mental Health Problems I – Family 2
N617 Informatics and Health Care Technology 1
ID630 Health Care Quality Improvement 3

FALL
N669 Role Development and Role Enactment for Advanced Role Practice in Nursing 3
N687-2 Clinical Management of Individuals with Mental Health Problems II – Family 3
N686-2 Practicum in Clinical Management of Individuals with Mental Health Problems II – Family (180 clinical hours) 4

SPRING
N607-1 Health Policy and Population Health 2
N687-3 Clinical Management of Families and Groups with Mental Health Problems III 2
N686-3 Practicum in Clinical Management of Families and Groups with Mental Health Problems III – (270 clinical hours) 6

Total Hours 46

NURSE EDUCATOR

A nurse prepared at the master’s level in the Nurse Educator track is able to serve important functions as an expert health agency educator and as a faculty member in a nursing education program. To achieve this goal, the Nurse Educator track provides the graduate learner with the knowledge, skills and abilities of specialty nursing practice. The Nurse Educator curriculum provides the learner with a foundation to pursue doctoral education. All track-specific courses are offered online. Others are online or hybrid courses.

PLAN OF STUDY

FALL
N677 Advanced Health Assessment 3
N632 Discipline of Nursing 2
N652-1 Finance and Leadership in Health Care Systems 3
N613 Foundations of Nurse Educator Role and Teaching Methods 3
SPRING
N637  Advanced Physiology/Pathophysiology  3
N614-1  Nurse Educator Practicum I (90 clinical hours)  2
N666  Clinical Pharmacotherapeutics  3
N607-1  Health Policy and Population Health  2
N633  Research Design and Methods for Advanced Nursing Practice  2

SUMMER
N615-1  Educational Technology and Health Care Informatics  3
ID630  Health Care Quality Improvement  3
N620-1  Direct Care Role of the Nurse Educator Practicum II (90 clinical hours)  2

FALL
N616-1  Curriculum and Program Development and Evaluation  3
N625  Nurse Educator Practicum III (180 clinical hours)  4

Total Hours  12

SPRING
N641  Fiscal and Operations Management  3
N607-1  Health Policy and Population Health  2
N633  Research Design and Methods for Advanced Nursing Practice  2

SUMMER
ID630  Health Care Quality Improvement  3
N646  Organizational Leadership and Communication  3
N640  Project Management (or another approved elective)  3

FALL
N659  Residency in the Nursing and Health Care Administrator Role (525 clinical hours)  7
N696  Directed Study in Management Research  3

Total Hours  18

NURSING AND HEALTH CARE ADMINISTRATOR
The Nursing and Health Care Administrator track provides a comprehensive study of concepts, theories and research for effective management of health care systems. Students immerse themselves in courses that provide experiential learning in finance, management, organization administration, policy and strategic management. The program culminates in a full-time-equivalent residency in which students integrate practice, theory and research with a senior administrator in health care. The plan of study is flexible and can be adapted to student needs during the year. The residency and accompanying directed study are the final components of the program, and the student may enroll in these during spring, summer or fall terms. Part-time and full-time plans of study are available.

PLAN OF STUDY
FALL  SEMESTER HOURS
N632  Discipline of Nursing  2
N644  Human Resource Management  3
N658  Strategic Management  3
N652-1  Finance and Leadership in Health Care Systems  3

SPRING
N616  Fiscal and Operations Management  3
N607-1  Health Policy and Population Health  2
N633  Research Design and Methods for Advanced Nursing Practice  2

SUMMER
ID630  Health Care Quality Improvement  3
N646  Organizational Leadership and Communication  3
N640  Project Management (or another approved elective)  3

FALL
N659  Residency in the Nursing and Health Care Administrator Role (525 clinical hours)  7
N696  Directed Study in Management Research  3

Total Hours  38

COURSE DESCRIPTIONS\(^1\) (500-and 600-level courses)
\(^1\)Courses of instruction and hours are subject to change. The School of Nursing reserves the right not to offer some courses because of low enrollment.

The School of Nursing employs a numerical grading system for most courses. Online courses meet synchronously or asynchronously and may require attendance at proctored examination or lab experiences. Hybrid courses require the student to be on campus up to four times during the semester.

N 521-1. Concepts of Professional Nursing Practice. This bridge course between basic nursing education and advanced practice nursing education examines the professional roles of provider of care, designer/manager/coordinator of care and member of the profession. Within these roles, specific role components inherent to professional nursing practice are explored. This course provides
students’ opportunity to master writing skills and to analyze professional writings to allow them to address relevant issues within today’s health care delivery system. This online course is delivered utilizing asynchronous distance learning modalities. (Lecture) (4 semester hours)

N 524. Portal to Advanced Physiology/Pathophysiology. This course provides an introduction to advanced physiology and pathophysiology. It facilitates seamless transition for the RN-MSN student into the master’s level Advanced Physiology/Pathophysiology. Course content includes an introduction to cell biology and genetics with a focus on application of the content to disease processes. Specific cellular and molecular mechanisms underlying the pathophysiological processes of diseases in all body systems will be highlighted. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (2 semester hours)

N 526. Portal to Advanced Health Assessment. This course provides an introduction to advanced health assessment. This intensive 15-clock-hour didactic course facilitates seamless transition for the associate degree nurse into the master’s level course Advanced Health Assessment. Course content focuses on an overview of the client interviewing skills with a focus on the principles of clinical observation and communication. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (1 semester hour)

N 527. Health Promotion in Populations. The course focuses on understanding the forces shaping community and global health patterns and the impact of these global processes on societies. Students will review strategies to assess, plan, implement and evaluate population-focused programs for health promotion and disease prevention of individuals, families, groups, communities and populations. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (2 semester hours)

N 528. Leadership & Management. This course describes the functions and roles of management and leadership in professional nursing. Decision-making, communication, motivation changes, theories, managed care and leadership strategies are presented and discussed to enhance the development of a beginning nurse manager. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

N 531-1. Health Information Technology & Patient Safety. This course provides a comprehensive introduction to the use of health information technology, patient safety and health care quality improvement. Emphasis is placed on technology-based health applications that enhance the efficacy of the nursing process as well as the role of the nurse in improving the quality of health care through designing, implementing and evaluating evidence-based patient safety interventions and strategies. Confidentiality, ethical and legal issues related to the use of electronic health records will be considered. This online course is delivered utilizing asynchronous distance learning modalities. (Lecture) (3 semester hours)

N 533. Portal to Research Design & Methods. This course provides an introduction to research facilitating seamless transition for the RN to MSN students into the master’s level course Research Design and Methods for Advanced Nursing Practice. Course content focuses on beginning skills and approaches to reading and evaluating research studies. This online course is delivered utilizing asynchronous distance learning modalities. (Lecture) (1 semester hour)

N 538. Health Care Leadership & Collaboration. This course describes the functions and roles of management and leadership in professional nursing. Decision-making, communication, motivation changes, theories, managed care and legal/ethical issues are presented and discussed to enhance the development of a beginning nurse manager. (Theory) This online course is delivered utilizing asynchronous distance learning modalities. (Lecture) (3 semester hours)

N 540. Portal to Fiscal & Operations Management. In this course, students are introduced to fiscal and operations management. Students will learn about operations management as a business function, the transformation process, key trends impacting health care organizations, key strategies for managing cost and the potential impact of fiscal and operations management on the patient experience. This online course is delivered utilizing asynchronous distance learning modalities. (Lecture) (1 semester hour)

N 545. Portal to Organizational Leadership & Communication. This course is designed to increase the student’s knowledge and application of organizational principles and communication models. This intense portal will introduce the student to application of systems thinking framework in analyzing organizational structure, culture and communication framework and the impact of these elements on organizational outcomes. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (2 semester hours)

N 600. Application & Interpretation of Adult Gero Acute Care Diagnostic Modalities. This course provides the theoretical basis for the application and interpretation of diagnostic modalities used in management of the acute care patient. Emphasis is placed on selected laboratory and radiology studies and interpretation of electrocardiogram and pulmonary function tests. (Lecture) (2 semester hours)

N 601-1. Practicum in Adult Gero Acute Care NP I. This supervised 45-hour clinical practice course offered in a variety of settings allows the student the opportunity to integrate and practice advanced health assessment, diagnostic reasoning and decision-making for the collaborative management of patients with selected acute health problems, such as cardiovascular disorders, diabetes, renal diseases, respiratory alterations, etc. Students are precepted by physicians/nurse practitioners under the direction of faculty. (Clinical Rotation) (1 semester hour)

N 601-2. Practicum in Adult Gero Acute Care NP II. This supervised 135-hour clinical practice in specialized settings allows the student the opportunity to integrate and practice advanced health assessment, diagnostic reasoning and decision-making for the collaborative management of adult gerontology clients with complex critical health problems. The student selects a clinical area of specialization and, through a learning contract developed with faculty, achieves the course objectives. Students are precepted by physicians/nurse practitioners under the direction of faculty.
practitioners under the direction of the course faculty. (Clinical Rotation) (1-3 semester hours)

N 601-3. Practicum in Adult Gero Acute Care NP III. This supervised 225-hour clinical practice in critical care settings allows students the opportunity to integrate and practice advanced health assessment, diagnostic reasoning and decision-making, for the collaborative management of patients with complex critical health problems, such as multisystem failure, cardiac and/or respiratory failure, brain attack or renal failure. The utilization of advanced technology as a diagnostic and management tool is emphasized. Students are precepted by physicians/acute care nurse practitioners under the direction of faculty. Settings include coronary care units, surgical intensive care units, emergency departments, etc. (Clinical Rotation) (5 semester hours)

N 601-4. Practicum in Adult Gero Acute Care NP IV. This supervised 225-hour clinical practice in acute/ critical care allows students the opportunity to refine and evaluate nursing management of patients with complex health problems. The focus of the clinical is to perfect their clinical skills, including diagnostic reasoning and decision-making. This, along with the clinical seminar IV, is the capstone experience for this role practice. Students are precepted by physicians/acute care nurse practitioners under the direction of faculty. Settings include coronary care units, surgical intensive care units, neurology intensive care units, emergency department, etc. (Clinical Rotation) (5 semester hours)

N 605-1. Adult Gero Acute Care Assessment Management & Evaluation I. This course provides the theoretical basis for advanced assessment, diagnosis, reasoning and decision-making for the collaborative management and evaluation for advanced nursing practice. Focus will be on the collaborative management of clients with acute health problems, such as diabetes, hypertension, acute renal failure, pulmonary diseases, endocrine problems, neurological disorders, etc. (Lecture) (2 semester hours)

N 605-2. Adult Gero Acute Care Assessment Management & Evaluation II. This course provides the theoretical basis for assessment, diagnosis reasoning and decision-making in the collaborative management for advanced nursing practice. Focus will be on the collaborative management and evaluation of clients with complex acute health problems, such as acute respiratory failure, heart failure, brain attack, post-surgical complications, pre-, intra- and post-partum complications, etc. (Lecture) (2 semester hours)

N 607-1. Health Policy & Population Health. This is a role support course to explore and analyze interrelations of societal values and issues, political process, politics and development of health policy and its impact on population health. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (2 semester hours)

N 610. Reproductive Health for Advanced Practitioners. This didactic course provides the theoretical basis for assessing and managing health care patterns in women for advanced role practice in nursing as a nurse practitioner. Emphasis is placed on health promotion, screening, prevention of illness and management of obstetric care and of problems common in the health care of women. (Lecture) (3 semester hours)

N 610-2. Reproductive Health for Adult Nurse Practitioners. This didactic course provides the theoretical basis for assessing and managing reproductive health care patterns in men and women for advanced role practice in nursing as an adult nurse practitioner. Emphasis is placed on health promotion, screening, prevention of illness and management of problems common in the reproductive health care of men and women. (Lecture) (2 semester hours)

N 610-3. Childbearing Health Care for the Advanced Nurse Practitioner. This didactic course provides the theoretical basis for assessing and managing childbearing conditions in women for advanced role practice in nursing. Emphasis is placed on health promotion, screening, prevention of illness and management of problems common in the childbearing phases of a woman’s life including preconception, prenatal and post-partum care. (Lecture) (1 semester hour)

N 612. Therapeutic Management of the Pediatric Client. This course provides a foundation and clinical application of the care of clients from birth through adolescence. Topics will include well child management in addition to management of selected illnesses common to this age group. Family theory and its relationship to health care management will be explored. (Lecture/Lab) (2 semester hours)

N 612-2. Therapeutic Management of the Pediatric Client II. This role support course provides the theoretical basis for advanced assessment, diagnostic reasoning and collaborative management of pediatric health problems in the pediatric acute care setting as a pediatric nurse clinician. Emphasis is placed on the collaborative management of pediatric clients with acute health problems. (Lecture) (2 semester hours)

N 612-3. Therapeutic Management of the Pediatric Client III. This role support course provides the theoretical basis for advanced assessment, diagnostic reasoning and collaborative management of pediatric health problems in the pediatric chronic care setting as a pediatric nurse clinician. Emphasis is placed on the collaborative management of pediatric clients with chronic health problems. (Lecture) (2 semester hours)

N 612-4. Therapeutic Management of the Pediatric Client IV. This role support course provides the theoretical basis for advanced assessment, diagnostic reasoning and collaborative management of pediatric health problems in the pediatric critical care setting as a pediatric nurse clinician. Emphasis is placed on the collaborative management of pediatric clients with critical health problems. (Lecture) (2 semester hours)

N 613. Foundations of Nurse Educator Role & Teaching Methods. This role support course encourages the educator student to use critical thinking, creativity, and research outcomes to develop expertise in the design and delivery of instructional strategies. Learning theories as well as other selected principles and theories associated with the educator role are emphasized. The roles of the nurse educator as scholar, collaborator and educator are explored. (Lecture) (1-3 semester hours)

N 614-1. Nurse Educator Practicum I. This course is the first of three practice courses that gives the graduate learner an opportunity to develop and practice advanced skills in teaching and communication in academic, hospital or community environments with an emphasis in the academic setting. The graduate learner will apply theoretical knowledge in the delivery of nursing education to
individuals, groups, families and communities. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (90 clinical hours) (Practicum/Internship) (2 semester hours)

N 615-1. Educational Technology & Health Care Informatics. This course provides an overview of current technologies used for instructional design, delivery and evaluation in nursing education and technologies used to deliver, enhance, integrate and coordinate patient care. Opportunities for using and evaluating current nursing education and health care technologies are incorporated in the course. Principles of data management for provision of evidence-based care and health education are explored along with the use of electronic health records to improve patient care. (Lecture) (3 semester hours)

N 616-1. Curriculum & Program Development & Evaluation. This role support course facilitates the application of nursing and educational theories, concepts and models in the design and evaluation of nursing curricula and programs. Societal influences and acquisition of new knowledge in nursing and related disciplines are analyzed in relation to curriculum and program development and evaluation in nursing. This course provides the student an opportunity to design data collection and analysis strategies used in evaluation processes. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

N 617. Informatics & Health Care Technology. This course provides an overview of the use of technologies to deliver, enhance, integrate, and coordinate care; data management to analyze and improve outcomes of care; health information management for evidence-based care and health education; and facilitation and use of electronic health records to improve patient care. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (1 semester hour)

N 618. Focus on Advanced Nursing Practice Specialist (Neonatal). This didactic course will provide a thorough understanding of the pathophysiology and care technologies used for comprehensive neonatal assessment, including prenatal care, newborn assessment, acuity classification and management of common neonatal syndromes and complications. The structural and functional development of body systems, methods of data collection and analysis, and principles of evidence-based care are emphasized. A 180-hour practicum course is focused on advancement of the graduate learner's knowledge and ability to deliver evidence-based care to neonates. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (2 semester hours)

N 620-1. Direct Care Role of the Nurse Educator (Prac II). This course is the second of three courses that gives the graduate learner an opportunity to implement, evaluate and plan the delivery of educational content to individuals, groups and communities. The emphasis is on teaching practice in hospital settings with multiple delivery modalities and measuring outcomes of planned instructional strategies in the practice setting. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (90 clinical hours) (Practicum/Internship) (2 semester hours)

N 625. Nurse Educator Practicum III. This capstone practicum provides the graduate learner opportunities to implement the nurse educator role components of teacher, scholar and collaborator with a preceptor in a selected educational setting. Opportunities are provided to utilize theoretical knowledge of evaluation processes to critically examine curriculum and program components and learning outcomes. Self-assessment and strategies for transition to the educator role are incorporated. The emphasis is on teaching practice in multiple settings with multiple delivery modalities. (180 clinical hours) (Clinical Rotation) (4 semester hours)

N 627-4. Clinical Management of Adults & Older Adults I. This course is focused on the principles of adult health, advanced clinical assessments of adults and older adults of diverse cultures, issues in the care of adults and older adults with emphasis on wellness, prevention, health maintenance and early health care interventions. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (2 semester hours)

N 627-5. Clinical Management of Adults & Older Adults II. This course is focused on the diagnosis and treatment of acute and chronic illnesses, common geriatric syndromes, and complex health problems of adults and older adults of diverse cultures, including frail and demented older adults in rural settings. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

N 627-6. Clinical Management of Adults & Older Adults III. This course is focused on synthesis of theory into evidence-based gerontological advanced nursing practice with adults and older adults and their families of diverse culture, integration of NP roles and professional practice in selected rural health care systems. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (2 semester hours)

N 628-4. Practicum in Clinical Management of Adults & Older Adults I. This 180-hour practicum course is focused on advanced clinical assessments of adults and older adults from diverse cultures, with emphasis on wellness, prevention, maintenance and early interventions in rural health care settings. (Clinical Rotation) (3-4 semester hours)

N 628-5. Practicum in Clinical Management of Adults & Older Adults II. This 180-hour practicum course is focused on the diagnosis and treatment of acute and chronic illnesses, common geriatric syndromes and complex health problems of adults and older adults of diverse cultures, with emphasis on advanced health care interventions with frail and demented adults and older adults in rural health care settings. (Clinical Rotation) (2-4 semester hours)

N 628-6. Practicum in Clinical Management of Adults & Older Adults III. This 270-hour practicum course is focused on synthesis of theory into evidence-based advanced nursing practice with adults and older adults and their families of diverse cultures, integration of AGNP roles and practice management in selected rural health care systems. (Clinical Rotation) (4-6 semester hours)

N 629-1. Advanced Neonatal Nursing I. This didactic course addresses the complete neonatal assessment process, including prenatal thorough neonatal history and neonatal physical examination. Neonatal pharmacology, common neonatal diagnostic and laboratory testing and invasive procedures are also examined as well as family function, dynamics, crisis theory and the grieving process are surveyed. (Lecture) (3 semester hours)

N 629-2. Advanced Neonatal Nursing II. This didactic course will provide a thorough understanding of the pathophysiology and management of common disease processes in the neonatal (preterm and term infants). This course will focus on the cardiovascular, pulmonary, gastrointestinal/nutrition, renal/genitourinary and hematologic systems as well as fluid and electrolytes. Furthermore,
this course will assist in developing the role of the neonatal nurse practitioner in the neonatal intensive care nursery (NICU), especially in emergency situations. (Lecture) (4 semester hours)

N 629-3. Advanced Neonatal Nursing III. This didactic course will provide a thorough understanding of the pathophysiology and management of common disease processes in the neonate (preterm and full-term infants). This course will focus on the endocrine and metabolic, immune, neurobehavioral, musculoskeletal, eyes/ears/nose/throat and dermatologic systems. Furthermore, this course will include discharge planning and follow-up care for the high-risk neonate. (Lecture) (4 semester hours)

N 632. Discipline of Nursing. This core course involves the study of knowledge shared among members of the discipline, the patterns of knowing and knowledge development, criteria for evaluating knowledge claims, and philosophy of science. The course is aimed at enabling graduate students to become knowledgeable about approaches to the study of disciplines and scientific knowledge development. The inter-relationship between theory, research and practice is examined through discussions and critique of selected theories relevant for nursing. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (2 semester hours)

N 633. Research Design & Methods for Advanced Nursing Practice. This core course is focused on understanding and using research designs and methods to support clinical practice. It provides the knowledge base for research problem identification, the ethical conduct of research, synthesis of research literature, critical analysis of research design, methods and data analysis for utilization in practice. In this course, students will identify practice questions for scholarly projects in role-specific courses. (Lecture) (2 semester hours)

N 634-1. Practicum I: Neonatal Nurse Practitioner. This clinical role support course provides the theoretical basis for advanced assessment, diagnostic reasoning and collaborative management of pediatric health problems in the neonatal health care setting as a neonatal nurse practitioner. (Clinical Rotation) (2 semester hours)

N 634-2. Practicum II: Neonatal Nurse Practitioner. This second clinical role support course will continue to provide the theoretical basis for advanced assessment, diagnostic reasoning and collaborative management of specific health problems in the neonatal health care setting as a neonatal nurse practitioner. Focus of care on the neonates will be related to the cardiovascular, pulmonary, gastrointestinal/nutrition, renal/genitourinary and hematologic systems as well as emergency situations that arise in the neonate. (Clinical Rotation) (3 semester hours)

N 634-3. Practicum III: Neonatal Nurse Practitioner. This third clinical role support course will continue to provide the theoretical basis for advanced assessment, diagnostic reasoning and collaborative management of specific health problems in the neonatal health care setting as a neonatal nurse practitioner. Focus of care on the neonates will be related to the endocrine/metabolic, immune, neurobehavioral, musculoskeletal, eyes/ears/nose/throat and dermatologic systems that arise in the neonate as well as discharge planning and follow-up care for the high-risk neonate and family. (Clinical Rotation) (3 semester hours)

N 634-4. Residency Program. This final course provides concentrated clinical experiences as students synthesize theory, knowledge and skills from previous courses within the neonatal nurse practitioner scope of practice. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis and problem management with select client groups in collaboration with preceptors and other health care professionals in the critical care setting to further develop expertise relevant to the assessment and management of groups of neonates and infants through age 2. (Practicum/Internship) (1-7 semester hours)

N 637. Advanced Physiology/Pathophysiology. This course provides the graduate student with an understanding of human physiological and pathophysiological processes. A human body systems approach will be used in the presentation of physiologic concepts and adaptations and alterations which occur in selected disease states across the life span. This course will build a foundation essential for planning and evaluating health care and health care outcomes and serves as a basis for understanding the rationale for assessment and intervention that is taught in the advanced nursing courses. This online course is delivered through synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

N 640. Project Management. In this course, students learn the principles and fundamentals of project management necessary to achieve objectives in health care organizations. Special emphasis will be placed on the application of leadership skills, overcoming objections, achieving buy-in, conflict management, negotiation skills and working with diverse groups of individuals. Through case studies and various exercises, students will use tools and techniques to gain experience in single and multi-project management. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

N 641. Fiscal and Operations Management. Students learn how effective operations management is essential to achieving a favorable patient care experience and the financial health of an organization. Using quantitative and qualitative measures, students will study how to reduce cost and improve quality related to the conversion of resources into desired health care services and products. This online course is delivered through synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

N 644. Human Resource Management. This role support course is designed to increase students’ knowledge and application of concepts, theories and models of human resource management. Emphasis is on the analysis of structural and behavioral systems, human resources process systems and human resources outcomes. (Lecture) (3 semester hours)

N 646. Organizational Leadership & Communication. This course is designed to increase students’ knowledge and application of concepts, theories and models in communication for organizational leadership, problem-solving and decision-making. The course emphasizes communication as a tool for organizational effectiveness and leadership. The content focuses on self-awareness/knowledge, communication within complex adaptive systems, communicating for organizational effectiveness, facilitating difficult conversations and managing conflict. (Lecture) (3 semester hours)
N 652-1. Finanace & Leadership in Health Care Systems. This course is the introductory health care finance and leadership course for all MSN students. The course focuses broadly on leadership principles and their application at the micro and macro levels. This introduction to leadership is followed by the essential accounting and financial management principles and concepts relevant to management of health services organizations. (Lecture) (3 semester hours)

N 658. Strategic Management. This role support course is designed to provide the student with the opportunity to describe, analyze, and apply the strategic management process. Emphasis is placed on understanding and using tools and techniques such as SWOT analysis, matrix analysis, flow charts and performance measures to analyze a health care system. (Lecture) (3 semester hours)

N 659. Residency in Nursing & Health Care Administrator Role. The residency provides a structured field experience in an administrator role. The student will have an opportunity to apply theories, principles and techniques learned in the didactic portion of the program in a selected health system under the guidance of an experienced preceptor and faculty advisor. (75 clinical hours per semester hour - total 525 clinical hours) (Clinical Rotation) (1-7 semester hours)

N 660. Focus on Advanced Nursing Practice Spec (Peds). This didactic course provides a foundation for the role of pediatric nurse practitioners to survey the normal growth and development and expected developmental milestones of the pediatric client from conception through adolescence. This course will build a foundation essential for the assessment, planning and evaluation of the health in the pediatric clients as well as the assessment for pediatric clients. (Lecture) (2 semester hours)

N 661-1. Practicum for Pediatrics I. This course provides a foundation and clinical application of the care of clients from birth through adolescence in the primary care setting. Emphasis is placed on health promotion, screening, prevention of illness and management of selected client health problems in the pediatric client. (Clinical Rotation) (2 semester hours)

N 661-2. Practicum for Pediatrics II. This course provides opportunities for the graduate student to develop expertise in the role of the pediatric nurse practitioner in the acute care setting. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis and problem management with select client groups in collaboration with preceptors and other health care professionals. (Clinical Rotation) (4 semester hours)

N 661-3. Practicum for Pediatrics III. This course provides opportunities for the graduate student to develop expertise in the role of the pediatric nurse practitioner in the chronic care setting. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis and problem management with select client groups in collaboration with preceptors and other health care professionals. (Clinical Rotation) (4 semester hours)

N 661-4. Practicum for Pediatrics IV. This course provides opportunities for the graduate student to develop expertise in the role of the pediatric nurse practitioner in the critical care setting. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis and problem management with select client groups in collaboration with preceptors and other health care professionals. (Clinical Rotation) (4 semester hours)

N 661-5. Residency Program. This final clinical course provides concentrated clinical experiences in primary, acute, chronic and critical care settings to prepare for entry level functioning in the dual role of the acute/primary care nurse practitioner. This course will assist the pediatric nurse practitioner student to assume responsibility for the direct management and health care in these areas specific to this dual advanced nurse clinician role. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis and problem management with select client groups in collaboration with preceptors and other health care professionals. (Practicum/Internship) (1-7 semester hours)

N 666. Clinical Pharmacotherapeutics. This course provides a foundation and clinical application of pharmacotherapeutic interventions commonly prescribed for healthy and ill individuals across the life span. Emphasis is placed on pharmacokinetic and pharmacodynamic principles along with integration of the use of these products, including variations for selected special populations specific to the clinical track of study and client characteristics. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

N 669. Role Development & Enactment for Advanced Role Practice in Nursing. In this role course, enactment of advanced role practice in nursing is studied. Course will focus on the continued development of knowledge for role development and implementation. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

N 677. Advanced Health Assessment. This course focuses on the theoretical basis of performing a physical assessment on the individual throughout the life span. Students will acquire advanced knowledge and skills necessary to perform physical assessments. The emphasis is on mastering interviewing, history-taking and advanced physical assessment skills. (Lecture) (3 semester hours)

N 682-1. Therapeutic Management in Primary Care I. This role support course provides theoretical basis for assessing and managing client health patterns for advanced role practice in nursing as a nurse clinician. Emphasis is placed on health promotion, screening, prevention of illness and management of selected client health problems. (Lecture) (2 semester hours)

N 682-2. Therapeutic Management in Primary Care II. This role support course provides foundational knowledge for managing care of persons with altered health patterns relevant to advanced role practice as a nurse clinician. Altered health patterns are examined in relation to differential diagnosis, therapeutic agents and problem management. (Lecture) (2 semester hours)

N 682-3. Therapeutic Management in Primary Care III. This course focuses on the health issues and needs of older adults and principles for evaluating, managing and coordinating their care in a variety of settings. Emphasis is on the collaborative role of advanced practice nurses in assisting older adults and family caregivers from diverse ethnic and cultural backgrounds to negotiate health care delivery systems. (Lecture) (2 semester hours)
N 685-1. Practicum in Primary Care I. This course provides opportunities for the graduate student to develop expertise in the role of the family nurse practitioner. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis and problem management for the subset of women's health client groups in collaboration with preceptors and other health care professionals. (90 clinical hours) (Clinical Rotation) (1-2 semester hours)

N 685-2. Practicum in Primary Care II. This course provides opportunities for the graduate student to develop expertise in the role of family nurse practitioner. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis and problem management for the subset of pediatric client groups in collaboration with preceptors and other health care professionals. (135 clinical hours) (Clinical Rotation) (2-3 semester hours)

N 685-3. Practicum in Primary Care III. This course provides opportunities for the graduate student to develop expertise in the role of the family nurse practitioner. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis and problem management for the subset of primary care client groups in collaboration with preceptors and other health care professionals. (180 clinical hours) (Clinical Rotation) (2-4 semester hours)

N 685-4. Practicum in Primary Care IV. This course provides opportunities for the graduate student to develop expertise in the role of the family nurse practitioner. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis and problem management with select client groups in collaboration with preceptors and other health care professionals. (225 clinical hours) (Clinical Rotation) (3-5 semester hours)

N 686-1. Practicum in Clinical Assessment of Persons with Mental Health Problems I Fam. This 180-hour practicum course is focused on the application of theoretical concepts and assessment skills with persons of diverse cultures in rural health care settings experiencing or at risk for common mental health problems and major psychiatric disorders. (Clinical Rotation) (4 semester hours)

N 686-2. Practicum in Clinical Management of Individuals with Mental Health Problems II Fam. This 180-hour practicum course is focused on integration of theory and practice in assessment, diagnosis, intervention and documentation of individuals of diverse cultures in rural settings experiencing mental health problems, major psychiatric disorders and psychiatric complications of physical illnesses. (Clinical Rotation) (4 semester hours)

N 686-3. Practicum in Clinical Management of Families and Groups with Mental Health Problems III. This 270-hour practicum is focused on evidence-based psychoeducation, supportive therapy and psychotherapy with groups, couples and families of diverse cultures and on synthesis of clinical roles, practice management activities and strategies for complex mental health issues in rural health care settings. (Clinical Rotation) (6 semester hours)

N 687-1. Clinical Assessment of Persons with Mental Health Problems I - Family. This didactic course is focused on a theoretical basis for advanced psychiatric mental health nursing practice with persons of diverse cultures in rural settings experiencing or at risk for common mental health problems and major psychiatric disorders. Emphasis is on the mental health environment and advanced clinical processes, including communication strategies, psychiatric assessments, and diagnostic standards. (Lecture) (2 semester hours)

N 687-2. Clinical Management of Individuals with Mental Health Problems II - Family. This didactic course is focused on the advanced nursing practices of assessment, diagnosis, treatment planning, evaluation, and documentation of individuals of diverse cultures in rural settings experiencing common mental health problems, major psychiatric disorders, and psychiatric complications of physical illnesses. (Lecture) (3 semester hours)

N 687-3. Clinical Management of Families & Groups with Mental Health Problems III. This didactic course is focused on evidence-based conceptual models, theories and techniques for therapies with groups, couples and families of diverse cultures across the lifespan. The clinical roles, practice management activities and strategies for complex mental health care issues in rural settings also are evaluated. (Lecture) (2 semester hours)

N 696. Directed Study in Management Research. This role support course provides an opportunity for students to apply the research process to administrative problems under the direction of a graduate faculty mentor. Focus areas of research projects include organizational behavior, costs analysis, outcomes measurement, strategic management, health policy, case management, managed care and information systems. (Lecture) (1-3 semester hours)

**GRADUATE PROGRAM ELECTIVES**

ID 500. Educator Institute. This course is designed to strengthen the educator’s role through examination of issues and skills related to health provider education in Professional Schools and other health care settings. Students will use educational and learning theories to: 1) develop course content; 2) plan strategies for change in curriculum development; 3) demonstrate didactic and clinical instructional modalities; and 4) conduct didactic and clinical evaluations. The course format consists of theoretical and practical application of content and allows the student to produce tangible and useful educational products. (Lecture) (1-3 semester hours)

ID 600. Educator Institute. This course is designed to strengthen the educator’s role through examination of issues and skills related to health provider education in Professional Schools and other health care settings. Students will use educational and learning theories to: 1) develop course content; 2) plan strategies for change in curriculum development; 3) demonstrate didactic and clinical instructional modalities; and 4) conduct didactic and clinical evaluations. (Lecture) (1-3 semester hours)

N 609. Directed Individual Study. A didactic elective course enabling the student to use individually designed learning experiences focused on selected topics in nursing to satisfy individual learning needs and interests. A mutually agreed upon contract that details objectives and evaluation methods for the experience will be developed by student and faculty. (Lecture) (1-3 semester hours)

N 638-1. Synthesis 1st Yr Nurse Practitioner Management. This elective course will offer students the opportunity to synthesize information from prerequisite courses using a case study approach. (Lecture) (1-3 semester hours)
N 638-2. Clinical Elective for Advanced Practice Nursing. This precepted clinical course provides the student an opportunity to practice in the role of advanced nurse practitioner and begin to establish the skills necessary to assume responsibility for management and health care of clients. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, differential diagnosis, evaluation and health care management with select client groups in collaboration with preceptors and other health care professionals. (Practicum/internship) (1-3 semester hour)

N 698. Directed Study in Research. This elective allows students to participate in research activities as specified in a mutually determined learning contract. A nursing faculty member with a graduate appointment will direct all research activities. With faculty guidance, students may select to: 1) participate with a mentor (minimum master's degree preparation) in the mentor's ongoing research activities; or 2) complete individual or group research proposed in previous courses. (Lecture) (1-3 semester hours)

POST-MASTER’S (PMN) PROGRAM

The Post-Master’s program is designed for nurses who already hold a master’s degree in nursing and who wish to practice as nurse practitioners, nurse educators or administrators. Theory and clinical experiences focus on the role selected by the student and are congruent with the student’s long-term career goals. The curriculum consists of supportive science and clinical specialty courses. Graduates of the Post-Master’s Nurse Practitioner tracks are eligible for national certification by professional organizations and for state certification by the Mississippi State Board of Nursing Certification. Post-Master’s plans of study are individualized based on previous coursework.

SUGGESTED PMN PLANS OF STUDY

Students will be given an individualized plan of study appropriate for their role by their academic advisor upon enrollment. Students who already have Nurse Practitioner certification in another area will typically have a shorter plan of study. Contact the appropriate track director regarding a plan of study that is developed based on your previous graduate nursing coursework.

DOCTOR OF NURSING PRACTICE (DNP) PROGRAM

OVERVIEW

The DNP program is based on the AACN Essentials of Doctoral Education for Advanced Nursing Practice. UMMC offers two entry points to the DNP – the Post Baccalaureate DNP (multiple tracks available) and the Post-Master’s DNP. Applicants interested in pursuing a Nurse Practitioner track in the DNP program should complete the post-baccalaureate DNP application.

The purpose of the DNP program is to prepare advanced practice nurses at the highest professional level of clinical nursing practice to advance the application of nursing knowledge for the purpose of improving health care to diverse populations. Nurses who wish to continue their education in the areas of advanced practice, nursing and health administration or staff development may consider the DNP option. It is a viable option for nurse practitioners, nurse midwives, nurse anesthetists, nurses in or pursuing health administration positions, or nurses who work in staff development.

APPLICATION INFORMATION

The deadline for receipt of completed applications is March 31 for fall semester admission.

1. Individuals seeking admission to the DNP program must meet the following requirements:
   a. Completed application;
   b. Graduate GPA of 3.2 on a 4.0 scale if a master’s degree has been earned or an undergraduate GPA of 3.2 if applying for the post-baccalaureate DNP;
   c. Satisfactory scores on the Graduate Record Exam (GRE), including a score of 3.5 or higher on the analytical section.
   d. Previous degree: For Post-Baccalaureate applicants, a BSN is required; Post-Master’s applicants must hold a BSN degree and a master’s degree in nursing or related field;
   e. Evidence of an unrestricted/unencumbered nursing license as a registered nurse in the United States or one of its territories and be eligible for licensure in Mississippi. May and December BSN graduates who are applying to the Post-Baccalaureate DNP must successfully complete NCLEX-RN® and be licensed as a RN prior to the program’s start date. August BSN graduates must successfully complete NCLEX-RN® and be licensed as a RN during the first semester of the Post-Baccalaureate DNP program;
   f. One year of professional nursing experience preferred, but not required;
   g. Completion of at least one research course and one statistics course at the undergraduate or graduate level;
   h. Three letters of reference;
   i. Curriculum vitae or professional resume;

2. For applicants who earned course work/degrees from institutions outside the United States:
   a. Completion of the Test of English as a Foreign Language (TOEFL) for graduates of foreign schools whose academic language is not English. The minimum required score is:
      • TOEFL-Internet Based Test (IBT): 79 or higher
      • TOEFL-Paper Based Test (PBT): 550 or higher
   b. Other documents required by UMMC and local, state and federal authorities;
   c. Transcripts must be evaluated in a course-by-course report from World Education Services (WES) or the Commission on Graduates of Foreign Nursing Schools (CGFNS).
3. Computer literacy requirement - Fluent use of computers is expected to successfully complete the program. Applicants should be familiar with the use of basic computing including, but not limited to, the internet, search engines, browsers, instructional computer systems (Blackboard or Web CT) and publicly available research databases (PubMed, CINAHL, Psych, etc.).

DNP PROGRAM OUTCOMES
1. Develop and manage innovative health services to improve access, quality and health outcomes.
2. Enhance the culture of safety in health systems through the application of information technologies and evidenced-based practice.
3. Translate practice inquiry to improve health services delivery for diverse populations.
4. Provide leadership for multidisciplinary teams through analysis of critical indicators and/or health systems to improve health status.
5. Design culturally competent health services for vulnerable populations.
6. Translate theoretical knowledge into practice to improve health outcomes.
7. Examine, implement and evaluate the modification of evidenced-based health services, health systems and health policies.
8. Develop and test new models of care that address the complex health needs of individuals, families and rural populations.

CAPSTONE INQUIRY
The capstone inquiry is the scholarly activity that culminates in the knowledge application of evidence-based practice and translation obtained during the doctoral program. Students will identify and carry through an inquiry, such as a pilot study, a program evaluation, a quality improvement project, an evaluation of a new practice model or a consulting project. The student integrates and applies appropriate theories and inquiry methods to achieve specified outcomes. Two practice inquiry courses accompany the capstone inquiry and include content on information systems and technology needed for establishing evidence-based practice models; the use of outcomes measurement and skills needed for the transferring of data between heterogeneous systems; and demonstration of the skills and techniques for evaluation.

A committee guides the student through inquiry identification, planning, implementation and evaluation. This committee will evaluate the inquiry for academic credit. The student will provide the committee with a proposal for a practice-related inquiry. Specific criteria for each inquiry are determined by the committee. The work results in a written document with an oral defense.

RESIDENCY EXPERIENCE
Residency experiences afford the student the opportunity to develop and synthesize the knowledge and skills required to demonstrate doctoral level competency in a specialized nursing practice area. The residency requirement for the DNP program meets the AACN requirement of 1,000 clinical hours. In the Post-Master’s program, the student will spend at least 500 hours meeting the residency requirements, depending upon the transferable clinical hours from the student’s master’s education. The clinical practice hours include those required to complete the capstone inquiry project. Students in the Post-Baccalaureate DNP plan of study will obtain a minimum of 1,000 clinical hours in the program.

SUGGESTED PLANS OF STUDY
POST-BACCALAUREATE DNP PLAN OF STUDY - Nursing and Health Care Administrator

<table>
<thead>
<tr>
<th>FALL</th>
<th>SEMESTER HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N632 Discipline of Nursing</td>
<td>2</td>
</tr>
<tr>
<td>N652-1 Finance and Leadership in Health Care Systems</td>
<td>3</td>
</tr>
<tr>
<td>DNP720 Biostatistics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>8</td>
</tr>
<tr>
<td>SPRING</td>
<td></td>
</tr>
<tr>
<td>N607-1 Health Policy and Population Health</td>
<td>2</td>
</tr>
<tr>
<td>N633 Research Design and Methods for Advanced Nursing Practice</td>
<td>2</td>
</tr>
<tr>
<td>N641 Fiscal and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>DNP700 Clinical Applied Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>10</td>
</tr>
<tr>
<td>SUMMER</td>
<td></td>
</tr>
<tr>
<td>ID730 Health Care Quality Improvement (75 clinical hours)</td>
<td>3</td>
</tr>
<tr>
<td>N646 Organizational Leadership and Communication</td>
<td>3</td>
</tr>
<tr>
<td>DNP703 Population Health</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9</td>
</tr>
<tr>
<td>FALL</td>
<td></td>
</tr>
<tr>
<td>N644 Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>N658 Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>DNP740 Project Management (75 clinical hours)</td>
<td>3</td>
</tr>
<tr>
<td>DNP702 Transforming Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>
### POST-BACCALAUREATE DNP PLAN OF STUDY - Adult-Gerontology

#### Acute Care NP

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL</td>
<td>N632</td>
<td>Discipline of Nursing</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N652-1</td>
<td>Finance and Leadership in Health Care Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N600</td>
<td>Application and Interpretation of Acute Care Diagnostic Modalities</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N677</td>
<td>Advanced Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td>SPRING</td>
<td>N601-1</td>
<td>Practicum in Adult-Gerontology Acute Care Nurse Practitioner (45 clinical hours)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N637</td>
<td>Advanced Physiology/Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N666</td>
<td>Clinical Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td>SUMMER</td>
<td>N605-1</td>
<td>Adult-Gerontology Acute Care Assessment, Management, and Evaluation I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N601-2</td>
<td>Practicum in Adult-Gerontology Acute Care Nurse Practitioner II (135 clinical hours)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ID730</td>
<td>Health Care Quality Improvement (75 clinical hours)</td>
<td>3</td>
</tr>
<tr>
<td>FALL</td>
<td>N605-2</td>
<td>Adult-Gerontology Acute Care Assessment, Management, and Evaluation II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N601-3</td>
<td>Practicum in Adult-Gerontology Acute Care Nurse Practitioner III (225 clinical hours)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>DNP720</td>
<td>Biostatistics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DNP702</td>
<td>Transforming Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>SPRING</td>
<td>N607-1</td>
<td>Health Policy and Population Health</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N601-4</td>
<td>Practicum in Adult-Gerontology Acute Care Nurse Practitioner IV (225 clinical hours)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>DNP701</td>
<td>Theoretical Foundations for Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DNP700</td>
<td>Clinical Applied Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>SUMMER</td>
<td>DNP703</td>
<td>Population Health</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DNP706</td>
<td>Evaluation Approaches, Models and Methods</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DNP705</td>
<td>Practice Inquiry I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>DNP712</td>
<td>Capstone Inquiry (75 clinical hours)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Semester Hours:** 68

**Total Clinical Hours:** 1050
### POST-BACCALAUREATE DNP PLAN OF STUDY - Adult-Gerontology NP

#### FALL SEMESTER HOURS
- DNP769 Role Development and Role Enactment for Advanced Role Practice in Nursing 1
- DNP740 Project Management (75 clinical hours) 3
- ID718 Health Policy and the Health Care System 3
- DNP712 Capstone Inquiry (150 clinical hours) 2
- DNP708 Practice Inquiry II 1
- DNP759 *Residency (75 clinical hours) 1

#### SPRING SEMESTER HOURS
- DNP704 Leadership in Health Systems 3
- DNP707 Health Care Finance 3
- DNP712 Capstone (150 clinical hours) 2
- DNP759 *Residency (75 clinical hours) 1

Total Hours 81

Total Clinical Hours 1305

*Taken every semester from this point until graduation

---

**THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER**
SPRING
DNP704 Leadership in Health Systems 3
DNP707 Health Care Finance 3
DNP712 Capstone (150 clinical hours) 2
DNP759 *Residency (75 clinical hours) 1

Total Hours 84
Total Clinical Hours 1305

*Taken every semester from this point until graduation

POST-BACCALAUREATE DNP PLAN OF STUDY - Family NP

FALL
N632 Discipline of Nursing 2
N652-1 Finance and Leadership in Health Care Systems 3
N610 Reproductive Health for Advanced Nursing Practice 3
N677 Advanced Health Assessment 3

SPRING
N612 Therapeutic Management of the Pediatric Patient 2
N685-1 Practicum in Primary Care (90 clinical hours) 2
N633 Research Design and Methods for Advanced Nursing Practice 2
N637 Advanced Physiology/Pathophysiology 3
N666 Clinical Pharmacotherapeutics 3

SUMMER
N682-1 Therapeutic Management in Primary Care I 2
N685-2 Practicum in Primary Care II (135 clinical hours) 3
ID730 Health Care Quality Improvement (75 clinical hours) 3

FALL
N682-2 Therapeutic Management in Primary Care II 2
N685-3 Practicum in Primary Care III (180 clinical hours) 4
DNP720 Biostatistics I 3
DNP702 Transforming Advanced Nursing Practice 3

SPRING
N607-1 Health Policy and Population Health 2
N682-3 Therapeutic Management in Primary Care III 2
N685-4 Practicum in Primary Care IV (225 clinical hours) 5
DNP701 Theoretical Foundations for Advanced Nursing Practice 3
DNP700 Clinical Applied Epidemiology 3

SUMMER
DNP703 Population Health 3
DNP706 Evaluation Approaches, Models and Methods 3
DNP705 Practice Inquiry I 1
DNP712 Capstone Inquiry (75 clinical hours) 1

FALL
DNP769 Role Development and Role Enactment for Advanced Role Practice in Nursing 1
DNP740 Project Management (75 clinical hours) 3
ID718 Health Policy and the Health Care System 3
DNP712 Capstone Inquiry (150 clinical hours) 2
DNP708 Practice Inquiry II 1
DNP759 *Residency (75 clinical hours) 1

SPRING
DNP704 Leadership in Health Systems 3
DNP707 Health Care Finance 3
DNP712 Capstone (150 clinical hours) 2
DNP759 *Residency (75 clinical hours) 1
Total Hours 86
Total Clinical Hours 1305
*Taken every semester from this point until graduation

POST-BACCALAUREATE DNP PLAN OF STUDY - Psychiatric/Mental Health NP

FALL
N632  Discipline of Nursing  2
N652-1  Finance and Leadership in Health Care Systems  3
N677  Advanced Health Assessment  3

SPRING
DNP700  Clinical Applied Epidemiology  3
N633  Research Design and Methods for Advanced Nursing Practice  2
N637  Advanced Physiology/Pathophysiology  3
N666  Clinical Pharmacotherapeutics  3

SUMMER
N687-1  Clinical Assessment of Persons with Mental Health Problems I – Family  2
N686-1  Practicum in Clinical Assessment of Persons with MH Problems I – Family (180 clin hrs)  4
ID730  Health Care Quality Improvement (75 clinical hours)  3

FALL
N687-2  Clinical Assessment of Persons with Mental Health Problems II – Family  3
N686-2  Practicum in Clinical Assessment of Persons with MH Problems II – Family (180 clin hrs)  4
DNP720  Biostatistics I  3
DNP702  Transforming Advanced Nursing Practice  3

SPRING
N607-1  Health Policy and Population Health  2
N687-3  Clinical Management of Families and Groups with MH Problems III  2
N686-3  Practicum in Clinical Management of Families & Groups III (270 clinical hours)  6
DNP701  Theoretical Foundations for Advanced Nursing Practice  3

SUMMER
DNP703  Population Health  3
DNP706  Evaluation Approaches, Models and Methods  3
DNP705  Practice Inquiry I  1
DNP712  Capstone Inquiry (75 clinical hours)  1

FALL
DNP769  Role Development and Role Enactment for Advanced Role Practice in Nursing  1
DNP740  Project Management (75 clinical hours)  3
ID718  Health Policy and the Health Care System  3
DNP712  Capstone Inquiry (150 clinical hours)  2
DNP708  Practice Inquiry II  1
DNP759  *Residency (75 clinical hours)  1

SPRING
DNP704  Leadership in Health Systems  3
DNP707  Health Care Finance  3
DNP712  Capstone (150 clinical hours)  2
DNP759  *Residency (75 clinical hours)  1

Total Hours 82
Total Clinical Hours 1305
*Taken every semester from this point until graduation
POST-MASTER’S DNP PLAN OF STUDY

FALL
ID718  Health Policy and the Health Care System  3
DNP720  Biostatistics I  3
DNP702  Transforming Advanced Nursing Practice  3

SPRING
DNP700  Clinical Applied Epidemiology  3
DNP704  Leadership in Health Systems  3
DNP701  Theoretical Foundations for Advanced Nursing Practice  3

SUMMER
ID730  Health Care Quality Improvement (75 clinical hours)  3
DNP703  Population Health  3
DNP705  Practice Inquiry I  1

FALL
DNP706  Evaluation Approaches, Models and Methods  3
DNP708  Practice Inquiry II  1
DNP740  Project Management (75 clinical hours)  3

SPRING
DNP707  Health Care Finance  3
DNP712  Capstone Inquiry (150 clinical hours)  2

SUMMER
DNP712  Capstone Inquiry (225 clinical hours)  3

Variable: (The program requires a minimum of 5 semester hours of Capstone Inquiry.)

Total Semester Hours  40
Total Clinical Hours  525

COURSE DESCRIPTIONS (700-level courses)

DNP 700. Clinical Applied Epidemiology. This course provides an overview of the basic epidemiological methods and study designs that may be used by advanced practice nurses to study the health of populations. This course will combine a focus on traditional and social epidemiology to examine how society and social organizations influence health and well-being of individuals and populations. In particular, this course will address the frequency, distribution, surveillance and tracking of disease as well as the social determinants of states of health in populations. The course will include new methods and applications of already known epidemiological methods for elucidating the complex and socioecological web within which the health-disease phenomenon occurs. (Lecture) (2-3 semester hours)

DNP 701. Theoretical Foundations for Advanced Nursing Practice. This course examines relevant theories and models from nursing and related disciplines for applicability to advanced nursing practice. Role theory, learning theory, psychological theory, management theory, leadership theory, consultation models and collaborative models are analyzed for historical significance, relative scientific position and contemporary application for advanced nursing practice and practice inquiry. Systematic examination, evaluation and refinement of relevant theories and models enable the student to develop a conceptual model for practice within a relevant setting. (Lecture) (3 semester hours)

DNP 702. Transforming Advanced Nursing Practice. This course is designed to be the introductory course for the DNP student and will introduce the DNP from a historical perspective, then address the three domains of advanced nursing practice, leadership and scholarship. This course will focus on influencing practice patterns for populations, communities and health care systems, articulating the leadership role of the DNP and embracing practice inquiry as fundamental. (Lecture) (3 semester hours)

DNP 703. Population Health. This course introduces an understanding of the multiple determinants of health of populations. Students will be presented an overview of the determinants of health and measurement of health status. One of the major goals of the course will be to enable students to apply the concepts underlying the trends in health care to the health status of populations in their clinical settings as well as in integrated delivery systems of the future. The goal of this course is to develop the student’s understanding of the principles and practice of monitoring population health. (Lecture) (3 semester hours)

DNP 704. Leadership in Health Systems. This course focuses on nursing leadership, integrating theory and research as a basis for improvement of health systems and health outcomes. Emphasis is placed on strategic thinking, influence, negotiation and power strategies for effective leadership in health care delivery systems. (Lecture) (3 semester hours)
DNP 705. Practice Inquiry I. This course covers information systems and technology needed for establishing evidence-based practice models in clinical, educational, and administrative settings. The emphasis for this course is on the role of information technology and the use of data and the translation of research into practice. Students will develop skills needed for transferring data between heterogeneous systems. (Lecture) (1 semester hour)

DNP 706. Evaluation Approaches, Models & Data Collection Methods. In this course, the student will examine evaluation approaches, models and methods appropriate to translate research findings into clinical practice and to conduct practice and health system performance evaluations. The DNP is accountable for the provision of quality, cost-effective health care. Outcomes measurement, process improvement, program evaluation, impact analysis and provider performance are studied. (Lecture) (3 semester hours)

DNP 707. Health Care Finance. This course provides students with an overview of the principal financial mechanisms in the U.S. health care industry and offer specific insights into the critical issues the industry currently faces. A feature of the course is the development of practical financial analysis skills that will provide students with a foundation for immediate application within the health care industry and a better understanding of course materials as presented. Training in use of these tools will include use of several of the most important financial tools and methodologies employed across the health care industry, such as benefit/cost and cost-effectiveness analysis, ratio analysis and others. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

DNP 708. Practice Inquiry II. This course builds upon the data management skills developed in Practice Inquiry I. This course focuses on developing a beginning level of understanding the use of outcomes measurement frameworks and the use of outcome data in practice, educational and administrative settings. Students select and analyze outcome measures, apply skills in data management and evaluate data management processes for their the individual capstone projects. (Lecture) (1 semester hour)

DNP 712. Capstone Inquiry. In this course, the student identifies an inquiry area. A two-member committee for the inquiry is appointed. The course focuses on inquiry identification, inquiry planning, implementation and evaluation of the inquiry in collaboration with a committee. The student integrates and applies appropriate theoretical and evidence-based literature and inquiry methods to achieve specified outcomes. A total of 5 semester hours (375 clinical hours) of DNP 712 are required for completion of the DNP program. (Clinical Rotation) (1-5 semester hours)

DNP 720. Biostatistics I. This course is designed to introduce the application of statistical methods to health sciences. Contents include descriptive statistics, some basic probability concepts, distribution, central limit theorem, hypothesis testing, and power and sample size calculation. Techniques of t-test, ANOVA, linear regression and correlation analysis will be taught along with in-class exercises using SPSS and other predictive analytics software (Lecture) (3 semester hours)

DNP 721. Biostatistics II. This course is designed to concentrate on more advanced methods of statistical analysis including regression diagnostics and canonical correlation, logistic regression, factor analysis, path analysis, and structural equation modeling. The analysis technique will be taught along with in-class exercises using SPSS. It is assumed that students have taken Biostatistics I and have basic skills of using SPSS. (Lecture) (3 semester hours)

DNP 740. Project Management. In this course, students learn the principles and fundamentals of project management necessary to achieve objectives in health care organizations. Special emphasis will be placed on the application of leadership skills, overcoming objections, achieving buy-in, conflict management, negotiation skills and working with diverse groups of individuals. Through case studies and various exercises, students will use tools and techniques to gain experience in single and multi-project management. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (75 clinical hours) (Lecture) (3 semester hours)

DNP 759. Residency in the DNP Role. The purpose of the residency is to provide structured clinical (field) experiences functioning as a DNP. The student will have an opportunity to apply the theories, principles and techniques learned in the didactic portion of the DNP program in a selected health system setting under the guidance of a clinical mentor and a faculty advisor. The residency allows the student to integrate advanced nursing practice, leadership and scholarship domains of the DNP role for the improvement of programs and systems of health care. The residency experience provides the student with a foundation to practice at the highest level of nursing practice. (75 clinical hours per semester hour) (Pacticum/Internship) (1-7 semester hours)

DNP 769. Role Development & Enactment for Advanced Role Practice in Nursing. (Online) In this role course, enactment of advanced role practice in nursing is studied. Seminars will focus on the continued development of knowledge for role development and implementation, advanced communication, and interventions with groups and communities. (Lecture) (1 semester hour)

PhD IN NURSING PROGRAM

UMMC offers two entry points to the PhD in Nursing program: the Post-BSN and Post-Master’s. The Post-BSN option is designed to allow highly motivated and exceptional BSN graduates an accelerated and rigorous route to the PhD. Students in their last year of a BSN program or registered nurses who have earned a BSN and demonstrate potential for academic success and significant contributions to nursing may apply. The Post-Master’s option offers opportunities for registered nurses who hold a BSN degree and a graduate degree in nursing or a related field to gain the complementary knowledge and experiences requisite for scholarly pursuits in nursing and health-related fields.

The PhD program provides a strong foundation in theoretical and methodological content essential for the scholarly investigation of health care problems encountered in the practice of nursing. The program is designed to develop nurse researchers to generate and translate knowledge toward improving the health of individuals, families, communities and populations through the conduct of biologic, physiologic or experiential research in health and illness. The program of study and research is foundational to understanding
client-centered health problems and developing the theoretical and experiential foundation necessary to initiate and coordinate clinical outcomes research.

Complete information about the PhD in nursing program is included in the School of Graduate Studies in the Health Sciences section of the Bulletin.

INTERDISCIPLINARY COURSES (600- and 700-level courses)

**ID 630. Health Care Quality Improvement.** This course equips health professions students (medicine, nursing, health administration) with the ability and confidence to contribute to continual improvement in health care. Through seminar and field experiences, students will learn the philosophy, knowledge and skills of continuous improvement, teamwork and interdisciplinary work, and apply these to improve patient-centered health care quality. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

**ID 700. Ethics in Research.** This course explores issues related to ethics in research conducted in a variety of settings. Principles of philosophy of science and select ethical theories are applied as a framework for critical ethical issues in research. (Lecture) (2 semester hours)

**ID 718. Health Policy & the Healthcare System.** The purpose of this course is to provide students the opportunity to analyze health policies and economic issues as they relate to health delivery systems. The complex arrangements and interactions among governmental, private not-for-profit, and for-profit systems are explored within a policy context that includes economic, legal, cultural, sociologic and political perspectives. The critical role of the healthcare professional in shaping and carrying out health policy is stressed. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (Lecture) (3 semester hours)

**ID 730. Health Care Quality Improvement.** This course equips health professions students (medicine, nursing, health administration) with the ability and confidence to contribute to continual improvement in health care. Through seminar and field experiences students will learn the philosophy, knowledge and skills of continuous improvement, teamwork, and interdisciplinary work, and apply these to improve patient-centered health care quality. (75 clinical hours) (Lecture) (1-3 semester hour)

FACULTY

Josie Bidwell, BSN, MSN, DNP (University of Mississippi); assistant professor of nursing

Kayla Carr, BSN, MSN (University of Mississippi); instructor in nursing

Robin Christian, BSN (University of Memphis), MSN (Texas Woman’s University), DNP (Texas Christian University); associate professor of nursing

Janet Cooper, BSN, MSN (University of Mississippi), PhD (University of Southern Mississippi); associate professor of nursing

Kimberly Douglas, BSN, MSN (University of Mississippi); instructor in nursing

Fazlay Faruque, BS, MS (University of Rajshahi, Bangladesh), MS, PhD (University of Mississippi); professor of nursing

Audwin Fletcher, BS (Mississippi State University), BSN, MSN, PhD (University of Mississippi); professor of nursing

Jeanne Fortenberry, BSN (University of Southern Mississippi), MS (Capella University); assistant professor of nursing

Mary Kate Fouquier, BS (University of Kentucky), MSN (Case-Western Reserve, Ohio), PhD (Georgia State); assistant professor of nursing

Sherri Franklin, BSN, MSN (University of Mississippi); assistant professor of nursing

Katie Chancellor Hall, BSN (Mississippi College), MSN (University of Mississippi); instructor in nursing

Jennifer Hargett, BSN (Mississippi University for Women), MSN (University of Mississippi); instructor in nursing

Marilyn Harrington, BSN, MSN, PhD (University of Mississippi); assistant professor of nursing

Janet Harris, BSN, MSN (University of Mississippi), DNP (University of Pittsburgh); professor of nursing

Lisa Haynie, BSN (University of Mississippi), MSN, (Delta State University), PhD (University of Mississippi); professor of nursing

Pamela Helms, BSN (University of Mississippi); assistant professor of nursing

Christina Higgins, BSN, MSN (University of Mississippi); assistant professor of nursing

Laree Hiser, BS (Texas A&M University), PhD (University of California); associate professor of nursing

Kim W. Hoover, BSN (Northeast Louisiana University), MSN, PhD (University of Mississippi); professor of nursing

Mary Jackson, BSN, MSN (Chamberlain College); instructor in nursing

Sheila Keller, BS, PhD (University of Mississippi); associate professor of nursing

Lishia Lee, BSN, MSN (University of Mississippi); assistant professor of nursing

Sharon Lobert, BA (University of Michigan), MS, PhD (Vanderbilt University); professor of nursing

Susan Lofton, BSN (University of Mississippi), MSN (University of Southern Mississippi), PhD (University of Mississippi); professor of nursing

Cynthia Luther, BSN, MSN (University of Southern Mississippi), PhD (University of Alabama); assistant professor of nursing

Robyn MacSorley, BSN, MSN (University of Mississippi); instructor in nursing

Carl Mangum, BSN, MSN (University of Mississippi), PhD (University of Southern Mississippi); associate professor of nursing
Betsy Mann, BSN, MSN (University of Mississippi), DNP (Samford University); assistant professor of nursing
Tina Martin, BSN, MSN, PhD (University of Mississippi); professor of nursing
Sharon McElwain, BSN (Southeastern Louisiana University), MSN (Loyola University), DN. (University of Mississippi); instructor in nursing
Mary McNair, BSN, MSN (University of Mississippi); assistant professor of nursing
LaDonna Northington, BSN, MSN (University of Mississippi); professor of nursing
Anne Norwood, BS (University of Mississippi), BSN, MSN (Delta State University), PhD (University of Mississippi); professor of nursing
Keyshawna Pittman, BSN (University of Southern Mississippi), MSN (University of Mississippi); assistant professor of nursing
Christian Pruett, BSBA (University of Southern Mississippi), MBA (Mississippi College), PhD (Mississippi State University); assistant professor of nursing
Marcia M. Rachel, BSN (Mississippi College), MSN (University of Southern Mississippi), PhD (University of Mississippi); professor of nursing
Gaye Ragland, BSN, MSN (University of Mississippi); assistant professor of nursing
Kathy Rhodes, BSN (University of Mississippi), MSN (Mississippi University for Women); instructor in nursing
Rebecca Rives, BSN, MSN. (University of Southern Mississippi); PhD (University of Mississippi) associate professor of nursing
Jennifer Robinson, BSN (Southeastern Louisiana University), MSN (University of Southern Mississippi), PhD (University of Mississippi); associate professor of nursing
Sandra Stanton, BSN, MSN (University of Mississippi); instructor in nursing
Mary W. Stewart, BSN (Mississippi College), MSN, PhD (University of Mississippi); professor of nursing
Eva Tatum, BSN, MSN (University of Mississippi); assistant professor of nursing
Leslie Thweatt, BSN (Baptist College of Health Sciences), MSN (University of Mississippi); instructor in nursing
Jean Walker, BSN (Mississippi College), MSN (University of Southern Mississippi), PhD (University of Mississippi); professor of nursing
Jill White, BSN, MSN., PhD (University of Mississippi); assistant professor of nursing
Monica White, BSN, MSN (University of Mississippi); instructor in nursing
Robin Wilkerson, BSN, MSN (University of Mississippi), Ph.D. (University of Tennessee); professor of nursing
Ellen P. Williams, BSN, MSN (University of Tennessee Health Science Center), PhD (University of Mississippi); associate professor of nursing
Renee Williams, BSN (University of Southern Mississippi), MSN (University of Mississippi), PhD (Jackson State University); professor of nursing
Kristi Wilson, BSN, MSN (Chamberlain College), instructor in nursing
Karen Winters, BSN (Texas Christian University), MSN (University of Alabama), PhD (University of Mississippi); professor of nursing
Sharon Wyatt, BSN, MSN (University of Alabama), PhD. (University of Virginia); professor of nursing
THE MOST HEALTH-RELATED DEGREES IN MISSISSIPPI
The School of Health Related Professions academic calendar is for all programs.

NOTE: Clinical activities of students vary and may not conform to calendar.

### SHRP 2015-2016 Semester Academic Calendar

<table>
<thead>
<tr>
<th>April</th>
<th>13 Monday</th>
<th>Registration begins for 2015-2016 summer and fall semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17 Friday</td>
<td>Last day to submit an application for August degree</td>
</tr>
<tr>
<td>May</td>
<td>12 Tuesday</td>
<td>$50 late registration fee For 2015-2016 summer term effective today</td>
</tr>
<tr>
<td>May</td>
<td>22 Friday</td>
<td>2015 Commencement</td>
</tr>
</tbody>
</table>

#### SUMMER 2015

| May      | 26 Tuesday | Orientation for new students and classes begin               |
| May      | 26 Tuesday | $100 late registration fee For 2015-2016 summer term effective today |
| June     | 5 Friday   | Last day to register or add a course                         |
|          | 8 Monday   | Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund |
| July     | 2 Thursday | Midterm grades due                                          |
|          | 3 Friday   | Independence Day holiday observed                            |
|          | 6 Monday   | Classes resume                                              |
|          | 10 Friday  | Last day to withdraw from a course and receive only a “W” grade if failing |
|          | 27 Monday  | $50 late registration fee For 2015-2016 fall semester effective today |
|          | 27 Monday  | Final examinations begin                                    |
| August   | 31 Friday  | Final examinations end; last day of summer term              |
|          | 4 Tuesday  | EOS reports due to the Dean                                 |

#### FALL 2015

| August   | 6, 7 Thursday, Friday | Orientation for new students                                |
|          | 10 Monday             | Classes begin                                              |
|          | 10 Monday             | $100 late registration fee 2015-2016 fall semester effective today |
|          | 14 Friday             | Last day to register for fall semester                      |
|          | 21 Friday             | Last day to add a course                                   |
|          | 21 Friday             | Last day to submit an application for December degree       |
| September| 1 Tuesday             | Last day to withdraw from school or from a course without receiving a withdrawal grade and to receive a tuition refund |
|          | 7 Monday              | Labor Day holiday observed                                 |
|          | 8 Tuesday             | Classes resume                                             |
| October  | 7 Wednesday           | Midterm grades due                                         |
|          | 23 Friday             | Last day to withdraw from a course and to receive only a “W” grade if failing |
| November | 6 Friday              | Program Focus Day                                          |
|          | 9 Monday              | Registration begins for 2015-2016 spring semester           |
|          | 18 Wednesday          | Employment Opportunities Day                               |
|          | 20 Friday             | Fall break begins at 5:00 p.m.                             |
|          | 30 Monday             | Classes resume                                             |
| December | 7 Monday              | Final examinations begin                                   |
|          | 11 Friday             | Final examinations end                                     |
|          | 11 Friday             | Christmas and New Year’s holidays begin at 5:00 p.m.       |
|          | 15 Tuesday            | EOS reports due to the Dean                                |
|          | 19 Saturday           | End of fall semester                                       |
|          | 28 Monday             | $50 late registration fee For 2015-2016 spring semester effective today |

#### SPRING 2016

| January  | 11 Monday           | Classes begin                                              |
|          | 11 Monday           | $100 late registration fee 2015-2016 spring semester effective today |
|          | 15 Friday           | Last day to register for spring semester                    |
|          | 18 Monday           | Martin Luther King Jr. holiday observed                     |
|          | 19 Tuesday          | Classes resume                                             |
|          | 22 Friday           | Last day to add a course                                   |
|          | 22 Friday           | Last day to submit an application for May degree            |

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>1</td>
<td>Monday Last day to withdraw from school or from a course without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Wednesday Student Financial Wellness Seminar</td>
</tr>
<tr>
<td>March</td>
<td>4</td>
<td>Friday Program Awareness Day</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Friday Spring break begins at 5:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Friday Midterm grades due</td>
</tr>
<tr>
<td>March</td>
<td>7-11</td>
<td>Mon-Fri Spring break</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Monday Classes resume</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>Friday Last day to withdraw from a course and receive only a “W” grade if failing</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>Thursday Easter holiday begins at 5:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>Tuesday Classes resume</td>
</tr>
<tr>
<td>April</td>
<td>11</td>
<td>Monday Registration begins for 2016-2017 summer term</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Friday Last day to submit an application for August 2016 degree</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Friday SHRP Research Day</td>
</tr>
<tr>
<td>May</td>
<td>2</td>
<td>Monday Final examinations begin</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Friday Final examinations end; last day of spring semester</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Friday SHRP Honors Day</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Tuesday EOS reports due to the Dean</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>Tuesday $50 late registration fee for 2016-2017 summer term effective today</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Friday Commencement</td>
</tr>
</tbody>
</table>
HISTORY
The Board of Trustees authorized the School of Health Related Professions in October 1971 to provide a source of trained, competent allied health personnel to meet the needs of Mississippi; provide consultant services to allied health educational programs; aid in the development of appropriate cooperative education programs for allied health personnel; and provide continuing education programs for allied health personnel.

MISSION
In keeping with the vision of the University of Mississippi Medical Center, the School of Health Related Professions is dedicated to improving lives by achieving the highest standards of performance in education, research and health care; promoting the value of professionalism and lifelong learning among students, faculty and staff; finding solutions to the challenges of health disparities in Mississippi; embracing diversity; recruiting and retaining high performing students and faculty; and graduating outstanding health care professionals.

PROGRAMS
The School of Health Related Professions serves approximately 700 students in the following programs:

- Bachelor of Science in Cytotechnology (Zelma Cason, PhD, Director)
- Bachelor of Science in Dental Hygiene (Rebecca M. Barry, PhD, Director)
- Bachelor of Science in Health Informatics and Information Management (Ann Peden, PhD, Director)
- Bachelor of Science in Health Sciences (Linda Croff-Poole, MPH, Director)
- Bachelor of Science in Medical Laboratory Science (La’Toya Richards-Moore, PhD, Director)
- Bachelor of Science in Radiologic Sciences (Kristi Moore, PhD, Director)
- Post-baccalaureate Certificate in Nuclear Medicine Technology (Sherry J. West, MS, Director)
- Post-baccalaureate Certificate in Magnetic Resonance Imaging (Asher Street, MS, Director)
- Master of Health Informatics and Information Management (Ann Peden, PhD, Director)
- Master of Health Sciences (Juanyce D. Taylor, PhD, Director)
- Master of Occupational Therapy (Christy Morgan, PhD, Director)
- Doctor of Health Administration (Angela Burrell, MSN Coordinator)
- Doctor of Physical Therapy (Rebecca H. Pearson, PhD, Director)

GENERAL ADMISSION REQUIREMENTS
Selection of applicants is made on a competitive basis, and equal educational opportunity is offered to all students who meet the entrance requirements without regard to race, creed, sex, color, religion, marital status, sexual orientation, age, national origin, disability or veteran status.

For admission purposes, the School of Health Related Professions at the University of Mississippi Medical Center gives preference to residents of Mississippi, as defined by Miss. Code §§ 37-103-7, 37-103-13 and IHL Policy 610.

Out-of-state applicants will be considered only if there are positions available after all qualified Mississippi applicants are accepted. The number of students admitted to each of the various departments within the school is dependent upon the educational resources available to support the program.

Meeting qualifications does not ensure admission as selection of applicants is on a competitive basis. No applicant is accepted until the admissions process is complete, which may include an interview by members of the appropriate departmental admissions committee. Applicants should not present themselves for interviews until requested as interviews are scheduled as required. Those applicants whom the appropriate departmental admissions committee deems it advisable to interview are notified well in advance.

Transfer of Credits - All prerequisite courses may be taken at either the University of Mississippi, Oxford campus, or a regionally accredited institution of higher education. (If transferring from a Mississippi community college, please see the Articulation Agreement between the Mississippi Board of Trustees of State Institutions of Higher Learning and the Mississippi State Board for Community and Junior Colleges for program-specific transfer. Depending upon the undergraduate program, up to 60 semester hours of academic credit is the maximum which may be applied toward admission to departments where a degree is granted by the University of Mississippi Medical Center.
Technical Standards — The program admissions committees of the School of Health Related Professions, in accordance with Section 504 of the 1973 Vocational Rehabilitation Act and the Americans with Disabilities Act (PL101-336), have established technical standards for the essential functions of students in the school’s educational programs. A copy of these technical standards can be found on each department’s web page; click on the Admissions link to see the link for the department’s Technical Standards.

Verbal and written communication skills are vital to success in the academic programs in the School of Health Related Professions and, therefore, applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) examination and demonstrate competence in written and spoken English. Information on the TOEFL examination may be obtained from the Educational Testing Service, (877) 863-3546.

Background Check — Mississippi Law requires all health care workers, including students, to successfully complete a criminal history background check, including fingerprinting, prior to beginning clinical activities. Students will receive information about the Medical Center process for completing the criminal history background checks from their respective schools. Be advised that a felony conviction may affect a student’s continued enrollment in the School of Health Related Professions and a graduate’s eligibility to sit for certification, registration, or licensure examinations. Affected students should contact the appropriate certification, registry or licensure agency or organization.

Transient or Non-degree Seeking — The School of Health Related Professions does not routinely accept transient, non-degree, audit or honor students. Incoming students, former SHRP students or transient students seeking a professional degree from another UMMC program may take courses at SHRP on a temporary basis per dean approval. Applicants are required to fill out a transient/non-degree seeking application administered through the UMMC Registrar’s Office and receive approval from the Program Chair and SHRP Dean to register for a course. Prior to registering for a course, transient or non-degree seeking students must submit the fully completed application and meet all appropriate admission requirements. Proof of required immunizations must be submitted to Student Health Services before the student can register for a course. Approved transient, non-degree, audit or honor students are administratively enrolled through the Registrar’s Office at the beginning of the term and monitored by the faculty of the designated program of study.

Probation or Conditional Acceptance — A student who is accepted into a program at SHRP with less than the required cumulative GPA or specified admission requirements will be placed on academic probation with a conditional acceptance. All probation or conditional acceptances must be approved by the SHRP Dean. The Program’s Chair and Admission Committee is responsible for identifying the requirements, with established time limits, that must be met to attain good standing in the designated program. If the student does not satisfy the set conditions, this will lead to disqualification from the major degree program without an intervening term on explicit probation.

GENERAL APPLICATION PROCEDURE

Applications for programs in the School of Health Related Professions must apply online. All applicants must pay a nonrefundable application fee of $25.

All transcripts and documents submitted in support of an application become the property of the University of Mississippi Medical Center and cannot be returned to an applicant or forwarded to another school or individual.

Applications may be submitted for the enrollment period designated on the application beginning July 1 and continuing until the application deadline as established by each program. The school reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080. If the applicant fails to complete the application, is accepted and fails to enroll or is not accepted, a new application including all forms, documentation and transcripts must be submitted to be considered for a subsequent enrollment date.

Application deadlines are:

Bachelor of Science in Cytotechnology
  Summer Admission
  Fall Admission

Bachelor of Science in Dental Hygiene (Traditional)
  Fall Admission

Bachelor of Science in Dental Hygiene (Advanced Standing)
  Fall Admission
  Spring Admission

Bachelor of Science in Health Informatics and Information Management (Traditional)
  Fall Admission

Bachelor of Science in Health Informatics and Information Management (Progression)
  Summer Admission
  Fall Admission
  Spring Admission

Bachelor of Science in Health Sciences
  Summer Admission
  Fall Admission

Bachelor of Science in Medical Laboratory Science (Traditional)
  Fall Admission
Bachelor of Science in Medical Laboratory Science (Progression)
  Fall Admission  February 1
Bachelor of Science in Radiologic Sciences (Traditional)
  Fall Admission  February 15
Bachelor of Science in Radiologic Sciences (Advanced Standing)
  Fall Admission  July 15
Post-baccalaureate Certificate in Magnetic Resonance Imaging
  Summer Admission  April 1
Post-baccalaureate Certificate in Nuclear Medicine Technology
  Summer Admission  April 1
Master of Health Informatics and Information Management
  Fall Admission  March 1
Master of Health Sciences
  Summer Admission  April 15
Master of Occupational Therapy
  Summer Admission  January 15
Doctor of Health Administration
  Summer Admission  December 1
Doctor of Physical Therapy
  Summer Admission  November 1

TUITION AND REQUIRED FEES

Note: Tuition and fees listed below are valid for 2015-16 only and are subject to change pending information from the Institutions of Higher Learning (IHL). Please contact the Department of Student Accounting at (601) 984-1060 for further information.

Tuition for the Bachelor of Science in Cytotechnology, Dental Hygiene, Health Informatics and Information Management, Health Sciences, Medical Laboratory Science and Radiologic Sciences is $306 per semester hour, up to a maximum charge per semester of $3,672 for Mississippi residents. An additional $551.25 per semester hour, up to a maximum of $6,615 per semester, is charged to non-residents.

Tuition for the Post-baccalaureate Certificate in Magnetic Resonance Imaging and Nuclear Medicine Technology, Master of Health Informatics and Information Management, Master of Health Sciences, Master of Occupational Therapy and Doctor of Health Administration is $408 per semester hour, up to a maximum charge per semester of $3,672 for Mississippi residents. An additional $735 per semester hour, up to a maximum of $6,615 per semester, is charged to non-residents.

Tuition for the Doctor of Physical Therapy is $578.92 per semester hour, up to a maximum charge per semester of $5,210.78 for Mississippi residents. An additional $715.33 per semester hour, up to a maximum of $6,437.97 per semester, is charged to non-residents.

Out-of-State Tuition Waiver Policy

All waivers are contingent upon the student’s submission of timely and adequate proof of having met the applicable criteria, and awarding of any such waiver will be determined on a case-by-case basis. Waivers will equal to the current applicable non-resident surcharge. The out-of-state waiver policy will be reviewed annually by the Office of the Associate Vice Chancellor for Academic Affairs and the Council of Deans. Applicants must be residents of contiguous states: Alabama, Tennessee, Arkansas and Louisiana. Exceptions will be considered on a case-by-case basis by the dean.

Information regarding miscellaneous out-of-pocket expenses is located under the respective program of study.

FINANCIAL AID

Students wishing to apply for financial aid at the University of Mississippi Medical Center must complete the FAFSA (Free Application for Federal Student Aid) online (using the Medical Center’s Federal School Code number 004688) and apply for a Personal Identification Number (PIN) online. Because the University of Mississippi Medical Center offers special financial aid programs to students from underserved areas, the Medical Center recommends all applicants, regardless of financial need, complete the FAFSA. Applicants who need financial aid assistance should contact the Office of Student Financial Aid at the University of Mississippi Medical Center at (601) 984-1117 or by e-mail.

SCHOLARSHIPS AND LOANS

The Dean's Scholarship, established in 2001, offers a full tuition scholarship to a student in the School of Health Related Professions. Recipients must be in good academic standing.

E.H. Sumners Foundation Scholarships were established in 1977 by Mrs. E.H. Sumners of Eupora, MS, to provide scholarship assistance for students from Webster, Montgomery, Attala, Carroll and Choctaw counties who are enrolled at the Medical Center.

Federal-State Loan Programs, in which the Medical Center participates, are administered through the Office of Student Financial Aid.

Feild Co-operative Association, Inc. Loan program offers low-interest, long-term loans to residents of Mississippi who have completed a minimum of two years of college work. Students may borrow up to $1,000 per nine-month academic year.
Frances H. Freeman Scholarship Fund was established in 1990, in recognition of Mrs. Freeman and her many contributions to medical technology education. Mrs. Freeman was the first chairman of the School of Health Related Professions' medical technology department. The scholarship is awarded to a senior medical laboratory science student who has earned a minimum 3.50 grade point average at the University of Mississippi Medical Center and has demonstrated outstanding performance in professional activities.

George C. and Laura B. McKinstry Loan Fund was established in 1973 by Dr. McKinstry in memory of his father and mother to provide low-interest loans to needy students in the School of Health Related Professions.

Groat/Moore Emergency Student Loan Fund was established in 1990 with an initial gift from K.C. Moore. The fund provides low-interest, short-term loans to qualified occupational therapy students.

Health Related Professions Alumni Student Emergency Loan Fund provides small low-interest loans to students repayable within 90 days.

Irene H. Snipes Scholarship Fund was established in 1997 by the Mississippi Hospital Association in memory of Irene H. Snipes. The fund provides assistance to students in good academic standing.

James T. Baird Memorial Scholarship, established in 2000, offers a full tuition scholarship to a student in the School of Health Related Professions. All recipients must be in good academic standing, and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

Lettie Pate Whitehead Foundation Scholarships are available to students in all programs. Awards are based on financial need.

Ottie Schillig Memorial Scholarship Fund was established in 1984 through a gift to the Medical Center from the Schillig Trust. Miss Schillig, a native of Port Gibson, was a noted concert singer. At least one scholarship is available each year to the School of Health Related Professions. All recipients must be in good academic standing, and preference is given to those students who intend to practice in small Mississippi towns and communities.

Pearl and Otis Walters Scholarship Fund is presented annually to a SHRP student(s) with outstanding academic achievement and who intends to practice in smaller Mississippi towns and communities.

Physical Therapy Scholarship was established in 2009 by friends and program alumni. One scholarship is awarded annually to a second-year physical therapy student.

Raymond E. Hogue Scholarship Fund was established in 2008 to recognize the first chairman of the physical therapy program and his contributions to practice in Mississippi. At least one scholarship is awarded annually to a qualified second-year physical therapy student.

Rita and David Halbrook Endowment to the Health Informatics and Information Management program was established in 2007. This scholarship is awarded annually to a qualified applicant.

Russ-Russell Memorial Loan Fund was established by colleagues in memory of Dr. C.R. Russ and Dr. J.V. Russell. This fund provides low-interest loans to qualified dental hygiene students who demonstrate financial need.

William D. Mobley Memorial Scholarship Fund was established in 1976 by Forrest C. Mobley, a 1930 graduate of the university, in memory of his father. This fund provides scholarships for University of Mississippi Medical Center students pursuing a dental hygiene education.

AWARDS AND HONORS

Academic Excellence Award is presented to graduating students in the Department of Occupational Therapy and Department of Physical Therapy who have achieved an overall grade point average of 3.75 or better every semester of continuous enrollment.

Alliance of the Mississippi Dental Association Outstanding Dental Hygiene Student Award is presented to the student in the dental hygiene department who is judged by the faculty to be the outstanding student as demonstrated by academic performance, departmental and school activities, professional service and community involvement.

Alpha Eta Award is presented by the University of Mississippi Medical Center chapter of the Alpha Eta Honor Society to student initiates of Alpha Eta who excel in scholarship and leadership. The recipients of this award will be the University of Mississippi Medical Center nominees for the national Alpha Eta Society’s Sidney Rodenberg and Lee Holder Awards.

Alpha Eta Society is a national allied health scholastic and leadership honorary which recognizes outstanding achievement by allied health students, faculty and alumni. Student membership is limited to seniors who have an overall grade point average of 3.50 or better for bachelor degree candidates and 3.75 or better for master’s or doctoral degree candidates; each program is limited to no more than 20 percent of the graduating class.

American Association of Public Health Dentistry Outstanding Dental Hygiene Student Award, a national recognition award, is presented to the senior dental hygiene student who is judged by the faculty to be outstanding as demonstrated by his/her achievement in community dentistry and dental public health.

Ann Whitfield Fox Award is presented to the radiologic sciences student graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

Benton Clay Gordon Award, sponsored by the Mississippi Radiological Society, is presented to the graduating radiologic sciences student who demonstrated outstanding performance in clinical practice.

Bette A. Groat Occupational Therapy Award is presented to the graduating occupational therapy student who has maintained a high level of performance, both clinically and academically, and represents the occupational therapy profession in an exemplary manner before peers and the public.
Celia Robson Sports and Orthopedics Physical Therapy Award, an award honoring Celia Robson, is presented to the graduating physical therapy student demonstrating exemplary attitude and interest in sports physical therapy.

Central Mississippi Dental Hygienists’ Association Award, sponsored by the Central Mississippi Dental Hygienists’ Association, is presented to a graduating dental hygiene student who exhibits outstanding knowledge in the preventive aspects of dental disease and for contributions toward the preventive oral health of patients.

Colgate STAR Award, sponsored by Colgate, is presented to a senior dental hygiene student who best exhibits the interest, understanding and leadership expected in the area of community oral health.

Dean’s Award is presented to graduating students in any discipline, whose activities in the areas of academics, scholarship, school, community or professional service are exemplary and bring honor to the school. The award is presented at the discretion of the dean.

Dean’s List recognizes students for superior academic achievement. Eligibility is based upon at least 12 semester hours in the preceding semester on the Medical Center campus with a semester average of 3.50 or above.

D.J. Banford Award is presented to academically eligible occupational therapy student(s) to support the student’s extraordinary efforts of being a single custodial parent of minor children.

Dr. Virginia Stansel Tolbert Award, sponsored by the Mississippi State Medical Association, is given on Commencement Day to the graduating student who has the highest academic average.

Excellence in Coding Award is presented to the senior health informatics and information management student deemed by the faculty to demonstrate excellence in all aspects and applications of coding and classification systems.

Health Informatics and Information Management Leadership Award is presented to the graduating health informatics and information management student who demonstrates exceptional leadership qualities and achievements.

John Carey Bolen Occupational Therapy Memorial Award is presented to the graduating occupational therapy student who, as deemed by the faculty, exemplifies the spirit of occupational therapy through courage and determination to persevere and overcome adversity to accomplish professional goals while maintaining interest and enthusiasm for the profession.

Juanita Woods Distinguished Service Award, sponsored by the Mississippi Physical Therapy Association in honor of Juanita Woods, is presented to the graduating physical therapy student who has demonstrated involvement in community and school activities, and leadership in the physical therapy profession.

Lois Boackle Jones Memorial Award was established in 2013 by the family of Lois Boackle Jones. One award is given annually to a senior student who has earned a minimum 3.75 grade point average at the University of Mississippi Medical Center. The scholarship rotates among baccalaureate programs.

Magnetic Resonance Imaging Excellence Award is presented to the graduating student in Magnetic Resonance Imaging who has excelled both academically and clinically.

Marshal of the Class Award is presented to the Student Marshal of the Class, selected as the graduating student with highest grade point average in a department on a rotational basis. The Marshal of the Class is responsible for organizing, leading and guiding the graduates at commencement.

Mississippi Academy of Science Outstanding Cytotechnology Student Award is presented to the graduating cytotechnology student who is judged by the faculty to be the outstanding student as demonstrated by academic performance, departmental and school activities, professional service and community involvement.

Mississippi Blood Services Medical Laboratory Science Outstanding Clinical Achievement Award is presented to the senior medical laboratory science student who demonstrates outstanding clinical achievement in the senior year.

Mississippi Dental Association Achievement Award, sponsored by the Mississippi Dental Association, is presented to the graduating dental hygiene student who has been an active leader, is in the upper 20 percent of the class and intends to work in Mississippi.

Mississippi Dental Hygienists’ Association Clinical Achievement Award is presented by the Mississippi Dental Hygienists’ Association to the senior dental hygiene student who demonstrates outstanding confidence, competence and interpersonal skills in clinical performance.

Mississippi Occupational Therapy Association Outstanding Leadership Award is presented to a graduating occupational therapy student judged by the faculty to consistently demonstrate exceptional leadership skills in the classroom, on the school campus and in the community.

Mississippi Society of Cytopathology Outstanding Clinical Achievement Award, sponsored by the Mississippi Society of Cytopathology, is presented to the graduating cytotechnology student judged by the faculty to be outstanding in clinical interpretation as demonstrated by clinical and academic performance.

Mississippi Society of Radiologic Technologists Excellence Award, sponsored by the Mississippi Society of Radiologic Technologists, is presented to the graduating student in Radiologic Sciences who has excelled both academically and clinically.

Neva F. Greenwald Physical Therapy Award is presented to the graduating physical therapy student who has maintained a high level of performance, both clinically and academically, and represents the physical therapy profession in an exemplary manner before peers and the public.

Non-Gynecological Clinical Award is presented to the graduating cytotechnology student who demonstrates excellence in clinical diagnosis of non-gynecologic cases.

North Mississippi Medical Center Community Outreach Occupational Therapy Award is presented to the graduating occupational therapy student who demonstrates community awareness and promotion of the field of occupational therapy.
North Mississippi Medical Center Community Outreach Physical Therapy Award is presented to the graduating physical therapy student who demonstrates community awareness and promotion of the field of physical therapy.

Nuclear Medicine Technology Excellence Award is presented to the graduating student in Nuclear Medicine Technology who has excelled both academically and clinically.

Occupational Therapy Award of Clinical Excellence is presented to the graduating occupational therapy student who demonstrates outstanding performance, judgment and attitude in clinical performance.

Occupational Therapy Scholastic Award is presented to the senior occupational therapy student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

Outstanding Graduate Student Capstone Award is presented to the graduating student in the Master of Health Sciences program who demonstrates academic excellence, as deemed by departmental faculty, and received the highest peer reviewed rating on his/her capstone presentation.

Outstanding Health Informatics and Information Management Student Award is presented to the graduating health informatics and information management student judged by the faculty to be the outstanding student as demonstrated by academic performance, departmental and school activities, professional service and community involvement.

Outstanding Immunohematology Award is presented to the graduating medical laboratory science student with the highest academic average in immunohematology.

Outstanding Occupational Therapy Student Award is presented to the graduating occupational therapy student who is judged by the faculty to be the outstanding student as demonstrated by academic performance, departmental and school activities, professional service and community involvement.

Outstanding Physical Therapy Student Award is presented to the graduating physical therapy student who is judged by the faculty to be the outstanding student as demonstrated by academic performance, departmental and school activities, professional service and community involvement.

Outstanding Undergraduate Student Capstone Award is presented to the graduating student in the bachelor of science in health sciences program who demonstrates academic excellence, as deemed by departmental faculty, and received the highest peer reviewed rating on their capstone presentation.

Phi Kappa Phi is a national honor society recognizing and promoting academic excellence in all fields of higher education and engaging the community of scholars in service to others. Initiates are selected on the basis of academic achievement.

Physical Therapy Award of Excellence, initiated by the physical therapy class of 1983, is presented to a graduating physical therapy student in recognition of overall contribution to physical therapy and the potential for future professional achievement.

Physical Therapy Clinical Education Award, initiated by the physical therapy class of 1991, is presented to a graduating physical therapy student or students who are judged by essay to have a keen insight into the goals and benefits of clinical education and who reflect a commitment to lifelong learning.

Physical Therapy Scholastic Award is presented to the graduating physical therapy student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

Pi Theta Epsilon (Gamma Lambda Chapter) is a specialized honor society recognizing and encouraging superior scholarship among occupational therapy students. The society strives to instill in its members the ideal of respect for learning and commitment to scholarship throughout one’s professional life.

Rebecca J. Yates Professionalism Award is given to a health informatics and information management graduating student who displays exceptional poise, confidence, knowledge and skill.

Regions Bank Health Informatics and Information Management Scholastic Award is presented to the graduating health informatics and information management student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

Regions Bank Medical Laboratory Science Scholastic Award is presented to the graduating medical laboratory science student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

Robert B. Weaver Student Physical Therapy Award, sponsored by the physical therapy class of 1998, recognizes a graduating physical therapy student for friendliness, helpfulness, genuine concern, cooperation, effective communications and interpersonal skills.

Scottie Mooney Memorial Outstanding Medical Laboratory Science Student Award is presented to the graduating medical laboratory science student judged by the faculty to be outstanding in clinical interpretation as demonstrated by clinical and academic performance.

Sigma Phi Alpha Dental Hygiene National Honor Society, honors seniors who rank the highest in scholarship, service and leadership. This student must also exhibit potential qualities for future growth and attainment.

Student Research Awards, sponsored by the School of Health Related Professions, acknowledges students for their outstanding achievements in research.

Trustmark National Bank Cytotechnology Scholastic Award is presented to the graduating cytotechnology student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

Trustmark National Bank Dental Hygiene Scholastic Award is presented to the graduating dental hygiene student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.
University Pathology Associates Award, sponsored by the University Pathology Associates, is presented to the graduating medical laboratory science student who demonstrates the highest standards in professionalism and interpersonal communication skills in laboratory knowledge.

Who's Who Among Students in American Universities and Colleges listing is a national compendium recognizing seniors for outstanding achievements.

Zelma Cason Outstanding Achievement Award is given to the graduating cytotechnology student who has shown exceptional ability in both the didactic and clinical components of the program.

**ACADEMIC REGULATIONS**

The regulations published in the Bulletin are a digest of the rules of the University and School of Health Related Professions. Changes may be made in the regulations at any time to promote the best interests of the university and its students. Students are responsible for knowing the published regulations, policies and standards of the University and the School.

**Registration** – In order for the student to receive credit for any course, the student must be registered for that course in the Office of Student Records and Registrar.

**Attendance** – Enrollment in the School of Health Related Professions obligates students to attend all class meetings and complete all assigned course work. No right or privilege exists which permits a student to be absent from any given number of class meetings or to collaborate on any assigned course work or exams unless given permission from the course instructor.

**Classroom Behavior** – Students are expected to behave respectfully toward class instructors, guest lecturers and fellow students. Cell phones must be turned off or placed on silent mode. Food and drink are only permitted in designated areas. Disruptive behavior in an academic situation or purposely harming academic facilities also is grounds for academic discipline.

**Standards of Honesty** – The School of Health Related Professions is conducted on a basis of common honesty. Dishonesty, cheating, plagiarism or knowingly furnishing false information to the School are regarded as particularly serious offenses and may result in disciplinary action.

**Grading** – In determining the final grade to be assigned to each student at the end of a course, all important attributes of each student’s performance in the course are given consideration. This includes cognitive, psychomotor and other attributes such as deportment, interpersonal relationships, attitudes toward course work and other factors which in the opinion of the faculty are important to the student’s future role as a health care professional.

**Undergraduate and Post-baccalaureate certificate programs:**

Final grades will be expressed using this letter system: “A” - Excellent, 90-100; “B” - Good, 80-89; “C” - Average, 75-79; “D” - Below average, 70-74; “F” - Failure, below 70. The quality point value of each letter grade is A-4; B-3; C-2; D-1; and F-0.

**Graduate programs:**

Final grades will be expressed using this letter system: “A” - Excellent, 90-100; “B” - Good, 80-89; “C” - Less than satisfactory, 75-79; and “F” – Failure, below 75, the quality point value of each letter grade is A-4; B-3; C-2; and F-0.

The grade of “F” may be recorded when the student has failed to meet the minimal performance standards, dropped the course without permission, officially withdrawn from the course with a failing grade after the last day specified in the academic calendar, or failed to satisfy requirements for the removal of an incomplete grade. A letter grade of “I” (incomplete) is given if a student’s work is satisfactory but for reasons beyond the student’s control is incomplete at the time grades are recorded. If not removed within the time limit specified by the instructor (not to exceed 12 months), the dean will consult with the instructor and a grade of “W” or “F” will be assigned. In some pass/fail courses, the grade of “P” is recorded for a student who earns a passing grade. “P” grades are not used in computing the student’s grade point average.

An instructor may change a reported grade only if the original grade was incorrectly assigned due to clerical or computational error or if a student meets the requirements for the removal of an “I” grade.

**Grade Challenge** – The responsibility for evaluating student work and assigning grades lies with the instructor of a course. However, a student may challenge a grade in order to initiate a review process for the student to better understand the reason(s) why the grade was assigned, the instructor to be made aware of and correct possible errors, and academic administrators to review the basis on which a grade has been awarded and, to correct, when appropriate, grades assigned by arbitrary or capricious action or other reasons not related to academic performance.

In all cases of a disputed grade, the student has the burden of proof that the assigned grade was not appropriate. It is for this reason that students should first speak with the instructor. If satisfaction is not found after speaking with the instructor, the student should speak with the program director who will advise the student to submit a written petition to include a copy of the syllabus and any assignment/grading rubrics along with copies of any tests, quizzes, assignments or other written work completed for which the student is challenging the grade. If the student is still not satisfied, the department chair and/or dean’s office will review the action of the program director and/or department chair to see if the grade being challenged was appropriately assessed. If, in the opinion of the program director, department chair and/or the dean’s office, deficiencies in instruction are so grave as to warrant such a change, the proper remedy will usually involve alternative assignments or examinations to allow the student the opportunity to demonstrate the appropriate level of competency in that area in order to earn a different grade than the grade originally assigned. The decision of the dean’s office is final.
Course Withdrawal – Registration for a course makes the student responsible for attending that class until the course is completed or until, with the permission of the dean or designee, the student withdraws from the course. Official withdrawal is facilitated by the dean or designee submitting official notice of withdrawal to the Offices of the Registrar, Student Financial Aid and Student Accounting. An approved withdrawal, if completed on or before the last day specified in the academic calendar, will not be recorded on the student’s record. Withdrawals authorized after the last day specified in the academic calendar will be recorded as a “W.” Withdrawals authorized after the three quarters point of the semester, specified in the academic calendar, will be recorded as an “F” if failing a course at the time of withdrawal. Failure to officially withdraw will result in the recording of a failing grade in the course in which the student is registered.

Academic Progress – It is the student’s responsibility to ascertain his or her academic progress and to seek assistance from the course instructor if the student finds himself or herself performing inadequately. The program faculty reserves the right to recommend promotion, probation, reclassification, or dismissal of any student. The school reserves the privilege of promoting only those students who, in the judgment of the program faculty, satisfy the requirements of scholarship and personal suitability for the profession.

Promotion – Promotion is contingent upon successful academic performance, including demonstration of professional attributes. Recommendations for promotion and graduation are made by the program faculty to the dean.

Probation – Undergraduate
Upon the recommendation of undergraduate and post-baccalaureate certificate program faculty, a student may be placed on probation when either the student’s semester or overall cumulative grade point average falls below 2.00 or the student has failed to meet professional expectations.

Probation – Graduate
Upon the recommendation of graduate program faculty, a student may be placed on probation when either the student’s semester or overall cumulative grade point average falls below 3.00 or the student has failed to meet professional expectations.

Dismissal – Undergraduate
Upon recommendation of undergraduate and post-baccalaureate certificate program faculty, a student may not be permitted to continue enrollment when:
1. The student has received a grade of “F”;
2. The student’s overall cumulative grade point average is less than 2.00 on all course work completed at the University of Mississippi Medical Center;
3. The student’s grade point average is less than 2.00 in each of two consecutive grading periods;
4. The student has failed to meet professional expectations; or
5. The student incurs an unexplained or unexcused absence from all classes and school and departmental activities for a period of two continuous weeks.

Dismissal – Graduate
Upon recommendation of graduate program faculty, a student may not be permitted to continue enrollment when:
1. The student has received a grade of “F”;
2. The student’s overall cumulative grade point average is less than 3.00 at the end of the second semester or any semester thereafter;
3. The student has failed to meet professional expectations; or
4. The student incurs an unexplained or unexcused absence from all classes and school and departmental activities for a period of two continuous weeks.

When it seems advisable, a student may be dismissed from school without having been placed on probation. Students recommended for dismissal may appeal the dismissal by submitting a written request to the dean. In the event of an appeal, the student may continue to attend class until the appeal process has been concluded.

Appeal of Dismissal – The appeal procedure is designed to provide the student with a clearly defined avenue for appealing his or her dismissal if he or she believes the dismissal was an arbitrary or capricious action or for other reasons not related to academic performance. The appeal procedure is as follows:
1. The student should submit a written request for an appeal to the dean within five calendar days from the time that the notice of dismissal is sent by e-mail. Failure to make a written appeal within the five calendar day time period shall constitute a waiver of the appeal right and shall result in the sanction becoming final as recommended. The written request for an appeal must set forth the substantive basis for the appeal and be documented in an official letter to the dean.
2. The dean may uphold or deny the appeal or appoint a committee to hear the appeal and forward its written recommendation to the dean. If the dean appoints a committee to hear the appeal, the student will be informed of the time and place of the appeal hearing. The student must appear in person at the hearing to present the appeal to the appeals committee.
3. During an appeal hearing the student shall be permitted, at his or her expense, to have an advisor at the hearing and through all other stages of the disciplinary process. The role of the advisor/legal counsel shall be limited to an advisory capacity only. He/she will not be permitted to make opening or closing statements, question witnesses, or make oral argument. The student is entitled to present witnesses or other evidence, and make opening and concluding statements on his or her own behalf. If the student elects to bring legal counsel to the hearing, he/she must give prior notice to the dean.
4. The decision of the dean will be made in writing and will be sent by e-mail to the student. The dean’s decision shall be final, subject to the student’s right to appeal to the associate vice chancellor for academic affairs following the same procedures as outlined in numbers 1 and 2 above.

Leave of Absence – On the recommendation of a department chair and the approval of the dean, a student in good academic standing may be granted a leave of absence for legitimate medical or military reasons. The request for leave of absence must be appropriately documented, and in the case of medical leave, must be reviewed by the director of the Student-Employee Health Service. Leave may not exceed one (1) calendar year.

Program Withdrawal – Registration in an academic program makes the student responsible for completion of the course of study or until, with the permission of the dean or designee, the student withdraws from the curriculum. Official withdrawal is facilitated by the dean or designee submitting official notice of withdrawal to the Offices of the Registrar, Student Financial Aid and Student Accounting.

An approved withdrawal, if completed on or before the last day specified in the academic calendar, will not be recorded on the student’s record. Withdrawals authorized after this date will be recorded as a “W” unless the student has completed the course, in which case the final grade in the course will be recorded. Withdrawals authorized after the three quarters point of the semester, specified in the academic calendar, will be recorded as an “F” if failing a course at the time of withdrawal. Failure to officially withdraw will result in the recording of a failing grade in the course(s) in which the student is registered.

DEGREE REQUIREMENTS

Specific requirements for each degree program may be found in the Bulletin descriptions under the appropriate program. The School of Health Related Professions reserves the right to withhold a degree of any student deemed unsuitable for professional practice.

A degree cannot be granted unless the student has spent the equivalent of at least one full academic year in residency; earned a minimum of 30 semester hours of residence credits; and completed the required course of study in the School of Health Related Professions with the appropriate overall cumulative grade point average on all work at the University of Mississippi Medical Center:

- Bachelor of Science in Cytotechnology – 2.00 or better on a 4.00 scale
- Bachelor of Science in Dental Hygiene – 2.00 or better on a 4.00 scale
- Bachelor of Science in Health Informatics and Information Management – 2.00 or better on a 4.00 scale
- Bachelor of Science in Health Sciences – 2.00 or better on a 4.00 scale
- Bachelor of Science in Medical Laboratory Science – 2.00 or better on a 4.00 scale
- Bachelor of Science in Radiologic Sciences – 2.00 or better on a 4.00 scale
- Post-baccalaureate certificate in Magnetic Resonance Imaging – 2.00 or better on a 4.00 scale
- Post-baccalaureate certificate in Nuclear Medicine Technology – 2.00 or better on a 4.00 scale
- Master of Health Informatics and Information Management – 3.00 or better on a 4.00 scale
- Master of Health Sciences – 3.00 or better on a 4.00 scale
- Master of Occupational Therapy – 3.00 or better on a 4.00 scale
- Doctor of Health Administration – 3.00 or better on a 4.00 scale
- Doctor of Physical Therapy – 3.00 or better on a 4.00 scale

Transfer students who spend only one year in residency must attend in the year in which the degree requirements are completed.

COUNSELING

Professional and personal counseling is available from the faculty and administrative officers of the School of Health Related Professions and from other appropriate professionals at the University of Mississippi Medical Center through the Office of Academic Support and outside contract agencies.

STUDENT GOVERNMENT

The students in the School of Health Related Professions participate in all campus-wide student activities and have representatives on the University of Mississippi Medical Center Associated Student Body and the School of Health Related Professions Student Government Council. The council provides the administration and faculty with student opinion on matters affecting student welfare.

CYTOTECHNOLOGY (BS)

Hamed A. Benghuzzi, PhD, FAIMBE, FBSE, Department Chair
Zelma Cason, PhD, SCT(ASCP), CMIAC, Program Director
Mithra Baliga, MD, Medical Director

FACULTY

Professors:
Zelma Cason, PhD, SCT(ASCP), CMIAC
Elgenaid Hamadain, PhD

Associate Professors:
Mithra Baliga, MD
Assistant Professor:
Kenneth M. Heard Jr., MS, CT(ASCP)

Clinical Assistant Professors:
James P. Almas, MD
Weymoth Crowell, MD
Richard Griswold, MD

Clinical Assistants:
Barbara J. Proctor, MD
William Poston, MD

Clinical Instructors:
Rhonda Alexander, BS, SCT(ASCP)
Karen Horne, BS, CT(ASCP)
Jody Joiner, MS, CT(ASCP)
Bill Xie, MD, PhD

Richard B. Bowlin, BA, SCT(ASCP)
Jody Joiner, MS, CT(ASCP)
Brenda Taylor, BS, CT(ASCP)

Sarah Bradley, BS, CT(ASCP)
Bill Lambert, BS, CT(ASCP)
Laura W. Thompson, BS, CT(ASCP)

Alice J. Courtney, BS, CT(ASCP)
J. Kees Lowman, BS, CT(ASCP)
Audrey Wright, BS, CT(ASCP)

Jeff Hansen, MS, CT(ASCP)

ABOUT THE PROFESSION

The cytotechnologist, working under the direction of a pathologist, detects cell changes caused by different disease processes. This specialist prepares cell samples for examination after special staining techniques and then studies the slides for minute abnormalities in the color, size and shape of cell substances.

In many cases, these findings are the first warning signs of cancer. Most cytotechnologists find employment in a hospital, clinic or private laboratory.

ACCREDITATION STATUS

The cytotechnology program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), located at 1361 Park Street, Clearwater, FL 33756, in collaboration with the American Society of Cytopathology. CAAHEP’s phone number is (727) 210-2350.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the cytotechnology program must:

1. Have completed a minimum of 90 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Have an overall cumulative grade point average of 2.00 on a 4.00 scale;
3. Have written confirmation of completion of the Hepatitis B vaccination series, or the Hepatitis B vaccination series has been started at the time of registration;
4. Successfully complete an interview; and
5. Successfully complete (a grade of C or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Social or Behavioral Science¹</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Humanities and Fine Arts²</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Natural Science³</td>
<td>7</td>
<td>28</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>Total Prerequisites</td>
<td></td>
<td>90</td>
</tr>
</tbody>
</table>

¹Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
²Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.
³Natural Sciences include courses such as general biology, anatomy and physiology, genetics, histology, microbiology and zoology; general chemistry, organic chemistry and biochemistry; and physics.

PROGRAM APPLICATION DEADLINE

All application documents and the application fees must be received by the Office of Student Records and Registrar by February 1 for summer admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

EXPENSES

In addition to tuition, fees and health insurance, students should be prepared to spend approximately $1,500 per year for textbooks, instrumentation, supplies and uniforms. As students are required to spend part of the spring semester in clinical education experience in Mississippi or other contiguous states, students should be prepared to provide their own transportation, living costs and other incidental expenses during these clinical affiliations.
DEGREE AND CERTIFICATION
Candidates for the cytotechnology degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all course requirements, students will be awarded the Bachelor of Science in Cytotechnology from the University of Mississippi and are eligible to apply to take the appropriate national certification examination(s) to become certified as a cytotechnologist. Additional coursework may allow the student to be eligible to apply to take the appropriate national certification examination to become certified as a histotechnologist (contact program director for details).

PROFESSIONAL COURSE OF STUDY
SENIOR YEAR

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Description</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>CT 407 Introduction to Cytopathology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CT 423 Research Methods I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CT 430 Diagnostic Cytopathology I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CT 434 Diagnostic Cytopathology I Laboratory</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>10</td>
</tr>
<tr>
<td>Fall</td>
<td>CT 440 Diagnostic Cytopathology II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CT 443 Research Methods II</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CT 444 Diagnostic Cytopathology II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CT 446 Preclinical Practicum</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CT 450 Diagnostic Cytopathology III</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CT 454 Diagnostic Cytopathology III Laboratory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CT 468 Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12</td>
</tr>
<tr>
<td>Spring</td>
<td>CT 463 Honors Thesis</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CT 473 General Pathology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CT 480 Clinical Practice</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Total Required Hours</td>
<td>34</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

CT 407. INTRODUCTION TO CYTOPATHOLOGY. An introductory course designed to familiarize student with the health care field and the specific profession of cytotechnology; the basic tenets relative to proper use of the light microscope; the study of cytologic specimen collection and cytopreparation; key elements related to laboratory safety; and the principles of laboratory management and laboratory accreditation. (Lecture/Lab) (2 semester hours)

CT 423. RESEARCH METHODS I. A laboratory-lecture course having the objective of introducing the student to various basic procedures and techniques for the design, implementation, writing, analyzing data, principles of statistical analysis and presentation of quality clinical and basic science research projects. (Lecture/Lab) (2 semester hours)

CT 430. DIAGNOSTIC CYTOPATHOLOGY I. A systematic study of basic tissue types and the major organ systems of the body; the recognition and laboratory diagnosis of biochemical and cytogenetic disease; pathogenic microorganisms encountered in cytologic specimens and normal cytology in cervicovaginal preparations from the female genital tract. (Lecture) (3 semester hours)

CT 434. DIAGNOSTIC CYTOPATHOLOGY I (LABORATORY). Supervised evaluation of benign cervicovaginal smears from the female genital tract. (Lab) (3 semester hours)

CT 440. DIAGNOSTIC CYTOPATHOLOGY II. A systematic study of abnormal cervicovaginal preparations from the female genital tract as well as the study of advanced topics related to gynecologic cytopathology. (Lecture) (2 semester hours)

CT 443. RESEARCH METHODS II. A laboratory course designed to provide students with contemporary methods and procedures used in histotechnology, immunohistochemistry, molecular biology and fluorescence in situ hybridization (FISH). (Laboratory) (1 semester hour)

CT 444. DIAGNOSTIC CYTOPATHOLOGY II (LABORATORY). Supervised clinical correlation and evaluation of normal and abnormal cervicovaginal smears from the female genital tract. (Laboratory) (1 semester hour)

CT 446. PRECLINICAL PRACTICUM. Preparation for gynecological clinical cytopathology practice. (Laboratory) (1 semester hour)

CT 450. DIAGNOSTIC CYTOPATHOLOGY III. A systematic study of all non-gynecologic and fine needle aspiration cytology, with emphasis on reporting, cytohistologic correlation and adjunct diagnostic modalities, such as special stains, immunohistochemical staining procedures and molecular technology. The course includes the study of various microorganisms that are typically encountered in the different specimen types. Also included is discussion of other advanced non-gynecologic topics not heretofore covered. (Lecture) (2 semester hours)
CT 454. DIAGNOSTIC CYTOPATHOLOGY III (LABORATORY). Microscope evaluation and review of all non-gynecologic cytopathology specimens, including basic exfoliative fluid cytology, body cavity fluids (effusions) and fine needle aspiration biopsy specimens. (Laboratory) (2 semester hours)

CT 463. HONORS THESIS. Closely directed supervision and working on an individual basis with an instructor; final preparation and presentation of a research project. (Laboratory) (2 semester hours)

CT 468. HUMAN PHYSIOLOGY. Process of maintaining homeostasis and mechanisms of functional control. (Lecture) (3 semester hours)

CT 473. GENERAL PATHOLOGY. A study of the etiology and symptomatology of the general pathological conditions affecting the body. (Lecture) (2 semester hours)

CT 480. CLINICAL PRACTICE. Microscopic evaluation and review of gynecologic and non-gynecologic cytopathology specimens, including correlation between the cytology specimen and available histologic material. The course culminates in the practical application of all covered material during two supervised clinical rotation experiences. One rotation will be strictly cytology-oriented, while the other will center on research methodologies. (Clinical rotation) (8 semester hours)

CLINICAL FACILITIES
Clinical educational experiences in cytotechnology are provided in conjunction with the following health care facilities:

- AmeriPath Jackson - Jackson
- Forrest General Hospital - Hattiesburg
- G. V. “Sonny” Montgomery VA Medical Center - Jackson
- JPB Pathology, Inc. - Oxford
- Natchez Pathology Laboratory, Inc. – Natchez
- Ochsner Medical Center - New Orleans, LA
- St. Dominic Hospital - Jackson
- University of Mississippi Medical Center (University Hospital and Health System) - Jackson
- VA Gulf Coast Veterans Health Care System – Biloxi

DENTAL HYGIENE (BS)
Rebecca M. Barry, PhD, RDH, Department Chair and Program Director

FACULTY

Professors:
Tracy M. Dellinger, DDS
Ray Holder, DMD
Harold Mark Livingston, DDS

Associate Professors:
Rebecca M. Barry, PhD, RDH
Sandra Horne, MHSA, RDH
Amy L. Sullivan, PhD, RDH

Jamie R. Clay, DMD

Assistant Professors:
Linda S. Barkett, DMD
Teresa B. Duncan, MD, RDH
Neeta Mehta, DDS

Elizabeth Odom Carr, MDH, RDH
Angelia Garner, PhD, RDH
Charles E. Ramsey, DMD

Instructors:
Sharon Andrews, BS, RDH
Barbara Brent, BS, RDH

Elizabeth Moore, BS, RDH
Cynthia R. Senior, MEd, RDH

ABOUT THE PROFESSION
Registered dental hygienists are licensed oral health care professionals. Dental hygienists provide preventive services that limit the extent of cavities and periodontal disease as well as promote the overall health and well-being of the oral environment and head and neck region. Dental hygienists assess general and oral health by using a variety of diagnostic aids (comprehensive health histories, head, neck and oral examinations, radiographs and indices). Using the information obtained from the assessment process, the hygienist develops a care plan in conjunction with the patient’s goals and needs, provides oral health education and performs preventive (fluorides, sealants) and therapeutic services (non-surgical periodontal therapy). Baccalaureate graduates are employed as clinical practitioners, educators, researchers, administrators, managers, preventive program developers and consultants. Registered (licensed) dental hygienists practice according to the requirements of individual state dental practice acts.

ACCREDITATION STATUS
The dental hygiene program is accredited by the Commission on Dental Accreditation (CODA), 211 East Chicago Avenue, Chicago, IL 60611-2678. CODA’s phone number is (800) 621-8099.

TRADITIONAL DENTAL HYGIENE
The traditional baccalaureate degree program in dental hygiene is an entry-level program for students who want to obtain a dental hygiene license. Upon completion of the two-year program, students receive a bachelor’s of science degree and are prepared to apply for and obtain their initial dental hygiene licensure.
PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the dental hygiene program must:
1. Have completed a minimum of 57 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Have a minimum overall cumulative grade point average of 2.50 on 4.00 scale
3. Complete 8 hours observation of a licensed or registered dental hygienist in two separate clinical environments;
4. Complete an interview and hands-on test;
5. Submit ACT scores;
6. Complete 12 hours of the science and 24 hours of the non-science prerequisite courses prior to the February 15 application deadline to the program; and
7. Successfully complete (a grade of C or better) the following minimum prerequisite number of required courses below:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>General Biology or Zoology with Lab</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>General Chemistry with Lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>College Algebra</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Intro to Sociology</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Speech</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Anatomy and Physiology with Lab¹</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Microbiology with Lab</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Nutrition</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Abnormal, Adolescent/Child, Educational or Developmental Psychology</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td><strong>57</strong></td>
<td></td>
</tr>
</tbody>
</table>

¹One course in anatomy plus one course in physiology or anatomy and physiology combined for two courses.

PROGRAM APPLICATION DEADLINE
All application documents and application fees must be received by the Office of Student Records and Registrar by February 15 for fall admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions.

EXPENSES
In addition to tuition, fees, health insurance and professional association dues, students should be prepared to spend $3,000 the first year and $800 the second year at the University of Mississippi Medical Center for necessary books, uniforms and instruments. Additionally, students should be prepared to spend approximately $1,300 for licensure testing fees during the senior year.

DEGREE AND LICENSURE
Candidates for the dental hygiene degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all requirements, students will be awarded the Bachelor of Science in Dental Hygiene from the University of Mississippi and are eligible to apply to sit for national and state or regional board clinical examinations for licensure as a registered dental hygienist.

PROFESSIONAL COURSE OF STUDY

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 303</td>
<td>Professional Writing</td>
<td>2</td>
</tr>
<tr>
<td>DH 305</td>
<td>Dental Hygiene Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>DH 309</td>
<td>Dental Anatomy and Occlusion</td>
<td>2</td>
</tr>
<tr>
<td>DH 313</td>
<td>Radiology I</td>
<td>2</td>
</tr>
<tr>
<td>DH 315</td>
<td>Oral Histology and Embryology</td>
<td>2</td>
</tr>
<tr>
<td>DH 321</td>
<td>Head and Neck Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>DH 332</td>
<td>Scientific Foundations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 312</td>
<td>Primary Preventive Dentistry</td>
<td>3</td>
</tr>
<tr>
<td>DH 316</td>
<td>Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>DH 317</td>
<td>Medical Emergencies Related to the Dental Office</td>
<td>2</td>
</tr>
<tr>
<td>DH 318</td>
<td>Dental Hygiene Principles and Practice I</td>
<td>4</td>
</tr>
</tbody>
</table>
DH 328 Radiology II 2
DH 331 Periodontics I 2

SENIOR YEAR

Summer
DH 326 Dental Hygiene Principles and Practice II 2
DH 327 Patient Care I 2
DH 336 Biomaterials in Dentistry 2
DH 337 Anxiety and Pain Management 1
DH 400 Introduction to Research 2

Fall
DH 405 Patient Care II 3
DH 412 Pharmacology 3
DH 416 Oral Pathology 2
DH 418 Dental Hygiene Principles and Practice III 2
DH 431 Periodontics II 2
DH 435 Community Dental Health I 1
DH 438 Oral Health Research I 1

Spring
DH 429 Practice Management 3
DH 432 Dental Hygiene Principles and Practice IV 2
DH 433 Patient Care III 4
DH 437 Community Dental Health II 2
DH 439 Oral Health Research II 1

Total Required Hours 67

ADVANCED STANDING DENTAL HYGIENE

The Advanced Standing Baccalaureate Degree program in dental hygiene is intended to enhance the quality and education of dental hygienists. It enables practicing licensed dental hygienists to update their educational background, enhance their didactic skills, improve their clinical decision-making skills and receive the Bachelor of Science in Dental Hygiene. The program, offered across five semesters, is designed for, but not limited to, part-time, nontraditional students. Online coursework is the method of content delivery.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the advanced standing dental hygiene program must:

1. Have completed a minimum of 57 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Have completed a dental hygiene program accredited by the American Dental Association Commission on Dental Accreditation;
3. Submit a copy of a dental hygiene license;
4. Have a minimum cumulative GPA of 2.50 on a 4.00 scale; and
5. Successfully complete (a grade of C or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science¹</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Fine Arts²</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Natural Science³</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Prerequisites 57

¹Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
²Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.
³Natural Sciences include courses such as astronomy, biology, chemistry, geology, physics or physical science.

PROGRAM APPLICATION DEADLINE

All application documents and application fees must be received by the Office of Student Records and Registrar by July 1 for fall admission and December 1 for spring admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the
established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 303 Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>DH 311 Current Trends in Preventive Care</td>
<td>3</td>
</tr>
<tr>
<td>DH 319 Pathophysiology/Special Needs Patients</td>
<td>4</td>
</tr>
<tr>
<td>DH 401 Research Methods</td>
<td>4</td>
</tr>
<tr>
<td>DH 412 Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>DH 428 Dental Hygiene Case Studies</td>
<td>4</td>
</tr>
<tr>
<td>DH 430 Advanced Practice Management</td>
<td>3</td>
</tr>
<tr>
<td>DH 434 Dental Hygiene Practices</td>
<td>2</td>
</tr>
<tr>
<td>DH 440 Community Dental Health</td>
<td>4</td>
</tr>
<tr>
<td>DH 455 Capstone Study*</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

*Upon the successful completion of DH 455, students will be awarded an additional 33 semester hours of transfer elective credit based on required course work completed in the previous program that enables them to sit for and earn their professional credential.

DEGREE

Candidates for the dental hygiene degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all requirements, students will be awarded the Bachelor of Science in Dental Hygiene from the University of Mississippi.

COURSE DESCRIPTIONS

**DH 303. PROFESSIONAL WRITING.** Techniques and practice in intermediate composition strategies, including development, research and analysis. A study of rhetoric in health care and methods for adapting to the needed rhetorical situation by the hygienist. (Lecture) (3 semester hours)

**DH 305. DENTAL HYGIENE INSTRUMENTATION.** Development and application of the fundamentals of instrumentation. (Lecture/Lab) (3 semester hours)

**DH 309. DENTAL ANATOMY AND OCCLUSION.** A study of dental anatomy and physiology. Focus is on developmental and anatomical differences among teeth, root morphology and anomalies, and includes an introduction to static and dynamic occlusion. (Lecture) (2 semester hours)

**DH 311. CURRENT TRENDS IN PREVENTIVE CARE.** Focuses on expanding the dental hygienist’s understanding of primary prevent measures used to promote oral health. Included are biofilm control, an update on demineralization/remineralization, motivational interviewing, caries management by risk assessment (CAMBRA), prevention for the oral cancer patient, treating dentinal sensitivity, oral malodor and current use of pit and fissure sealants. (Lecture) (3 semester hours)

**DH 312. PRIMARY PREVENTIVE DENTISTRY.** Focuses on the science and practice of preventive dental care. The etiology and associated risk factors of common oral diseases are presented. The measures that promote oral health and prevent disease are emphasized: tooth brushing, toothpastes, and mouth rinses, interproximal cleaning, diet modification, fluorides, sealants and oral risk assessments. Also included are health promotion theories and prevention of oral disease in various life stages. (Lecture) (3 semester hours)

**DH 313. RADIOLOGY I.** Study of radiology and its use in dentistry as a diagnostic aid. Theories of exposure, processing, evaluation and interpretation of normal and abnormal structures are taught for both digital and film-based image capture. An emphasis is placed on normal anatomic structures viewed in periapical and panoramic surveys. (Lecture) (2 semester hours)

**DH 315. ORAL HISTOLOGY AND EMBRYOLOGY.** A study of the histology of teeth and surrounding structures. A survey of the elements of embryology of the head and neck, especially related to the development of the teeth, dental arches, salivary glands, buccal mucosa, pharynx and tongue. (Lecture) (2 semester hours)

**DH 316. PATHOPHYSIOLOGY.** A study of the pathology and oral health management of disease. Topics include functions of the cells, tissues, organs and organ systems and how they relate to the disease process, along with the inflammatory process and immunologic response. Emphasizes normal and pathological responses to illness as related to the evaluation and treatment of the dental patient. (Lecture) (3 semester hours)

**DH 317. MEDICAL EMERGENCIES RELATED TO THE DENTAL OFFICE.** A comprehensive study in the prevention, management, recognition, treatment and disposition of medical emergencies that may occur in the dental office. (Lecture) (2 semester hours)

**DH 318. DENTAL HYGIENE PRINCIPLES & PRACTICE I.** An introduction to the “Dental Hygiene Process of Care” with emphasis on professionalism, infection control, data collection protocol and patient assessment. Skills are practiced in a clinical setting. Upon successful completion of the lecture and laboratory sessions, students will apply knowledge and treat a patient in the dental hygiene clinic as part of the course completion. Prerequisite: DH 305 Corequisite: DH 312 (Lecture/Lab) (4 semester hours)

**DH 319. PATHOPHYSIOLOGY/SPECIAL NEEDS PATIENTS.** A study of the pathology and oral health management of disease and injuries. Topics include functions of the cells, tissues, organs and organ systems and how they relate to the disease process, along with the
inflammatory process and immunologic response. Emphasizes normal and pathological responses to illness as related to the evaluation and treatment of the dental patient. Specific emphasis on dental hygiene care of patients with various systemic, mental, physical disorders and special needs. (Lecture) (4 semester hours)

DH 321. HEAD AND NECK ANATOMY. A detailed study of the skeletal, muscular, vascular and neural features of the head and neck. (Lecture) (2 semester hours)

DH 326. DENTAL HYGIENE PRINCIPLES & PRACTICE II. Expands on “Dental Hygiene Principles & Practice I” through additional lecture and laboratory sessions. Additional clinical procedures and practice will include nutritional counseling, sharpening of instruments, placement of chemotherapeutic and desensitizing agents, placement of sealants, caries detection techniques, use of ultrasonics and air polishers, and taking impressions for study models and bleaching trays. Prerequisites: Fall junior year courses. (Lecture/Lab) (2 semester hours)

DH 327. PATIENT CARE I. The development and application of clinical skills in assessment, care plans, implementation and evaluation of care. Corequisite: DH 326 (Clinical rotation) (2 semester hours)

DH 328. RADIOLOGY II. Expands the student’s knowledge of the didactic portion of DH 313 “Radiology I.” Radiographic surveys via the paralleling technique are exposed and evaluated. Panoramic radiographs are also exposed. (Lecture/Lab) (2 semester hours)

DH 331. PERIODONTICS I. An introduction to periodontics. The focus is on biological and clinical aspects of periodontontology including histopathology, etiology, diagnosis and treatment planning of periodontal diseases. (Lecture) (2 semester hours)

DH 332. SCIENTIFIC FOUNDATIONS. A study of the functions of the cells, tissues, organs and organ systems and how they relate to the disease process. The inflammatory process including the immunologic response and healing will be included. (Lecture) (3 semester hours)

DH 336. BIOMATERIALS OF DENTISTRY. Introduction to biomaterials employed in dentistry. Techniques and materials utilized in the clinical environment will be practiced in the “Dental Hygiene Theory I” lab. Prerequisites: All courses in previous semester. Corequisites: All courses in junior spring semester. (Lecture) (2 semester hours)

DH 337. ANXIETY AND PAIN MANAGEMENT. Methods used to control pain, fear and anxiety in the dental office. Including the use of nitrous oxide and oxygen analgesia. (Lecture) (1 semester hour)

DH 400. INTRODUCTION TO RESEARCH. An introduction to research design emphasizing systematic investigation involving human subjects as it relates to data collection, analysis and interpretation of findings. Emphasis on critical review of dental hygiene research studies and their application to clinical practice. (Lecture) (2 semester hours)

DH 401. RESEARCH METHODS. An introduction to research design emphasizing systematic investigation involving human subjects as it relates to data collection, analysis and interpretation of findings. The course is intended to critically review current dental hygiene research culminating in a literature review on a specific topic. (Lecture) (4 semester hours)

DH 405. PATIENT CARE II. Students will expand on the application of patient care to a diversified population. Emphasis on establishing competence in preventive and therapeutic procedures. Prerequisites: DH 326 and DH 327; Corequisite: DH 418 (Clinical rotation) (3 semester hours)

DH 412. PHARMACOLOGY. A study of drug actions and their mechanisms when introduced to the body under specific conditions and the reactions of the body to these drugs. Special emphasis is placed on pharmacological knowledge that will provide more effective care of the patient by the dental hygienist. (Lecture) (3 semester hours)

DH 416. ORAL PATHOLOGY. This course is a study of the definition, distribution, causality, resolution and outcomes of pathological conditions affecting the head and neck with emphasis on the oral and perioral areas. (Lecture) (2 semester hours)

DH 418. DENTAL HYGIENE PRINCIPLES & PRACTICE III. Expand on the “Dental Hygiene Principles & Practice” courses with continued discussion on theoretical, practical and ethical concepts in dental hygiene. Specific emphasis on dental hygiene care of patients with various systemic, mental, physical disorders and/or special needs will be covered. Prerequisites: All courses in previous semester. Corequisites: All courses in the senior fall semester. (Lecture) (2 semester hours)

DH 428. DENTAL HYGIENE CASE STUDIES. Current technology used to prepare and present multimedia presentations regarding selected dental hygiene clinical scenarios. A component of the course involves legal and ethical issues that arise in clinical practice. (Lecture) (4 semester hours)

DH 429. PRACTICE MANAGEMENT. Dental office practice and procedures, including the importance of business methods in a profession; record systems, including computer applications, accounting and collection of fees; resume development; and interviewing skills. (Lecture) (3 semester hours)

DH 430. ADVANCED PRACTICE MANAGEMENT. A study of the delivery of client-centered care practice while emphasizing business methods, records systems, accounting and collection of fees, economics, conflict management and accommodations to the evolving health care system. (Lecture) (3 semester hours)

DH 431. PERIODONTICS II. Builds on the foundation knowledge presented in “Histology and Periodontology” with emphasis on recognition, therapeutic surgical and non-surgical treatment of periodontal disease. Prerequisites: DH 331 and DH 327 (Lecture) (2 semester hours)

DH 432. DENTAL HYGIENE PRINCIPLES & PRACTICE IV. Theoretical, practical and ethical concepts in dental hygiene. Focus on dental/dental hygiene specialties and subspecialties. Dental practice acts, and state and regional licensing differences. (Lecture) (2 semester hours)
DH 433. PATIENT CARE III. A continuation of comprehensive patient care services with emphasis on establishing entry-level competence in preventive and therapeutic procedures. (Clinical rotation) (4 semester hours)

DH 434. DENTAL HYGIENE PRACTICES. Concepts of advanced dental hygiene instrumentation, instrument sharpening, solutions for common instrumentation difficulties, ergonomic techniques, appointment planning and instrument sequencing are included. (Lecture) (2 semester hours)

DH 435. COMMUNITY DENTAL HEALTH I. Introduction to the history, principles and ethics of dental public health. Included are theories and techniques of health promotion and disease prevention, distribution of oral diseases, principles of dental epidemiology and the use of dental indexes. (Lecture) (1 semester hour)

DH 437. COMMUNITY DENTAL HEALTH II. A continuation of the didactic knowledge and skills obtained in DH 435 “Community Dental Health I.” Selected readings, discussion and practical experiences related to planning, implementation and evaluation of the teaching/learning process in community settings. (Lecture/Lab) (2 semester hours)

DH 438. ORAL HEALTH RESEARCH I. Research process exploration by extensive review of current literature and developing and presenting a case report. (Lecture) (1 semester hour)

DH 439. ORAL HEALTH RESEARCH II. A continuation of “Oral Health Research I.” Review of the oral health literature on a periodontal, unique case or oral health topic resulting in a written and verbal presentation. Develop and present a table clinic at a professional meeting. Prerequisite: DH 438 (Lecture) (1 semester hour)

DH 440. COMMUNITY DENTAL HEALTH. Development and utilization of skills in the area of community-based program planning, implementation and evaluation. History, principles and ethics of dental public health are discussed, along with an emphasis on disease prevention, distribution of oral diseases, principles of dental epidemiology and the use of dental indexes. Students will implement a community-based program utilizing program planning and evaluation skills. (Lecture) (4 semester hours)

DH 455. CAPSTONE STUDY. Students examine, synthesize and develop solutions to issues faced in oral health care. In cooperation with the course advisor and/or program director, students will select a contemporary topic in dental hygiene and develop a comprehensive project or paper evaluating solutions to the particular issue and present the paper to faculty according to course guidelines. (Lecture) (4 semester hours)

HEALTH ADMINISTRATION (DHA)

Jessica H. Bailey, PhD, RHIA, CCS, Department Chair and Program Director
Angela Burrell, MSN, RN, Program Coordinator

FACULTY

Professors:
Jessica H. Bailey, PhD, RHIA, CCS
Susan Taylor, PhD

Associate Professor:
Mitzi Norris, PhD, MT(ASCP), SM(ASCP)

Assistant Professors:
Jessylen Age, DNP, RN
Cindy Dishongh, MHS, RHIA
Elizabeth Franklin, PhD
John Hodnett, DNP, RN, LPC

Kaye Bender, PhD, RN
Richard Roberson, JD
Ellen Jones, PhD
Rob McElhaney, PhD, CPA
Terry Pollard, MA
Helen R. Turner, MD, PhD
Brian Rutledge, PhD

ABOUT THE PROGRAM

The Doctor of Health Administration (DHA) program offers an advanced educational opportunity in health care leadership. The program trains leaders in administration, education and clinical areas to navigate changes in the health care environment. The program is designed to provide graduates an opportunity to assume upper level managerial and leadership roles within the health care delivery system. The program is also designed to prepare licensed, certified and/or registered health care practitioners for faculty and leadership positions within health care organizations.

The DHA program, offered across nine semesters, is devised for, but not limited to, part-time, nontraditional students. Online course work is the primary method of content delivery with minimal face-to-face mandatory on-campus sessions.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the doctor of health administration program must:

1. Have a master’s degree or professional doctorate from a regionally accredited institution of higher learning with a GPA of at least 3.00 on a 4.00 scale in a health care related field or a master’s degree from a regionally-accredited institution of higher learning with a GPA of at least 3.00 on a 4.00 scale and five or more years of experience in health care management, health care policy, clinical medical specialty, etc.;
2. Submit an official score report from the GRE and,
3. Submit curriculum vitae or resume.

A limited number of applicants will be admitted to the health administration program with students selected on a competitive basis. Qualification does not ensure admission.

**PROGRAM APPLICATION DEADLINES**

All application documents and the application fees must be received by the Office of Student Records and Registrar by December 1 for summer admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions.

**EXPENSES**

In addition to tuition, students should be prepared to spend $1,500 to $2,000 per year for textbooks and supplies.

**DEGREE AND CERTIFICATION**

Candidates for the doctor of health administration degree must have completed the prescribed curriculum with an overall cumulative grade point average of 3.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all requirements, students will be awarded the doctor of health administration from the University of Mississippi.

**PROFESSIONAL COURSE OF STUDY**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHA 700 Leadership Strategies in Health Entities</td>
<td>3</td>
</tr>
<tr>
<td>DHA 706 Foundations of Health Policy</td>
<td>3</td>
</tr>
<tr>
<td>DHA 712 Strategic Change Management</td>
<td>3</td>
</tr>
<tr>
<td>DHA 718 Current Trends in Accreditation &amp; Licensure</td>
<td>3</td>
</tr>
<tr>
<td>DHA 724 Healthcare Law, Regulations &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>DHA 730 Organizational Behavior for Health Professions</td>
<td>3</td>
</tr>
<tr>
<td>DHA 736 Health Economics</td>
<td>3</td>
</tr>
<tr>
<td>DHA 748 Communications in Health Organizations</td>
<td>3</td>
</tr>
<tr>
<td>DHA 754 Fundamentals of Applied Research</td>
<td>3</td>
</tr>
<tr>
<td>DHA 756 Quality Processes in Health Organizations</td>
<td>3</td>
</tr>
<tr>
<td>DHA 760 Fiscal Responsibility &amp; Accountability</td>
<td>3</td>
</tr>
<tr>
<td>DHA 764 Health Systems</td>
<td>3</td>
</tr>
<tr>
<td>DHA 770 Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>DHA 776 Applied Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>DHA 798 Doctoral Project</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

**COURSE DESCRIPTIONS**

**DHA 700. LEADERSHIP STRATEGIES IN HEALTH ENTITIES.** An exploration of leadership strategies that generate value, competitive advantage and growth in health entities. Students will be exposed to core concepts, analytical techniques and frameworks. (Lecture) (3 semester hours)

**DHA 706. FOUNDATIONS OF HEALTH POLICY.** An examination of health policy and economic issues as they relate to the health care delivery system. The complex arrangements and interactions among governmental, private not-for-profit and for-profit systems are explored within a context including economic, legal, socio-political and public policy perspectives. (Lecture) (3 semester hours)

**DHA 712. STRATEGIC CHANGE MANAGEMENT.** A discussion of the strategic change management process in the delivery of health care. Within the context of health care mission, planning, resource allocation, program implementation and program evaluation are examined. (Lecture) (3 semester hours)

**DHA 718. CURRENT TRENDS IN ACCREDITATION & LICENSURE.** An inquiry into the foundations, requirements and trends in various accrediting and licensing entities within health care. (Lecture) (3 semester hours)

**DHA 724. HEALTH CARE LAW, REGULATIONS & ETHICS.** An exploration of the legal and ethical issues and dilemmas in the delivery of health care. The principles and practical application of laws and regulations affecting operational decisions of health care providers, health plans and third-party payers along with the social, moral and ethical issues encountered in the balance of patient interests, needs and rights. (Lecture) (3 semester hours)

**DHA 730. ORGANIZATIONAL BEHAVIOR FOR HEALTH PROFESSIONS.** An examination of organizational theory as applied in the delivery of health care. Areas studied include psychological and cultural processes affecting recruitment and selection, factors influencing training and development, the scientific method as applied to health care organizations, theories and practices influencing employee performance, effective management theory and practice, engaging and involving employees in organizational processes, and employee well-being. (Lecture) (3 semester hours)
DHA 736. HEALTH ECONOMICS. A discussion of economic theory, trends, market issues and applications as related to health care delivery. The application of economic analytical techniques to health care markets, quality improvement and patient safety will be explored. (Lecture) (3 semester hours)

DHA 748. COMMUNICATIONS IN HEALTH ORGANIZATIONS. An exploration of concepts and issues related to communication among internal entities and with external entities in the delivery of health care. Interprofessional collaborative practice, interprofessional education, knowledge management, negotiation, mediation and public relations will be studied. (Lecture) (3 semester hours)

DHA 754. FUNDAMENTALS OF APPLIED RESEARCH. An inquiry into the principles and techniques for designing and implementing research studies in the health care environment. Critical assessment of literature, analysis and interpretation of results, and application to management decisions will be studied. (Lecture) (3 semester hours)

DHA 756. QUALITY PROCESSES IN HEALTH ORGANIZATIONS. A review of methods to improve health care systems and health care delivery. Students will learn to focus on identifying opportunities to improve process, developing methods to identify factors that impact process and using data to determine appropriate actions. (Lecture) (3 semester hours)

DHA 760. FISCAL RESPONSIBILITY & ACCOUNTABILITY. An examination of financial management and operations theory as related to health care delivery. (Lecture) (3 semester hours)

DHA 764. HEALTH SYSTEMS. A discussion of the evolution, structure and current issues in the health systems. Students will be exposed to provider, supplier and payer aspects of health systems as well as to health care disparity within the United States, especially within Mississippi. (Lecture) (3 semester hours)

DHA 770. EPIDEMIOLOGY. An exploration of epidemiological principles and tools of investigation as applied to managerial decision-making in health care delivery. Students will examine health behaviors and lifestyles that impact demand on health care delivery systems, require integration of health services, necessitate preventive programs and affect continuity of care. (Lecture) (3 semester hours)

DHA 776. APPLIED RESEARCH TECHNIQUES. A continuation of DHA 754 “Fundamentals of Applied Research” Students will apply qualitative research methods to community health problems and critique research in terms of design, technique, analysis and interpretation. (Lecture) (3 semester hours)

DHA 798. DOCTORAL PROJECT. Research, findings, recommendations and conclusions of a doctoral research project will be reported. Course may be repeated for credit, but not more than 18 hours may be applied to the doctoral degree. (Dissertation) (3-12 semester hours)

HEALTH INFORMATICS AND INFORMATION MANAGEMENT (BS)

Ann H. Peden, PhD, RHIA, CCS, Department Chair and Program Director

FACULTY

Professors:
Jessica H. Bailey, PhD, RHIA, CCS
Ann H. Peden, PhD, RHIA, CCS

Associate Professor:
Lisa Morton, PhD, RHIA

Assistant Professors:
Angela Burrell, MSN, RN
Monte E. Luehlfling, MSSM
Delia Owens, BSN, MSN, JD

Jamil Ibrahim, BA, MBA, PhD
Angela Morey, MSM, RHIA

Instructors:
Carisa D. Nixon, RN, RHIA
Charity Peacock, MS, RHIA
Shannon Wentz, BS, MBA
Dorthy Young, PhD, MHSA

ABOUT THE PROFESSION

Health informatics and information management professionals are experts in managing the collection, storage, retrieval and interpretation of health care information. To provide the highest quality health care delivery, health care information is used not only for patient care, but also in medical legal issues, research, planning and evaluation. Opportunities for employment are found in a variety of settings, including hospitals, clinics, rehabilitation centers, home health agencies, managed care organizations, insurance agencies, governmental agencies, educational institutions and research centers.

ACCREDITATION STATUS

The health informatics and information management baccalaureate program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM), 233 North Michigan Avenue, 21st Floor, Chicago, IL 60601-5800. CAHIIM’s phone number is (312) 233-1183.
TRADITIONAL HEALTH INFORMATICS AND INFORMATION MANAGEMENT

The traditional baccalaureate degree program in health informatics and information management is an entry-level program for students who want to pursue a career in health informatics and information management and to obtain the registered health information administrator (RHIA) credential from the American Health Information Management Association. Upon completion of the two-year program, students receive a bachelor's of science degree and are prepared to apply for and obtain their RHIA.

The program is designed for full- or part-time, nontraditional students. Online coursework is the method of content delivery.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the health informatics and information management program must:

1. Have completed a minimum of 59 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Have an overall cumulative grade point average of 2.50 on a 4.00 scale;
3. Submit ACT scores; and
4. Successfully complete (a grade of C or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science¹</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Speech</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Fine Arts²</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Anatomy and Physiology with Lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Accounting</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Basic Computer Concepts and Applications</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Total Prerequisites</td>
<td></td>
<td>59</td>
</tr>
</tbody>
</table>

¹Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
²Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.

PROGRAM APPLICATION DEADLINE

All application documents and the application fees must be received by the Office of Student Records and Registrar by March 1 for fall admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

EXPENSES

In addition to tuition and fees, traditional students should be prepared to spend $2,500 over the course of the program for books and supplies. In addition to books and supplies, students are required to take the Registered Health Information Administrator examination during the senior year at a cost of approximately $300. The cost of the registry examination and all required items are covered in the financial aid package for qualifying students.

DEGREE AND CERTIFICATION

Candidates for the health informatics and information management degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all requirements, students will be awarded the Bachelor of Science in Health Informatics and Information Management from the University of Mississippi and are eligible to apply to take the registration examination of the American Health Information Management Association for the RHIA designation.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>HI 311 Database Applications in Health Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>HI 315 Health Information Management in Hospitals</td>
<td>4</td>
</tr>
<tr>
<td>HI 318 Medical Concepts</td>
<td>3</td>
</tr>
<tr>
<td>HI 326 Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>HI 319 Medical Concepts II</td>
<td>4</td>
</tr>
<tr>
<td>HI 325 Coding and Classification Systems for Diagnoses</td>
<td>4</td>
</tr>
<tr>
<td>HI 329 Health Care Data Structure</td>
<td>3</td>
</tr>
<tr>
<td>HI 416 Research Design and Statistics for Health Informatics &amp; Information Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>
PROGRESSION HEALTH INFORMATICS AND INFORMATION MANAGEMENT

This progression program is designed to allow a health care professional holding the Registered Health Information Technician (RHIT) credential from the American Health Information Management Association to receive credit for previous educational and professional experience and to earn a baccalaureate degree in health informatics and information management from the University of Mississippi Medical Center. The program, offered across five semesters, is designed for, but not limited to, part-time, nontraditional students. Online coursework is the method of content delivery.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the progression health informatics and information management program must:

1. Have completed minimum of 54 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Hold a current RHIT credential; and
3. Successfully complete (a grade of C or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Humanities and Fine Arts(^1)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science(^2)</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td><strong>24</strong></td>
<td><strong>54</strong></td>
</tr>
</tbody>
</table>

\(^1\)Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.

\(^2\)Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.

PROGRAM APPLICATION DEADLINE

All application documents and the application fees for the progression program in health informatics and information management must be received by the Office of Student Records and Registrar by May 1 for summer admission, July 15 for fall admission, and December 15 for spring admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

EXPENSES

In addition to tuition and fees, progression students should be prepared to spend $2,500 over the course of the program for books and supplies. In addition to books and supplies, students are required to take the Registered Health Information Administrator examination during the senior year at a cost of approximately $300. The cost of the registry examination and all required items are covered in the financial aid package for qualifying students.
PROFESSIONAL COURSE OF STUDY

JUNIOR YEAR

**Fall**
- HI 311 Database Applications in Health Information Systems 4
- HI 428 Quality Management & Performance Improvement Strategies 3
  
  **Total Semester Hours:** 7

**Spring**
- HI 329 Health Care Data Structure 3
- HI 416 Research Design and Statistics for Health Informatics & Information Management 3
  
  **Total Semester Hours:** 6

SENIOR YEAR

**Summer**
- HI 309 Topics in Health Informatics & Information Management 3
- HI 429 Advanced Privacy, Security and Legal Issues 3
  
  **Total Semester Hours:** 6

**Fall**
- HI 381 Health Information Administration Professional Practice Experience I 1
- HI 424 Revenue Cycle and Reimbursement Management 3
- HI 425 Health Care Systems Design and Analysis 4
  
  **Total Semester Hours:** 8

**Spring**
- HI 422 Management of Health Information Systems 4
- HI 451 Directed Study* 3
- HI 482 Health Information Administration Professional Practice Experience II 1
  
  **Total Semester Hours:** 8

**Total Required Hours:** 35

*Upon the successful completion of HI 451, students will be awarded an additional 31 semester hours of transfer elective credit based on required course work completed in the associate degree program that enables them to sit for and earn their professional credential.

DEGREE

Candidates for the health informatics and information management degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all requirements, students will be awarded the Bachelor of Science in Health Informatics and Information Management from the University of Mississippi.

COURSE DESCRIPTIONS

**HI 309. TOPICS IN HEALTH INFORMATICS AND INFORMATION MANAGEMENT.** Overview of health informatics and methods of applying information technology to health information management functions, including collection, storage, management, analysis and reporting of health care data and information; the impact of selected national health information initiatives on health information systems including initiatives related to the classification of health care data. (Lecture) (3 semester hours)

**HI 311. DATABASE APPLICATIONS IN HEALTH INFORMATION SYSTEMS.** Basic principles of data structure and data quality; data modeling; database design and development; management of data resources and databases. (Lecture/Lab) (4 semester hours)

**HI 315. HEALTH INFORMATION MANAGEMENT IN HOSPITALS.** Health information systems in the acute hospital setting including record content, record retention requirements, accreditation and licensure, manual filing and numbering systems, vital statistics and the computer-based record. (Lecture/Lab) (4 semester hours)

**HI 316. HEALTH INFORMATICS AND INFORMATION MANAGEMENT ACROSS HEALTH CARE SETTINGS.** Health informatics and information management in long term care, home health care, ambulatory care, behavioral health, hospice and other health care settings; includes documentation requirements, licensure and accreditation standards, quality assessment, reimbursement methodologies, electronic health records and information systems. Prerequisite: HI 315 (Lecture) (3 semester hours)

**HI 318. MEDICAL CONCEPTS I.** A study of current clinical concepts in diseases and their treatments with emphasis on medical language. Prerequisite: Anatomy and Physiology (Lecture) (3 semester hours)

**HI 319. MEDICAL CONCEPTS II.** A study of current clinical concepts with emphasis on specified diseases and their causes, lesions, manifestations and treatments. Prerequisite: HI 318 (Lecture) (4 semester hours)

**HI 325. CODING AND CLASSIFICATION SYSTEMS FOR DIAGNOSES.** Classifying diagnoses with limited introduction to classifying procedures; case mix classifications; relationship between various classifications and provider reimbursement mechanisms for inpatients. Prerequisite HI 318. Pre- or Corequisite HI 319 (Lecture/Lab) (4 semester hours)

**HI 326. HUMAN RESOURCE MANAGEMENT.** Principles and policies of personnel administration, including interviewing, evaluating and compensating with emphasis on health care settings. (Lecture) (3 semester hours)
HI 327. CODING AND CLASSIFICATION SYSTEMS FOR PROCEDURES. Classifying procedures; case-mix classifications; relationship between various classifications and provider reimbursement mechanisms. Prerequisite HI 318; Pre- or Corequisite HI 319 (Lecture/Lab) (3 semester hours)

HI 329. HEALTH CARE DATA STRUCTURE. A study of health care data, its collection, analysis and uses with emphasis on infrastructure and regulatory requirements to support electronic health records. Prerequisite: HI 311 (Clinical Rotation) (3 semester hours)

HI 330. SPECIAL TOPICS. Elective. Content Varies. May be repeated for credit. Prerequisite: Permission of program director (Lecture) (1-3 semester hours)

HI 381. HEALTH INFORMATION ADMINISTRATION PROFESSIONAL PRACTICE EXPERIENCE I. Project-based practice of health information administration in affiliated health care organization(s) that support or regulate health care organizations or health care professionals. Projects completed will relate to didactic courses taken previously or concurrently. (Laboratory) (1 semester hour)

HI 416. RESEARCH DESIGN AND STATISTICS FOR HEALTH INFORMATICS AND INFORMATION MANAGEMENT. A study of basic topics of research design and statistics. Special focus on critical review and techniques of applied research for health information professionals. (Lecture) (3 semester hours)

HI 422. MANAGEMENT OF HEALTH INFORMATION SYSTEMS. Best practices in planning, organizing, staffing and directing health information services, including human resource management. (Lecture) (4 semester hours)

HI 425. HEALTH CARE SYSTEMS DESIGN AND ANALYSIS. A study of computerized health information systems with emphasis on systems design and analysis and systems integration. Prerequisite: HI 311 (Lecture) (4 semester hours)

HI 426. AFFILIATION. This supervised professional practice experience requires the student to spend 160 clock hours practicing health information administration in an affiliated health care organization (or one that supports or regulates health care organizations or health care professionals). Projects completed will relate to didactic courses taken previously or concurrently. Course also includes professional presentations from the students. (Clinical Rotation) (4 semester hours)

HI 427. SEMINAR. A study of methods of identifying and arriving at satisfactory solutions to problems that may be encountered in health information management. Comprehensive examination. (Lecture) (1 semester hour)

HI 428. QUALITY MANAGEMENT AND PERFORMANCE IMPROVEMENT STRATEGIES. Management of the quality assessment and performance improvement function, including benchmarking, statistical quality control and risk management; utilization and resource management; disease management process (such as case management, critical paths); outcomes measurement (such as patient, customer satisfaction, disease specific); benchmarking techniques; patient and organization safety initiatives. Prerequisite: HI 416 (Lecture) (3 semester hours)

HI 429. ADVANCED PRIVACY, SECURITY AND LEGAL ISSUES. Management of systems to ensure privacy, confidentiality, security of health information; health information laws, regulations, and standards; elements of compliance programs; professional ethical issues; legal health record in an electronic environment; e-discovery guidelines. (Lecture) (3 semester hours)

HI 430. SPECIAL TOPICS. Treatment of specific subjects not dealt with fully in other courses. This elective course may be repeated for credit. (Lecture) (1-4 semester hours)

HI 451. DIRECTED STUDY. Projects related to advanced health informatics and information management topics to demonstrate management and leadership skills. (Lecture) (3 semester hours)

HI 482. HEALTH INFORMATION ADMINISTRATION PROFESSIONAL PRACTICE EXPERIENCE II. Project-based practice of health information administration in affiliated health care organization(s) that support or regulate health care organizations or health care professionals. Projects completed will relate to didactic courses taken previously or concurrently. (Clinical rotation) (1 semester hour)

HI 483. HEALTH INFORMATICS AND INFORMATION MANAGEMENT PROFESSIONAL PRACTICE EXPERIENCE. This supervised professional practice experience requires the student to spend 80 clock hours practicing health information administration in an affiliated health care organization (or one that supports or regulates health care organizations or health care professionals). Projects completed will relate to didactic courses taken previously or concurrently. Course also includes professional presentations from the students. (Clinical rotation) (2 semester hours)
HEALTH INFORMATICS AND INFORMATION MANAGEMENT (MHIIM)
Ann H. Peden, PhD, RHIA, CCS, Department Chair and Program Director

FACULTY

Professors:
Jessica H. Bailey, PhD, RHIA, CCS
Ann H. Peden, PhD, RHIA, CCS

Associate Professor:
Lisa Morton, PhD, RHIA

Assistant Professors:
Angela Burrell, MSN, RN
Monte E. Luehlfling, MSSM
Angela Morey, MSM, RHIA

Instructor:
Dorthy Young, PhD, MHS

ABOUT THE PROFESSION

The Master of Health Informatics and Information Management program prepares health care professionals for leadership roles in a health care system that increasingly relies on information technology. It provides students with knowledge and skills in the areas of information systems analysis, design, implementation and management; health information exchange; social and ethical issues in health care computing; privacy and security of electronic health information; database and knowledge management; decision support systems; and other emerging areas.

The program has two tracks wherein students may earn a Master of Informatics and Information Management degree. The health informatics track prepares graduates to assume a critical role in the development and implementation of electronic health records in hospitals and health systems as related to structure, function and transfer of information, socio-technical aspects of health computing and human-computer interaction.

Specifically, graduates will be able to do the following:
1. Describe the impact of modern computing technologies and the Internet on biomedical computing;
2. Examine sociotechnical aspects of health care computing;
3. Evaluate human computer interaction and incorporate human factors engineering principles into user interface design;
4. Develop computer programming skills required for implementation of technical security applications and software design;
5. Apply networking principles to achieve system interoperability and health information exchange; and
6. Develop and map clinical terminologies, vocabularies and ontologies.

The health information management track prepares graduates to assume a critical role in the development and implementation of electronic medical records in hospitals and health systems, to manage patient health information and medical records, administer computer information systems, collect and analyze patient data, and use classification systems and medical terminologies.

Specifically, graduates will be able to do the following:
1. Apply knowledge of health data structure, content, and acquisition to the management of health care data;
2. Apply knowledge of clinical classification systems to manage processes, policies, and procedures to ensure the accuracy of coded data;
3. Manage processes for compliance and reporting of health care data based on knowledge of reimbursement methodologies, regulations, and revenue cycle management;
4. Analyze and present data for quality management, utilization management, risk management, and other patient care related studies; and
5. Apply knowledge of research methods to facilitate biomedical research while ensuring adherence to Institutional Review Board (IRB) processes and policies.

This track will allow graduates to test for the Registered Health Information Administrator credential from the American Health Information Management Association if an additional six hours are completed.

The Master of Health Informatics and Information Management, offered across six semesters, is devised for, but not limited to, part-time, non-traditional students. Online coursework is the method of content delivery.

ACCREDITATION STATUS

The health informatics track of the Master of Health Informatics and Information Management program is in candidacy with the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM), 233 North Michigan Avenue, 21st Floor, Chicago, IL 60601-5800. CAHIIM’s phone number is (312) 233-1183.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the Master of Health Informatics and Information Management program must:

1. Have a bachelor’s degree from a regionally-accredited institution of higher learning with a GPA of at least 3.00 on a 4.00 scale on the last 60 hours attempted;
2. Submit an official GRE report;
3. Submit a resume;
4. Submit an essay; and
5. Successfully complete (a grade of “C” or better) a course in Human Anatomy and Physiology or a pre-approved substitute

Students will be selected on a competitive basis. Qualification does not ensure admission.

PROGRAM APPLICATION DEADLINE
All application documents and the application fees must be received by the Office of Student Records and Registrar by March 1 for fall admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the established deadline, if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

EXPENSES
In addition to tuition and fees, students should be prepared to spend approximately $1,700 for books and supplies. Students who sit for the Registered Health Information Administrator examination can expect to incur an additional cost of approximately $300.

DEGREE AND CERTIFICATION
Candidates for the master of informatics and information management degree must have completed the prescribed curriculum with an overall cumulative grade point average of 3.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all requirements, students will be awarded the master of informatics and information management from the University of Mississippi.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI 601 Medical Concepts or HI 609 Information Technology &amp; Applications</td>
<td>3</td>
</tr>
<tr>
<td>HI 611 Research Design and Statistics in Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 630 Health Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>HI 632 Databases and Knowledge Management</td>
<td>3</td>
</tr>
<tr>
<td>HI 634 Development of Electronic Health Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>HI 699 Capstone in Health Informatics &amp; Information Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>HEALTH INFORMATICS TRACK</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td>HI 607 Management and Leadership in Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 614 Privacy and Security for Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 617 Epidemiology and Public Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 619 Health Information and Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>HI 631 Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 638 Clinical Vocabularies &amp; Classification Systems</td>
<td>3</td>
</tr>
<tr>
<td><strong>HEALTH INFORMATION MANAGEMENT TRACK</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td>HI 600 Health Information Management</td>
<td>3</td>
</tr>
<tr>
<td>HI 606 Management of Health Information Services and Systems</td>
<td>3</td>
</tr>
<tr>
<td>HI 609 Information Technology &amp; Applications</td>
<td>3</td>
</tr>
<tr>
<td>HI 610 Topics in Privacy, Security and Legal Aspects of Health Information</td>
<td>3</td>
</tr>
<tr>
<td>HI 613 Health Care Performance Improvement Strategies</td>
<td>3</td>
</tr>
<tr>
<td>HI 615 Health Care Reimbursement and Financial Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

*Should a student desire to sit for the Registered Health Information Administrator national exam, the student would need to pursue the health information management track and add the following electives. Students pursuing these electives are eligible to sit for the RHIA exam by virtue of CAHIIM accreditation of the baccalaureate program:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI 621 Clinical Classification Systems I*</td>
<td>1</td>
</tr>
<tr>
<td>HI 622 Clinical Classification Systems II*</td>
<td>1</td>
</tr>
<tr>
<td>HI 623 Clinical Classification Systems III*</td>
<td>1</td>
</tr>
<tr>
<td>HI 624 Clinical Classification Systems IV*</td>
<td>1</td>
</tr>
<tr>
<td>HI 681 Professional Practice Management Experience I*</td>
<td>1</td>
</tr>
<tr>
<td>HI 682 Professional Practice Management Experience II*</td>
<td>1</td>
</tr>
</tbody>
</table>

6
COURSE DESCRIPTIONS

HI 600. HEALTH INFORMATION MANAGEMENT. Health information systems in various settings, including record content, record retention requirements, accreditation and licensure, filing and numbering systems, vital statistics, electronic health records, documentation requirements, quality assessment and reimbursement methodologies. (Lecture) (3 semester hours)

HI 601. MEDICAL CONCEPTS. A study of current clinical concepts in diseases and their treatments with emphasis on medical language, specified diseases and their causes, lesions, manifestations and treatments. (Lecture) (3 semester hours)

HI 606. MANAGEMENT OF HEALTH INFORMATION SERVICES AND SYSTEMS. Development of managerial and leadership skills for managing health information services through group interaction, projects and reading; principles and policies of human resource management including interviewing, evaluating and compensating with emphasis on health care settings. (Lecture) (3 semester hours)

HI 607. MANAGEMENT AND LEADERSHIP IN HEALTH INFORMATICS. Management and leadership strategies with emphasis on health informatics issues. (Lecture) (3 semester hours)

HI 609. INFORMATION TECHNOLOGY & APPLICATIONS. Overview of health care data and methods of applying information technology to health information functions including collection, storage, management, analysis and reporting of health care data and information; the impact of selected national health information initiatives on health information systems. (Lecture) (3 semester hours)

HI 610. TOPICS IN PRIVACY, SECURITY, AND LEGAL ASPECTS OF HEALTH INFORMATION. Principles of law and their application in the health care field, the health record as a legal document, release of information, confidential communications, consents, authorizations, and risk management. HIPAA and HITECH requirements for privacy and security. (Lecture) (3 semester hours)

HI 611. RESEARCH DESIGN AND STATISTICS IN HEALTH INFORMATICS. Health informatics research design and statistics. Special focus on critical review and techniques of applied research. (Lecture) (3 semester hours)

HI 613. HEALTH CARE PERFORMANCE IMPROVEMENT STRATEGIES. Principles of performance improvement applied to health care organizations. (Lecture) (3 semester hours)

HI 614. PRIVACY AND SECURITY FOR HEALTH INFORMATICS. Assessment of security vulnerabilities and threats; exploration of technical applications and software tools used for securing health information systems. Addresses compliance with legal and regulatory guidelines. HIPAA and HITECH requirements for privacy and security. (Lecture) (3 semester hours)

HI 615. HEALTH CARE REIMBURSEMENT AND FINANCIAL MANAGEMENT. A study of the relationship between health information management and health care reimbursement. (Lecture) (3 semester hours)

HI 617. EPIDEMIOLOGY AND PUBLIC HEALTH INFORMATICS. An overview of the principles, methods and issues in epidemiology and public health informatics. Course topics include disease determinants in human populations; public health infrastructure, surveillance and reporting; evidence-based community health assessment; outbreak prediction and prevention; and technological advancements within the field. (Lecture) (3 semester hours)

HI 619. HEALTH INFORMATION AND COMPUTER SCIENCE. Principles of computer science theory and networking, including programming languages, system integration tools, electronic data exchange, technical security applications, system testing and IT system documentation. (Lecture) (3 semester hours)

HI 621. CLINICAL CLASSIFICATION SYSTEMS I. Overview of classification systems for diagnoses and procedures; case mix classifications; relationship between various classifications and provider reimbursement mechanisms. (Lecture) (1 semester hour)

HI 622. CLINICAL CLASSIFICATION SYSTEMS II. Classifying diagnoses. (Lecture) (1 semester hour)

HI 623. CLINICAL CLASSIFICATION SYSTEMS III. Classifying inpatient procedures. (Lecture) (1 semester hour)

HI 624. CLINICAL CLASSIFICATION SYSTEMS IV. Classifying outpatient procedures. (Lecture) (1 semester hour)

HI 630. HEALTH INFORMATION SYSTEMS. An examination of health informatics topics, including the electronic health record, clinical information systems, health care policy analysis and development, technology and data standards, health information exchange and consumer health informatics. (Lecture) (3 semester hours)

HI 631. HEALTH INFORMATICS. An exploration of the health informatics domain, including emergence of the discipline, health information systems research, clinical data standards theory and development, medical decision-making principles, biomedical simulations, artificial intelligence applications and principles for knowledge management system design. (Lecture) (3 semester hours)

HI 632. DATABASES AND KNOWLEDGE MANAGEMENT. A study of advanced use of health care data and knowledge management that addresses database methods in healthcare, data administration, data architecture, data modeling, data dictionary development, advanced data search and access techniques (data mining), advanced information/data analysis and presentation techniques. (Lecture) (3 semester hours)

HI 634. DEVELOPMENT OF ELECTRONIC HEALTH INFORMATION SYSTEMS. A study of technology applications used in healthcare, including electronic health records, that emphasizes project management, user interface design, system selection and security management. (Lecture) (3 semester hours)

HI 638. CLINICAL VOCABULARIES & CLASSIFICATION SYSTEMS. An examination of standardized clinical terminology, medical vocabulary standards, data mapping, and natural language processing including the classifications used for statistical reporting as well as terminologies required for interoperability standards. (Lecture) (3 semester hours)
HI 681. PROFESSIONAL PRACTICE EXPERIENCE I. In this supervised professional practice experience, students will spend 40 clock hours observing and/or practicing health information administration in affiliated health care organization(s) (or organizations that support or regulate health care organizations or health care professionals). A minimum of 5 additional clock hours will be spent preparing project reports and presenting findings to faculty and/or fellow students. Projects completed will relate to didactic courses taken previously or concurrently. (Practicum internship) (1 semester hour)

HI 682. PROFESSIONAL PRACTICE MANAGEMENT EXPERIENCE II. Building on “Professional Practice Experience I,” this supervised professional practice experience requires the student to spend 40 clock hours practicing health information administration in an affiliated health care organization (or one that supports or regulates health care organizations or health care professionals). A minimum of 5 additional clock hours will be spent preparing project reports and presenting findings to faculty and/or fellow students. Projects completed will relate to didactic courses taken previously or concurrently. (Practicum internship) (1 semester hour)

HI 683. SPECIAL TOPICS PROFESSIONAL PRACTICE MANAGEMENT EXPERIENCE. In this elective supervised professional practice experience, students will spend 40 clock hours per semester credit hour practicing health informatics or information administration in affiliated health care organization(s) (or organizations that support or regulate health care organizations or health care professionals). A minimum of 5 additional clock hours per semester credit hour will be spent preparing project reports and presenting findings to faculty and/or fellow students. Projects completed will relate to areas of special interest to the student. Course may be repeated for credit. Prerequisite: Permission of program director (Practicum internship) (1-6 semester hours)

HI 690. SPECIAL TOPICS. Elective covering selected issues, problems, research techniques, materials and policies. Content varies. May be repeated for credit. Prerequisite: Permission of program director (Lecture) (1-3 semester hours)

HI 699. CAPSTONE IN HEALTH INFORMATICS & INFORMATION MANAGEMENT. A study of methods of identifying and researching problems in health informatics and information management. (Lecture) (3 semester hours)

HEALTH SCIENCES (BS)
Juanyc D. Taylor, PhD, Department Chair
Linda Croff-Poole, MPH, RRT, Program Director

FACULTY

Professor:
Warren May, PhD

Associate Professors:
Jeanette Adair, MSSM, RRT, CPFT
Marc Nivet, EdD, MBA
Steve H. Watson, PhD, LPC, RTC

Assistant Professors:
Jessylen Age, DNP, MSHA, RN
John R. Hodnett, DNP, LPC, RN
Travis W. Schmitz, PhD, MBA, CMPE
Kristy Alpe, MSBA, RHIA
Jamil Ibrahim, PhD
Cory Smith, PhD, RN
Rebecca Butler, MEd
Terry Pollard, MA
Dana West, PhD
Linda Croff-Poole, MPH,RRT
Joni Roberts, DrPH, CES

Instructors:
Kim McGaugh, MS
Molly Ratcliff, MS

ABOUT THE PROGRAM
The Health Sciences program is designed to provide students with a firm foundation for understanding the role of health care in contemporary society. The program helps students develop the analytical skills and personal characteristics necessary for health care leadership positions.

The program has two tracks wherein students may earn a bachelor of science degree. Track I provides the opportunity for health care practitioners who hold an associate degree in a health care field and are licensed, registered or certified as health care professionals to earn the bachelor of science. Track II is designed for support personnel in operations of health care centers or organizations to earn the Bachelor of Science degree. Health education is also an integral component of the curriculum.

The program is devised for, but not limited to, part-time, non-traditional students. Online instruction is the primary method of content delivery.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the health sciences program must:

1. Have an associate degree or a minimum of 54 semester hours (Track 1) or 60 semester hours (Track II) of academic credit from a regionally accredited institution of higher learning;
2. Submit
   a. A copy of a current license, registration, or certification in a health care field (Track I)
   b. An employee verification from their previous or current supervisor in a health care institution (Track II only); or
c. Documentation detailing observation of various clinical and/or administrative support roles within the health care environment (Track II only); or

d. Documentation of a recent community service within the health care environment (Track II only)

3. Have a minimum overall cumulative grade point average of 2.00 on 4.00 scale; and

4. Successfully complete (a grade of C or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science²</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Fine Arts²</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Natural Science³</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>24-30</td>
</tr>
<tr>
<td>Total Prerequisites</td>
<td></td>
<td>54-60³</td>
</tr>
</tbody>
</table>

³Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
²Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.
³Natural Sciences include courses such as astronomy, anatomy and physiology, biology, chemistry, geology, physics or physical science.
⁴Track II applicants must have the required 60 hours of prerequisite courses prior to enrollment.

The program director and the dean must approve any exceptions to the requirements listed above. All applicants are subject to interview. An applicant’s certification, license, registration and transcript(s) will be reviewed to determine “health care practitioner” or “operations” eligibility.

**READMISSION POLICY**

This policy is for Bachelor of Science in Health Sciences students who have been inactive for two (2) or more consecutive semesters and those students who have reapplied to the program after a voluntary or involuntary absence.

- Students who have been inactive for two (2) consecutive semesters are subject to being administratively withdrawn by the School.
- Students will be required to re-apply to the program via the UMMC Registrar’s office and pay a new application fee.
- Updated transcripts will not be required as long as the student has not attended any other school during the period of inactivity.
- A written letter requesting consideration for readmission and an updated resume must be submitted for committee review. It is required that the letter include reasoning for inactivity.
- The admissions committee will review the student’s file. Once reviewed, the admission committee will determine if an interview is required. All readmissions are considered on a case-by-case basis.

Students applying for readmission are not guaranteed admission. All readmission requests must be made prior to the application deadline for the semester in which the student wishes to enroll.

Students who were placed on probation and are reapplying will only be considered for readmission on a probationary status. If readmitted, the student must complete the first 6 hours of returning classes with a 2.0 or higher GPA in order to have the probationary status removed.

**PROGRAM APPLICATION DEADLINE**

All application documents and the application fees must be received by the Office of Student Records and Registrar by April 15 for summer admission and June 15 for fall admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

**EXPENSES**

In addition to tuition, fees and health insurance, students should be prepared to spend approximately $500 per year for textbooks.

**DEGREE AND CERTIFICATION**

Candidates for the health sciences degree must have completed the prescribed curriculum with a cumulative grade point average of 2.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all requirements, students will be awarded the Bachelor of Science in Health Sciences from the University of Mississippi. A student must remain in good academic standing and may not repeat more than two courses.

**PROFESSIONAL COURSE OF STUDY (Track I)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 300 Survey and Settings of Health Care Delivery</td>
<td>3</td>
</tr>
<tr>
<td>HS 303 Writing for Health Professionals</td>
<td>3</td>
</tr>
<tr>
<td>HS 305 Cultural Competency in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HS 310 Principles of Management in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HS 311 Introduction to Research</td>
<td>3</td>
</tr>
<tr>
<td>HS 312 Continuing Education in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HS 405 Introduction to Policy, Law &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>HS 408</td>
<td>Organizational Behavior in Health Care</td>
</tr>
<tr>
<td>HS 420</td>
<td>Leadership Development</td>
</tr>
<tr>
<td>HS 427</td>
<td>Finance and Reimbursement in Health Care</td>
</tr>
<tr>
<td>HS 452</td>
<td>Program Planning and Implementation*</td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Upon the successful completion of HS 452, students will be awarded an additional 33 semester hours of transfer elective credit based on required course work completed in the associate degree program that enables them to sit for and earn their professional credential.

### PROFESSIONAL COURSE OF STUDY (Track II)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 300</td>
<td>Survey and Settings of Health Care Delivery</td>
<td>3</td>
</tr>
<tr>
<td>HS 303</td>
<td>Writing for Health Professionals</td>
<td>3</td>
</tr>
<tr>
<td>HS 305</td>
<td>Cultural Competency in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HS 308</td>
<td>Foundations of Disease and Health</td>
<td>3</td>
</tr>
<tr>
<td>HS 310</td>
<td>Principles of Management in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HS 311</td>
<td>Introduction to Research</td>
<td>3</td>
</tr>
<tr>
<td>HS 312</td>
<td>Continuing Education in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HS 320</td>
<td>The Role of Quality Improvement in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HS 326</td>
<td>Human Resources in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HS 330</td>
<td>Introduction of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>HS 405</td>
<td>Introduction to Policy, Law &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>HS 408</td>
<td>Organizational Behavior in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HS 418</td>
<td>Community Health</td>
<td>3</td>
</tr>
<tr>
<td>HS 420</td>
<td>Leadership Development</td>
<td>3</td>
</tr>
<tr>
<td>HS 427</td>
<td>Finance and Reimbursement in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HS 430</td>
<td>Strategic Decision Making in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HS 452</td>
<td>Program Planning and Implementation</td>
<td>3</td>
</tr>
<tr>
<td>Approved Electives</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

### COURSE DESCRIPTIONS

**HS 300. SURVEY AND SETTINGS OF HEALTH CARE DELIVERY.** An introductory review of the health care delivery system including topics such as the changing role of health care providers, hospitals, other facilities and governmental agencies. (Lecture) (3 semester hours)

**HS 303. WRITING FOR HEALTH PROFESSIONALS.** A structured writing-intensive course designed to prepare health care professionals to write analytical papers. The writing process, writing style, organization and clarity of communication are major emphases in this course. (Lecture) (3 semester hours)

**HS 305. CULTURAL COMPETENCY IN HEALTH CARE.** This course is designed to increase awareness of the need to provide health care to patients with diverse values, beliefs and behaviors. Emphasis will be placed on tailoring health care delivery to meet patients’ social, cultural and linguistic needs. (Lecture) (3 semester hours)

**HS 308. FOUNDATIONS OF DISEASE AND HEALTH.** The interface of health and basic disease processes. Topics include the definition, symptoms, etiology, treatment and prognosis of each disease process. (Lecture) (3 semester hours)

**HS 309. HEALTH INFORMATION PRIVACY AND SECURITY.** A study of the history and continuing evolution of American law regarding health information use as currently presented in the Health Insurance Portability and Accountability Act. (Lecture) (3 semester hours)

**HS 310. PRINCIPLES OF MANAGEMENT IN HEALTH CARE.** Management and leadership theories, functions and skills required for success in the health care organization with an emphasis on supervisory management. (Lecture) (3 semester hours)

**HS 311. INTRODUCTION TO RESEARCH.** An introductory study of research design with an emphasis on the analysis, synthesis, and application of evidence-based information in the health care delivery system. (Lecture) (3 semester hours)

**HS 312. CONTINUING EDUCATION IN HEALTH CARE.** An introduction to continuing education programs for health care facilities and systems. Includes development and delivery of programs and current problems in continuing education. (Lecture) (3 semester hours)

**HS 320. The ROLE OF QUALITY IMPROVEMENT IN HEALTH CARE DELIVERY.** This course examines the organization and operations of hospitals. The respective roles of hospital staff will be discussed. (Lecture) (3 semester hours)

**HS 326. HUMAN RESOURCES IN HEALTH CARE.** Principles and policies of personnel administration, including interviewing, evaluating and compensating with emphasis on health care settings. (Lecture) (3 semester hours)

**HS 330. INTRODUCTION TO STATISTICS.** An introductory course in statistical decision-making methods, including sampling, measures of central tendency, frequency distributions, probability, probability distributions, sampling methods, hypothesis testing, statistical inference, correlations, regression and analysis of variance. (Lecture) (3 semester hours)
HS 405. INTRODUCTION TO POLICY, LAW & ETHICS. An introduction to the study of interrelationships between political issues, sociological issues, ethical issues, public policy information and legal implications in the health care delivery system. (Lecture) (3 semester hours)

HS 408. ORGANIZATIONAL BEHAVIOR IN HEALTH CARE. An overview of the nature of employee behavior and the function of management in the health care organizational setting. Human behavior will be examined at individual, group and organizational levels, including strategies to increase productivity. (Lecture) (3 semester hours)

HS 415. PEDOGOGICAL CONCEPTS IN HEALTH EDUCATION. An introduction to methods and practices of teaching for the health educator. (Lecture) (3 semester hours)

HS 418. COMMUNITY HEALTH. This course is designed to provide comprehensive overview of principles and theoretical perspectives of community health and underserved populations. (Lecture) (3 semester hours)

HS 420. LEADERSHIP DEVELOPMENT. An introduction to the theory and practice of leadership. Students will explore how leadership theory can inform and direct the way leadership is practiced in the health care environment. (Lecture) (3 semester hours)

HS 423. HEALTH PROMOTION. An in-depth review of interventions, programs and strategies for promoting the prevention of common disease influenced by cultural, social, economic and educational factors. (Lecture) (3 semester hours)

HS 424. EPIDEMIOLOGY. A study of the causes, incidence and distribution of common diseases, including the humanistic and economic implications of these diseases. (Lecture) (3 semester hours)

HS 425. HEALTH BEHAVIOR. An examination of attitudes and beliefs of personal wellness and healthy living designed to improve health behavior. (Lecture) (3 semester hours)

HS 426. ISSUES IN HEALTH EDUCATION. A study of current issues in health education. (Lecture) (3 semester hours)

HS 427. FINANCE AND REIMBURSEMENT IN HEALTH CARE. Introduction to health care budgeting and finance, including legislation, federal programs, managed care and subscription programs. (Lecture) (3 semester hours)

HS 430. STRATEGIC DECISION-MAKING IN HEALTH CARE. The application of applied statistics and data analysis for strategic decision-making in health care organizations. (Lecture) (3 semester hours)

HS 452. PROGRAM PLANNING AND IMPLEMENTATION. A directed study or project involving a health care issue or problem. The student will work with a supervising faculty member and a mentor/preceptor. Prerequisite: Senior standing and permission of the program director are required. (Lecture) (3 semester hours)

HS 490. SPECIAL TOPICS. Interprofessional elective. Content varies. May be repeated for credit. Prerequisite: Permission of program director (Lecture) (1-5 semester hours)

HEALTH SCIENCES (MHS)
Juanyce D. Taylor, PhD, Department Chair and Program Director

FACULTY
Associate Professors:
Steve H. Watson, PhD, LPC, RTC

Linda Croff-Poole, MPH, RRT
Richard Roberson, JD
Brian Rutledge, PhD
Travis W. Schmitz, PhD, MBA, CMPE

Cory Smith, PhD, RN

Assistant Professors:
Jessylen Age, DNP, RN
Jamil Ibrahim, PhD
Ellen Jones, PhD

ABOUT THE PROGRAM
The Master of Health Sciences program offers an advanced educational opportunity in health care leadership. It was created to provide graduates an opportunity to assume upper level managerial and leadership roles within the health care delivery system. The program prepares licensed, certified and/or registered health care practitioners for faculty and leadership positions within the higher education system.

The program is devised for, but not limited to, part-time, non-traditional students. Online instruction is the primary method of content delivery.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the Master of Health Sciences program must:
1. Have a bachelor’s degree from a regionally accredited institution of higher learning with a GPA of at least 3.0 on a 4.0 scale in a health care-related field. Qualifying fields include clinical laboratory science, cytotechnology, dental hygiene, health care administration, health informatics, medical sciences, nursing, occupational therapy, physical therapy, psychology, public health, radiologic sciences, respiratory therapy, speech pathology, medicine or another health-related field.
Professional experience may also be considered. Other degrees may be considered acceptable at the discretion of the dean.

2. Submit an official score from the GRE, GMAT or MCAT; and
3. Submit a letter of recommendation from a current supervisor or previous instructor.

A limited number of applicants will be admitted to the Master of Health Sciences program during each admission cycle. Students will be selected on a competitive basis. Qualification does not ensure admission.

**READMISSION POLICY**

This policy is for master of health sciences students who have been inactive for two (2) or more consecutive semesters.

- Students who have been inactive for two (2) consecutive semesters are subject to being administratively withdrawn by the School.
- Students will be required to re-apply to the program via the UMMC Registrar’s office and pay a new application fee.
- Updated transcripts will not be required as long as the student has not attended any other school during the period of inactivity.
- A written letter requesting consideration for readmission and an updated resume must be submitted for committee review. It is required that the letter include reasoning for inactivity.
- The admissions committee will review the student’s file. Once reviewed, the admission committee will determine if an interview is required. All re-admissions are considered on a case-by-case basis.

Students applying for readmission are not guaranteed admission. All readmission requests must be made prior to the application deadline for the semester in which the student wishes to enroll.

Students who were placed on probation and are reapplying will only be considered for readmission on a probationary status. If readmitted, the student must complete the first 6 hours of returning classes with a 3.0 or higher GPA in order to have the probationary status removed.

**TRANSFER POLICY**

This policy is for Master of Health Sciences students who may have completed related graduate level coursework in a similar program.

- Graduate students must complete 75% of course work through courses offered by the University of Mississippi Medical Center.
- Graduate transfer work must have been completed at a regionally accredited institution in the United States.
- Graduate transfer work must have been completed with a grade of “B” or better. No transfer course work taken as pass/fail or a similar grading system will be accepted.
- Graduate transfer credit will not be allowed for undergraduate level courses, continuing education units (CEUs), and non-credit certificate programs.
- A maximum of nine (9) credit hours may be allowed for transfer toward the master of health sciences degree, as approved by the program director and the dean. The student transfer credit form must be completed.

**PROGRAM APPLICATION DEADLINE**

All application documents and the application fees must be received by the Office of Student Records and Registrar by April 15 for summer admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

**EXPENSES**

In addition to tuition, fees and health insurance, students should be prepared to spend approximately $500 per year for textbooks.

**DEGREE AND CERTIFICATION**

Candidates for the master of health sciences degree must have completed the prescribed curriculum with a cumulative grade point average of 3.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all requirements, students will be awarded the master of health sciences degree from the University of Mississippi.

**PROFESSIONAL COURSE OF STUDY**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 600 Personal and Ethical Leadership</td>
<td>3</td>
</tr>
<tr>
<td>HS 604 Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>HS 608 Health Care Law</td>
<td>3</td>
</tr>
<tr>
<td>HS 612 Data Analysis and Outcomes Assessment</td>
<td>3</td>
</tr>
<tr>
<td>HS 616 Health Care Administration</td>
<td>3</td>
</tr>
<tr>
<td>HS 630 Health Policy and Society</td>
<td>3</td>
</tr>
<tr>
<td>HS 650 Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>HS 652 Program Development and Implementation</td>
<td>3</td>
</tr>
</tbody>
</table>
COURSE DESCRIPTIONS

HS 600. PERSONAL AND ETHICAL LEADERSHIP. An exploration of applied leadership, personal leadership skills and the similarities and differences between leadership and management. (Lecture) (3 semester hours)

HS 604. ORGANIZATIONAL BEHAVIOR. An exploration of organizational structure and processes including interpersonal relations and team development with a particular focus on health care environments. Additionally, this course will provide the health care manager with a framework for decision-making, an understanding of work teams and employee motivation, perspectives for handling of conflict, tools for assessing work design and an evolution of an organizational behavior framework. (Lecture) (3 semester hours)

HS 608. HEALTH CARE LAW. An examination of the legal regulation of health care processes and the health care industry including access to care, finance, antitrust, contracts, medical malpractice, administrative law, patient rights, licensure and risk management. (Lecture) (3 semester hours)

HS 612. DATA ANALYSIS AND OUTCOMES ASSESSMENT. A study of basic applied statistical methods used in the summarization of management and health data for decision-making, especially as they relate to the interpretation of data. (Lecture) (3 semester hours)

HS 616. HEALTH CARE ADMINISTRATION. A practical and quantitative approach to operation and management of health care delivery systems including administration, financial systems, staffing, departmental functions and performance evaluation. (Lecture) (3 semester hours)

HS 630. HEALTH POLICY AND SOCIETY. An examination of theory and methods of health policy analysis in the public, nonprofit and private health sectors. Emphasis is placed on the role of analysis during various phases of the public policy formulation and implementation cycle. (Lecture) (3 semester hours)

HS 650. RESOURCE MANAGEMENT. An examination of the functions of administrators in health care and academic environments in relation to personnel, finance, resource allocation and strategic planning. (Lecture) (3 semester hours)

HS 652. PROGRAM DEVELOPMENT AND IMPLEMENTATION. An exploration of program planning and development that includes market conditions needs assessment, planning, implementation, allocation of resources and evaluation. (Lecture) (3 semester hours)

HS 654. CONTEMPORARY ISSUES IN HEALTH CARE FINANCE. A study of current issues in health economics, including problems and options in the financing of health care, physician and hospital services, mental health, long-term care and health care reimbursement. (Lecture) (3 semester hours)

HS 656. GRANT AND PROPOSAL DEVELOPMENT. A practical application of the knowledge and skills necessary to prepare a grant or business proposal for submission to a board of directors or other funding source, including the identification of a suitable area to address, needs assessment, identification of potential funding sources, developing the problem statement, exploring solutions and justification of all aspects of the proposal. (Lecture) (3 semester hours)

HS 658. WORKFORCE DEVELOPMENT. An examination of issues in health care workforce development, including the knowledge and skills necessary to assess needs and develop and facilitate interventions designed to educate/train, recruit, prepare and retain a viable employee workforce. (Lecture) (3 semester hours)

HS 690. SPECIAL TOPICS. Selected issues, problems, research techniques, materials and policies. Content varies. May be repeated for credit. Prerequisite: Permission of program director. (Lecture) (1-3 semester hours)

HS 699. INTEGRATED HEALTH CARE LEADERSHIP. A capstone course in which students utilize the knowledge, skills and insight gained from previous courses taken in the MHS program and from their individual life experiences to develop, implement and evaluate a project designed to improve some facet of health care delivery or program administration. (Lecture) (3 semester hours)

MAGNETIC RESONANCE IMAGING (MRI)

Mark R. Gray, PhD, RT (R) ARRT, Radiologic Sciences Department Chair
Asher Street, MS, RT (R) (MR) ARRT, Program Director & Clinical Coordinator

FACULTY

Associate Professor:
Kristi Moore, PhD, RT (R) (CT) ARRT

Assistant Professors:
Angela Burrell, MSN, RN
Seena Edgerton, MBA, RT (R) (M) ARRT
Mike Ketchum, MSEd, RT (R) ARRT
Sherry J. West, MS, RT (R) (N) CNMT

Instructors:
Lee Brown, BS, RT (R) (N) CNMT
Asher Street, MS, RT (R) (MR) ARRT
ABOUT THE PROFESSION

Magnetic resonance imaging (MRI) technologists are highly skilled radiologic professionals utilizing specialized computer systems, radiofrequencies and a strong magnetic field to create images of cross sectional anatomy for radiologists’ interpretation. The MRI technologist functions in multiple areas, including issues surrounding magnet safety, performing imaging procedures, monitoring patient comfort, ensuring quality assurance, and communicating and consulting with radiologists. The MRI technologist must possess communication skills to interact with compassion to both healthy and critically ill patients.

Magnetic resonance imaging continues to grow as a diagnostic imaging technique with the use of MRI quadrupling in recent years. The future expectations of the introduction of higher magnetic field strengths into clinical imaging departments, coupled with advanced imaging techniques such as functional MRI (fMRI) and spectroscopy, provide more detailed imaging for radiologists. The integration of MRI with Positron Emission Tomography (PET/MRI) is paving the way for the future in molecular level imaging, advancing disease management and improving care for all patients. Molecular imaging is being hailed as the next great advance in imaging. These developments provide technologists with a variety of skill enrichment opportunities and career advancements for the future.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the post-baccalaureate certificate program in magnetic resonance imaging must:

1. Have completed a baccalaureate degree from a regionally accredited institution of higher learning;
2. Have a minimum overall cumulative grade point average of 2.50 on a 4.00 scale;
3. Hold current ARRT (R) registration or be registry-eligible;
4. Have current CPR certification at the time of registration;
5. Complete an interview;
6. Provide documentation of a minimum of 8 hours of observation in a Magnetic Resonance Imaging Department; and
7. Successfully complete (a grade of “C” or better) the following prerequisite required courses:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Speech</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Anatomy and Physiology with lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Basic Computer Concepts and Applications</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td><strong>32</strong></td>
<td></td>
</tr>
</tbody>
</table>

PROGRAM APPLICATION DEADLINE

All application documents and the application fees must be received by the Office of Student Records and Registrar by April 1 for summer admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the registrar’s office after the deadline at (601) 984-1080.

EXPENSES

In addition to tuition, fees, health insurance and professional association dues, students should be prepared to spend $1,500 for textbooks, uniforms and registry examination fees.

CERTIFICATION

Students who satisfactorily complete all the requirements will be awarded the post-baccalaureate certificate in Magnetic Resonance Imaging (MRI) from the University of Mississippi and will be eligible to take the examination for certification offered by the American Registry of Radiologic Technologists (ARRT). Candidates for certification must have an overall grade point average (GPA) in University of Mississippi Medical Center course work of 2.0 or higher on a 4.0 scale. Most states require licensure in order to practice; however, state licenses are usually based on the results of the ARRT certification examinations. Be advised that a felony conviction may affect a graduate’s ability to sit for the ARRT certification examination or attain state licensure.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRI 501 Magnetic Resonance Imaging Foundations</td>
<td>3</td>
</tr>
<tr>
<td>MRI 505 Magnetic Resonance Imaging Principles</td>
<td>3</td>
</tr>
<tr>
<td>MRI 510 Magnetic Resonance Imaging Physics</td>
<td>3</td>
</tr>
<tr>
<td>MRI 512 Applied Magnetic Resonance Imaging I</td>
<td>3</td>
</tr>
<tr>
<td>MRI 524 Applied Magnetic Resonance Imaging II</td>
<td>3</td>
</tr>
<tr>
<td>MRI 550 Clinical Practicum I</td>
<td>3</td>
</tr>
</tbody>
</table>
COURSE DESCRIPTIONS

MRI 501. MAGNETIC RESONANCE IMAGING FOUNDATIONS. An introduction to practice management and clinical practices in the MRI environment, including aspects of patient care, procedural performance and competency. Basic applications of computers and digital imaging in the field of radiology are examined. A foundation of ethical and legal issues in the radiologic sciences is presented. An overview of imaging sciences in health care, including regulation and professional standards. Introduction to venipuncture in a laboratory setting. (Lecture/Lab) (3 semester hours)

MRI 505. MAGNETIC RESONANCE IMAGING PRINCIPLES. An introduction to physical principles of MRI, instrumentation, image formation and basic imaging parameters. The course will include an overview of the history of MRI. Fundamental principles covered include magnetism, signal production, contrast characteristics, imaging planes and image formation. Instrumentation information details operation and use of equipment, radiofrequency systems and gradient systems. (Lecture) (3 semester hours)

MRI 510. MAGNETIC RESONANCE IMAGING PHYSICS. In-depth information regarding pulse sequences, image formation and contrast. Emphasis is placed on details of MR parameters, pulse sequences, methods of data acquisition, imaging options, image artifacts and quality assurance to enable the student to maximize MR quality by understanding the fundamentals of MR imaging. (Lecture) (3 semester hours)

MRI 512. APPLIED MAGNETIC RESONANCE IMAGING I. The knowledge base necessary to perform standard magnetic resonance imaging procedures. Content includes MRI imaging procedures and sectional anatomy and physiology relating to the central nervous system and the musculoskeletal system. The study of normal anatomy and pathologic conditions aid the student in recognizing the need for imaging changes based on these conditions. Topics include clinical considerations regarding contrast administration and safety, magnetic field safety, and procedural considerations for optimal scanning techniques. (Lecture/Lab) (3 semester hours)

MRI 524. APPLIED MAGNETIC RESONANCE IMAGING II. A continuation of MRI 512. A knowledge base necessary to perform standard magnetic resonance imaging procedures. Content includes MRI imaging procedures and sectional anatomy and physiology relating to the cardiovascular system, thorax, abdomen, pelvis and special imaging procedures. The study of normal anatomy and pathologic conditions aid the student in recognizing the need for imaging changes based on these conditions. Topics include clinical considerations regarding contrast administration and safety, magnetic field safety and procedural considerations for optimal scanning techniques. (Lecture/Lab) (3 semester hours)

MRI 550. CLINICAL PRACTICUM I. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of magnetic resonance imaging procedures. Content includes experience in MR scanning techniques, safety procedures, image evaluation, image post processing, patient care and professional development. (Clinical rotation) (3 semester hours)

MRI 551. CLINICAL PRACTICUM II. A continuation of MRI 550. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of magnetic resonance imaging procedures. This course provides supervised experience in the clinical setting. Content includes experience in MR scanning techniques, safety procedures, image evaluation, image post processing, patient care and professional development. (Clinical rotation) (4 semester hours)

MRI 552. CLINICAL PRACTICUM III. A continuation of MRI 551. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of magnetic resonance imaging procedures. Provides supervised experience in the clinical setting. Content includes experience in MR scanning techniques, safety procedures, image evaluation, image post processing, patient care and professional development. (Clinical rotation) (4 semester hours)

MRI 560. MAGNETIC RESONANCE IMAGING SEMINAR. Prepares the student for the ARRT MRI certification exam. Content will integrate the clinical skills and classroom theories in a comprehensive review to include the specifications of the content categories: patient care, imaging procedures, data acquisition and processing and physical principles of image formation. (Lecture) (4 semester hours)

CLINICAL FACILITIES

Clinical educational experiences in magnetic resonance imaging are provided in conjunction with the following health care facilities:

- G.V. “Sonny” Montgomery VA Medical Center – Jackson
- Madison Radiological Group, LLC. – Madison
- Mississippi Sports Medicine - Jackson
- University of Mississippi Medical Center – (University Hospital and Health System) – Jackson
- St. Dominic-Jackson Memorial Hospital - Jackson
MEDICAL LABORATORY SCIENCE (BS)
La'Toya Richards-Moore, PhD, MLS(ASCP)CM, Department Chair and Program Director
Mohamed Ayman Asfour, MD, Medical Director

FACULTY

Professors:
Hamed A. Benguzzi, PhD, FAIMBE, FBSE
Mohamed Ayman Asfour, MD

Associate Professors:
Elgenaied Hamadian, PhD
La'Toya Richards-Moore, PhD, MLS(ASCP)CM
Stacy Hull Vance, PhD, MLS(ASCP)CM
Thomas Wiggers, MS, SH(ASCP)CM

Assistant Professors:
Felicia M. Tardy, PhD, MLS(ASCP)CM
Renee Wilkins, PhD, MLS(ASCP)CM

Instructor:
Jana K. Bagwell, BS

ABOUT THE PROFESSION

Medical laboratory science is a dynamic profession that is ever-changing in terms of technology and professional expertise. The medical laboratory scientist is a highly skilled scientist who functions in multiple roles. Some of these roles include performing and evaluating diagnostic laboratory procedures on body fluids, developing new diagnostic procedures, supervising biomedical research projects, providing technical expertise, consulting, managing clinical and research laboratory departments, and analyzing and implementing laboratory information systems. The major areas of interest in laboratory science are hematology, immunohematology (transfusion medicine), clinical microbiology, clinical chemistry, clinical immunology, body fluid analysis and molecular diagnostics.

Career opportunities for the medical laboratory scientist are readily available and include technical and management positions in hospitals and reference laboratories, research in biomedical companies, forensic medicine, public health, sales and marketing, private consulting, healthcare administration and education.

As one of the fastest growing industries of the 21st century, biotechnology is developing new diagnostic tests for clinical laboratories, research laboratories, forensic laboratories and the pharmaceutical industry. The skills of the molecular scientist are in great demand in the biotechnology industry. Molecular biology has developed more than any other science in the last 10 years.

The certified molecular biologist works in clinical, research, forensic and biotechnology laboratories. There is an exponential growth in opportunities in this field of study.

ACCREDITATION STATUS

The medical laboratory science program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 North River Road, Suite 720, Rosemont, IL 60018-5119. NAACLS’s phone number is (773) 714-8880.

TRADITIONAL MEDICAL LABORATORY SCIENCE

The traditional baccalaureate degree program in medical laboratory science is an entry-level program for students who want to become certified as a medical laboratory scientist or molecular biologist. Upon completion of the two-year program, students receive a bachelor of science and are eligible to apply to take national certification examinations to become certified as a medical laboratory scientist or molecular biologist.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the medical laboratory science program must:

1. Have completed a minimum of 58 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Complete a total of 12 semester hours in required science courses before the application is submitted;
3. Have an overall cumulative grade point average of 2.50 on a 4.00 scale; and
4. Successfully complete (a grade of C or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>General Chemistry with Lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Social or Behavioral Science¹</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Humanities and Fine Arts²</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>
Microbiology with Lab 1 4
Biological Sciences 3 12
Electives 4 10
Total Prerequisites 58
1Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
2Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.
3Biological Sciences include courses such as general biology, cell biology, anatomy and physiology, genetics, embryology and zoology. Science survey courses and science courses designed for non-majors are not acceptable for transfer credit.
4Electives should be selected from a broad range of academic courses which may include anatomy and physiology, cell biology, genetics, embryology, calculus, management or computer applications.

PROGRAM APPLICATION DEADLINE
All application documents and the application fees must be received by the Office of Student Records and Registrar by February 1 for fall admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

EXPENSES
In addition to tuition, fees and health insurance, students should be prepared to spend approximately $800 per year for textbooks, instrumentation, supplies and uniforms.

DEGREE AND CERTIFICATION
Candidates for the medical laboratory science degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Due to the variability of available clinical sites, completion of the required curriculum may be extended beyond the minimum of 24 months. Following satisfactory completion of all requirements, students will be awarded the Bachelor of Science in Medical Laboratory Science from the University of Mississippi and are eligible to apply to take national certification examinations to become certified as a medical laboratory scientist or molecular biologist.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th></th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MLS 312 Essentials of Hematology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 313 Clinical Bacteriology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 314 Essentials of Clinical Chemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 315 Phlebotomy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MLS 327 Laboratory Operations</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MLS 322 Clinical Hematology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 324 Clinical Chemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 325 Immunohematology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 332 Diagnostic Hemostasis</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MLS 340 General Pathology</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th></th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MLS 311 Basic and Clinical Immunology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 323 Mycology, Parasitology and Virology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 405 Introduction to Molecular Diagnostics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 430 Research Methods</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MLS 326 Clinical Simulation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 413 Diagnostic Microbiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 416 Research Design and Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MLS 417 Principles of Management and Education in CLS</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MLS 429 Clinical Correlations</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>
PROGRESSION MEDICAL LABORATORY SCIENCE

The progression program is designed to allow a Clinical Laboratory Technician/Medical Laboratory Technician (CLT/MLT) to receive credit for previous professional educational experiences and to earn a baccalaureate degree in clinical laboratory sciences from the University of Mississippi Medical Center. The program, offered across five semesters, is designed for, but not limited to, part-time, non-traditional students. Online coursework is the method of content delivery.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the progression medical laboratory science program must:

1. Hold certification as a MLT(ASCP);
2. Have completed a minimum of 58 semester hours of academic credit from a regionally accredited institution of higher learning;
3. Currently be practicing in a clinical laboratory as a generalist in clinical laboratory science;
4. Have a minimum GPA of 2.50 on a 4.00 scale; and
5. Successfully complete (a grade of “C” or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>General Chemistry with Lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Social or Behavioral Science(^1)</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Humanities and Fine Arts(^2)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Microbiology with Lab</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Biological Sciences(^3)</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Electives(^4)</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td></td>
<td><strong>58</strong></td>
</tr>
</tbody>
</table>

\(^1\)Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.

\(^2\)Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.

\(^3\)Biological Sciences include courses such as general biology, cell biology, anatomy and physiology, genetics, embryology and zoology. Science survey courses and science courses designed for non-majors are not acceptable for transfer credit.

\(^4\)Electives should be selected from a broad range of academic courses which may include anatomy and physiology, cell biology, genetics, embryology, calculus, management or computer applications.

PROGRAM APPLICATION DEADLINE

All application documents and the application fees must be received by the Office of Student Records and Registrar by February 1 for fall admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLS 310 Body Fluid Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MLS 311 Basic and Clinical Immunology</td>
<td>3</td>
</tr>
<tr>
<td>MLS 327 Laboratory Operations</td>
<td>3</td>
</tr>
<tr>
<td>MLS 405 Introduction to Molecular Diagnostics</td>
<td>3</td>
</tr>
<tr>
<td>MLS 417 Principles of Management and Education in CLS</td>
<td>2</td>
</tr>
<tr>
<td>MLS 429 Clinical Correlations</td>
<td>2</td>
</tr>
<tr>
<td>MLS 430 Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>MLS 432 Advanced Hematology</td>
<td>3</td>
</tr>
<tr>
<td>MLS 433 Advanced Clinical Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>MLS 434 Advanced Clinical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>MLS 435 Advanced Immunohematology</td>
<td>3</td>
</tr>
</tbody>
</table>
MLS 436 Advanced Clinical Simulation 2
MLS 445 Clinical Rotation* 4
Total Required Hours 37

*Upon the successful completion of MLS 445, students will be awarded an additional 29 semester hours of transfer elective credit based on required coursework completed in the associate degree program that enables them to sit for and earn their professional credential.

COURSE DESCRIPTIONS

MLS 310. BODY FLUID ANALYSIS. A study of the qualitative and quantitative changes in the renal system based on anatomical and physiological alteration. (Lecture/Lab) (3 semester hours)

MLS 311. BASIC AND CLINICAL IMMUNOLOGY. A study of the principles of in vivo and in vitro immunological responses and immunologic testing, theory and practice in relation to disease in man. (Lecture/Lab) (3 semester hours)

MLS 312. ESSENTIALS OF HEMATOLOGY. A study of blood and blood forming organs and basic diagnostic procedures. (Lecture/Lab) (3 semester hours)

MLS 313. CLINICAL BACTERIOLOGY. A study of pathological bacteria with an emphasis on techniques of isolation and identification. (Lecture/Lab) (3 semester hours)

MLS 314. ESSENTIALS OF CLINICAL CHEMISTRY. A study of biological compounds and elements found in body fluids. Emphasis is placed on methods of determination and clinical interpretation relating to pathological states in man. (Lecture/Lab) (3 semester hours)

MLS 315. PHLEBOTOMY. A study of theory, practical application, technical performance, and evaluation of procedures used in collecting, handling and processing blood specimens. (Lecture) (2 semester hours)

MLS 322. CLINICAL HEMATOLOGY. A study of blood cells and their abnormalities with emphasis on disease processes. Prerequisite: MLS 312 (Lecture/Lab) (3 semester hours)

MLS 323. MYCOLOGY, PARASITOLOGY AND VIROLOGY. A study of pathological microorganisms with an emphasis on techniques of isolation and identification of fungi and viruses, medically significant protozoan and helminth parasites and their vectors, and various culturing techniques. Prerequisite: MLS 313 (Lecture/Lab) (3 semester hours)

MLS 324. CLINICAL CHEMISTRY. A study of biological compounds and elements found in body fluids. Emphasis is placed on methods of determination and clinical interpretation relating to pathological states in man. Prerequisite: MLS 314 (Lecture/Lab) (3 semester hours)

MLS 325. IMMUNOHEMATOLOGY. A study of principles, techniques and applications of blood transfusion practices. (Lecture/Lab) (3 semester hours)

MLS 326. CLINICAL SIMULATION. Student presentations of case studies, new laboratory techniques, innovative management techniques, computer applications, new instrumentation, etc. (Lecture) (3 semester hours)

MLS 327. LABORATORY OPERATIONS. A study of laboratory math, basic statistics and quality assurance programs in the clinical laboratory. (Lecture) (3 semester hours)

MLS 332. DIAGNOSTIC HEMOSTASIS. A study of the blood-clotting system in normal and pathological states. Emphasis is placed on the correlation of test results with disease and therapies. (Laboratory) (1 semester hour)

MLS 340. GENERAL PATHOLOGY. A study of the etiology and symptomatology of the general pathological conditions affecting the body. (Lecture) (2 semester hours)

MLS 405. INTRODUCTION TO MOLECULAR DIAGNOSTICS. An introductory course in molecular terminology, the basic anatomy of a gene, the components of DNA and RNA, and the role of DNA and RNA in a cell. Principles of basic molecular techniques used in research and clinical laboratories will be introduced. (Lecture) (3 semester hours)

MLS 413. DIAGNOSTIC MICROBIOLOGY. A study of clinical specimens with regard to pathogenic organisms and diagnosis in organ systems. (Lecture/Lab) (3 semester hours)

MLS 416. RESEARCH DESIGN AND STATISTICS. A study of basic topics of research design and statistics. Special focus on critical review and techniques of applied research. (Lecture) (3 semester hours)

MLS 417. PRINCIPLES OF MANAGEMENT AND EDUCATION IN CLINICAL LABORATORY SCIENCES. An introduction to the principles of management and education as applied to the profession of medical laboratory science. (Lecture) (2 semester hours)

MLS 422. HEMATOLOGY PRACTICUM. Clinical education practicum in affiliated laboratories. Prerequisite: MLS 322 (Clinical rotation) (3 semester hours)

MLS 423. CLINICAL MICROBIOLOGY PRACTICUM. Clinical education practicum in affiliated laboratories. Prerequisite: MLS 323 (Clinical rotation) (3 semester hours)

MLS 424. CLINICAL CHEMISTRY PRACTICUM. Clinical education practicum in affiliated laboratories. Prerequisite: MLS 324 (Clinical rotation) (3 semester hours)

MLS 425. IMMUNOHEMATOLOGY PRACTICUM. Clinical education practicum in affiliated laboratories. Prerequisite: MLS 325 (Clinical rotation) (3 semester hours)

MLS 429. CLINICAL CORRELATIONS. A capstone course of medical laboratory sciences focusing on clinical diagnosis. (Lecture) (2 semester hours)
MLS 430. RESEARCH METHODS. An in-depth study in analyzing and evaluating the applications involved in research issues through literature reviews culminating in writing a research report. (Lecture) (3 semester hours)

MLS 432. ADVANCED HEMATOLOGY. A study of the basic diagnostic procedures related to blood and blood-forming organs combined with the study of blood cell abnormalities and disease processes. (Lecture) (3 semester hours)

MLS 433. ADVANCED CLINICAL MICROBIOLOGY. A study of proper techniques for isolation and identification of pathological bacteria combined with fungal, viral, protozoan and parasite identification. (Lecture) (3 semester hours)

MLS 434. ADVANCED CLINICAL CHEMISTRY. A study of biological compounds and elements located in body fluids with an emphasis on isolation and identification techniques. (Lecture) (3 semester hours)

MLS 435. ADVANCED IMMUNOHEMATOLOGY. A study of proper techniques, principles and applications for blood transfusion practices. (Lecture) (3 semester hours)

MLS 436. ADVANCED CLINICAL SEMINAR. A cumulative review of the major MLS subject areas: chemistry, urinalysis, microbiology, immunohematology, hematology, coagulation, virology, mycology, parasitology and laboratory operations, with an emphasis on certification preparation. (Lecture) (2 semester hours)

MLS 445. CLINICAL ROTATION. MLS progression clinical education practicum in affiliated laboratories (Clinical rotation) (4 semester hours)

CLINICAL FACILITIES
Clinical educational experiences in medical laboratory science are provided in conjunction with the following health care facilities:

- Baptist Memorial Hospital-DeSoto - Southaven
- Biloxi Regional Medical Center – Biloxi
- Central Mississippi Medical Center - Jackson
- Crossgates River Oaks Hospital - Brandon
- Delta Regional Medical Center - Greenville
- Magnolia Regional Health System - Corinth
- River Region Health System - Vicksburg
- Singing River Hospital – Pascagoula
- Southcentral Regional Medical Center – Laurel
- Southwest Mississippi Medical Center – McComb
- University of Mississippi Medical Center - Grenada
- University of Mississippi Medical Center (University Hospital and Health System) - Jackson

NUCLEAR MEDICINE TECHNOLOGY (NMT)
Mark R. Gray, PhD, RT (R) ARRT, Radiologic Sciences Department Chair
Sherry J. West, MS, RT (R) (N) ARRT, CNMT, Program Director and Clinical Coordinator
Anson L. Thaggard, MD, Medical Advisor

FACULTY

Associate Professor:
Kristi Moore, PhD, RT (R) (CT) ARRT

Assistant Professors:
Angela Burrell, MSN, RN
Seena Edgerton, MBA, RT (R) (M) ARRT
Mike Ketchum, MSEd, RT (R) ARRT

Instructors:
Lee Brown, BS, RT (R) (N) CNMT
Asher Street, MS, RT (R) (MR) ARRT
Mark R. Gray, PhD, RT (R) ARRT
Mike Ketchum, MSEd, RT (R) ARRT
Sherry J. West, MS, RT (R) (N) ARRT, CNMT
Ricky G. Strickland, BS, RPh

ABOUT THE PROFESSION
Nuclear medicine technology is a multidisciplinary paramedical field concerned with the use of radioactive materials for the diagnosis of various pathological disease states and for the treatment of specialized disorders. The nuclear medicine technologist (NMT) is responsible for radiation safety, quality control, preparing and administering radiopharmaceuticals, performing imaging procedures, collecting and preparing biological specimens, performing special laboratory procedures, and preparing data for interpretation by a physician. The ability to produce functional images and quantify physiologic processes at a molecular level distinguishes nuclear medicine technology from other imaging modalities such as radiography, sonography and magnetic resonance imaging (MRI).

Nuclear medicine is one of the fastest growing allied health professions due to the development of new radiopharmaceuticals for diagnostic and therapeutic purposes as well as promising research and development of cancer-detecting agents and imaging technology such as Positron Emission Tomography-Computed Tomography (PET/CT). Career opportunities are exceptional, ranging from positions as staff technologists to supervisory posts. Other positions are available in specialty areas as research technologists, PET/CT technologists and educators.
ACCREDITATION STATUS
The nuclear medicine technology program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT), 2000 W. Danforth Rd., Ste. 130 #203, Edmond, OK 73003. JRCNMT’s phone number is (405) 285-0546.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the post-baccalaureate certificate program in Nuclear Medicine Technology must:
1. Have completed a baccalaureate degree from a regionally accredited institution of higher learning;
2. Have a minimum overall cumulative grade point average of 2.50 on 4.00 scale;
3. Provide evidence of observation in a nuclear medicine clinical department for total of 8 hours;
4. Complete an interview;
5. Hold current ARRT (R) registration or be registry eligible;
6. Hold current CPR certification at the time of registration; and
7. Successfully complete (grade of "C" or better) the following minimum prerequisite number of required courses:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Speech</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Anatomy and Physiology with Lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>General Chemistry with Lab</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>General Physics*</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td><strong>33</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Students accepted for the NMT program must have successfully completed a general physics course taken within the physics department at a regionally accredited educational institution.

PROGRAM APPLICATION
All application documents and the application fees must be received by the Office of Student Records and Registrar by April 1 for summer admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

EXPENSES
In addition to tuition, fees, health insurance and professional association dues, students should be prepared to spend $1,500 for textbooks, uniforms and registry examination fees.

CERTIFICATION
Students who satisfactorily complete all the requirements will be awarded the post-baccalaureate certificate in Nuclear Medicine Technology from the University of Mississippi and will be eligible to take the examinations for certifications offered by the American Registry of Radiologic Technologists (ARRT) and the Nuclear Medicine Technologist Certification Board (NMTCB). Candidates for certification must have an overall grade point average (GPA) in University of Mississippi Medical Center coursework of 2.0 or higher on a 4.0 scale. Most states require licensure in order to practice; however, state licenses are usually based on the results of the ARRT and NMTCB certification examinations. Be advised that a felony conviction may affect a graduate’s ability to sit for the ARRT and NMTCB certification examinations or attain state licensure.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMT 501 Nuclear Medicine Foundations</td>
<td>3</td>
</tr>
<tr>
<td>NMT 506 Nuclear Physics and Radiobiology</td>
<td>2</td>
</tr>
<tr>
<td>NMT 510 Nuclear Medicine Technology Principles</td>
<td>3</td>
</tr>
<tr>
<td>NMT 512 Applied Nuclear Medicine Imaging I</td>
<td>3</td>
</tr>
<tr>
<td>NMT 524 Applied Nuclear Medicine Imaging II</td>
<td>4</td>
</tr>
<tr>
<td>NMT 550 Clinical Practicum I</td>
<td>3</td>
</tr>
<tr>
<td>NMT 551 Clinical Practicum II</td>
<td>4</td>
</tr>
<tr>
<td>NMT 552 Clinical Practicum III</td>
<td>4</td>
</tr>
<tr>
<td>NMT 560 Nuclear Medicine Seminar</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
COURSE DESCRIPTIONS

NMT 501. NUCLEAR MEDICINE FOUNDATIONS. An introduction to nuclear medicine technology emphasizing patient care; principles of nuclear radiation and safety; instrumentation and quality control; and medical law and ethics specific to NMT. Nuclear medicine mathematical applications for radionuclide activity, volume, concentration, decay and unit conversion formulas are introduced. Techniques and procedures for proper venipuncture in nuclear medicine procedures are presented in the laboratory setting. Medical terminology is presented and includes a study of word origins, structures, abbreviations and symbols. (Lecture/Lab) (3 semester hours)

NMT 506. NUCLEAR PHYSICS & RADIOBIOLOGY. Presents qualitative and quantitative concepts of radiation physics and radiobiology pertaining to medical applications in nuclear medicine; atomic and nuclear structure, radioactive decay, properties of radiation; and photon interactions in matter. Additionally, the course examines physical, chemical and biological mechanisms involved in radiation to living cells and their components. (Lecture) (2 semester hours)

NMT 510. NUCLEAR MEDICINE TECHNOLOGY PRINCIPLES. A study of the fundamental concepts of radiopharmaceutical production and mechanisms of localization; theoretical and practical concepts of nuclear instrumentation and statistics; principles of in vivo and in vitro counting and imaging, and Gamma/SPECT/PET technology and image management and reconstruction techniques. Medical terminology of nuclear concepts and procedures is presented, including definitions, spelling and pronunciation. (Lecture) (3 semester hours)

NMT 512. APPLIED NUCLEAR MEDICINE IMAGING I. A study of anatomy, physiology, terminology and pathology related to diagnostic nuclear medicine for the skeletal, gastrointestinal, respiratory, urinary and endocrine systems. The course presents current uses of radiopharmaceuticals for organ visualization, function and radiotherapy. Principles for determining diagnostic value of imaging results are presented in the clinical laboratory setting. Cross-sectional anatomy is included. (Lecture/Lab) (3 semester hours)

NMT 524. APPLIED NUCLEAR MEDICINE IMAGING II. A study of anatomy, physiology, terminology and pathology related to diagnostic and therapeutic nuclear medicine for the central nervous system and nuclear oncology. The course provides comprehensive studies of immunology, nuclear cardiology and related PET/CT. Principles for determining diagnostic value of imaging results are presented in the laboratory setting. Related cross-sectional anatomy is included. (Lecture/Lab) (4 semester hours)

NMT 550. CLINICAL PRACTICUM I. A supervised introduction to the clinical environment providing experience with in vivo and in vitro procedures; instrumentation quality control; radiopharmacy; applied radiation safety procedures; and clinical imaging. (Clinical rotation) (3 semester hours)

NMT 551. CLINICAL PRACTICUM II. A continuation of NM 550. Directed intermediate-level clinical practice providing practical clinical experience with in vivo and in vitro procedures; instrumentation quality control; radiopharmacy; applied radiation safety procedures; and clinical imaging. (Clinical rotation) (4 semester hours)

NMT 552. CLINICAL PRACTICUM III. A continuation of NM 551. Directed advanced-level clinical practice providing clinical experience with in vivo and in vitro procedures and therapies; PET/CT imaging and image evaluation; instrumentation quality control; radiopharmacy; applied radiation safety procedures; and department management. (Clinical rotation) (4 semester hours)

NMT 560. NUCLEAR MEDICINE SEMINAR. A review of current literature and research applied to nuclear medicine case studies, along with review of didactic and clinical NMT providing an overview of topics relating to professional certification. Factors affecting health policy and healthcare administration are presented. (Lecture) (4 semester hours)

CLINICAL FACILITIES

Clinical educational experiences in nuclear medicine technology are provided in conjunction with the following health care facilities:

- G. V. “Sonny” Montgomery VA Medical Center - Jackson
- Cardinal Health Nuclear Pharmacy - Jackson
- Central Mississippi Medical Center - Jackson
- Baptist Medical Center - Jackson
- St. Dominic Hospital - Jackson
- University of Mississippi Medical Center (University Hospital and Health System) - Jackson

OCCUPATIONAL THERAPY (MOT)

Christy M. Morgan, PhD, OTR/L, Department Chair and Program Director
Carol Tubbs, MA, OTR/L, Associate Department Chair

FACULTY

Professors:
- Dona Lee Andrew, PhD, OTR/L
- Peter W. Giroux, PhD, OTR/L
- Lorraine Street, PhD, OTR/L, BCP

Associate Professors:
- Robin Davis, MS, OTR/L
- Christy M. Morgan, PhD, OTR/L
- Carol Tubbs, MA, OTR/L
ABOUT THE PROFESSION
The occupational therapist is a health care professional that provides intervention to individuals across the life span whose lives have been impacted by physical, psychological or developmental problems. The therapist designs activities for these individuals to maximize occupational performance in work, self-care, leisure and other daily occupations. The therapist must have the ability to effectively interact with other people and enjoy creative problem-solving. Employment opportunities are found in hospitals, rehabilitation centers, outpatient facilities, mental health programs, private practice, long-term care facilities, home health agencies, industry and school settings.

ACCREDITATION STATUS
The occupational therapy program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449. ACOTE may be contacted by phone at (301) 652-2682 (AOTA).

PROGRAM ADMISSION REQUIREMENTS
The program consists of 36 months of didactic, laboratory, demonstration and clinical course work; the program does not accept outside course work, work experience or experiential learning in place of any MOT curriculum course. Class size is limited, and acceptance into the program is on a competitive basis. Preference is given to Mississippi residents; out-of-state applicants will be considered only if there are positions available after all qualified Mississippi applicants are accepted. The program does not offer advanced placement or admission based on ability to benefit. In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the occupational therapy program must:

1. Have completed a minimum of 72 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Have a minimum overall cumulative grade point average of 3.00 on a 4.00 scale;
3. Provide evidence of 24 hours of observation in at least two occupational therapy clinical departments or practices within the calendar year preceding the application deadline;
4. Complete an interview with the Occupational Therapy Admissions Committee;
5. Have written confirmation of completion of the Hepatitis B vaccination series or that the Hepatitis B vaccination series has been started at the time of registration; and
6. Successfully complete (a grade of "C" or better) the following prerequisite courses:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Speech</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Statistics²</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Social or Behavioral Science³</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>General Psychology</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Child or Adolescent or Abnormal or Educational Psychology</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth and Development or Developmental Psychology</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Fine Arts⁴</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>General Biology I and II or Zoology I and II or Higher Level Biology Courses with Lab¹</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Anatomy and Physiology with Lab⁵</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>General Chemistry with Lab¹</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Physics with Lab¹</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Electives⁵</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td></td>
<td><strong>72</strong></td>
</tr>
</tbody>
</table>

¹ Science survey courses designed for non-science majors are not acceptable for a required course.
² Statistics may include courses such as Elementary, Behavioral or Introductory. Survey courses are not acceptable.
³ Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
⁴ Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theater.
⁵ One course of pure human anatomy with lab AND one course of pure physiology with lab is equivalent to two anatomy and physiology with lab courses.
⁶ These are not required courses but might be helpful electives: medical terminology, trigonometry, additional psychology courses and/or other science courses.
**PROGRAM APPLICATION DEADLINE**

All application documents (including completed observation forms) and the application fees must be received by the Office of Student Records and Registrar by January 15 for summer admission. Students are strongly encouraged to complete the application submission well before the deadline date whenever possible. General application information may be found in the General Application Procedures section of the School of Health Related Professions.

**EXPENSES**

In addition to tuition, fees, and health insurance, students should be prepared to spend $2,000 to $3,000 per year for necessary books, supplies and uniforms. Students are also required to complete two 12-week full-time clinical rotations which are typically not within commuting distance from the Jackson area, and at least one of these placements will be out of Mississippi. Therefore, students should be prepared to provide for their own transportation, living and other incidental expenses during these clinical affiliation experiences.

**DEGREE AND CERTIFICATION**

Candidates for the occupational therapy degree must have completed the prescribed curriculum, encompassing 36 continuous months (3 years) of study, with an overall cumulative grade point average of 3.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Completion of the Master of Occupational Therapy program in its entirety is required for eligibility for the national certification examination. Graduates of the program are eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT certification examination. Be advised that a felony conviction may affect a graduate’s ability to sit for the NBCOT certification examination or attain state licensure. Note: Due to variability of available clinical sites, completion of the required curriculum may be extended beyond the minimum of 36 months. All OT students must complete Level II Fieldwork within 24 months following completion of didactic course work.

**PROFESSIONAL COURSE OF STUDY***

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th></th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT 310 Introduction to Occupational Therapy in Health Care Delivery</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 311 Group Process</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>OT 315 Medical Conditions I</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>OT 318 Introduction to Research</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT 308 Structural Analysis of Human Motion</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 309 Structural Analysis of Human Motion Laboratory</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 312 Concepts-Therapeutic Occupation I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 323 Occupational Therapy: Pediatrics/Early Childhood</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 337 Pediatric Fieldwork I</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT 313 Kinesiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 316 Medical Conditions II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>OT 326 Occupational Therapy: Middle Childhood/Adolescent</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>OT 328 Neuroscience for Occupational Therapy</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>OT 332 Concepts-Therapeutic Occupation II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND YEAR</th>
<th></th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT 317 Medical Conditions III</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 333 Occupational Therapy: Adult/Older Adult</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>OT 441 Legal and Ethical Issues in Occupational Therapy</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT 324 Psychiatric Medical Conditions</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 426 Neurological Principles in Occupational Therapy</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 427 Physical Dysfunction Fieldwork I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 434 Psychosocial Dysfunction</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 460 Research Methods I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT 422 Orthopedic Principles in Occupational Therapy</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT 430 Splinting, Orthotics and Physical Agent Modalities</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
OT 431 Assistive Technology and Environmental Adaptations 3
OT 435 Psychosocial Fieldwork I 3
OT 500 Research Methods II 3

THIRD YEAR

Semester Hours

Summer
OT 515 Fieldwork II A** 9

Fall
OT 501 Research Methods III 2
OT 510 Advanced Therapeutic Modalities 3
OT 516 Management Practices 3
OT 530 Advanced Clinical Reasoning 3
OT 542 Community Practice 3

Spring
OT 537 Fieldwork II B** 9
OT 541 Comprehensive Capstone 3

OT 490 Special Topics 1-4
Total required hours 114

*The Master of Occupational Therapy degree requires the completion of a sequenced curriculum that is progressive in nature. All required courses for each semester are prerequisites for required courses in subsequent semesters.

**A minimum of one fieldwork placement will be scheduled out-of-state. All OT students must complete Level II Fieldwork within 24 months following completion of didactic course work. Due to variability of available clinical sites, completion of the required curriculum, specifically the clinical portion, may be extended beyond the minimum of 36 months.

COURSE DESCRIPTIONS

OT 308. STRUCTURAL ANALYSIS OF HUMAN MOTION. In-depth knowledge of the gross anatomical structure and functions of the human body. Emphasis is placed on the study of the musculoskeletal system and muscle innervations with particular attention to the specific muscle functions and consequences of their loss related to occupational performance. (Lecture) (3 semester hours)

OT 309. STRUCTURAL ANALYSIS OF HUMAN MOTION LABORATORY. This is the dissection laboratory to complement OT 308 “Structural Analysis of Human Motion.” (Laboratory) (3 semester hours)

OT 310. INTRODUCTION TO OCCUPATIONAL THERAPY IN HEALTH CARE DELIVERY. Basic tenets of occupational therapy are introduced. Topics include history and philosophy of the profession, theories/frames of reference, and professional behavior, terminology and documents. The role of the occupational therapist in the context of various service delivery systems will be explored, with emphasis on the U.S. health care system. (Lecture) (3 semester hours)

OT 311. GROUP PROCESS. The content includes analysis of individual and group interaction, communication processes, group dynamics and opportunities for leadership skill development. (Lecture/Lab) (2 semester hours)

OT 312. CONCEPTUAL FRAMEWORK FOR THERAPEUTIC OCCUPATION I. Provides the student with knowledge of the “Occupational Therapy Practice Framework: Domain and Process.” The application of the framework is emphasized through analysis and adaptation of activities to enhance occupational performance across the life span. (Lecture/Lab) (3 semester hours)

OT 313. KINESIOLOGY. Integrates principles of biomechanics and knowledge of anatomy as it applies to human movement and the impact of impairment on occupational performance. Content also includes an introduction to procedures for evaluation of muscular and articular structures and other application labs. (Lecture/Lab) (3 semester hours)

OT 315. MEDICAL CONDITIONS I. Introduction of conditions commonly seen in pediatric and adolescent occupational therapy. Emphasis is placed on etiology, symptoms, medical intervention and direct implications for occupational performance. (Lecture) (2 semester hours)

OT 316. MEDICAL CONDITIONS II. Introduces medical conditions commonly seen in adult occupational therapy. Emphasis placed on etiology, symptoms, medical intervention and implication for occupational performance. (Lecture) (2 semester hours)

OT 317. MEDICAL CONDITIONS III. A continuation of OT 316. It introduces additional medical conditions commonly seen in adult occupational therapy. Emphasis is placed on etiology, symptoms, medical intervention and implication for occupational performance. (Lecture) (3 semester hours)

OT 318. INTRODUCTION TO RESEARCH. Introduces concepts essential for evidenced-based practice in occupational therapy. The process of locating, reviewing and critiquing biomedical research will be examined. Principles related to research design and statistical methods will be introduced. (Lecture) (2 semester hours)

OT 323. OCCUPATIONAL THERAPY: PEDIATRICS/EARY CHILDHOOD. Identifies the physical, psychological, social and cultural forces which affect children’s occupations within the environment from birth through early childhood. Occupational therapy theories/frames of reference and service delivery for this age group are examined. (Lecture/Lab) (3 semester hours)
OT 324. PSYCHIATRIC MEDICAL CONDITIONS. Introduces diagnostic categories of mental disorders as well as the medical, psychological and sociological factors that influence mental health. Emphasis is placed on etiology, symptoms, prognosis and general intervention. (Lecture) (3 semester hours)

OT 326. OCCUPATIONAL THERAPY: MIDDLE CHILDHOOD/ADOLESCENT. Identifies the physical, psychological, social and cultural forces which affect children’s occupations within the environment from middle childhood through adolescence. Occupational therapy theories/frames of reference and service delivery for this age group are examined. (Lecture/Lab) (4 semester hours)

OT 328. NEUROSCIENCE FOR OCCUPATIONAL THERAPY. An in-depth study of the structure and function of the central nervous system. Motor and sensory dysfunctions are related to localized disruptions of nervous system activities. (Lecture) (4 semester hours)

OT 332. CONCEPTUAL FRAMEWORK FOR THERAPEUTIC OCCUPATION II. A continuation of OT312. The application of the “Occupational Therapy Framework” is emphasized through advanced analysis and adaptation of activities to enhance occupational performance across the life span. Focus is on critical thinking skills related to clinical assessment, therapeutic use of alternative modalities and integration of professional behaviors. (Lecture/Lab) (3 semester hours)

OT 333. OCCUPATIONAL THERAPY: ADULT /OLDER ADULT. Identifies the physical, psychological, social and cultural forces which affect occupations within the environment throughout adulthood. The normal aging process, occupational therapy theories/frames of reference, and service delivery for this age group are examined. Clinical reasoning in assessment and treatment for adults are introduced. (Lecture/Lab) (4 semester hours)

OT 337. PEDIATRIC FIELDWORK I. Students apply didactic learning to the practice of occupational therapy in the pediatric population. The emphasis is on clinical problem-solving in assessment, treatment, outcomes and written documentation. (Lecture/Clinical rotation) (2 semester hours)

OT 422. ORTHOPEDIC PRINCIPLES IN OCCUPATIONAL THERAPY. The student is instructed in occupational therapy theories/frames of reference, evaluation, treatment techniques and discharge planning for persons with orthopedic and other physical dysfunction conditions. (Lecture/Lab) (3 semester hours)

OT 426. NEUROLOGICAL PRINCIPLES IN OCCUPATIONAL THERAPY. The student is instructed in occupational therapy theories/frames of reference, evaluation and treatment techniques, and discharge planning for persons with neurological conditions/disorders. (Lecture/Lab) (3 semester hours)

OT 427. PHYSICAL DYSFUNCTION FIELDWORK I. Students to apply didactic learning to the practice of occupational therapy in physical dysfunction. The emphasis is on clinical problem-solving in assessment, treatment, outcomes and written documentation. (Lecture/Clinical rotation) (3 semester hours)

OT 430. SPLINTING, ORTHOTICS AND PHYSICAL AGENT MODALITIES. Instruction in fabrication and application of splinting techniques and orthotics in occupational therapy practice. Basic principles and application of physical agent modalities are included. (Lecture/Lab) (3 semester hours)

OT 431. ASSISTIVE TECHNOLOGY AND ENVIRONMENTAL ADAPTATIONS. In-depth study of assistive technology as it impacts participation in occupations. Laboratory experiences focus on critical thinking skills related to environmental adaptation and the use of assistive technology to enhance occupational performance across all contexts. (Lecture/Lab) (3 semester hours)

OT 434. PSYCHOSOCIAL DYSFUNCTION. Concentrates on the entry-level OT skills required for mental health intervention across practice settings. The student is instructed in theories/frames of reference, evaluation and treatment techniques, and discharge planning for individuals with psychosocial problems. (Lecture/Lab) (3 semester hours)

OT 435. PSYCHOSOCIAL FIELDWORK I. Students apply didactic learning to the practice of occupational therapy in psychosocial dysfunction. The emphasis is on clinical problem-solving in assessment, treatment, outcomes and written documentation. (Lecture/Clinical rotation) (3 semester hours)

OT 441. ANALYSIS OF LEGAL AND ETHICAL ISSUES IN OCCUPATIONAL THERAPY. Knowledge and application of law and ethics related to occupational therapy practice. Strategies for analyzing and resolving professional dilemmas in service delivery are introduced and applied. In addition, legal topics including liability issues, malpractice, and business and education law are presented. (Lecture) (3 semester hours)

OT 460. RESEARCH METHODS I. Reinforces the conceptual basis for interpreting professional literature and making evidence-based practice decisions. Both qualitative and quantitative research designs are explored in-depth, and students are instructed in the research process with emphasis on the literature review. Student groups complete a literature review on a relevant topic under the direction of a faculty advisor. (Lecture) (3 semester hours)

OT 490. SPECIAL TOPICS. With the consent of the department chair, a student may elect to take this course on a subject of interest in special areas of occupational therapy. The student must have the support of a faculty advisor for course administration. Credits will be assigned according to the scope of the subject and/or project completed. (Independent Study) (1-4 semester hours)

OT 500. RESEARCH METHODS II. A continuation of the research process introduced in OT460. The didactic emphasis is on development of a research methodology and statistical analyses. Student groups complete the remainder of the research proposal under the direction of a faculty advisor. (Lecture) (3 semester hours)

OT 501. RESEARCH METHODS III. A continuation course of OT500. Didactic emphasis is on the compilation and dissemination of a final research report. Student groups complete the details unique to their research project under the direction of a faculty advisor. (Lecture) (2 semester hours)
OT 510. ADVANCED THERAPEUTIC MODALITIES AND APPLICATIONS. Instruction and application opportunities for treatment approaches inclusive of all populations across the lifespan and diagnostic categories. Topics include specialized treatment techniques and in-depth presentation of techniques introduced in earlier courses. Students examine and present a treatment topic and complete a longitudinal, case-based treatment plan. (Lecture/Lab) (3 semester hours)

OT 515. FIELDWORK II A. Full-time 12-week clinical experience in which students are responsible for providing services to clients/patients under the supervision of a qualified occupational therapy practitioner. The focus is on development of the skills necessary for entry level occupational therapy practice. Placements are selected to ensure exposure to a variety of settings and clients. (Clinical rotation) (9 semester hours)

OT 516. MANAGEMENT PRACTICES AND PROFESSIONAL LEADERSHIP. Students exposed to the day-to-day functions of an occupational therapist in administrative, managerial and leadership roles. Issues and resources related to professional development throughout the career are emphasized. (Lecture) (3 semester hours)

OT 530. ADVANCED CLINICAL REASONING. Students apply different types of clinical reasoning to the occupational therapy process through lecture and case analysis. Professional development is also emphasized. (Lecture) (3 semester hours)

OT 537. FIELDWORK II B. Full-time 12-week clinical experience in which students are responsible for providing services to clients/patients under the supervision of a qualified occupational therapy practitioner. The focus is on development of the skills necessary for entry level occupational therapy practice. Placements are selected to ensure exposure to a variety of settings and clients. (Clinical rotation) (9 semester hours)

OT 541. COMPREHENSIVE CAPSTONE. A comprehensive review of the curriculum in preparation for the national board examination. Includes information on the process for national certification and state licensure for the occupational therapist. Public dissemination of findings from OT 501 research projects will be required. (Lecture) (3 semester hours)

OT 542. COMMUNITY PRACTICE. Students will gain an understanding and appreciation of the role of occupational therapy in home and community settings as well as evidence-based practice, policy issues and trends in models of service delivery. Topics include traditional and emerging practice in the realms of health promotion, prevention, evaluation and intervention. (Lecture/Lab) (3 semester hours)

PHYSICAL THERAPY (DPT)
Rebecca H. Pearson, PT, PhD, Department Chair and Program Director
Lisa Barnes, PT, DPT, PhD, Associate Department Chair

FACULTY

Professors
Felix Adah, PT, PhD
Min Huang, PT, PhD
Rebecca H. Pearson, PT, PhD
Paula L. Stubbs, PT, PhD, RRT
Mark D. Weber, PT, PhD, SCS, ATC
Kimberly Curbow Wilcox, PT, PhD, NCS

Associate Professors:
Lisa Barnes, PT, DPT, PhD
Joy Kuebler, PT, DPT
Lisa Latham, PT, DPT
Emily McVey, MD

Assistant Professors:
Sherry Colson, PT, DPT
Melanie Lauderdale, PT, DPT
Ryan McGlawn, PT, DPT, OCS
Janet Slaughter, PT, DPT, PCS
Kimberly Willis, PT, DPT

Clinical Assistant Professor:
Maureen Hardy, PT, MS, CHT

ABOUT THE PROFESSION
The physical therapist is a health professional that examines, designs, implements and modifies therapeutic interventions for persons of all age groups in order to enhance or maintain endurance, muscle strength and mobility, and treat pain, movement dysfunction or disability due to disease, injury, loss of a body part or birth defect. The therapist helps the individual prevent injury and overcome movement dysfunction through the use of exercise, education, assistive devices and physical procedures. Additionally, the therapist considers psychological, sociological and economic factors in interactions with clients, patients and community groups, assesses living environments and recommends adaptations to eliminate architectural barriers.

As the need for qualified professional physical therapists exists wherever health care services are required, employment opportunities include hospitals, private practices, rehabilitation centers, home health agencies, industry, research centers, nursing homes, community centers, wellness centers, clinics and school settings. The physical therapy profession offers opportunities for advancement in the areas of education, clinical specialization, management, consultation and research. Practice settings, employment arrangements, occupational responsibilities and career opportunities depend upon the interests and skills of each practitioner.

ACCREDITATION STATUS
The physical therapy program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association, 1111 North Fairfax Street, Alexandria, VA 22314-1488. CAPTE’s phone number is (703) 706-3245.
PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the Doctor of Physical Therapy program must:

1. Provide evidence of observation in a minimum of two physical therapy clinical departments or practices for total of 40 hours. (Additional hours and sites are recommended. A maximum of 20 hours may be used from any one site. Hours earned through employment will not be accepted and no more than 20 hours total can be applied to the observation requirement from hours earned during internship experiences. All observation hours must be completed in the current year of application and documentation forms must be received by the application deadline.);
2. Have a baccalaureate degree from a regionally accredited institution of higher learning;
3. Have a minimum overall grade point average of 3.00 on a 4.00 scale;
4. Have a minimum required course grade point average of 3.00 on a 4.00 scale;
5. Submit an official GRE report that includes verbal, quantitative, and analytical writing scores;
6. Submit a resume that includes (1) career objective; (2) educational history; (3) work history; (4) community service activities; and (5) honors and activities;
7. Be proficient in the use of computers for word processing, spreadsheet, library database searching and be able to perform Internet searches;
8. Have current first aid and CPR certification at the time of registration;
9. Have written confirmation of completion of the Hepatitis B vaccination series or that the Hepatitis B vaccination series has been started at the time of registration; and
10. Successfully complete (a grade of “C” or better) the prerequisite courses as follows:

<table>
<thead>
<tr>
<th>Prerequisite Courses*</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics (mathematics, psychology or education)1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Biology with Lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry with Lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Physics with Lab</td>
<td>2</td>
<td>6-8</td>
</tr>
<tr>
<td>Advanced Physical or Biological Science2</td>
<td>1</td>
<td>3-5</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td></td>
<td><strong>28-32</strong></td>
</tr>
</tbody>
</table>

*Science survey courses designed for non-science majors are not acceptable for a required course. Normally required science courses must have been taken in the last 10 years. All physical or biological sciences listed at a particular college or university do not necessarily satisfy the prerequisite requirements; please consult with the physical therapy pre-academic advisor for clarification.
1Must be taken at a senior college.
2Must be 300 level or above and taken at a senior college. Associated labs, whether incorporated or offered separately, must also be completed. Student must have completed all specified prerequisites for each advanced science course taken.

PROGRAM APPLICATION DEADLINE

All application documents and the application fees must be received by the Office of Student Records and Registrar by November 1 for summer admission, while final fall transcripts must be received by the last Tuesday in January. General application information may be found in the General Application Procedures section of the School of Health Related Professions.

EXPENSES

In addition to tuition, fees, health insurance and professional insurance, students should be prepared to spend $3,000 to $4,000 per year for necessary books, supplies and uniforms. Students are required to spend part of the second fall semester, 8 weeks of the third summer semester and all of the spring semester of the third year in full-time clinical education experiences in Mississippi or other states. Although some clinical institutions may offer a small stipend or room and board, students should be prepared to provide their own transportation, living and other incidental expenses during these clinical education experiences. One long-term clinical education assignment will be at an out-of-state facility and a second assignment will be at an in-state facility outside the Jackson metro area. Students may be required to buy laptop computers and/or wireless handheld personal data assistance devices that will be compatible with the campus computer network.

DEGREE AND LICENSURE

Candidates for the physical therapy degree must have completed the prescribed curriculum with an overall cumulative grade point average of 3.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all course requirements, the student will be awarded the Doctor of Physical Therapy degree from the University of Mississippi. Due to the variability of available clinical sites, completion of the required curriculum may be extended beyond the minimum of 36 months. Students are recommended by the faculty for graduation. The graduate will be eligible to take the national physical therapy licensure examination.
## PROFESSIONAL COURSE OF STUDY

### FIRST YEAR

<table>
<thead>
<tr>
<th>Summer</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT 600 Anatomical Basis of Human Movement in Physical Therapy Practice</td>
<td>7</td>
</tr>
<tr>
<td>PT 610 Introduction to Physical Therapy Practice</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT 601 Physiologic Basis of Physical Therapy I</td>
<td>3</td>
</tr>
<tr>
<td>PT 602 Human Kinesiology and Biomechanics I</td>
<td>3</td>
</tr>
<tr>
<td>PT 611 Systems Review and Clinical Dysfunction</td>
<td>4</td>
</tr>
<tr>
<td>PT 620 Acute Care in Physical Therapy I</td>
<td>4</td>
</tr>
<tr>
<td>PT 630 Principles of Physical Therapy Practice I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT 603 Physiologic Basis of Physical Therapy II</td>
<td>3</td>
</tr>
<tr>
<td>PT 621 Clinical Tests and Measures in Physical Therapy Practice</td>
<td>4</td>
</tr>
<tr>
<td>PT 631 Assessment and Management of Musculoskeletal Problems I</td>
<td>4</td>
</tr>
<tr>
<td>PT 632 Principles of Physical Therapy Practice II</td>
<td>3</td>
</tr>
<tr>
<td>PT 660 Evidence-Based Physical Therapy Practice I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

### SECOND YEAR

<table>
<thead>
<tr>
<th>Summer</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT 604 Human Kinesiology and Biomechanics II</td>
<td>3</td>
</tr>
<tr>
<td>PT 605 Pharmacology in Physical Therapy</td>
<td>2</td>
</tr>
<tr>
<td>PT 633 Acute Care in Physical Therapy II</td>
<td>3</td>
</tr>
<tr>
<td>PT 640 Legal and Ethical Issues in Healthcare</td>
<td>2</td>
</tr>
<tr>
<td>PT 670 Specialty Practice in Physical Therapy Elective</td>
<td>2*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT 617 Issues in Community Health and Prevention and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>PT 634 Assessment and Management of Musculoskeletal Problems II</td>
<td>3</td>
</tr>
<tr>
<td>PT 641 Organizational Systems in Healthcare Delivery</td>
<td>2</td>
</tr>
<tr>
<td>PT 650 Clinical Experience I</td>
<td>6</td>
</tr>
<tr>
<td>PT 662 Journal Seminar I</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT 606 Neurosciences in Physical Therapy Practice</td>
<td>4</td>
</tr>
<tr>
<td>PT 612 Developmental Basis of Functional Movement across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>PT 635 Physical Therapy Management of Integumentary Problems</td>
<td>4</td>
</tr>
<tr>
<td>PT 636 Neurological Aspects of Physical Therapy Practice I</td>
<td>3</td>
</tr>
<tr>
<td>PT 661 Evidence-Based Physical Therapy Practice II</td>
<td>2</td>
</tr>
<tr>
<td>PT 663 Journal Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>PT 670 Specialty Practice in Physical Therapy Elective</td>
<td>2*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

### THIRD YEAR

<table>
<thead>
<tr>
<th>Summer</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT 613 Applied Clinical Decision-Making</td>
<td>3</td>
</tr>
<tr>
<td>PT 651 Clinical Experience II</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT 616 Comprehensive Capstone</td>
<td>3</td>
</tr>
<tr>
<td>PT 637 Neurological Aspects of Physical Therapy Practice II</td>
<td>4</td>
</tr>
<tr>
<td>PT 638 Neurological Aspects of Physical Therapy Practice III</td>
<td>4</td>
</tr>
<tr>
<td>PT 642 Resource Management in Physical Therapy</td>
<td>2</td>
</tr>
<tr>
<td>PT 670 Specialty Practice in Physical Therapy Elective</td>
<td>2*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>
### COURSE DESCRIPTIONS

**PT 600. ANATOMICAL BASIS OF HUMAN MOVEMENT IN PHYSICAL THERAPY PRACTICE.** An integrated approach to regional study of the gross anatomical structure and functions of the human body with emphasis on the study of the musculoskeletal, nervous, cardiovascular and pulmonary systems. Prerequisite: Admission (Lecture/Lab) (7 semester hours)

**PT 601. PHYSIOLOGIC BASIS OF PHYSICAL THERAPY I.** The study of human physiology with special emphasis on cardiopulmonary, musculoskeletal, nervous, endocrine and reproductive systems as well as acid base balance. Prerequisite: PT 600 (Lecture) (3 semester hours)

**PT 602. HUMAN KINESIOLOGY AND BIOMECHANICS I.** A study of normal and abnormal human movement with consideration of static and dynamic structural relationships. Emphasis is on the clinical application of kinesiologic principles and relationships. Prerequisite: PT 600 (Lecture/Lab) (3 semester hours)

**PT 603. PHYSIOLOGIC BASIS OF PHYSICAL THERAPY II.** An examination of the client’s response to physical therapy intervention in health and disease. Emphasis is on the physiologic responses and adaptations of the cardiopulmonary and musculoskeletal systems and the energy systems utilized during activity. Prerequisite: PT 601 (Lecture) (3 semester hours)

**PT 604. HUMAN KINESIOLOGY AND BIOMECHANICS II.** A study of human structure and movement in the areas of gait and posture. Both normal and abnormal gait and posture will be addressed in lecture and laboratory settings. Basic introductions and principles in the areas of motor learning and motor control will be presented. Prerequisites: PT 602 and PT 621 (Lecture/Lab) (3 semester hours)

**PT 605. PHARMACOLOGY IN PHYSICAL THERAPY.** General concepts of pharmacokinetics and pharmacodynamics. Includes a survey of the classes of pharmacological agents used in the treatment of diseases and disorders of the cardiovascular, pulmonary, musculoskeletal, integumentary and neuromuscular systems. Examination of clinical responses to drug interactions and side effects in the physical therapy patient population and presentation of medical diagnostic measures used to assess diseases and disorders of these systems. Prerequisites: PT 601 (Lecture) (2 semester hours)

**PT 606. NEUROSCIENCES IN PHYSICAL THERAPY.** Neurological basis of central nervous system function with emphasis on motor performance. Includes applications for cranial nerve, reflex and sensory testing. Prerequisite: PT 611 (Lecture) (4 semester hours)

**PT 610. INTRODUCTION TO PHYSICAL THERAPY PRACTICE.** Principles and conceptual bases of communication, education, cultural diversity, documentation in the health care record, psychosocial aspects of care and disability and introduction to ethical practice in a variety of health care settings. (Lecture) (3 semester hours)

**PT 611. SYSTEMS REVIEW AND CLINICAL DYSFUNCTION.** Principles and practices related to the systems review process of physical therapy examination. Clinical pathology of body systems with emphasis on the influence of these pathologies on the role and practice of physical therapists. Prerequisite: PT 600 (Lecture) (4 semester hours)

**PT 612. DEVELOPMENTAL BASIS OF FUNCTIONAL MOVEMENT ACROSS THE LIFE SPAN.** Study of the sequential changes of human development, maturation and aging from conception to death with emphasis on neuromuscular and musculoskeletal systems. Prerequisite: PT 604 (Lecture) (3 semester hours)

**PT 613. APPLIED CLINICAL DECISION MAKING.** A synthesis of concepts learned during the preceding clinical experience, utilizing case study presentations, sharing of clinical in-services and professional socialization. Requisite: Concurrent enrollment in PT 651; Prerequisites: PT 605 and PT 650 (Lecture) (3 semester hours)

**PT 616. COMPREHENSIVE CAPSTONE.** A review and synthesis of the patient client management model with a focus on specific clinical disorders with an emphasis on clinical decision-making based on clinical experiences. A secondary emphasis is on preparation for the National Physical Therapy Examination. Prerequisites: PT 613 and PT 651 (Lecture) (3 semester hours)

**PT 617. ISSUES IN COMMUNITY HEALTH AND PREVENTION AND WELLNESS.** A synopsis of issues in community health, including epidemiological concepts, community education processes and a survey of community health stakeholders, current programs and agencies. The role of physical therapists in prevention and promotion of health is examined in relation to principles and practices for primary, secondary and tertiary prevention. Prerequisites: PT 603, PT 610, PT 611, PT 640 and PT 660 (Lecture) (3 semester hours)

**PT 620. ACUTE CARE IN PHYSICAL THERAPY I.** Practice related to the role of the physical therapist in the acute care setting, including introduction to radiology, lab values, pulmonary function testing, cardiac monitoring and equipment utilized for patients in this setting. Prerequisite: PT 600 (Lecture/Lab) (4 semester hours)

**PT 621. CLINICAL TESTS AND MEASURES IN PHYSICAL THERAPY PRACTICE.** Theory and application of patient examination skills including muscle performance testing, goniometry, sensory testing, functional assessment, functional capacity examination, assessment of home and work environments, and application of ergonomic principles. Incorporates documentation of patient examination and evaluation in the medical record. Prerequisites: PT 601, PT 602, PT 610 and PT 611 (Lecture/Lab) (4 semester hours)
PT 630. PRINCIPLES OF PHYSICAL THERAPY PRACTICE I. Basic principles and procedures involved in transfers, bed mobility, patient positioning, draping, body mechanics, passive range of motion, vital signs assessment and gait training with assistive devices. Prerequisites: PT 600 and PT 610 (Lecture/Lab) (3 semester hours)

PT 631. ASSESSMENT AND MANAGEMENT OF MUSCULOSKELETAL PROBLEMS I. Specific assessment skills related to appendicular musculoskeletal problems. Presentation of various management techniques, such as exercise, flexibility and mobilization, which are used in the management of these problems. Prerequisites: PT 602 and PT 611 (Lecture/Lab) (4 semester hours)

PT 632. PRINCIPLES OF PHYSICAL THERAPY PRACTICE II. Physical, electrical, and mechanical modalities used in physical therapy treatment. Prerequisites: PT 601, PT 611 and PT 630 (Lecture/Lab) (3 semester hours)

PT 633. ACUTE CARE IN PHYSICAL THERAPY II. Assessment and treatment of patients in the acute care setting with a variety of medical conditions. Emphasis on the equipment utilized as well as assessment parameters related to the management of patients in acute care settings. Prerequisites: PT 603, PT 620 and PT 621 (Lecture/Lab) (3 semester hours)

PT 634. ASSESSMENT AND MANAGEMENT OF MUSCULOSKELETAL PROBLEMS II. Specific assessment skills related to axial and pelvic musculoskeletal problems. Presentation of various management techniques, such as exercise, flexibility and mobilization, which are used in the management of these problems. Prerequisites: PT 604 and PT 631 (Lecture/Lab) (3 semester hours)

PT 635. PHYSICAL THERAPY MANAGEMENT OF INTEGUMENTARY PROBLEMS. Explores patient-client management of the patient with integumentary disruption, including pressure ulcers, neuropathic and vascular wounds, burns, scar tissue, lymphedema and amputation. Prerequisites: PT 604, PT 605 and PT 632 (Lecture/Lab) (4 semester hours)

PT 636. NEUROLOGICAL ASPECTS OF PHYSICAL THERAPY PRACTICE I. Basic principles of rehabilitation for the physically disabled individual. Emphasis is placed on comprehensive management of neuromuscular related conditions with focus on achieving individual functional potential through therapeutic intervention, equipment and orthotic evaluation, and patient education. Prerequisites: PT 604, PT 605, PT 606, and PT 621 (Lecture/Lab) (3 semester hours)

PT 637. NEUROLOGICAL ASPECTS OF PHYSICAL THERAPY PRACTICE II. Introduction to current theories, clinical examination, evaluation, and management of neurological conditions with emphasis on the adult population. Includes principles of rehabilitation and neurological disease processes. Prerequisites: PT 604, PT 605, PT 606 and PT 621 (Lecture/Lab) (4 semester hours)

PT 638. NEUROLOGICAL ASPECTS OF PHYSICAL THERAPY PRACTICE III. Assessment and treatment of neurological and musculoskeletal dysfunctions presenting in the 0 to 21 years of age population in a variety of community and health care settings. Emphasis is placed on comprehensive management of neuromuscular conditions and includes overview of congenital or acquired orthopedic conditions affecting the pediatric population. Prerequisites: PT 605, PT 606, PT 612 and PT 621 (Lecture/Lab) (4 semester hours)

PT 640. LEGAL AND ETHICAL ISSUES IN HEALTH CARE. An overview of the legal structure of the health care system, including public and private law affecting health care. Concurrent ethical issues are explored with a focus on ethical principles and decision-making. (Lecture) (2 semester hours)

PT 641. ORGANIZATIONAL SYSTEMS IN HEALTHCARE DELIVERY. An overview of the structure of health care delivery. Emphasizes patient settings, reimbursement mechanisms, accreditation, risk management, consultation, advocacy, and quality assessment and improvement. Prerequisite: PT 640 (Lecture) (2 semester hours)

PT 642. RESOURCE MANAGEMENT IN PHYSICAL THERAPY. Explores the business management of the physical therapy practice. Includes management theory, strategic planning, operations planning, human resource management, budgeting, marketing and leadership. Prerequisite: PT 641 (Lecture) (2 semester hours)

PT 650. CLINICAL EXPERIENCE I. An eight-week full-time clinical education experience. Emphasis based on basic evaluation and treatment techniques of musculoskeletal conditions of the upper and lower extremities and medical conditions. Prerequisite: Enrolled in regular track and in good academic standing. (Clinical rotation) (6 semester hours)

PT 651. CLINICAL EXPERIENCE II. An eight-week full-time clinical education experience. The student is assigned to one of a variety of practice settings. Emphasis is on comprehensive evaluation, diagnosis and treatment planning for a variety of patient care problems. Prerequisites: PT 650, enrolled in regular track and in good academic standing. (Clinical rotation) (6 semester hours)

PT 652. CLINICAL EXPERIENCE III. The final clinical education course consisting of full-time long-term experiences in a variety of settings. This course is the culmination of the students' previous didactic and clinical experiences and is designed to assist the student in achieving clinical competence as an entry-level physical therapist. Emphasis is on professional behaviors as well as comprehensive patient management. Prerequisites: PT 651, enrolled in regular track and in good academic standing. (Clinical Rotation) (6 semester hours)

PT 653. CLINICAL EXPERIENCE IV. The final clinical education course consisting of full-time long-term experiences in a variety of settings. This course is the culmination of the students' previous didactic and clinical experiences and is designed to assist the student in achieving clinical competence as an entry-level physical therapist. Emphasis is on professional behaviors as well as comprehensive patient management. Prerequisites: PT 652, enrolled in regular track and in good academic standing (Clinical Rotation) (6 semester hours)

PT 660. EVIDENCE-BASED PHYSICAL THERAPY PRACTICE I. A survey of research design and statistical methods used in biomedical research. Content will provide an introduction to foundational knowledge necessary for interpreting scientific literature. (Lecture) (3 semester hours)
PT 661. EVIDENCE-BASED PHYSICAL THERAPY PRACTICE II. Building on foundational concepts of PT 660, this course develops the ability of the student to interpret and appraise evidence in physical therapy literature. Prerequisite: PT 660 (Lecture) (2 semester hours)

PT 662. JOURNAL SEMINAR I. Preceptor guided group process review of current literature for the development of methodology for a research project. Seminar is pass/fail. (Laboratory) (1 semester hour)

PT 663. JOURNAL SEMINAR II. Preceptor guided group process review of current literature related to the completion of a research project. Seminar is pass/fail. (Laboratory) (1 semester hour)

PT 670. SPECIALTY PRACTICE IN PHYSICAL THERAPY. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women’s health, pediatric therapy, neurological therapy skills or other areas of interest. Elective is pass/fail. Requisite: Good academic standing and permission of the instructor. (Lecture/Lab) (2 semester hours)

PT 671. INDEPENDENT STUDY IN PHYSICAL THERAPY PRACTICE. An independent study course designed to enhance the knowledge base in administrative, education or clinical issues. Permission of the instructor and department chair is required. Credit hours assigned according to the scope of the project. (Lecture) (1-4 semester hours)

PT 672. SPECIAL TOPICS IN PHYSICAL THERAPY PRACTICE. A student may take this course on a subject of interest or a clinical practice area of physical therapy with permission of the course faculty and department chair. Credit hours assigned according to the scope of the project. (Lecture) (1-4 semester hours)

RADIOLOGIC SCIENCES (BS)
Mark R. Gray, PhD, RT (R) ARRT, Radiologic Sciences Department Chair
Kristi Moore, PhD, RT (R) (CT), ARRT, Program Director
Seena Edgerton, MBA, RT (R) (M) ARRT, Clinical Coordinator

FACULTY
Associate Professor:
Kristi Moore, PhD, RT (R) (CT) ARRT

Assistant Professors:
Angela Burrell, MSN, RN
Seena Edgerton, MBA, RT (R) (M) ARRT
Mark R. Gray, PhD, RT (R) ARRT
Mike Ketchum, MSEd, RT (R) ARRT
Kevin McKay, MA, RT (R) (T) ARRT, CMD
Sherry J. West, MS, RT (R) (N) CNMT

Instructors:
Lee Brown, BS, RT (R) (N) CNMT
Asher Street, MS, RT (R) (MR), ARRT

ABOUT THE PROFESSION
The field of radiologic sciences is a dynamic profession that is ever-changing in terms of technology and professional expertise. Radiology is one of the fastest growing, most exciting and increasingly important fields in medicine today. Radiologic sciences is a specialized field in which professional radiologic technologists perform medical imaging procedures for the purpose of diagnosing disease and injury. The radiologic technologist is responsible for performing a variety of challenging and interesting examinations on a diverse patient population. Those procedures include conventional radiography, fluoroscopy and surgical studies. Although many graduates seek employment as diagnostic radiographers, some choose to specialize in advanced imaging modalities, such as magnetic resonance imaging, computed tomography, sonography, radiation therapy, nuclear medicine, mammography, vascular imaging and quality management. As an integral part of the health care team, radiologic technologists endeavor to provide outstanding patient care while limiting radiation exposure to patients, themselves and others.

A career as a radiologic technologist offers a promising future, job stability and competitive salaries with other health professionals who have similar educational backgrounds. Excellent career opportunities exist in hospitals, diagnostic imaging centers and private physician’s offices. The Bachelor of Science in Radiologic Sciences provides graduates opportunities for career advancement in areas such as administration, medical sales, education, quality management and public health facilities. The employment outlook for radiologic technologists is expected to grow faster than average for all occupations through the year 2016. As technology advances and the population ages, the demand for radiologic procedures has increased, thus creating a demand for new professionals in the field.

ACCREDITATION STATUS
The radiologic sciences program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), mail@jrcert.org, 20 N. Wacker Dr., Suite 2850; Chicago, IL 60606-2901. JRCERT’s phone number is (312) 704-5300.

TRADITIONAL RADIOLOGIC SCIENCES
The traditional baccalaureate degree program in radiologic sciences is an entry-level program for students who want to become a registered radiologic technologist. Upon completion of the program, consisting of 22 continuous months, students receive a bachelor
of science degree and are prepared to apply for and are eligible to take the examination for certification as a registered radiologic technologist.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the radiologic sciences program must:
1. Have completed a minimum of 57 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Have a minimum overall cumulative grade point average of 2.50 on 4.00 scale;
3. Complete an interview with the Radiologic Sciences Admissions Committee;
4. Submit ACT scores;
5. Hold current CPR certification at the time of registration;
6. Successfully complete a background check at the time of registration; and
7. Successfully complete (a grade of “C” or better) the following minimum prerequisite number of required courses:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science¹</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Speech</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Fine Arts²</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Anatomy and Physiology with Lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Basic Computer Concepts and Applications</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Electives³</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td></td>
<td><strong>57</strong></td>
</tr>
</tbody>
</table>

¹Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
²Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.
³The Radiologic Sciences Admissions Committee highly recommends general chemistry with lab and general physics as electives. Additional recommended electives are medical terminology, natural sciences (biology, microbiology), advanced mathematics and advanced computer sciences.

PROGRAM APPLICATION DEADLINE
All application documents and the application fees must be received by the Office of Student Records and Registrar by February 15 for fall admission. General application information may be found in the General Application Procedures section of the School of Health Related Professions. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

EXPENSES
In addition to tuition, fees, health insurance and professional association dues, students should be prepared to spend $3,600 the first year and $1,650 the second year at the University of Mississippi Medical Center for necessary books, uniforms and instruments.

DEGREE AND CERTIFICATION
Candidates for the radiologic sciences degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all requirements, students will be awarded the Bachelor of Science in Radiologic Sciences from the University of Mississippi and are eligible to take the examination for certification offered by the American Registry of Radiologic Technologists (ARRT). Most states require licensure in order to practice; however, state licenses are usually based on the results of the ARRT certification examination. Be advised that a misdemeanor or felony conviction may affect a graduate’s ability to sit for the ARRT certification examination or attain state licensure.

PROFESSIONAL COURSE OF STUDY

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Fall</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD 300 Concepts of Radiologic Sciences</td>
<td>2</td>
</tr>
<tr>
<td>RAD 306 Radiographic Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>RAD 312 Radiation Protection</td>
<td>2</td>
</tr>
<tr>
<td>RAD 318 Principles of Image Formation I</td>
<td>3</td>
</tr>
<tr>
<td>RAD 324 Age Specific Patient Care</td>
<td>2</td>
</tr>
<tr>
<td>RAD 354 Clinical Practicum I</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>Semester</td>
<td>Course Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Spring</td>
<td>RAD 330 Radiologic Physics</td>
</tr>
<tr>
<td></td>
<td>RAD 336 Radiobiology</td>
</tr>
<tr>
<td></td>
<td>RAD 342 Research Methods</td>
</tr>
<tr>
<td></td>
<td>RAD 348 Radiographic Procedures II</td>
</tr>
<tr>
<td></td>
<td>RAD 350 Principles of Image Formation II</td>
</tr>
<tr>
<td></td>
<td>RAD 360 Clinical Practicum II</td>
</tr>
<tr>
<td></td>
<td><strong>Total Required Hours</strong></td>
</tr>
<tr>
<td>Summer</td>
<td>RAD 400 Legal and Ethical Issues in Imaging Sciences</td>
</tr>
<tr>
<td></td>
<td>RAD 451 Management Issues in Diagnostic Health Care</td>
</tr>
<tr>
<td></td>
<td>RAD 454 Clinical Practicum III</td>
</tr>
<tr>
<td></td>
<td>RAD 472 Seminar I</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Hours</strong></td>
</tr>
<tr>
<td>Fall</td>
<td>RAD 406 Radiographic Procedures III</td>
</tr>
<tr>
<td></td>
<td>RAD 412 Advanced Medical Imaging Science</td>
</tr>
<tr>
<td></td>
<td>RAD 436 Radiographic Pathology</td>
</tr>
<tr>
<td></td>
<td>RAD 460 Clinical Practicum IV</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>RAD 418 Digital Image Acquisition and Display</td>
</tr>
<tr>
<td></td>
<td>RAD 424 Principles of Computed Tomography</td>
</tr>
<tr>
<td></td>
<td>RAD 430 Pharmacology and Drug Administration</td>
</tr>
<tr>
<td></td>
<td>RAD 448 Radiographic Procedures IV</td>
</tr>
<tr>
<td></td>
<td>RAD 466 Clinical Practicum V</td>
</tr>
<tr>
<td></td>
<td>RAD 475 Seminar II</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Hours</strong></td>
</tr>
</tbody>
</table>

**Total Required Hours**: 65

**CLINICAL FACILITIES**

Clinical educational experiences in radiologic sciences are provided in conjunction with the following health care facilities:

- G. V. “Sonny” Montgomery VA Medical Center - Jackson
- Hardy Wilson Memorial Hospital - Hazlehurst
- King’s Daughters Hospital - Yazoo City
- Merit Health Madison - Canton
- Madison Radiological Group LLC - Madison
- Mississippi Methodist Rehabilitation Center - Jackson
- River Region Health System - Vicksburg
- Scott Regional Medical Center - Morton
- University of Mississippi Medical Center (Jackson Medical Mall) - Jackson
- University of Mississippi Medical Center (Lakeland Family Medicine Center) - Jackson
- University of Mississippi Medical Center (University Hospital and Health System) - Jackson
- University Physicians Grants Ferry Clinic - Flowood

**ADVANCED STANDING RADIOLOGIC SCIENCES**

The advanced standing baccalaureate degree program in radiologic sciences is intended to enhance the quality and education of registered radiologic technologists. It enables practicing registered radiologic technologists to update their education background, enhance their didactic skills, improve their clinical decision-making skills, and receive the Bachelor of Science in Radiologic Sciences. The program, offered across five semesters, is designed for, but not limited to, part-time, non-traditional students. Online course work is the method of content delivery.

**PROGRAM ADMISSION REQUIREMENTS**

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the advanced standing radiologic sciences program must:

1. Submit a copy of current ARRT (R) credential;
2. Have completed a minimum of 57 semester hours of academic credit (exclusive of physical education, military science, dogmatic religion, and vocational courses) from a regionally accredited institution of higher learning;
3. Have a minimum cumulative GPA of 2.50 on a 4.00 scale; and
4. Successfully complete (a grade of “C” or better) the following minimum prerequisite number of required courses below:
COURSE DESCRIPTIONS

RAD 300. CONCEPTS OF RADIOLOGIC SCIENCES. An overview of the foundations in radiography involving the practitioner’s role in the health care delivery system. An introduction to general anatomy and body systems, mobile radiography, trauma radiography and surgical radiography are explored. Principles, practices and policies of the health care organization(s), medical language, professional communication and professional responsibilities of the radiographer will be examined and discussed. (Lecture) (2 semester hours)

RAD 306. RADIOGRAPHIC PROCEDURES I. Provides a knowledge base necessary to perform standard radiographic procedures of the thoracic viscera, abdomen, upper and lower extremities, and bony thorax. Content includes the radiographic anatomy and positioning of these body structures. Laboratory experience will be used to complement the didactic portion. (Lecture/Lab) (3 semester hours)

RAD 312. RADIATION PROTECTION. Basic theories and principles related to the safe utilization of diagnostic radiographic equipment in a clinical setting. The student applies the theories and principles of safe radiation exposure. (Lecture) (2 semester hours)

RAD 318. PRINCIPLES OF IMAGE FORMATION I. Factors that govern and influence the production and recording of radiologic images. Content includes the importance of minimum imaging standards, discussion of a problem-solving technique for image evaluation and the factors affecting image quality. Laboratory experience will be used to complement the didactic portion. (Lecture/Lab) (3 semester hours)

RAD 324. AGE SPECIFIC PATIENT CARE. Patient care theory and techniques for a diverse patient population. Content includes age-appropriate interpersonal communication, human diversity, patient transfer and immobilization techniques, vital sign monitoring, sterile and aseptic technique, infection control and medical emergencies. (Lecture) (2 semester hours)

RAD 330. RADIOLOGIC PHYSICS. Qualitative and quantitative concepts of radiation physics pertaining to medical applications in radiology; atomic and nuclear structure; properties of radiation; X-ray production; artificial production; photon interactions in matter; and attenuation processes. (Lecture) (2 semester hours)

RAD 336. RADIOBIOLOGY. Qualitative and quantitative concepts of radiobiology pertaining to genetic and somatic effects of ionizing radiation and the mechanisms of interaction from subcellular level to organism. (Lecture) (2 semester hours)
RAD 342. RESEARCH METHODS. Provides an overview of research design methodology in radiologic sciences. Emphasis is on data collection, analysis, interpretation and effective communication of research via written and oral presentations. (Lecture) (2 semester hours)

RAD 348. RADIOGRAPHIC PROCEDURES II. A continuation of RAD 306. Content includes the radiographic anatomy and positioning of the shoulder and pelvic girdles as well as the vertebral column. Laboratory experience will be used to complement the didactic portion. (Lecture/Lab) (3 semester hours)

RAD 350. PRINCIPLES OF IMAGE FORMATION II. A continuation of RAD 318. Content will include imaging accessories, technique charts, image receptors, image processing, sensitometry and criterion for image evaluation. Laboratory experience will be used to complement the didactic portion. (Lecture/Lab) (3 semester hours)

RAD 354. CLINICAL PRACTICUM I. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Content includes patient assessment; radiographic examinations of extremities (upper and lower), chest, bony thorax and abdomen; radiologic imaging critique; concepts of team practice and patient-centered clinical practice; total quality management; and professional development. (Clinical rotation) (2 semester hours)

RAD 360. CLINICAL PRACTICUM II. A continuation of RAD 354. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Content includes patient assessment; radiographic examinations of extremities (upper and lower) and girdles, chest, bony thorax, abdomen and vertebral column; radiologic imaging critique; concepts of team practice and patient-centered clinical practice; total quality management; and professional development. (Clinical rotation) (2 semester hours)

RAD 400. LEGAL AND ETHICAL ISSUES IN IMAGING SCIENCES. A study of legal and ethical issues in imaging sciences. Topics include ethical theories, end-of-life care, living wills, confidentiality, risk management and quality review, HIPAA and implementation of the electronic health record. (Lecture) (3 semester hours)

RAD 406. RADIOGRAPHIC PROCEDURES III. A continuation of RAD 348. Content includes the radiographic anatomy and positioning of the digestive system, biliary system and cranium. Laboratory experience will be used to complement the didactic portion. (Lecture/Lab) (3 semester hours)

RAD 412. ADVANCED MEDICAL IMAGING SCIENCE. A study of the advanced physical principles of diagnostic radiology. Topics include image intensification, specialized radiographic units and quality control of radiographic equipment and accessories. (Lecture) (3 semester hours)

RAD 414. ADVANCED CLINICAL PRACTICE SKILLS. Focuses on the current health care delivery environment, including patient assessment, monitoring, infection control and management. It includes working with multicultural patients, managing problem patients and patient education. Additional topics include an overview of considerations when working in an increasingly digital imaging environment. (Lecture) (4 semester hours)

RAD 418. DIGITAL IMAGE ACQUISITION AND DISPLAY. Explores the components, principles and operations of digital imaging systems. Factors that impact image acquisition, display, archiving and retrieval are discussed. Principles of digital imaging quality assurance and maintenance are presented. (Lecture) (3 semester hours)

RAD 424. PRINCIPLES OF COMPUTED TOMOGRAPHY. Explores the basic physical and technical principles of computed tomography (CT) imaging. Content includes computed tomography generations, components, operations and imaging processes with an emphasis on sectional anatomy as compared to planar anatomy as seen in computed tomography. (Lecture) (2 semester hours)

RAD 430. PHARMACOLOGY AND DRUG ADMINISTRATION. An overview of pharmacologic principles and practices in patient care with emphasis on imaging procedures. Topics include biopharmaceutics, pharmacokinetics, pharmacodynamics, drug classifications, radiopharmaceuticals, venipuncture, routes of drug administration, emergency medications and cardiac monitoring. (Lecture) (2 semester hours)

RAD 436. RADIOGRAPHIC PATHOLOGY. Introduces theories of disease causation and the pathophysiologic disorders that compromise healthy systems. Content includes etiology, pathophysiologic responses, clinical manifestations, radiographic appearance and management of alterations in body systems. (Lecture) (3 semester hours)

RAD 438. RADIOGRAPHIC IMAGE ANALYSIS. A study of specific factors of the radiographic process that affect image quality with an emphasis on refinement of image analysis and problem-solving skills. Image analysis of the appendicular skeleton, axial skeleton, chest, abdomen and digestive system will be explored. (Lecture) (4 semester hours)

RAD 442. CLINICAL RESEARCH METHODS. A study of research design methodology in radiologic sciences. Topics include terminology of research, qualitative and quantitative methods, statistics, basic research designs and data analysis techniques. Emphasis is placed on critical review of radiologic sciences research studies and their application to clinical practice. (Lecture) (4 semester hours)

RAD 448. RADIOGRAPHIC PROCEDURES IV. A continuation of RAD 406. Content includes the radiographic anatomy and positioning of the urinary system, reproductive system and central nervous system as well as the use of advanced radiographic procedures. Laboratory experience may be used to complement the didactic portion. (Lecture/Lab) (3 semester hours)
RAD 451. MANAGEMENT ISSUES IN DIAGNOSTIC HEALTH CARE. A study of managerial roles and functions in health care organizations with emphasis in diagnostic imaging. Content includes connective processes, planning, organizing, staffing, influencing, controlling and labor relations. Provides a foundation of managerial thoughts and processes which lead to organizational success and maximum productivity. (Lecture) (3 semester hours)

RAD 454. CLINICAL PRACTICUM III. A continuation of RAD 360. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Content includes patient assessment; radiographic examinations of extremities (upper and lower) and girdles, chest, bony thorax, abdomen and vertebral column; radiologic imaging critique; concepts of team practice and patient-centered clinical practice; total quality management; and professional development. (Clinical Rotation) (3 semester hours)

RAD 460. CLINICAL PRACTICUM IV. A continuation of RAD 454. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Content includes patient assessment; radiographic examinations of extremities (upper and lower) and girdles, chest, bony thorax, abdomen, vertebral column and gastrointestinal system; radiologic imaging critique; concepts of team practice and patient-centered clinical practice; total quality management; and professional development. (Clinical Rotation) (3 semester hours)

RAD 466. CLINICAL PRACTICUM V. A continuation of RAD 460. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Content includes patient assessment; radiographic examinations of extremities (upper and lower) and girdles, chest, bony thorax, abdomen, vertebral column, urinary system, gastrointestinal system, reproductive system and central nervous system; radiologic imaging critique; concepts of team practice and patient-centered clinical practice; total quality management; and professional development. (Clinical rotation) (3 semester hours)

RAD 472. SEMINAR I. An overview of various topics in radiologic sciences. (Lecture) (1 semester hour)

RAD 475. SEMINAR II. A continuation of RAD 472 and provides an overview of various topics in radiologic sciences. (Lecture) (1 semester hour)

RAD 478. COMPUTED TOMOGRAPHY APPLICATIONS AND SECTIONAL IMAGING. A study of the basic physical principles of computed tomography (CT) imaging. Content includes fundamentals of computed tomography, equipment and instrumentation, data acquisition, image processing and reconstruction, patient safety, image quality and procedure protocols of common computed tomography examinations. Provides an overview of human anatomy, viewed in body sections, as it relates to the imaging professional. (Lecture) (4 semester hours)

RAD 484. RADIOLOGIC SCIENCES DIRECTED STUDY. Involves a directed study designed to provide registered radiologic technologists the opportunity to demonstrate their expanded capabilities resulting from previous didactic and clinical experience gained in radiologic sciences. Requires the student to utilize the knowledge, skills and insights gained from previous courses taken in the Advanced Standing Radiologic Sciences track and requires the student to develop a comprehensive e-portfolio of material that includes, but is not limited to, directed reading essays, testing assignments, CITI Basic Course assignments, an MSDH Health Care Law presentation and a Curriculum Vitae. The student will work with a supervising faculty member and a mentor/preceptor. Prerequisite: Senior standing and permission of the program director are required (Lecture) (4 semester hours)

RAD 490. SPECIAL TOPICS. Interdisciplinary elective. Content varies. May be repeated for credit. Prerequisite: Permission of instructor required (Lecture) (1-4 semester hours)

FACULTY

KAYLA C. ABRAHAM, BS, MA (University of Louisiana at Monroe); assistant professor of occupational therapy

FELIX ADAH, BS (University of Ife), M.S. (University of Ibadan), PhD (University of Mississippi); professor of physical therapy

JEANETTE ADAIR, BA (Ottawa University), MSSM (University of Mississippi); associate professor of health sciences

JESSYLEN AGE, BSN, MSHA (Mississippi College), DNP (University of Mississippi); assistant professor of health sciences

KRISTY ALPE, BS (University of Mississippi), MSBA (Mississippi State University); assistant professor of health sciences

DONA LEE ANDREW, BS (University of Western Ontario), MS (University of Manitoba), PhD (University of Mississippi); professor of occupational therapy

SHARON ANDREWS, BS (University of Mississippi); instructor of dental hygiene

JANA K. BAGWELL, BS (University of Mississippi); instructor of medical laboratory science

JESSICA H. BAILEY, BS (University of Mississippi), MA, PhD (University of Missouri-Columbia); professor of health informatics and information management

LINDA BARKETT, BS (Mississippi State University), DMD (University of Mississippi); assistant professor of dental hygiene

LISA BARNES, BS, DPT (University of Mississippi). Ph.D. (University of Southern Mississippi); associate professor of physical therapy

REBECCA M. BARRY, BS (Louisiana State University), MEd (Mississippi State University), PhD (University of Mississippi); associate professor of dental hygiene

KAYE BENDER, MS (University of Southern Mississippi), BSN, PhD (University of Mississippi); professor of health administration

HAMED A. BENGHUZZI, BS (University of Garyounis-Benghazi), MS, PhD (University of Dayton); professor of clinical health sciences
BARBARA BRENT, BS (University of Mississippi); instructor of dental hygiene
LEE BROWN, BS (University of Mississippi); instructor of radiologic sciences
ANGELA BURRELL, BSN (Mississippi College), MSN (University of Mississippi); assistant professor of radiologic sciences
REBECCA BUTLER, BS (University of Southern Mississippi), MEd (University of West Florida); assistant professor of health sciences
ELIZABETH ODOM CARR, BS (University of Mississippi), MDH (University of Tennessee); assistant professor of dental hygiene
ZELMA CASON, BS (Jackson State University), MS (University of Mississippi); PhD (University of Mississippi) professor of cytotechnology
JAMIE R. CLAY, BA, DMD (University of Mississippi); associate professor of dental hygiene
SHERRY COLSON, BS, DPT (University of Mississippi); assistant professor of physical therapy
KELLY CRAWFORD, BS (University of Mississippi), MSM (Belhaven University); instructor of occupational therapy
LINDA CROFF-POOLE, BS (University of Mississippi), MPH (University of Southern Mississippi); assistant professor of health sciences
ROBIN DAVIS, BS (University of Alabama at Birmingham), MS (University of Mississippi); associate professor of occupational therapy
CLYDE DESCHAMP, BS, MEd (University of Southern Mississippi), PhD (Jackson State University); professor of general health professions
CYNTHIA DISHONGH, BS (University of Mississippi), MHS (Mississippi College); assistant professor of health administration
TERESA B. DUNCAN, BS (Medical College of Georgia), MDH (University of Tennessee); assistant professor of dental hygiene
SEENA SHAZOWEE EDGERTON, BS (William Carey University), MBA (Mississippi State University); assistant professor of radiologic sciences
ELIZABETH FRANKLIN, BA (University of Southern Mississippi), MEd, PhD (University of Mississippi); assistant professor of health administration
ANGELIA GARNER, BS, MS, PhD (University of Mississippi); assistant professor of dental hygiene
PETER GIROUX, BS (Northeastern Louisiana University), MHS (Mississippi College), PhD (University of Mississippi); professor of occupational therapy
MARK R. GRAY, BA (Ottawa University), MS, PhD (University of Mississippi); assistant professor of radiologic sciences
ELGENAID HAMADAIN, BS (University of Alexandria), MS, PhD (Mississippi State University); professor of clinical health sciences
KENNETH M. HEARD JR., BA, MS (University of Mississippi); assistant professor of cytotechnology
JOHN HODNETT, BS, MEd (Delta State University), BSN (University of Southern Mississippi), MSN (University of Alabama), DNP (University of Alabama Tuscaloosa); assistant professor of health sciences
SANDRA HORNE, BS (University of Mississippi), MHSA (Mississippi College); associate professor of dental hygiene
MIN HUANG, BS, PhD (University of Mississippi), MD (Tongji Medical University); professor of physical therapy
JOHN C. HYDE, BS (Western Kentucky University), MS (Trinity University), PhD (University of Alabama at Birmingham); professor of general health professions
JAMIL IBRAHIM, BA (University of Mustansiriyah), MBA (Jackson State University), PhD (University of Southern Mississippi); assistant professor of health sciences
ELLEN JONES, BS (Springfield College), MS (University of Southern Mississippi), PhD (University of Mississippi); assistant professor of health administration
MIKE KETCHUM, BS (University of Louisiana at Monroe), MSED (Peru State College); assistant professor of radiologic sciences
ED KING, BA (Millsaps College), BST, MST (Boston University); associate professor of clinical health sciences
JOY KUEBLER, BS (University of Mississippi), MS (University of Alabama at Birmingham), DPT (University of South Alabama); associate professor of physical therapy
MEGAN LADNER, BS (University of Mississippi), MS (University of Southern Mississippi); assistant professor of occupational therapy
LISA LATHAM, MS (University of Southern Mississippi), BS, DPT (University of Mississippi); associate professor of physical therapy
MELANIE LAUDERDALE, BS (Mississippi State University), DPT (University of Mississippi); assistant professor of physical therapy
MONTE LUEHLFING, BS (University of Southern Mississippi), MS (University of Mississippi); assistant professor of health informatics and information management
WARREN MAY, BA, MA (University of West Florida), PhD (Louisiana State University); professor of health sciences
ROB MCELHANEY, BSBA, MPA, PhD (University of Southern Mississippi); assistant professor of health administration
KIM MCGAUGH, BS (University of Central Arkansas), MS (University of Mississippi); instructor of health sciences
RYAN MCGLAWN, BS (Delta State University), MPT, DPT (University of Mississippi); assistant professor of physical therapy
KEVIN MCKAY, BA, MA (University of Mississippi); assistant professor of radiologic sciences
EMILY MCVEY, BAE (University of Mississippi), MD (University of Mississippi); associate professor of physical therapy
ELIZABETH MOORE, BS (University of Mississippi); instructor of dental hygiene
KRISTI MOORE, BS, MS, PhD (University of Mississippi); associate professor of radiologic sciences
LAT'OYA RICHARDS-MOORE, BS (Tougaloo College), BA, MS, PhD (University of Mississippi); associate professor of medical laboratory science
ANGELA MOREY, BS (Medical College of Georgia), MSM (Georgia State University); assistant professor of health informatics and information management
CHRISTY M. MORGAN, BS (University of Mississippi), MHSA (Mississippi College), PhD (University of Mississippi); associate professor of occupational therapy
LISA MORTON, BS (Louisiana Tech University), MLIS (Louisiana State University), PhD (Drexel University); associate professor of health informatics and information management
MARC NIVET, BS (Southern Connecticut State University), MS (Long Island University), EdD (University of Pennsylvania); associate professor of health sciences
CARISA NIXON, BSN (Union University), BS HIIM (University of Mississippi); instructor of health informatics and information management
MITZI NORRIS, BS, MS (Mississippi University for Women), PhD (University of Mississippi); associate professor of health administration
DELLA OWENS, BSN. (University of Southern Mississippi), MSN (University of Alabama), JD (University of Mississippi); assistant professor of health informatics and information management
ROBIN PARISH, BS, MA (Touro College); assistant professor of occupational therapy
CHARITY PEACOCK, BS, MS (University of Mississippi); instructor of health informatics and information management
REBECCA H. PEARSON, BS, MEd, EdS, PhD (University of Mississippi); professor of physical therapy
ANN H. PEDEN, BA, PhD (University of Mississippi), MBA (Louisiana Tech University); professor of health informatics and information management
TERRY POLLARD, BS, MA (University of Southern Mississippi); assistant professor of health sciences
CHARLES E. RAMSEY, BS (Mississippi College), DMD (University of Mississippi); assistant professor of dental hygiene
MOLLY RATCLIFF, BBA, MS (Mississippi State University); instructor of health sciences
RICHARD ROBERSON, BA (Baylor University), JD (University of Mississippi); assistant professor of health administration
JONI ROBERTS, BA (Washington Adventist University), MAT (American University), DrPh (Loma Linda University); assistant professor of health sciences
ROBIN W. ROCKHOLD, BA (Kenyon College), PhD (University of Tennessee); professor of clinical health sciences
PENNY ROGERS, BS (University of Mississippi), MAT, (Grand Canyon University); assistant professor of occupational therapy
BRIAN RUTLEDGE, BA, MHSA (Mississippi College), PhD (University of Mississippi); assistant professor of health administration
TRAVIS SCHMITZ, BS, MBA (Mississippi College), PhD (University of Mississippi); assistant professor of health sciences
CYNTHIA SENIOR, BS (University of Mississippi), MEd (William Carey University); instructor of dental hygiene
JANET SLAUGHTER, BS, DPT (University of Mississippi); assistant professor of physical therapy
CORY SMITH, BSE (Delta State University), PhD (University of Mississippi); assistant professor of health sciences
ASHER STREET, BS, MS (University of Mississippi); instructor of radiologic sciences
LORRAINE STREET, BA (University of Mississippi), MOT. (Texas Woman’s University), PhD (University of Mississippi); professor of occupational therapy
PAULA STUBBS, MST (Jackson State University), BS, BSPE, PhD (University of Mississippi); professor of physical therapy
AMY L. SULLIVAN, BS, MS, PhD (University of Mississippi); associate professor of dental hygiene
FELICIA M. TARDY, BS (Alcorn State University), BS, MS, PhD (University of Mississippi); assistant professor of medical laboratory science
JUANYCE TAYLOR, BS, PhD (University of Southern Mississippi), MEd (Jackson State University); assistant professor of health sciences
SUSAN TAYLOR, BA, BS (Blue Mountain College), MS, PhD (Louisiana State University); professor of health administration
TONIA B. TAYLOR, BS, PhD (Jackson State University); assistant professor of occupational therapy
CAROL TUBBS, BS (Louisiana State University), BA, MA, (University of Mississippi); associate professor of occupational therapy
HELEN TURNER, BS (Mississippi University for Women), PhD, MD (University of Mississippi); professor of health administration
STACY HULL VANCE, BS, MS (Jackson State University), BS, MS, PhD (University of Mississippi); associate professor of medical laboratory science
STEVE H. WATSON, BA, MCC, MPC (Mississippi College), PhD (Mississippi State University); associate professor of health sciences
MARK D. WEBER, BS (Ohio State University), MS (University of Southern Mississippi), PhD (University of Mississippi); professor of physical therapy

SHANNON WENTZ, BS (Louisiana Tech University), MBA (Northeast Louisiana University); instructor of health informatics and information management

DANA WEST, BA (Tougaloo College), MA (Mississippi College), PhD (Jackson State University); assistant professor of health sciences

SHERRY J. WEST, BS, MS (Midwestern State University); assistant professor of radiologic sciences

THOMAS WIGGERS, BS (Millsaps College), MS (University of Mississippi); associate professor of medical laboratory science

KIMBERLY CURBOW WILCOX, BS (Mississippi State University), MS (Texas Woman’s University), BS, PhD (University of Mississippi); professor of physical therapy

RENEE WILKINS, BS, MS, PhD (University of Mississippi); assistant professor of medical laboratory science

KIMBERLY WILLIS, BS, DPT (University of Mississippi); assistant professor of physical therapy

DORTHY YOUNG, BA (Furman University), MHSA (Mississippi College), PhD (University of Mississippi); instructor of health informatics and information management
MISSISSIPPI’S ONLY SCHOOL OF DENTISTRY
## 2015-2016 Semester Academic Calendar

### SUMMER TERM

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>25</td>
<td>Mon</td>
<td>Memorial Day</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>Tues</td>
<td>Classes begin for D3 and D4</td>
</tr>
<tr>
<td>June</td>
<td>8</td>
<td>Mon</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td></td>
<td>11-14</td>
<td>Thurs-Sun</td>
<td>Mississippi Dental Association Annual Meeting</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sandestin, FL</td>
</tr>
<tr>
<td>July</td>
<td>3</td>
<td>Fri</td>
<td>Independence Day holiday</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Mon</td>
<td>$50 late registration fee for fall semester effective today</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>Fri</td>
<td>Last day of clinic/classes</td>
</tr>
</tbody>
</table>

### FALL SEMESTER

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>4-7</td>
<td>Tues-Fri</td>
<td>D1 orientation</td>
</tr>
<tr>
<td></td>
<td>6-7</td>
<td>Thurs-Fri</td>
<td>Faculty retreat</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Mon</td>
<td>ASDA Recognition Day</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Mon</td>
<td>$100 late registration fee for fall semester effective today</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Tues</td>
<td>All classes begin D1,D2,D3,D4</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Thurs</td>
<td>SEPC D3,D4 summer term</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Fri</td>
<td>Last day to register for fall semester</td>
</tr>
<tr>
<td>September</td>
<td>7</td>
<td>Mon</td>
<td>Labor Day holiday observed</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Tues</td>
<td>Classes resume</td>
</tr>
<tr>
<td>October</td>
<td>8</td>
<td>Tues</td>
<td>D1 Ethics Signing Ceremony</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Tues</td>
<td>ADA Success Program D1, D2, D3, D4</td>
</tr>
<tr>
<td>November</td>
<td>5-10</td>
<td>Thurs-Tues</td>
<td>American Dental Association Annual Meeting</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Washington, D.C.</td>
</tr>
<tr>
<td></td>
<td>26-27</td>
<td>Thurs-Fri</td>
<td>Thanksgiving holidays</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>Mon</td>
<td>Classes resume</td>
</tr>
<tr>
<td>December</td>
<td>11</td>
<td>Fri</td>
<td>Last Day of Class D1,D2</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Fri</td>
<td>Last Day of Clinic D3, D4</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Sat</td>
<td>End of the fall semester</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Tues</td>
<td>Fall semester grades Due</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>Mon</td>
<td>$50 late registration fee for spring semester effective today</td>
</tr>
</tbody>
</table>

### SPRING SEMESTER

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>7</td>
<td>Thurs</td>
<td>SEPC, D1,D2,D3,D4 fall semester</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Mon</td>
<td>Classes resume</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Mon</td>
<td>$100 late registration fee for spring semester effective today</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Tues</td>
<td>Diversity training</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Mon</td>
<td>Martin Luther King’s birthday holiday observed</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Tues</td>
<td>Grand Rounds resumes</td>
</tr>
<tr>
<td>February</td>
<td>1-5</td>
<td>Mon-Fri</td>
<td>Service Learning/Private Practice Practicum</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Wed</td>
<td>Student Financial Wellness Seminar</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Fri</td>
<td>ADA Give Kids a Smile Day</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Tues</td>
<td>Research Day</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>Fri</td>
<td>ACD Ethics Seminar /ACD White Coat Ceremony and D4</td>
</tr>
<tr>
<td>March</td>
<td>3-5</td>
<td>Thurs-Sat</td>
<td>Commission on Dental Competency Assessments (CDCA) Examination</td>
</tr>
<tr>
<td></td>
<td>7-11</td>
<td>Mon-Fri</td>
<td>Spring break</td>
</tr>
<tr>
<td></td>
<td>12-15</td>
<td>Sat-Tues</td>
<td>American Dental Education Association Annual Meeting</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Denver, CO</td>
</tr>
<tr>
<td></td>
<td>16-19</td>
<td>Wed-Sat</td>
<td>American Association of Dental Research Annual Meeting</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Mon</td>
<td>Classes resume</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>Thurs</td>
<td>Impressions Program</td>
</tr>
<tr>
<td></td>
<td>17-19</td>
<td>Thurs-Sat</td>
<td>Hinman Dental Meeting, Atlanta, GA</td>
</tr>
<tr>
<td>Month</td>
<td>Date</td>
<td>Day</td>
<td>Event/Note</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td>------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>April</td>
<td>7</td>
<td>Thurs</td>
<td>MS Jurisprudence exam</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Mon</td>
<td>Registration begins for 2016-2017 summer term and fall semester</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Thurs</td>
<td>Hembree Honor Society Banquet</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Fri</td>
<td>Alumni and Friends Weekend</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Tue</td>
<td>Awards Day Program</td>
</tr>
<tr>
<td>May</td>
<td>5</td>
<td>Thurs</td>
<td>Omicron Kappa Upsilon Dental Honor Society Banquet</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Fri</td>
<td>MDA Senior Honors Banquet</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Fri</td>
<td>D4 deadline for diploma dated May 27</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Fri</td>
<td>Last day of classes for D1,D2,D3,D4</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>Tues</td>
<td>All grades due</td>
</tr>
<tr>
<td></td>
<td>19-21</td>
<td>Thurs-Sat</td>
<td>CDCA retake, manikin and patient</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>Tues</td>
<td>SEPC Meeting D4 Students</td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td>Tue-Wed</td>
<td>D4 checkout and records reviews</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>Wed</td>
<td>SEPC Meeting D1, D2, &amp; D3 students</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Fri</td>
<td>Commencement</td>
</tr>
</tbody>
</table>
HISTORY
The long-range plan for the development of the Medical Center included the creation of a dental school in the 1971-1979 period. In the regular session of 1973, the Mississippi Legislature authorized the Board of Trustees to establish a School of Dentistry at the Medical Center for the “encouragement of the study of dentistry toward the doctor of dental medicine degree (DMD) as well as the continued education of the state’s dental health professionals, and the encouragement of dental research and the improvement of dental health.”

The School of Dentistry enrolled its first students in 1975, and the first class was graduated in May, 1979. The dental education building, which adjoins the main Medical Center complex by an enclosed walkway, was completed in 1977. The contemporary, five-story structure was dedicated in public and scientific ceremonies in March 1978.

PROGRAMS
The School of Dentistry offers a course of instruction leading to the degree of Doctor of Dental Medicine (DMD). The curriculum extends over four calendar years and is accredited by the American Dental Association Commission on Dental Accreditation. The commission is a specialized accrediting body recognized by the American Dental Association Commission on Recognition of Postsecondary Accreditation and by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-2719 or at 211 East Chicago Avenue, Chicago, IL 60611.

Master of Science and Doctor of Philosophy degrees in Biomedical Materials Science are offered by the School of Graduate Studies in Health Sciences. These graduate programs are open to dentists, engineers and other scientists and medical professionals. They focus on the fundamental principles of materials science and the unique requirements associated with the use of materials in a living system, including the oral environment.

MISSION
The University of Mississippi School of Dentistry’s diverse student body, faculty and staff exemplify qualities of leadership and dedication to preparing competent, ethical dentists for Mississippi and to furthering the health of its citizens. The School of Dentistry fosters an environment of lifelong learning, collaborative teaching, service and research through partnerships within the Medical Center, and with community organizations and dental health practitioners throughout Mississippi.

CORE VALUES
Integrity
- Honesty and fairness in our actions
- Building trust within our relationships
- Courage to do “what is right”

Excellence
- Realize and commit to our full potential
- Achievement and performance set to the highest standards

Leadership
- Willingness to take responsibility
- Creating a vision, setting goals to make a difference

Professionalism
- Ethical conduct, character and spirit for the advancement of our profession

Continuous Improvement
- Dedication to lifelong learning while recognizing the need to change for improvement
- Establishing and monitoring goals to enhance our value to the profession and the citizens of Mississippi

Diversity
- Accept our differences while working together as a cohesive group and recognizing the value and strength derived through diversity

Caring
- Concern for and recognizing the needs of others
- Kindness and compassion shown in all interactions
ADMISSION TO THE DENTAL CURRICULUM

The authority to select applicants for admission to the UMMC School of Dentistry is vested in the Dental School Admissions Committee (DSAC) and the Dean of the School of Dentistry. DSAC is appointed by the Dean of the School of Dentistry and includes clinical and basic science faculty of the School of Dentistry and the School of Medicine, representatives of the dental private practice, UMMC School of Dentistry students and other administrative personnel in the various departments at the University of Mississippi Medical Center. All correspondence and records regarding the admissions process are filed in the Office of Student Records and Registrar, become the property of the University of Mississippi Medical Center and cannot be returned or forwarded to the applicant or another school.

Selection of applicants is made on a competitive basis without regard to race, gender, religion, marital status, age, national origin or veteran status. Decision and consideration are given to both cognitive and noncognitive components. Cognitive components include overall GPA, overall science GPA, overall DAT (academic average), overall science DAT and masters GPA, if applicable. Noncognitive components include honesty/integrity, ethics/values, respect for others, critical thinking, communication skills, altruism, motivation for dentistry, accountability, support system, maturity, excellence, vision of practice, participation in Health Careers programs, leadership, self-appraisal and research. Recommendations from college science faculty, dentists that have been shadowed and community service directors are also considered. Multiple mini-interviews with members of the Admissions Committee are required.

For admission purposes, the School of Dentistry at the University of Mississippi Medical Center gives preference to residents of Mississippi, as defined by Miss. Code §§ 37-301 and IHL Policy 610. As such, the School of Dentistry currently accepts admission applications only from individuals who are U.S. citizens or lawful permanent residents. The School of Dentistry may choose not to accept applications from students who cannot demonstrate residency as defined by Miss. Code § 37-103-7 and 37-103-13. In recent years, nonresidents have not been considered for admission to the School of Dentistry.

Applicants must complete all required course work at an accredited U.S. or Canadian college or university. Full-time members of the U.S. military must obtain orders to be based in Mississippi prior to starting first-year classes. All questions pertaining to resident status should be addressed to the Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 38216-4505.

INTERVIEWS – Applicant files are reviewed by the School of Dentistry Admissions screeners. Applicants whose credentials indicate potential for success in the UMMC dental school program are invited for an interview session which includes multiple mini-interviews with members of the DSAC. Applicants must not present themselves for interviews until requested to do so by the Admissions Committee. Prescreening factors include, but are not limited to, metrics (grades and DAT scores), shadowing experiences (minimum of 100 hours of shadowing is required with at least four different dentists), research experience, commitment to community service (volunteer work with at least four different organizations is recommended) as well as professionalism, leadership, and other noncognitive attributes. Interviews are scheduled during specific periods, and applicants are notified in advance of such periods.

APPLICATION PROCEDURE – The UMMC School of Dentistry is now a participant of the ADEA Associated American Dental Schools Application Service, AADSAS. Applicants can apply online. Contact information for ADEA AADSAS:

- Phone: (617) 612-2045 (Applicant inquiries only)
- E-mail: mailto:aadsasinfo@aadsasweb.org
- Website: http://portal.aadsasweb.org/

It is not necessary that an applicant complete the entire application at once. The applicant may save the application and work on it over a period of time. Once it is submitted, however, only minor changes can be made online. Check with AADSAS to determine what information can be edited after submission of the application.

Upon verification of an applicant’s primary application, the applicant will be provided with a link to complete the UMMC School of Dentistry’s supplemental application. The supplemental application fee is $50.

Application Timetable: There are no exceptions to the below listed deadlines.

- Earliest date of application: JUNE 2, 2015
- Application deadline:
  - AADSAS deadline: SEPTEMBER 25, 2015 (Application, all documentation and fees required by AADSAS must be received by AADSAS.)
  - UMMC School of Dentistry deadline: OCTOBER 16, 2015 (All application materials, including secondary application, fees, official transcripts and letters of recommendation, must be received.)
- Earliest date of acceptance notification: DECEMBER 1, 2015

DENTAL ADMISSION TEST (DAT) – Applicants for admission to the UMMC School of Dentistry must take the American Dental Association Dental Admission Test (DAT). The test must be scheduled to be taken by computer at Prometric Testing Centers. Information regarding the American Dental Association Dental Admission Test may be obtained from the pre-dental advisor in most colleges or from the American Dental Association, 211 East Chicago Avenue, Chicago, Illinois 60611. By following a well-planned schedule, the pre-dental student should be ready to take the test at the end of the second full year of college work; the DAT is generally taken by March of the third year of college work. DAT scores more than 3 years old are not accepted. Candidates seeking to retake the DAT must wait 90 days before a re-test is allowed.
COURSE REQUIREMENTS – The applicant must show credit for at least three years of college work, totaling not fewer than 90 successful semester hours (grade of “C” or better), completed in a regionally accredited United States or Canadian college or university.

In addition, all applicants must meet the following minimum requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>2 semesters / 3 quarters</td>
</tr>
<tr>
<td>Inorganic Chemistry</td>
<td>2 semesters / 3 quarters (Must include laboratory)</td>
</tr>
<tr>
<td>Organic Chemistry</td>
<td>2 semesters / 3 quarters (Must include laboratory)</td>
</tr>
<tr>
<td>Physics</td>
<td>2 semesters / 3 quarters (Must include laboratory)</td>
</tr>
<tr>
<td>General Biology or Zoology (I and II)</td>
<td>2 semesters / 3 quarters (Must include laboratory)</td>
</tr>
<tr>
<td>Advanced Biology and/or Chemistry</td>
<td>2 semesters / 3 quarters One course must include one of the following: microbiology, comparative anatomy, or biochemistry (to be completed at a senior college, but no laboratory is required)</td>
</tr>
<tr>
<td>Mathematics</td>
<td>2 semesters / 3 quarters (College algebra and trigonometry or higher level.)</td>
</tr>
<tr>
<td>Statistics or Biostatistics</td>
<td>1 semester / 1 quarter (General, business or scientific statistics. This is in addition to one year mathematics requirement.)</td>
</tr>
</tbody>
</table>

While not required, these courses are highly recommended: Foreign language, sociology, psychology, speech, humanities, philosophy, embryology, histology, immunology, cell biology, physiology.

Unacceptable Courses – None of the minimum 90 acceptable semester hours of collegiate course work listed or described or recommended above may be met by the following: correspondence courses; courses in physical training, military science, or dogmatic religion; courses in mathematics or science designed for non-science majors; or course credit granted without college-level testing and grade. A limited number of distance learning credits may be accepted for liberal arts electives; however, none will be accepted for required science and math courses. Courses taken outside science and math departments (course numbers other than BIOL, CHEM, PHYS or MATH) are not acceptable as required courses.

Approved Elective Courses – It is recommended that the student develop proficiency in a specific area while in undergraduate school and acquire a background in the humanities and social sciences, consulting with a pre-dental/pre-health profession advisor concerning specific courses.

CREDIT TRANSFERRED FROM A COMMUNITY COLLEGE – A maximum of 65 semester hours of credit from a junior college may be applied toward admission. However, it is strongly recommended that as many required science courses as possible be completed at a senior college or university to improve chances for admission.

TRANSFER STUDENTS ADMISSION WITH ADVANCED STANDING – The University of Mississippi Medical Center School of Dentistry does not accept transfer students from other dental schools except under exceptional circumstances. The School of Dentistry reserves the right to determine those exceptional circumstances in which they may consider a transfer student.

COMPLETION OF DEGREES – An applicant enrolled in a degree-granting program at any college or university is expected to complete the requirements for and earn that degree before enrollment in dental school. Unless prior approval has been granted by the Admissions Committee, this applies to both undergraduate and graduate degrees.

CONDITIONAL ACCEPTANCE – Acceptance to the dental school is conditional; the Admissions Committee may rescind an offer of acceptance at any time before matriculation if an applicant fails to maintain expectations upon which the acceptance was based. Examples include, but are not limited to, a significant decline in academic performance, failure to complete prerequisites or other course work and degrees in progress, patterns of unprofessional behavior and incidents discovered in a criminal background check.

SPECIAL STUDENT

No student may enroll for courses in the School of Dentistry as a special part-time student without being admitted by the Admissions Committee and receiving approval from the Associate Dean for Academic Affairs to attend class(es).

TECHNICAL STANDARDS FOR ADMISSION

The Dean and faculty’s recommendation that a student be granted the DMD degree by the University of Mississippi Medical Center signifies that the recipient of that degree possesses the knowledge, skills and attitudes to provide care across a wide spectrum of dental health needs and to function effectively in varied clinical settings. The dental practitioner must exhibit a unique combination of scientific and health care knowledge, technical abilities, communication and interpersonal skills as well as professional attitudes and behaviors in order to deliver the dental health care that is required and expected of today’s dental professional.

The University of Mississippi School of Dentistry has a responsibility for the welfare of patients treated at the school and a responsibility to graduate the best possible practitioners. Therefore, the School of Dentistry maintains certain minimum technical standards for admission to the school. Applicants must possess a basic core of skills and abilities that will allow them to successfully complete the dental curriculum and benefit fully from their professional education. As an integral part of their education, students are required to provide treatment for patients who seek care at the School of Dentistry. The school has the responsibility of ensuring the safety of those patients. This includes the completion of treatment safely and within an acceptable amount of time.
It is the responsibility of the candidate for admission to review the technical standards for admissions.

**Motor Skills:** All applicants must be able to meet the following technical standards: Candidates must have sufficient motor function to conduct various diagnostic and treatment procedures; to manipulate dental instruments and handpieces. These behaviors require both gross and fine muscular movements and coordination, as well as sight, touch and manual dexterity and fully functioning wrists, hands, fingers and arms. Candidates must be able to ensure that basic life support emergency procedures, including CPR, can be performed on all patients; transfer and position disabled patients personally or with assistance from auxiliary personnel; position themselves in an appropriate sitting or standing position so as to render dental care; position dental equipment including carts, stools and dental chair; operate hand or foot controls utilizing fine movements; operate high and low speed dental handpieces during dental treatment requiring controlled movements of less than one millimeter; utilize hand instrumentation including surgical instruments for dental procedures on hard and soft tissues; perform all necessary procedures in required educational exercises including activities in the preclinical laboratories; execute motor movements necessary to arrive at a diagnosis and treatment plan, and provide patient care including emergency treatment; perform motor functions to elicit information from patients or from simulations through palpation, auscultation, percussion and other diagnostic procedures utilizing instrument manipulation.

**Sensory Skills:** Candidates must have functional use of the senses of vision, hearing, touch and smell in order to observe and learn effectively in the classroom, laboratory and clinical settings and, ultimately, to provide oral health care in a practice setting. These sensory skills must be sufficient to allow the student to acquire information through physical, laboratory and clinical means; to visualize intraoral and extraoral structures; to observe a patient accurately both close at hand and at a distance; and to obtain information from written documents, films, slides and video. Candidates must be able to perform educational exercises, dental examinations, and treatment utilizing functions of vision (acuity, accommodation and adequate color differentiation), touch (tactile sense using direct and indirect palpation), hearing (distinguishing sounds of auscultation and percussion, and discerning audible signs of distress from a patient) and smell (enabling observation and discernment of normal and abnormal odoriferous conditions related to either the patient or environment) in order to correctly discriminate between normal and abnormal tissues or conditions during examination, diagnostic and treatment procedures; read charts, records, small print and handwritten notations; and interpret radiographs and other graphic images with and without assistive devices.

**Communication Skills:** Candidates must have sufficient fluency in the English language to be able to speak, understand, read and write so as to obtain information from texts and lectures; communicate concepts; perceive and describe patient behaviors and emotional states; communicate effectively and sensitively with patients and all members of the health care team both orally and in writing. Candidates must be able to discuss, explain and exchange information with the patient at a level necessary to develop a health history to address health problems, to arrive at diagnoses and treatment plans and to give direction before, during and after treatment; to retrieve information from texts and lectures; to communicate concepts on written and oral examinations and to other health care workers/providers; and to communicate effectively in spoken and written English in classroom, laboratory and clinical settings.

**Cognitive Skills:** Candidates must possess those cognitive skills necessary to problem solve in all educational and clinical settings, to accumulate, comprehend and apply information as part of learning and in the establishment of a diagnosis and treatment plan, and to provide oral health care. Candidates must demonstrate the ability to acquire, analyze, synthesize, integrate, measure, calculate and manage data and background knowledge in developing understanding and concepts, and to do so in educational and clinical settings; to perform these cognitive skills in a critical and logical problem solving format and to do so within a specific time limited framework; to comprehend three-dimensional and spatial relationships of structures; to make rational decisions regarding patient care; and to provide treatment within an acceptable time frame so as to insure safety of the patient.

**Behavioral Skills:** Candidates must demonstrate sufficient behavioral and social skills, professionalism and emotional health to successfully accomplish the responsibilities related to care of the dental patient and to perform to the fulfillment of the full range of academic and clinical duties of a student. Candidates must be able to manage patients with a wide variety of moods and do so in a tactful, congenial and compassionate manner so as to avoid alienation and antagonism; possess sufficient physical ability to meet the demands of ongoing, concurrent classroom, laboratory and clinical educational exercises; adapt to a changing environment, display flexibility and function appropriately in the face of those uncertainties inherent in dental education; possess emotional health sufficient to carry out tasks, have good judgment and behave in a professional, reliable, mature and responsible manner; exhibit appropriate motivation and a genuine interest in caring for others; exercise good judgment in prompt completion of responsibilities attendant to the educational process and to the diagnosis, treatment planning and care of patients; possess interpersonal skills and attributes of integrity, empathy, stability and punctuality to be able to function effectively as part of the dental health care team.

**ACCEPTED APPLICANT INFORMATION**

**TEXTBOOKS, LABORATORY SUPPLIES AND CLINIC COATS** – Students must purchase dental articulator, dentoform, laboratory coats and clinic coats and other required equipment and supplies as specified throughout the course of study. These items are required purchases through the Medical Center Bookstore. Electronic books will be required for each starting class. Those who have not purchased the school’s required electronic books, supplies and all instruments for any semester will not be permitted to begin classes for that semester. A designated laptop computer must also be purchased before students begin first-year classes. Other personally acquired laptop computers will not satisfy this requirement.
ACADEMIC REGULATIONS

Curriculum – The dental school administration reserves the right to make changes in curricula and regulations and required equipment and supplies when those changes are determined to be in the best interest of the students and the school.

Examinations – Examinations may be written, oral, practical, simulations, standardized patients or other means or combinations. The student may be excluded from an examination for failure to pay tuition or fees. Make-up examinations for failure of a course must have permission of the Student Evaluation and Promotion Committee (SEPC).

Grades –

1. The School of Dentistry employs a numerical grading system based on zero to 100.
2. A student must achieve a grade of 70 or more in each course. Students must satisfactorily complete all requirements stated for each course in the syllabus and all Clinical Practice guidelines in each Clinical Practice syllabus in order to become eligible for promotion.
3. If work is incomplete for reasons beyond a student’s control, a temporary grade of “Incomplete” is reported when grades are due. The “I” must be replaced with a final grade prior to the termination of the following semester.
4. If a course extends beyond the end of a semester, the SEPC and the relevant course director will notify students of unsatisfactory progress.
5. Transfer of acceptable course credit attained in programs other than as a student at the University of Mississippi School of Dentistry will be recorded as a “Transfer” grade on the official transcript.
6. All students will be allowed to view their final grades on the SAP – Student Connections software. Students may challenge grades within 30 days of issuance of final grades; otherwise, grades will stand as recorded.
7. The determination of class rank is made by using the grade point average, which is derived by:
   a. multiplying the grade in course by the clock hours of that course; and
   b. by dividing these totals (grades x clock hours-of all courses) by total number of clock hours (of all courses, except remedial or repeat courses).
8. The determination of letter grade published grade point average is derived by:
   a. multiplying the numerical grade in the course by the semester hours of that course; and
   b. dividing the totals in “a” by the total number of semester hours.

In order to be eligible for the Dean’s Honor List, a student must have attained: 1) an average of 85 or higher for the academic year; 2) must be in the top 20% of the class; 3) must have completed stated guidelines for the academic year; and 4) must have received all passing grades for the academic year.

Withdrawal – Students who are unable to return to school at the beginning of any semester or who must discontinue their work during the year for legitimate reasons ordinarily will be permitted to withdraw in good or satisfactory standing with approval of the Dean. Students who withdraw must complete School of Dentistry check out procedures as per the SOD Business Office. Failing to comply will result in no grades being recorded on the student’s record. Approved withdrawal, if completed on or before the last day specified in the academic calendar, will not be recorded on the student’s record. Withdrawals authorized after this date will be recorded as a “W” if student performance is satisfactory and as an “F” if the student performance is unsatisfactory at the time of withdrawal.

Students who have withdrawn in good standing must receive approval for readmission from the SEPC on the basis of their status at the time of withdrawal. Students who have been absent for more than one academic year, must apply to the Admissions Committee for readmission. This readmission application must be made before November 1 of the year prior of enrollment.

Leave of Absence – Leaves of absence are granted at the discretion of the Dean and will be for a period of up to one year.

Scholarship, Promotion, and Graduation – Student promotion depends on the satisfactory completion of each year’s work and overall satisfactory performance. Promotions within the School of Dentistry are considered on the basis of recommendations by individual instructors, on departmental evaluations and the student’s total record.

Students in the School of Dentistry should be aware of the information in the course syllabi which details practices, procedures and provisions of the school pertaining to academic and clinical performance and related matters.

Listed below are the minimum acceptable standards of scholastic performance, promotion and graduation:

1. Scholastic performance and promotions, first, second, and third years:
   a. achieve a grade of 70 or more in each course and satisfactorily complete all requirements stated for each course in the syllabus and all Clinical Practice guidelines in each Clinical Practice syllabus and
   b. achieve an overall score of 75 (passing) or higher on the National Dental Board Examination, Part I to be eligible for promotion to the third year.
2. Fourth-year eligibility requirements for the Doctor of Dental Medicine degree:
   a. achieve a grade of 70 or more in each course and satisfactorily complete all requirements stated for each course in the syllabus, including all Clinical Practice 675 guidelines in each Clinical Practice 675 syllabus
   b. register and take the National Dental Board Examination, Part II, during the academic graduating year.
c. discharge all financial obligations to this school; and

d. merit a recommendation from the SEPC to the Dean for eligibility to receive the Doctor of Dental Medicine degree. The School and University make no actual or implied guarantee that any student completing most or all of the required work will be granted a dental degree. Factors other than academic achievement are and may be used to determine the eligibility for a student to be granted a dental degree.

**Due Process** – Due process for students is defined in the procedures identified in the Student Handbook.

**TUITION AND REQUIRED FEES**

**DOCTOR OF DENTAL MEDICINE**

The tuition rates for the 2015-2016 academic year are $25,525 for Mississippi residents, which includes laboratory and library usage. This amount is divided into either two or three semester charges, depending on the individual course calendars for each year of dental school. Note: All amounts are subject to change pending information from the Institutions of Higher Learning (IHL). Please contact the Department of Student Accounting at (601) 984-1060 for more information.

**Computers** – Entering dental students are required to buy the laptop computer specified by the School of Dentistry with factory configured software and hardware compatible with the Medical Center’s wireless computer network. Without this laptop, students will not be eligible to begin classes. Students entering dental school are expected to possess basic computer competencies. These include, but are not limited to, use of a computer, use of e-mail, use of Internet browsers and use of software for word processing and data backup. Each student will be provided an institutional e-mail account and will be responsible for frequently checking this account and responding to e-mail sent to that address. Please consult the Accepted Applicants information posted on the SOD Student Affairs website for more information.

**Materials/Supplies** – Dental students are provided numerous types of dental materials/supplies during their dental education and most items are included as part of their tuition and fees. However, additional educational supplies above the normal threshold may be purchased on an individual basis from the storeroom. Students will be charged for any supplies that exceed the normal allowance. Students must purchase dental articulator, dentoform, laboratory coats and clinic coats as specified throughout the course of study. These items are required purchases through the Medical Center bookstore. Electronic books will be required for each starting class. Those who have not purchased the school’s required electronic books, supplies and all instruments for any quarter will not be permitted to begin classes for that semester.

**LOANS**

**Dental Alumni Student Emergency Loan Fund** provides small, low-interest loans to students repayable in 90 days.

**Dental Memorial Loan Fund** is made possible by various memorial funds contributed to the School of Dentistry. It is awarded to a Mississippi resident based on academic performance and potential.

**State of Mississippi Dental Education Loan Fund**, approved by the Legislature of the State of Mississippi in 1975, allows under the program for tuition to be awarded each academic year, not to exceed a total of four academic years. The applicant must be a resident of Mississippi, agree to specialize in general dentistry and agree to practice general dentistry immediately upon graduation in a critical need area of the state. Interested students may call: Mississippi Office of State Student Financial Aid, (601) 432-6997, toll-free in Mississippi 1-800-327-2980, or visit the website to complete the online application.

**George C. and Laura B. McKinstry Scholarship/Loan Fund** was established in 1973 by Dr. McKinstry in memory of his father and mother to provide low-interest loans to needy students in the School of Dentistry.

**Luper Dental Student Loan Fund** provides low-interest loans to students who demonstrate financial need as determined by the Office of Student Financial Aid and meet selection criteria of the School of Dentistry Scholarship Committee.

**SCHOLARSHIPS**

**Ottilie Schillig Memorial Scholarship** was established in 1984 through a gift to the Medical Center from the Schillig Trust. Miss Schillig, a native of Port Gibson, was a noted concert singer. At least one scholarship is available each year to the School of Dentistry. All recipients must be in good academic standing and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

**Sumner Foundation Scholarship Fund** was established in 1977 by Mrs. E.H. Sumners of Eupora, MS, to provide scholarship assistance for students from Webster, Montgomery, Attala, Carroll and Choctaw counties who are enrolled at the University of Mississippi Medical Center.

**Mississippi Health Professional Loan/Scholarship Program** was established to provide loans to students in medicine, dentistry, nursing, physical therapy or occupational therapy who are Mississippi residents. The loan offers a cancellation clause as an inducement to practice health care with or at certain Mississippi hospitals, state health clinics or certain other public health institutions. The loan to scholarship conversion is one year’s loan cancellation for one year’s service.

**Dean’s African-American Scholarship** was established in 2001. Selection will be made by the School of Dentistry Scholarship Committee, and prospective recipients must have a GPA of at least 3.0. Preference will be given to Mississippi residents. If the recipient remains in good academic standing, the scholarship will be renewed for each year the recipient is in dental school. The committee will recommend candidates, with the final selection made by the Dean.
Robert M. Hearin Support Foundation Minority Scholarships, established by the Robert M. Hearin Support Foundation, is awarded to a first-year African-American dental student who is a Mississippi resident. Recipients are selected by the School of Dentistry Scholarship Committee. Selection is based on prior academic achievement, the student’s potential for success in dentistry, and accepted institutional financial aid guidelines. The scholarship is renewable each year as long as the recipient remains in good academic standing. Recipients must commit to reside and practice dentistry in Mississippi for a period of five years.

Pierre Fauchard Academy Dental Student Scholarship Award is awarded to a D3 student. This individual has demonstrated the greatest potential for developing into an outstanding leader in the dental profession. The student need not have the highest grades nor be the most technically proficient, but one who has leadership qualities in the university, dental school, community or other worthy activity. The qualities of integrity, imagination, initiative and communicative skills enter into the selection process as well as the recipient’s need for financial aid.

Dr. James W. Rice and Grace Vaughan Rice Scholarship in Dentistry is established as an academic scholarship under accepted guidelines of the Department of Financial Aid at the University of Mississippi Medical School. The recipient should be a senior student with the highest cumulative academic average over the first three years of dental school from among those students otherwise eligible for the award. The recipient should have financial need as determined by the School of Dentistry in consultation with the Office of Financial Aid. The recipient must have demonstrated the ability to relate to patients, staff and faculty in a positive, constructive manner. The recipient must be of good moral character and exhibit the highest ethical and professional standards.

James T. Baird Memorial Scholarship Fund was established in 2000 through a gift to the Medical Center. This is a one-time scholarship given to a first-year dental student provided that funds are available. All recipients must be in good academic standing, and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

L.W. Brock Scholarship is funded by an endowment. Five percent (5%) of the earnings will be used to fund scholarships. A recipient must be in the top 1/3 of the class and demonstrate financial need. A recipient will receive no less than $500. This is not a renewable scholarship, as annual earnings cannot be predicted.

Pearl & Otis Walters Scholarship Fund is funded by endowment earnings. The recipient is chosen by the School of Dentistry Scholarship Committee and the selection is based on academic ability, perceived service and contribution to the profession in the state, character and intention to practice in a smaller community. These funds continue as long as the student remains in satisfactory academic standing.

Danny Niolet Scholarship was established in 2013 by the Danny Niolet family and is designated for a first-year dental student who is entering dental school as a second career with special consideration given to students from the Mississippi Gulf Coast. This scholarship fund will be funded by endowment earnings.

Helen Reeves Turner, MD, PhD, Scholarship was established in 2013 and is awarded each year to a deserving student from one of the Medical Center Schools. The recipient of this award, selected by the dean or his designee, exemplifies Dr. Turner’s outstanding attributes of leadership, education and service.

GIVING TO THE UNIVERSITY OF MISSISSIPPI SCHOOL OF DENTISTRY

Alumni and friends of the University of Mississippi School of Dentistry are encouraged to make gifts in support of educational, clinical and research efforts. These gifts may be unrestricted and used in the school’s areas of greatest need, or restricted to specific departments or programs. The gifts may also be given now or deferred until a future time agreed upon by the donor and the School of Dentistry. The school recognizes donors at various levels of annual giving as well as offering special recognition to those who have achieved extraordinary life-time giving levels.

AWARDS and HONORS

Academy of Dental Materials – This award is presented to the senior who has demonstrated excellence in the field of dental materials science.

Academy of Dentistry for Persons with Disabilities – This award is presented to the student or students whose projects, achievements and attitudes have demonstrated a sincere interest and concern for the dental needs of persons with disabilities and special patients while an undergraduate dental student.

Academy of General Dentistry Award – This award, sponsored by the Mississippi Academy of General Dentistry, is presented to the senior who exhibits the greatest potential for becoming an outstanding general practitioner.

Academy of Operative Dentistry – This award is presented to the senior who has demonstrated outstanding achievement in operative dentistry.

Academy of Osseointegration – This award is presented to the senior who is recognized as an outstanding dental student in implant dentistry.

ADA/Dentsply Student Clinician Research Program Award – This award is presented to recognize a deserving student for outstanding accomplishment and achievement in the field of research.

Jeffery Alexander Award for Academic Achievement in Pre-Clinical Sciences – This award is presented to a first-year student who has demonstrated academic achievement in the pre-clinical sciences.

Alliance of the Mississippi Dental Association Award – This award is presented to a third-year dental student who has demonstrated initiative toward community dental health.
American Academy of Implant Dentistry – This award is presented to the student who demonstrates the most interest, academically and clinically, in implant dentistry.

American Academy of Oral and Maxillofacial Pathology – This award is presented to the senior dental student who has demonstrated exemplary aptitude and achievement in Oral and Maxillofacial Pathology.

American Academy of Oral and Maxillofacial Radiology – This award is presented to a senior who has demonstrated special interest and accomplishment in Oral and Maxillofacial Radiology.

American Academy of Oral Medicine – This award is presented to the senior who has demonstrated proficiency in the clinical management of medically complex patients, the diagnosis and non-surgical management of medically-related conditions of the oral and maxillofacial regions, and promise, academic achievement and interest in the discipline of oral medicine.

American Academy of Pediatric Dentistry – This award is presented to the senior who has been judged by the faculty to be the most outstanding in the field of dentistry for children.

American Academy of Periodontology – This award is presented to the senior who has shown the highest level of academic and clinical achievement related to Periodontics.

American Association of Endodontists – This award is presented to the senior who has shown outstanding interest and achievement in Endodontics.

American Association of Oral and Maxillofacial Surgeons, Dental Student Award – This award is presented to the senior who has demonstrated outstanding performance in undergraduate study and clinical training in the area of oral and maxillofacial surgery and anesthesiology.

American Association of Oral and Maxillofacial Surgeons, Dental Implant Student Award – This award is presented to the senior who has demonstrated outstanding performance in undergraduate study and clinical training in the area of dental implant placement.

American Association of Oral Biologists – This award is presented to the senior dental student who has made significant contributions to the advancement of oral biology and has demonstrated the potential for further achievement in this field.

American Association of Orthodontists – This award is presented to the senior dental student who has demonstrated exceptional interest in the development of the oro-facial complex.

American Association of Public Health Dentistry – This award is presented to the senior who has demonstrated special interest and achievement in community dentistry and dental public health.

American College of Dentists, Mississippi Section, Student Award – This award is presented to the dental student showing outstanding performance and professionalism while in dental school. The recipient of this award is selected by the UMMC American College of Dentists faculty.

American College of Prosthodontists Achievement Award – This award is presented to a graduating dental student who has excelled in the area of Prosthodontics.

ASDA Award of Excellence – This award honors the spirit of volunteerism and recognizes student participation or leadership in service to their school and local community.

Eleanor Bushee American Association of Women Dentists Award – This award is presented to a senior dental student who is a member of the American Association of Women Dentists and who has demonstrated outstanding leadership and academic excellence.

Class Marshal for Commencement – The selection as class marshal for commencement is based on commitment and service to the senior class, school and university.

Community Preventive Dentistry Award – This award is presented by the Department of Periodontics and Preventive Sciences to the senior who has shown outstanding achievement and potential in preventive dentistry.

Dean’s Scholastic Achievement Award – This award is presented by the Dental Alumni Chapter of the University of Mississippi Alumni Association to the student in the senior class who has the highest cumulative academic average for the first three years of dental school.

Delta Dental Student Leadership Award – This award is presented to a senior who has demonstrated a desire to serve the community and will be a strong leader in dentistry and in their community.

Dental Physiology Award – This award is presented to the dental student who has demonstrated outstanding scholastic performance in the dental physiology course.

Dentsply Merit Award in Removable Prosthodontics – This award is presented to the senior who has demonstrated exceptional ability in the field of removable prosthodontics.

Robert R. Finch Oral Pathology Award – This award, initiated by the family of the late Robert R. Finch, DDS, professor of oral pathology and first assistant dean for educational programs, is presented to the senior who has shown outstanding interest, accomplishment and promise in the field of oral pathology.

Hiram A. Gatewood Sr. Memorial Award – This award is given to a third-year dental student who possesses the academic, clinical, leadership, and moral qualities necessary in the practice of general dentistry. Preference will be given to the student who is from or who plans to practice in a small-town setting.
Bradford A. Gordon Memorial Award – This award established by the Class of 1988 and sponsored by the Dental Alumni Chapter of the University of Mississippi Alumni Association, honors the late Brad A. Gordon, DMD, a 1985 graduate of the School of Dentistry. The award is presented to the student who, as judged by the senior class, typifies the traits most associated with Dr. Gordon: determination, perseverance and an overwhelming will to succeed even in the face of adversity. The name of the recipient will be engraved on a plaque which hangs in the School of Dentistry.

HANAU Best of the Best Prosthodontic Award – This award is presented to the graduating senior who has excelled in the study and clinical application of prosthodontics.

International College of Dentists Student Leadership Award – This award is presented to the senior who has demonstrated leadership in dental schools student government, excellence in academics and has demonstrated the potential to continue leadership roles after graduation.

International College of Oral Implantologists – This award is presented to the senior dental student who displays the greatest interest and commitment to implantology/implant dentistry.

Lynn Frances Johnston Memorial Award – This award, established by the class of 1983, honors the late Lynn Frances Johnston, D.M.D., a 1983 graduate of the UMMC School of Dentistry. The award is presented to a first-year dental student based on academic achievement, ethical standards and professional behavior.

Dr. Zandra Dorr Klein Memorial Award – This award was established in 2003 by the family and friends of Dr. Zandra Dorr Klein. The award goes to a deserving female third-year student who has shown outstanding academic accomplishment and has performed at a high level in clinical periodontics.

June A. Larsen Memorial Award in Clinical Oral Radiology – This award was initiated by the Employee of the Quarter Committee and is supported by the family of the late June A. Larsen, chief oral radiographic technician and first employee of the quarter at the UMMC School of Dentistry. The award is presented to a third-year dental student who has demonstrated outstanding compassion and technical skills in clinical Oral Radiology.

Mississippi Dental Association Award – This award is presented to the senior who demonstrates strong commitment to the goals of dentistry, leads in the area of volunteering for dental related activities, and demonstrates strong personal goals to help further the goals of the dental profession in Mississippi while attending the University of Mississippi School of Dentistry.

Pierre Fauchard Academy Senior Student Award – This award is presented to a deserving senior who has exhibited leadership and through accomplishments, has demonstrated dedication to the advancement of dental literature, and has excelled academically and clinically in dental school.

Quintessence Award for Clinical Achievement in Periodontics – This award is presented to a senior dental student to recognize outstanding achievement in dental studies in the area of periodontics.

Quintessence Award for Clinical Achievement in Restorative Dentistry – This award is presented to the senior to recognize outstanding clinical achievement in restorative care.

Quintessence Publishing Co. Award for Research Achievement – This award is presented to a senior dental student for outstanding achievement in research.

J. Julius Ratliff Award of the MS Association of Orthodontists – This award, sponsored by the MS Association of Orthodontists, is presented to the senior with the highest academic average who has been accepted into an advanced education program in orthodontics.

Regions Bank Award – This award is presented to a Mississippi resident based on academic excellence and overall performance.

Restorative Dentistry Award – This award is presented to a fourth-year dental student who has demonstrated outstanding skills in providing comprehensive restorative care.

Southeastern Academy of Prosthodontics Award – This award is presented to the senior who has demonstrated outstanding achievement in the area of prosthodontics.

Dr. Chris Spraberry Award for Pre-Clinical Excellence – This award is presented to a third-year student who has demonstrated outstanding achievement and excellence in pre-clinical sciences leading to the practice of general dentistry.

Trustmark Bank Award – This award is presented to the senior dental student demonstrating great interest and outstanding performance in preventive and health maintenance management.

Omicron Kappa Upsilon Honor Dental Society – Seniors are selected for this national honor dental society on the basis of high scholastic achievement, exemplary traits of character and qualities for professional growth and achievement.

Phi Kappa Phi Honor Society – Members of this national scholastic honor society are selected on the basis of academic achievement.

William S. Kramer Award of Excellence – This award is presented by the Supreme Chapter of Omicron Kappa Upsilon Honor Dental Society in honor of William S. Kramer, DDS, former president and secretary-treasurer of the Supreme Chapter of OKU. The award recognizes a junior student who has demonstrated scholarship, character and the potential promise for advancement of dentistry and service to humanity.

Brian D. Stone Memorial Award – This award, sponsored by Dental Lifeline Network and established by Drs. Joy and Justin Stone, is presented to a senior dental student who demonstrated a commitment to help people with special needs or as a community volunteer and has excelled in special needs patient care.

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
DEGREES

DOCTOR OF DENTAL MEDICINE DEGREE

The degree of Doctor of Dental Medicine is conferred upon candidates of good moral character who have properly fulfilled all academic requirements of the School of Dentistry’s curriculum; and who have discharged all financial obligations to this school.

The diploma is awarded summa cum laude, Wallace V. Mann Jr. Award, to the graduate who ranks first in the class in academic achievement; magna cum laude to the second ranking graduate; and cum laude to the graduates who rank third and fourth.

THE CURRICULUM IN DENTISTRY

The curriculum consists of four academic years. Each year contains two semesters (fall and spring) of approximately 18 weeks each; additionally, the third year and the fourth year have summer programs of approximately ten weeks. Because of an ongoing evaluation by the Curriculum Committee, clock hours and placement of courses may be different from that listed in the following distribution of instruction by clock hours.

DISTRIBUTION OF INSTRUCTION BY SEMESTER HOURS

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Fall</th>
<th>Spring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 604 Biochemistry</td>
<td>7</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>DENT 623-1 Clinical Problem Solving I</td>
<td>-</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>DENT 611-1 Service Learning and Community Oral Health</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>DENT 616-1A Dental Caries I-Amalgam (Lec)</td>
<td>-</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>DENT 616-18 Dental Caries II-Amalgam (Lab)</td>
<td>-</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>DENT 620-1A Dental Morphology and Occlusion (Lec)</td>
<td>5</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>DENT 620-18 Dental Morphology and Occlusion (Lab)</td>
<td>4</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>DENT 607-1 Basic Life Support I</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>DENT 642-1 Introduction to Dental Ethics</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Fall</th>
<th>Spring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 600-A Gross Anatomy (Lec)</td>
<td>-</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>DENT 600-B Gross Anatomy (Lab)</td>
<td>-</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>DENT 612 Neuroanatomy</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>DENT 617-1 Biomedical Literature Skills for Case-Based Dentistry</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>DENT 619 Materials Science</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>DENT 622-1 Methods in Problem-Oriented Dentistry I-Oral Diagnosis</td>
<td>6</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>DENT 622-2 Methods in Problem-Oriented Dentistry II-Oral Radiology</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>DENT 641 Microbiology</td>
<td>-</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>DENT 601A Microscopic Anatomy (Lec)</td>
<td>4</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>DENT 601B Microscopic Anatomy (Lab)</td>
<td>4</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>DENT 610-1 Perio Diseases-Introduction &amp; Concepts</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>DENT 614-1 Pain, Fear, and Anxiety I-Pain Control</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>DENT 625 Physiology</td>
<td>-</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>DENT 647 Evidence Based Dentistry</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
<td><strong>55</strong></td>
<td><strong>92</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND YEAR</th>
<th>Fall</th>
<th>Spring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 629 Behavioral Disorders I</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>DENT 623-2 Clinical Problem Solving II</td>
<td>-</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>DENT 611-2 Service Learning and Community Oral Health</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>DENT 616-2A Esthetic Problems I (Lec)</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>DENT 616-2B Esthetic Problems I (Lab)</td>
<td>3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>DENT 616-3A Dental Caries III-Indirect Restorations (Lec)</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>DENT 616-3B Dental Caries III-Indirect Restorations (Lab)</td>
<td>5</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>DENT 616-5A Indirect Esthetic Restorations and Digital Imaging (Lec)</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>DENT 616-5B Indirect Esthetic Restorations and Digital Imaging (Lab)</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>DENT 618-1A Preclinical Complete Denture Prosthodontics (Lec)</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>DENT 618-1B Preclinical Complete Denture Prosthodontics (Lab)</td>
<td>-</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>DENT 618-2A Preclinical Fixed Prosthodontics (Lec)</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>DENT 618-2B Preclinical Fixed Prosthodontics (Lab)</td>
<td>-</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>DENT 618-3A Preclinical Removable Prosthodontics (Lec)</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
### SECOND YEAR/continued

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Fall</th>
<th>Spring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 618-3B</td>
<td>Preclinical Removable Prosthodontics (Lab)</td>
<td>3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>DENT 606-1A</td>
<td>Oral Lesions I-Introductory Oral Pathology</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>DENT 616-4A</td>
<td>Preclinical Pediatric Dentistry (Lec)</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>DENT 616-4B</td>
<td>Preclinical Pediatric Dentistry (Lab)</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>DENT 637</td>
<td>Pathology</td>
<td>5</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>DENT 610-2</td>
<td>Perio Diseases Non-Surgical Therapies</td>
<td>4</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>DENT 626</td>
<td>Pharmacology</td>
<td>-</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>DENT 630-1A</td>
<td>Pulpal Disorders I-Endodontics (Lec)</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>DENT 630-1B</td>
<td>Pulpal Disorders I-Endodontics (Lab)</td>
<td>-</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>DENT 639-1</td>
<td>Essentials of Oral-Maxillofacial Surgery</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

### THIRD YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Summer</th>
<th>Fall</th>
<th>Spring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 617-2A</td>
<td>Advanced Biomedical Literature Skills for Case-Based Dentistry</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>DENT 665</td>
<td>Aging</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>DENT 633-2</td>
<td>Behavioral Disorders II: The Pediatric Patient</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>DENT 650</td>
<td>Clinical Practice I</td>
<td>-</td>
<td>73</td>
<td>-</td>
<td>73</td>
</tr>
<tr>
<td>DENT 611-3</td>
<td>Service Learning and Community Oral Health</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>DENT 623-3</td>
<td>Clinical Problem Solving III and Orientation</td>
<td>-</td>
<td>8</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>DENT 607-2</td>
<td>Basic Life Support II</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>DENT 642-2</td>
<td>Ethics II</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>DENT 624A</td>
<td>Implant Dentistry</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>DENT 624B</td>
<td>Implant Dentistry</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>DENT 618-6</td>
<td>Fixed Prosthodontic Topics</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>DENT 621A</td>
<td>Occlusal Disorders-Equibration (Lec)</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>DENT 621B</td>
<td>Occlusal Disorders-Equibration (Lab)</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>DENT 606-2</td>
<td>Oral Lesions II-Oral Pathology Seminar</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>DENT 643-1</td>
<td>Orthodontics I</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>DENT 643-2</td>
<td>Orthodontics II</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>DENT 614-3</td>
<td>Pain, Fear and Anxiety III-Advanced Pain</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>DENT 610-3</td>
<td>Perio Diseases Adv &amp; Surgical Therapies</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>DENT 646-1</td>
<td>Socioeconomic Factors I-Public Health Dent</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>DENT 646-2</td>
<td>Socioeconomic Factors II-Health Systems</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>DENT 634</td>
<td>Systemic Medical Conditions</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>DENT 697-13</td>
<td>Preparation for the Regional Board Manikin</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>13</td>
<td>18</td>
<td>92</td>
<td>123</td>
</tr>
</tbody>
</table>

### FOURTH YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Summer</th>
<th>Fall</th>
<th>Spring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 675-1</td>
<td>Admissions</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>DENT 675-2</td>
<td>Oral Pathology/Oral Radiology</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>DENT 675-3</td>
<td>Orthodontics</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>DENT 675-4</td>
<td>Oral &amp; Maxillofacial Surgery</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>DENT 675-5A</td>
<td>Pediatric Dentistry</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>DENT 675-5B</td>
<td>Advanced Experiences in Pediatric Dentistry</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>DENT 675-6</td>
<td>Periodontics</td>
<td>-</td>
<td>12</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>DENT 675-7A</td>
<td>Operative Dentistry</td>
<td>-</td>
<td>17</td>
<td>-</td>
<td>17</td>
</tr>
<tr>
<td>DENT 675-7B</td>
<td>Fixed Prosthodontics</td>
<td>-</td>
<td>10</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>DENT 675-7C</td>
<td>Removable Prosthodontics</td>
<td>-</td>
<td>14</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>DENT 675-8</td>
<td>Endodontics</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>DENT 675-10</td>
<td>Acute Illness</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>DENT 675-11</td>
<td>Comprehensive Patient Care</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>DENT 679</td>
<td>Mission First</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>DENT 623-4</td>
<td>Clinical Problem Solving IV</td>
<td>-</td>
<td>12</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>DENT 611-4A</td>
<td>Service Learning and Community Oral Health</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>DENT 611-4B</td>
<td>Service Learning and Community Oral Health</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>
COURSES OF INSTRUCTION

FIRST YEAR

DENT 600A. Human Gross Anatomy. The lectures explain hard-to-understand topics, clinical correlations to show the value of anatomy to clinical medicine. Students are provided with PowerPoint slides in advance to preview the regions that to be studied on that day. Pre-lab discussions are also presented to facilitate the dissection. (Lecture) (5 semester hours)

DENT 600B. Human Gross Anatomy. This is a hands-on exploratory discovery course based on a complete dissection of the human body. Human cadaver, skeletal and cross-sectional anatomical materials are provided for dissection and study. The students will be responsible for the complete dissection of specific regions. (Laboratory) (7 semester hours)

DENT 601A. Human Micro Anatomy. This didactic course consists of (1) an in-depth structural, functional and developmental survey of cells, tissues and organs; and (2) an analysis of the basic concepts of developmental anatomy of oral and facial structures. Clinical correlations are included where appropriate. Furthermore, this course provides a basis for understanding other subject areas, including head and neck portion of Dental Gross Anatomy, physiology, pathology and the clinical dental sciences. (Lecture) (4 semester hours)

DENT 601B. Human Micro Anatomy. This hands-on microscopic course consists of (1) an in-depth light and electron microscopic study of cells, tissues and organs; and (2) an intensive modular directed study of the microscopic composition and development of oral and facial structures. Clinical correlations are included where appropriate. Furthermore, this course provides a basis for understanding other subject areas, including head and neck portion of Dental Gross Anatomy, physiology, pathology and the clinical dental sciences. (Laboratory) (4 semester hours)

DENT 604. Biochemistry. Fundamental course in biochemistry, including chemistry of amino acids and proteins, nucleic acids, carbohydrates and lipids, enzymology, metabolism and metabolic regulation, membrane structure and function, oxidative phosphorylation, hormonal control mechanisms, molecular biology and protein synthesis. This course also includes a number of lectures on oral biology and dental biochemistry, including blood clotting, dental caries, connective tissue, and calcium and phosphorous metabolism. (Lecture) (4 semester hours)

DENT 607-1. Basic Life Support I. This unit provides in-depth knowledge of basic life support, including recognition of signs and symptoms of cardiopulmonary emergencies and principles and techniques of cardiopulmonary resuscitation. Instruction includes lectures, slide and film presentations, and demonstration-practice on resuscitation training manikins. (Lecture) (1 semester hour)

DENT 610-1. Periodontal Diseases Introduction & Concepts. This is the introductory course in the periodontal curriculum. It is designed to help students gain an understanding of periodontal health and health maintenance as well as the underlying disease processes that occur if health deteriorates. Key concepts of prevention, examination and diagnosis will be covered. Additionally experimental learning will be incorporated where the students will have simulated learning on a dentaform and then take these skills and treat actual patients as part of a rotation into the periodontics clinic. (Lecture) (3 semester hours)

DENT 611-1. Service Learning I. This unit will consist of a one-week field experience at selected sites throughout Mississippi to prepare students to assume their role in the community. Additional units are offered in each of the subsequent years with an elective opportunity offered in the fourth year. Students are evaluated on ability to design, implement and evaluate a health education project. (Lecture) (3 semester hours)

DENT 612. Neuroanatomy. This course explores both the gross external and internal structural entities that comprise the human nervous system with an emphasis on relevance to dental practice. Through a combination of: (1) didactic; (2) small group active learning sessions; and (3) self-guided lab modules, the student gains an appreciation for normal nervous system anatomy. Structure correlations that yoke internal nervous system structures with sensory and motor systems are presented. Special emphasis is placed on understanding the relationship of cranial nerve composition and distribution that register sensations arising from the face and oral cavity, including dental structures, as well as central connections of the cranial nerves encountered in the dental practice. Clinical correlations are included where appropriate. Furthermore, this course provides a basis for understanding other subject areas, including head and neck portion of Dental Gross Anatomy, physiology, pathology and the clinical dental sciences. (Lecture) (2 semester hours)

DENT 614-1. Pain, Fear and Anxiety Control I. The perception of pain, the psychology of fear and anxiety and their impact on dentistry are presented. Alleviation and control of pain are presented in the context of alternative methods based on the individual patient. Basic methods taught are behavioral and pharmacological with emphasis on local anesthetics. Local anesthesia techniques are taught using lecture, videotapes and demonstrations. (Lecture) (2 semester hours)
DENT 616-1A. Dental Caries I. This is a lecture course introducing operative dentistry. Detection and resolution of dental caries by conservative operative dentistry methods are introduced. The theory of operative dentistry, principles of cavity preparation, instruments and restorative materials are covered in this course. (Lecture) (4 semester hours)

DENT 616-1B. Dental Caries I. This is a laboratory portion introducing operative dentistry. Students are taught how to utilize the dental operatory and equipment. The course includes the use of artificial teeth to develop essential psychomotor skills necessary for the restoration of teeth. Students prepare and restore with dental amalgam, composite resins, glass ionomer, andIRM various class I, II, III, V restorations in pre-clinic. (Laboratory) (7 semester hours)

DENT 617-1. Introduction Biomedical Literature Skills Case-Based Dentistry. Assist students in using the biomedical literature to identify the best practice standards for treating patients by analyzing a case study, developing searchable clinical questions and locating evidence-based information. Special emphasis is placed on the services and materials available at the Medical Center. (Lecture) (1 semester hour)

DENT 619. Materials Science. Fundamental principles which relate composition, structure and processing of metals, polymers, ceramics and composites to their properties and uses are presented. In addition, biocompatibility and safety-related issues for use of dental materials are discussed. Selected topics in dental materials properties and processing are also introduced. The course builds on basic chemistry and physics courses to prepare the students for topics in dental materials which will be presented in other preclinical courses within the curriculum. (Lecture) (3 semester hours)

DENT 620-1A. Dental Morphology and Occlusion. This lecture course introduces the student to dental terminology and presents a detailed study of the morphological characteristics of the permanent and primary teeth. This study also includes the intra-arch relationships of the teeth and their effects on the health of the dental supporting structures. A study of the eruption sequence of the primary and permanent teeth as well as a study of pulp morphology for each permanent tooth is presented. (Lecture) (5 semester hours)

DENT 620-1B. Dental Morphology and Occlusion. This laboratory course introduces students to the reproduction in wax of accurate morphological characteristics of the permanent teeth and establish normal intra-arch and inter-arch tooth relationships. Students must also identify teeth dry specimens. (Laboratory) (4 semester hours)

DENT 622-1. Methods in Problem-Oriented Dentistry I. This course introduces the students to the important concept of “problem-oriented dentistry” and its relevance and application to both patient care and dental education. The course is presented in formal lectures, group seminars and clinic sessions. Methods are presented for: (1) communicating with the patient; (2) obtaining a complete health history; (3) determining the vital signs; (4) performing extraoral and intraoral examinations; and (5) taking a comprehensive diagnostic radiographic survey. This course also presents the general principles of dental radiology and discusses the medically compromised dental patient. The intent of this course is to expose the students to the problem-oriented dental record, the procedures and techniques to collect the patients’ database, and an overview of the activities in the different dental school clinics. (Lecture) (6 semester hours)

DENT 622-2. Methods in Problem-Orient Dentistry II. Rotation through the Oral Radiology Clinic for purposes of making, processing, mounting and interpreting oral radiographs. (Lecture) (1 semester hour)

DENT 623-1. Clinical Problem Solving I. Students are required to attend Grand Rounds presentations and to participate in scheduled CPS team meetings and clinical sessions. The student assists and observes an assigned D-3 student or other team member providing patient care and where the student becomes familiar with team patient care, the problem-oriented dental record, departmental clinical protocols and chairside assisting. Grand Rounds presentations and CPS team meetings grades are recorded separately, and each must have a passing grade in order to pass the CPS course. (Lecture) (6 semester hours)

DENT 625. Physiology. This course is designed to provide the student with knowledge of the basic functions of the cells, tissues, organs and organ systems, and how they interrelate to accomplish the many and diverse functions of the human body. (Lecture) (8 semester hours)

DENT 641. Microbiology. Basic concepts in microbiology and immunology are presented and correlated with disease processes having a bacterial, viral, mycotic or parasitic etiology. Special emphasis is given to diseases of importance in dental medicine. The course includes lectures, laboratory, demonstrations and examinations. (Lecture) (6 semester hours)

DENT 642-1. Introduction to Dental Ethics. The introductory course in dental ethics is designed to allow students the opportunity to explore societal needs and professional obligations to ethical behavior. This course prepares the student for beginning the journey of a health care professional and provides foundation knowledge for the more advanced third-year course. (Lecture) (1 semester hour)

DENT 647. Evidence Based Dentistry. The purpose of this course is to provide the student with an understanding of what constitutes good research in an effort to promote evidence-based dentistry (EBD). Being able to read and evaluate the current literature is an important component in EBD. The main objective of this course is to develop the ability to weigh the relative merits of different types of research. Specific goals are: 1) to develop the ability to properly evaluate the evidence-based literature to aid in developing best practices for the dental profession; 2) to develop the knowledge of the basic tools and concepts used in the practice of research; 3) to understand the importance of research study design; and 4) to recognize the appropriate data analysis for the major research designs. (Lecture) (2 semester hours)

SECOND YEAR

DENT 606-1. Oral Lesions I. This course is a designed to introduce dental students to Oral and Maxillofacial Pathology, the study of disease processes that affect oral and paroral structures. The relationship between embryologic development of the head and neck and developmental disorders, reactive responses to physical and chemical injury and sequelae of immunologic and infectious diseases
are featured as well as oral cancer and oral manifestations of systemic disorders. Clinical, radiographic and histopathologic characteristics of disease will be presented in a discussion format to help the student build a foundation for future clinical practice. (Lecture) (3 semester hours)

DENT 610-2. Periodontal Diseases Non-Surgical Therapies. This course will deal with periodontal decision-making and non-surgical therapies. It will prepare students for the clinic and for management of mild to moderate cases of periodontal diseases. Preventive and health-directing approaches will be emphasized. Students will also be introduced to critical analysis of important journal articles. Case presentations will predominate the educational offerings. The course format will encompass lecture, workshops and small group discussions. Active participation in the Periodontics clinic, when assigned on Tuesday morning, will provide an essential learning component of the course whereby students gain first-hand experiences in patient examination, diagnosis, planning and patient care that supplement didactic teachings. (Lecture) (4 semester hours)

DENT 611-2. Service Learning II. See 611 for course description, first year. (Lecture) (3 semester hours)

DENT 616-2A. Esthetic Problems I. This course is a continuation of Dental Caries IA. This lecture course is a multidiscipline approach to cosmetic dentistry, including philosophy, esthetic problems diagnosis and treatment planning, adhesive materials, whitening, anterior and posterior composite restorations, tooth alignment, jaw relationships and dental photography. (Lecture) (2 semester hours)

DENT 616-2B. Esthetic Problems I. This course is a continuation of Dental Caries IB. This laboratory course includes fabrication of whitening trays, esthetic direct composite restorations on dentoform teeth, utilization of esthetic proportions in building teeth, color, smile analysis, and composite materials testing. (Laboratory) (3 semester hours)

DENT 616-3A. Dental Caries III - Indirect Restorations. This course is the lecture portion that introduces the student to the preparation and restoration of teeth with pin-retained complex amalgam restorations and single-unit indirect metal crowns. This lecture portion covers all elements of preparation design and material selection for these type restorations. (Lecture) (2 semester hours)

DENT 616-3B. Dental Caries III - Indirect Restorations. This course is the laboratory portion that introduces the student to the hands-on preparation and fabrication of pin-retained complex restorations as well as fabrication of multiple single-unit indirect metal crowns. Fabrication of acrylic temporaries associated with the metal crowns are also introduced. (Laboratory) (5 semester hours)

DENT 616-4A. Preclinical Pediatric Dentistry. This course is a didactic lecture course with an associated laboratory. Lectures focus on the problems associated with dental caries and their sequelae in the child patient, and also present material needed to diagnose and treat the child patient. Some lectures present specific techniques to be performed in the laboratory, and others present associated topics. (Lecture) (2 semester hours)

DENT 616-4B. Preclinical Pediatric Dentistry. In the laboratory, students are asked to perform basic restorative procedures on a pediatric typodont. There are daily projects to be turned in as well as a laboratory practical exam. (Laboratory) (2 semester hours)

DENT 616-5A. Indirect Esthetic Restoration & Digital Imaging. The course is an introduction to esthetic preparation guidelines for indirect restorations using CAD/CAM technologies. (Lecture) (1 semester hour)

DENT 616-5B. Indirect Esthetic Restoration & Digital Imaging. The course is an introduction to esthetic preparation and fabrication techniques for indirect restorations using CAD/CAM technologies. (Laboratory) (2 semester hours)

DENT 618-1A. Preclinical Complete Denture Prosthodontics. The etiology of edentulism is presented along with anatomic, physiologic and socio-economic implications which affect treatment of the complete denture patient. Discussion of clinical techniques and demonstrations of clinical steps are viewed in video segments. This is to aid the student in understanding the overall process in construction of complete dentures. (Lecture) (2 semester hours)

DENT 618-1B. Preclinical Complete Denture Prosthodontics. In this laboratory course, students get experience fabricating custom impression trays for impression making, record bases and occlusion rims and subsequently mounting casts and setting and arranging several different occlusal schemes for complete denture fabrication. (Laboratory) (6 semester hours)

DENT 618-2A. Preclinical Fixed Prosthodontics. This is a preclinical course where students read information on tooth preparations for full coverage crowns and are evaluated by a written test. (Lecture) (2 semester hours)

DENT 618-2B. Preclinical Fixed Prosthodontics. This is a preclinical course where students do tooth preparations for full coverage metal-ceramic and all-ceramic restorations on typodont teeth. (Laboratory) (5 semester hours)

DENT 618-3A. Preclinical Removable Partial Denture Prosthodontics. This is a lecture course in which problems of the partially edentulous patient are reviewed. Components of removable partial dentures are learned. Theory of removable partial denture design and biomechanical considerations are discussed and designs are completed for the different types of partially edentulous situations. (Lecture) (2 semester hours)

DENT 618-3B. Preclinical Removable Partial Denture. This is a laboratory course whereby students practice preliminary and final impression making, fabricating of special trays for final impressions of the partially edentulous patient, wrought wire clasp bending and fabrication of partially edentulous record bases and occlusion rims. Practical experience is obtained in rest seat preparation exercises on a simulated patient in the SIM LAB under clinical conditions. (Laboratory) (3 semester hours)

DENT 623-2. Clinical Problem Solving II. Students are required to attend Grand Rounds presentations and participate in scheduled CPS team meetings and clinical sessions. An in-depth knowledge of the patient admissions process is acquired. Four-handed dentistry techniques with the student as chairside dental assistant are emphasized. Grand Rounds presentations and CPS team meetings grades are recorded separately, and each must have a passing grade in order to pass the CPS course. (Lecture) (11 semester hour)
DENT 626. Pharmacology. Students are introduced to the principles underlying the use of pharmacological agents in dental practice. Concepts related to pharmacokinetics, drug-receptor interactions, drug interactions and reversion of pathological states to physiological states with drugs are covered. In addition, the mechanisms of drug action, therapeutic effects, side-effects, toxicities and clinical applications of various commonly used drugs and drug classes are presented through a combination of lectures and clinical correlations. (Lecture) (6 semester hours)

DENT 629. Behavioral Disorders I. This course focuses on behavioral dentistry and as such deals with theoretical and applied information drawn from psychology, sociology, counseling and other fields of human behavior with emphasis on practical implications for dental practice. Topics include stress and stress management, motivation, compliance, and preventive behavior, origin and treatment of dental fears, substance abuse, communication skills and patient management and special care of the disabled patient. (Lecture) (1 semester hour)

DENT 630-1A. Pulpal Disorders I - Endodontics. A study of the dental pulp in health and disease. Management of pulpal disorders and contributing factors are considered. Techniques/materials required for resolution of pulpal disorders are studied in-depth. (Lecture) (3 semester hours)

DENT 630-1B. Pulpal Disorders I - Endodontics. Endodontic treatment is performed on extracted teeth in the Simulation Lab to prepare students for clinical treatment. Techniques, materials and procedures closely follow the protocol utilized in the Endodontic clinic. (Laboratory) (5 semester hours)

DENT 637. Pathology. This course provides background in general and systemic pathology. Included are abnormalities in cell growth and function, including neoplasms, genetic, nutritional and metabolic factors in disease, circulatory disorders, inflammation and repair, immunity and allergy, infection and infectious diseases, and pathology specific to organ systems. Examples of specific histologic material and color transparencies pertinent to lectures and study of autopsy specimens are presented. (Lecture) (5 semester hours)

DENT 639-1. Essentials of Oral-Maxillofacial Surgery. Fundamentals of diagnosis, evaluation and treatment planning of patients requiring oral surgery are presented. Pharmacological and clinical bases of local anesthesia and related drugs are stressed. Techniques of anesthetic administration are demonstrated and practiced. Management of infection, removal of teeth and roots, alveoloplasty, cysts, complications, accidents and post-operative care are discussed and demonstrated. (Lecture) (3 semester hours)

DENT 650-11. Psychomotor Skills Review. This course provides an opportunity for skills review in the simulation laboratories for students who have been out of school for up to one year due to a leave of absence. The schedule and preclinical projects are determined on an individual basis to prepare the student for re-entry into the curriculum. This course may be taken during the second or third years. (Clinical Rotation) (1 semester hour)

THIRD YEAR

DENT 606-2. Oral Lesions II. This course is presented as clinical pathological conferences in which various disease processes involving both the soft and hard tissues of the oral and paraoral environs are discussed. Emphasis is placed on students’ ability to describe the lesion(s) presented, the accepted treatment modality and to arrive at a reasonable differential diagnosis. (Lecture) (3 semester hours)

DENT 607-2. Basic Life Support II. This course provides the background knowledge to prevent, diagnose and treat life-threatening conditions and to deal with prevention and recognition of emergencies that occur in the dental office. (Lecture) (1 semester hour)

DENT 610-3. Periodontal Diseases-Advanced & Surgical Therapies. Students will study evidence-based decision-making and contemporary management of advanced periodontal diseases. They will also be introduced to critical analysis of periodontal journal articles via seminar format. A variety of surgical principles and techniques will be addressed in lectures and in the simulation laboratory. (Lecture) (4 semester hours)

DENT 611-3. Service Learning III. Students with developed community health projects spend additional time in implementation and evaluation phases. Students integrate didactic material into active programs that benefit communities and selected groups of individuals. (Lecture) (3 semester hours)

DENT 614-3. Pain, Fear and Anxiety Control III. Methods used in control of pain, fear and anxiety in dentistry are presented in lecture, clinical participation and demonstration. The course emphasizes the use of nitrous oxide and oxygen analgesia with clinical participation. (Lecture) (2 semester hours)

DENT 617-2. Advanced Biomedical Literature Skills for Case-Based Dentistry. This instructional program is a continuation of Biomedical Literature Skills-1. Using case studies, students search specialized databases for evidence-based information for clinical decision-making. Students are introduced to the statewide biomedical knowledge-based electronic infrastructure. (Lecture) (1 semester hour)

DENT 618-6. Fixed Prosthodontics Topics. This is a lecture course that covers topics associated with full-coverage crowns and fixed partial dental prostheses (i.e. rational, materials, techniques, preparation and delivery procedures, etc.) (Lecture) (3 semester hours)

DENT 621-A. Occlusal Disorders. This is a presentation-based course that exposes the third-year dental students to more advanced occlusal considerations of patients. Definitions, etiology, pathophysiology and differential diagnosis of occlusal dysfunctions of the masticatory system are discussed. Emphasis is placed on conditions that the beginning general dentist should recognize and be able to treat as part of an overall comprehensive therapy for routine patients. The student dentist is exposed to various types of splints that can be used to treat acute patient problems involving muscular, TMD or disc dysfunction prior to dental therapy that may alter the patient’s occlusion. Students are presented information on centric relation techniques and appropriate cases to utilize the techniques. (Lecture) (1 semester hour)

DENT 621-B. Occlusal Disorders. This is a laboratory and clinical-based course. The overall objective is to fabricate a flat-plane splint on partners and understand how these are adjusted intra-orally to help correct some of the disorders presented in 621-A. The students
improve their impression-taking skills and are exposed to more in-depth principles using centric relation records, bite registration techniques and face bows. Student cases are mounted on articulators where students are exposed to more in-depth settings of the articulator and their correlation to patient factors. Students fabricate anterior guide tables and subsequent maxillary splints are fabricated. Finally, the students are exposed to principles and techniques for occlusal adjustments and selective grinding procedures (Laboratory) (2 semester hours)

DENT 623-3. Clinical Problem Solving III. Students are required to attend Grand Rounds presentations and to participate in scheduled CPS team meetings and clinical sessions. Grand Rounds presentations and CPS team meetings grades are recorded separately, and each must have a passing grade in order to pass the CPS course. D3 students will guide and assist an assigned student with becoming familiar with team patient care, the problem-oriented dental record, departmental clinical protocols and chairside assisting. (Lecture) (8 semester hours)

DENT 624A. Implant Dentistry. Basic information for this treatment modality regarding indications, contra-indications, patient selection, potential complications and referral mechanisms is presented along with an overview of implant materials design, placement procedures and tissue interfaces. (Lecture) (1 semester hour)

DENT 624B. Implant Dentistry. The student gets hands-on experience with placement and restorative procedures for non-complex implant supported crowns and dental prostheses. (Laboratory) (2 semester hours)

DENT 633-2. Behavioral Disorders II: Pediatric Patient. This is a lecture course designed to introduce students to behavior management of the child dental patient. Skills in communication and behavior shaping are stressed. A range of patients is discussed from the so-called normal to those with special needs. (Lecture) (2 semester hours)

DENT 634. Systemic Medical Conditions. This is a course in systemic medical conditions and their impact on dental care for third year dental students. It is designed to teach students how to treatment plan and provide dental care for patients who have varying degrees of compromising medical problems. The new graduate must be able to perform an examination that collects biological, psychological, and social information needed to evaluate the medical and oral condition of patients of all ages, determine a differential, provisional or definitive diagnosis by interpreting and correlating findings from the history, clinical and radiographic examination and other diagnostic tests, and diagnose, treat, and manage oral and maxillofacial surgical problems. (Lecture) (3 semester hours)

DENT 642-2. Ethics II. The course introduces health law and the Mississippi Dental Practice Act. It also is a continuation of the Introduction to Dental Ethics. Emphasis is placed on the relationship and obligations, both ethical and legal, of the dentist and the patient. Case studies are used to delineate principles of ethics in the dentist-patient relation. (Lecture) (1 semester hour)

DENT 643-1. Orthodontics I. The fundamentals of orthodontics and complementary topics are discussed. Subjects include dentofacial growth and development, normal occlusion, classification of malocclusion, and a historical and contemporary perspective of the orthodontist's relation to the profession of dentistry. Diagnostic and clinical concepts are illustrated with diverse clinical case presentations. Practical exercises in cephalometric and mixed dentition analysis are performed. The biomechanical principles of removable and fixed appliances are presented in preparation for the course Orthodontics II. (Lecture) (3 semester hours)

DENT 643-2. Orthodontics II. Case selection and appliance design for the treatment of uncomplicated malocclusions are discussed in a laboratory setting. Students take impressions and produce a set of orthodontic study casts. Several common fixed and removable appliances are fabricated. (Lecture) (3 semester hours)

DENT 646-1. Socioeconomic Factors I. This course introduces the dental student to the philosophy of scientific reasoning, i.e., biostatistics, epidemiology and research methodology will be presented. Examples from the dental literature are used to illustrate concepts. Overviews of the socioeconomic factors in Mississippi and current and proposed health care systems and practices as they relate to population oral health needs and demands will be included. (Lecture) (1 semester hour)

DENT 646-2. Socioeconomic Factors II. This course explains systems of health care delivery in the United States, with an emphasis on dental delivery systems. Students will review health policy concerns at the individual, state and national levels, and compare various organizational and financial approaches to providing health care. (Lecture) (2 semester hours)

DENT 650. Clinical Practice I. Clinical practice within dental school encounters all techniques required for practice of general dentistry. Clinical experience is the student's responsibility with patients assigned for comprehensive care. Evaluations are made on daily clinic attendance and number of patient clinical experiences. (Lecture) (73 semester hours)

DENT 665. Aging. The course is designed to provide basic information about the aging process and its impact on the general health status of individuals. Special emphasis is placed on effects of aging in health and disease on the oral health status. Lecture material is presented on the biological process associated with normal aging, psychological changes that occur with aging, social and cultural impact of aging, changes of general health status with advancing age and the impact of age on dental care. Lecturers will be comprised of experts from the University of Mississippi Medical Center campus. (Lecture) (2 semester hours)

DENT 697-13. NERB Manikin Prep Course. This is a lab course in which the student practices (with faculty guidance) for endodontic and fixed prosthodontic procedures to be performed on the manikin portion of the NERB. (Laboratory) (2 semester hours)

FOURTH YEAR

DENT 611-4A. Service Learning and Community Oral Health. D4 students will utilize their learning experiences from their D3 service learning projects and build upon them to create a set of proven pathways/opportunities for future projects with the BEST PRACTICE MODEL PROJECTS. D4s will revisit and participate in their approved community projects or work in a FQHC during SLCOH week for a total of 40 Hours. The student will make the arrangements for his/her choice of two or more FQHCs or/and project. If a FQHC is chosen, this time should be divided into at least 2 sites to as many as 5 sites to complete 40 hours (Lecture) (3 semester hours)
DENT 611-4B. Service Learning and Community Oral Health. In the spring semester for 611-B, a reflective paper regarding Service Learning Concept and the student’s four-year learning experience will be required for completion of this course. The paper should include personal examples from their specific project from D2/D4 years and their overall opinion of the SLCOH years supporting your views. (Lecture) (1 semester hour)

DENT 622-4A. Methods IV- Practice Management. This course is designed to introduce the students to business factors important to make decisions on associateships and ownership of a dental practice. General business concepts are presented as well as specific concepts necessary to manage a successful dental practice. They are exposed to practice overhead including personnel cost. Students complete productivity logs to help them understand chair utilization, time management and effects of managed care and other third-party payers on financial outcomes. Leadership and management skills are emphasized as necessary for a successful practice. Personnel practices are presented so the beginning dentist is aware of legal obligations to hire, manage and terminate employees. Associate-ship agreements and practice transitions are discussed to aid the beginning dentist in finding employment opportunities and purchasing a practice. Students are also presented with personal financial strategies and how they relate to their dental business and retirement planning. The students have exposure to practicing dentists in various stages of their careers that present their perspectives and advice and answer questions from the students. (Lecture) (3 semester hours)

DENT 622-4B. Methods IV- Practice Management. This course is designed to introduce the students to business factors important to make decisions on associateships and ownership of a dental practice. General business concepts are presented as well as specific concepts necessary to manage a successful dental practice. They are exposed to practice overhead including personnel cost. Students complete productivity logs to help them understand chair utilization, time management and effects of managed care and other third-party payers on financial outcomes. Leadership and management skills are emphasized as necessary for a successful practice. Personnel practices are presented so the beginning dentist is aware of legal obligations to hire, manage and terminate employees. Associate-ship agreements and practice transitions are discussed to aid the beginning dentist in finding employment opportunities and purchasing a practice. Students are also presented with personal financial strategies and how they relate to their dental business and retirement planning. The students have exposure to practicing dentists in various stages of their careers that present their perspectives and advice and answer questions from the students. (Lecture) (1 semester hour)

DENT 623-4. Clinical Problem Solving IV. Students are required to attend Grand Rounds presentations and to participate in scheduled CPS team meetings and clinical sessions. The Grand Rounds presentation is evaluated by the quality of the supporting document that must be satisfactorily completed and submitted prior to the receipt of a final course grade. D4 students will guide and assist other team members with becoming familiar with team patient care, the problem-oriented dental record, departmental clinical protocols, and chairside assisting. The D4 team captain must also participate in D2 clinical orientations as required by departmental chairmen. Supporting Grand Rounds documentation, Grand Rounds participation and CPS team meetings grades are recorded separately, and each must have a passing grade in order to pass the CPS course. Daily clinical attendance is also must have a passing grade in order to pass the CPS course (Lecture) (12 semester hours)

DENT 630-2. Pulpal Disorders II. Emphasis on resolution of advanced problems in endodontics. The students will also be introduced to various instruments, supplies, and techniques that they may not have experienced during their preclinical and clinical years. (Lecture) (1 semester hour)

DENT 639-2. Advanced Topics in Oral-Maxillofacial Surgery. This course provides knowledge to diagnose and treat selected cases of complicated exodontia and to exclude or refer cases the practitioner does not feel competent to handle. Lecture and clinic participation by assisting oral and maxillofacial surgery staff. (Lecture) (2 semester hours)

DENT 642-4. Ethics IV. Emphasis will be on the role of integrity in our daily professional lives and how ethical reflection may contribute to our understanding of our professional roles and obligations. (Lecture) (1 semester hour)

DENT 644-1. Private Practice Practicum. Students will participate in extramural practice rotations throughout the state to observe clinical and business operations. They will assist and participate in clinical practice. (Practicum/Internship) (3 semester hours)

DENT 645. Advanced Topics. The Advanced Clinical Dentistry course provides a: 1) review of all clinical disciplines to help identify the students’ strengths and weaknesses as to basic concepts; 2) the integration of all clinical disciplines, as information from various disciplines as presented concurrently; 3) improving the students’ ability to approach patient care integrating knowledge from all disciplines during diagnosis, treatment planning, treatment, and outcomes evaluations, and; 4) the introduction of new concepts, techniques, and materials. (Lecture) (1 semester hour)

DENT 675-1. Admissions. This is a clinical-based course developing the skills of interviewing patients, to ascertain pertinent medical and dental issues, and performing comprehensive diagnostic evaluations. These evaluations include soft- and hard- tissue exams, impressions, face bows and bite registrations for mounting diagnostic cast on articulators as well as dental photographs. After identifying all dental concerns, whether to be treated by the student dentist or not, the students consult with all applicable disciplines to develop strategies to address the problems of the patient. The students develop skills to assimilate information into appropriate treatment plans for the individual patients, as well as for all patients with similar types of problems. They also develop skills to present comprehensive treatment plans to patients in a manner that patients can appreciate. (Clinical Rotation) (6 semester hours)

DENT 675-2. Oral Pathology/Radiology. This course will teach dental students how to properly prescribe and make intra-oral and extra-oral radiographs. It will also teach them how to interpret radiographic images and construct a differential diagnosis of pathology visualized on these radiographic images. (Clinical Rotation) (5 semester hours)

DENT 675-3. Orthodontics. This rotation is designed to introduce the dental student to clinical orthodontics. The student treats one orthodontic case, presents two case presentations and recognizes how to manage orthodontic problems (Clinical Rotation) (4 semester hours)
DENT 675-4. Oral & Maxillofacial Surgery. This course provides the opportunity for the student to learn basic skills necessary to provide basic oral surgery patient care. This includes medical assessment of the patient, physical exam, radiographic interpretation, diagnosis and planning care. Care is delivered in the oral surgery suite. Both full-time and part-time oral and maxillofacial surgeons provide clinical coverage and instruction. The student should be able to safely deliver basic oral surgical care upon successful completion of requirements for this course. (Clinical Rotation) (4 semester hours)

DENT 675-5A. Pediatric Dentistry. Each student is expected to provide comprehensive oral health care, including preventive maintenance care, for all patients assigned to them as primary provider. It is expected that patients are treated comprehensively following an appropriately sequenced treatment plan that has been approved by a full-time faculty member. Students are expected to complete all the care on each patient’s treatment plan as their primary provider as the development of a provider-patient relationship is essential in Pediatric Dentistry. It is as important for the patient to begin to trust their health care provider as it is for the dental student to learn how to manage behavior of the patient and technically treat any dental needs of the patient. (Clinical Rotation) (6 semester hours)

DENT 675-5B. Advanced Experiences in Pediatric Dentistry. The clinical rotation focuses on providing essential experiences in management of a diverse patient population. This rotation will allow the students to interact and gain experience in management of pediatric patients that present at Batson Children’s Hospital for Children’s Dental Specialty clinic. During this time, the student will work closely with the postdoctoral residents and pediatric dentistry faculty as they provide comprehensive dental care to pediatric patients. (Clinical Rotation) (1 semester hour)

DENT 675-6. Periodontics. Students gain extensive clinical experience in periodontal evaluation, decision-making, non-surgical treatments, surgical treatments and maintenance protocols. Additionally, they are required to occasionally mentor first- and second-year students during Tuesday morning rotations. In order to pass the course, two competency examinations must be completed successfully. (Clinical Rotation) (12 semester hours)

DENT 675-7A. Operative Dentistry. This course is the senior level teaches the student to diagnose, plan and treat patients by utilizing direct filling materials, such as amalgam, composite and glass ionomer type restorations. (Clinical Rotation) (1 semester hour)

DENT 675-7B. Fixed Prosthodontics. This course allows students to diagnose, plan and treat patients needing fixed restorations (inlays, onlays, crowns and fixed partial dental prostheses). (Clinical Rotation) (1 semester hour)

DENT 675-7C. Removable Prosthodontics. This course allows students to diagnose, plan and treat patients needing removable prosthetics (conventional and immediate dentures, implant-retained or tooth-retained overdentures, transitional partial dentures including acrylic, flexible resin and thermoplastic resin partial dentures, implant retained partial dentures and conventional partial dental prostheses). (Clinical Rotation) (1 semester hour)

DENT 675-8. Endodontics. This course component allows students clinical experience in diagnosis and treatment of pulpal/periradicular disease and assessing outcomes of endodontic treatment. (Clinical Rotation) (1 semester hour)

DENT 675-10. Acute Illness. (Clinical Rotation) (6 semester hours)

DENT 675-11. Comprehensive Patient Care. This course is an assessment of the senior dental students ability to provide comprehensive treatment to their patients during their years of clinical patient care. (Clinical Rotation) (1 semester hour)

DENT 679. Mission First. (Clinical Rotation) (3 semester hours)

DENT 699. Clinical Comprehensive Examination. This course evaluates certain diagnostic and clinical practice skills. This examination also prepares students to take the CITA Examination. (Lecture) (1 semester hour)

ELECTIVE COURSES

DENT 697-1. Review of Head and Neck Anatomy. An opportunity to dissect and/or review the anatomy of the head and neck with special emphasis on the anatomical basis for clinical procedures, including local anesthesia. Students will also review recent articles concerning clinical anatomy research. (Lecture) (2 semester hours)

DENT 697-5. Mississippi State Dental Board Observership. D4 students are invited to attend Mississippi State Dental Board meetings with a faculty member. By attending, the students see first-hand how the board functions, and they observe both formal and informal hearings. (Lecture) (1-2 semester hours)

DENT 697-8. Persons Living With HIV. The objective of this course is to provide dental students additional clinical experience in the treatment of patients with HIV. Both preventative and restorative treatment will be provided by the student during scheduled days. The student will receive a grade (credit) for up to six restorative procedures during the rotation. The student will also become familiar with DEXIS Digital Imaging System, taking radiographs for diagnostic purposes. (Lecture) (1-3 semester hours)

DENT 697-9. Continuing Health Education for Dental Student. This course encourages dental student participation in the professional activity of continuing health education, and emphasizes the importance of lifelong learning. (Lecture) (1-3 semester hours)

DENT 697-10. Endodontic Externship. This course provides an experience of advanced endodontics through the participation in a graduate endodontics residency program. The student will be exposed to treatment planning, literature review and case presentation seminars with additional clinical exposure to advanced endodontic treatment techniques. (Lecture) (2 semester hours)

DENT 697-11. Oral Oncology Elective. The objective of this course is to expose the student to oral head and neck oncology from risk to rehabilitation, including diagnosis, staging, management, surgery, chemotherapy, radiation and rehabilitation post-cancer treatment and to help them gain an understanding of how to intervene with tobacco-using patients in an effective way. All semesters. (Clinical Rotation) (3 semester hours)
DENT 697-12. Private Practice Externship Elective. The student must have completed all prerequisites, competences and goals for all 675 clinical courses to qualify to take this course. The externship will allow the student to experience a variety of private practice environments that he/she may be considering as a career. (Practicum/Internship) (3 semester hours)

DENT 698-1. Diseases Head & Neck-Rotation in Otorhinolaryngology. This course provides the student with didactic and clinical experiences pertaining to diseases of the head and neck with an emphasis on neoplastic diseases. Practical demonstrations of office procedures and hospital surgical procedures shall be conducted. (Lecture) (1-3 semester hours)

DENT 698-4. Clinical Research Methodology. A limited number of students will be taught how to develop and conduct a research project. (Lecture) (1-3 semester hours)

DENT 698-5. Literature and Dentistry. This course will provide the student with an understanding of the relationship of literature to dentistry, to understand literature’s influence on the public’s perception of dentistry and dentistry’s influence on literature, and hence the public’s perception. (Lecture) (2 semester hours)

DENT 698-6. Analyzing Scientific Literature. This course will provide students with the tools and practical experience to interpret the scientific literature. (Lecture) (1-2 semester hours)

DENT 698-8. Elective Preceptorship Military or Public Health Dentistry. This elective is for those D4 students that have met the qualifications and are selected for training at a military or public health clinic. The student must actively participate in the patient care and operation of the clinic to which he/she is assigned. The student must also give an oral presentation to the course coordinator detailing the operation of that clinic when the student returns to the School of Dentistry. (Lecture) (3 semester hours)

DENT 698-9. Conduct of Research. The main objective of this elective is to permit exposure of dental students to research. This exposure may be first-time event or may be a continuation of previous research experiences. (Lecture) (2 semester hours)

DENT 698-10. Advanced Clinical Orthodontics. This course is designed to introduce the dental student to orthodontic practice. The student will understand office staffing, scheduling, inventory and sophisticated orthodontic armamentarium. (Lecture) (3 semester hours)

DENT 698-13. AGD-Residency Internship. This provides the undergraduate dental student exposure to advanced dental procedures, appropriate clinical treatment of all medically compromised patients and experience in communications with the medical community. Objectives will be completed by the use of clinical encounters. (Lecture) (3 semester hours)

DENT 698-17. Introduction to Scanning Electron Microscopy. After participation in this course, a student should be able to understand the theories and mechanics of electron microscopy, prepare specimens for SEM observation, align the column and observe specimens with the SEM, and produce high-quality SEM photomicrographs. The theory and practical aspects of performing compositional analysis and mapping using the energy dispersive X-ray spectrometer will be covered. At completion of the course, the student should be able to use the integrated SEM/EDS system to qualitatively determine composition as well as understanding the use of calibration to produce quantitative results. Use of the system for digital image acquisition and elemental mapping will be covered. (Lecture) (3 semester hours)

DENT 698-18. Advanced Occlusal Disorders. Students will learn a simplified technique for the fabrication of a muscle relaxation appliance. Each student will fabricate, deliver and adjust a Michigan biteplane splint for a patient. The course consists of lecture, laboratory and clinical sessions. (Lecture) (2 semester hours)

DENT 698-20. Externships. These are typically one to two weeks in length. They are located at other dental schools, hospitals or allied health facilities. They must be approved by the Dean and all clinical department chairs; therefore, you must submit your request for the program at least three months in advance. (Lecture) (3 semester hours)

DENT 698-28. Special Topics in Pharmacology & Toxicology. The student will be presented with a series of realistic clinical scenarios that involve patients in whom pharmacological therapeutic decisions are essential to patient management. Students will work in teams to obtain detailed background information relevant to pharmacodynamic and pharmacokinetic issues critical to patient management, prepare formal written and oral summations of that information, defend the information and resolve issues of pharmacological patient management. (Lecture) (3 semester hours)

DENT 698-31. Occlusal Equilibration. Students will learn the indications for occlusal adjustments by selective grinding. A method for obtaining harmonious occlusal function through selective grinding will be presented. Students will do a functional occlusal analysis of a patient, determine whether an occlusal adjustment is indicated and then mount diagnostic casts in a semiajustable articulator. Following equilibration of these casts, occlusal equilibration of the patient will be done. (Lecture) (1 semester hour)

DENT 698-34. Oral-Maxillo Facial Surgery Externship. On-site, UMMC. Students should expect to be involved in didactic and clinical instruction in oral and maxillofacial surgery. Experience with the medically compromised patient and inpatients can be expected as well. Surgical anatomy and local anesthetics will be reviewed. Summer, fall or spring semesters. Hours to be determined/approved by the chair of Oral & Maxillofacial Surgery. (Clinical Rotation) (1-3 semester hours)

DENT 698-35. Oral- Maxillofacial Surgery Externship. Students should expect to be involved in didactic and clinical instruction in oral and maxillofacial surgery. Experience with the medically compromised patient and inpatients can be expected as well. Surgical anatomy and local anesthetics will be reviewed. (Lecture) (1-3 semester hours)

DENT 698-37. Emergent Dental Care Center. The purpose of this elective is to provide the undergraduate dental student with additional opportunities to diagnose and manage patients with more complicated acute dental problems. (Lecture) (2 semester hours)

DENT 698-41. Periodontics Externship. The externship is designed to give rising D4 students interested in pursuing specialty training in Periodontics with an opportunity to visit a graduate program in the specialty. Externships are arranged by the student in consultation.
with the externship coordinator. Externships are generally one week in duration and may be completed at any accredited Periodontics specialty program in the United States. (Lecture) (1-3 semester hours)

DENT 698-48. Dental Mission Externship. The externship is designed to give D-3 and D-4 students elective credit for participation in volunteer dental mission projects. Students arrange to participate in a project, usually though not exclusively through a church-related group. Projects are community-based and each has specific goals. Up to 40 hours of elective credit may be earned, depending on the length of the project. (Lecture) (1-3 semester hours)

THE ORAL AND MAXILLOFACIAL SURGERY ADVANCED EDUCATIONAL PROGRAM (OMS AEP)
This is a six-year combined OMS residency/MD degree program designed to fulfill the educational requirements of the Council on Dental Education of the American Dental Association, the American Board of Oral and Maxillofacial Surgery and the American Medical Association. The successful candidate is awarded the MD degree after completion of the third and fourth years of medical school, certificate of one-year General Surgery internship after completion of PGY 2, and a certificate of OMS residency at completion of PGY 4.

Candidates are graduates of accredited U.S. dental schools who have met certain requirements set forth by the UMMC OMS residency and Medical School Admissions committee.

OMS AEP Outline

<table>
<thead>
<tr>
<th>Program Year</th>
<th>Category</th>
<th>Training Description</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1*</td>
<td>PGY1</td>
<td>OMS Resident</td>
<td>7/1 – 5/31</td>
</tr>
<tr>
<td>2</td>
<td>M3</td>
<td>3rd Year Medical Student</td>
<td>6/1 - 5/31</td>
</tr>
<tr>
<td>3**</td>
<td>M4</td>
<td>4th Year Medical Student (9 months)</td>
<td>6/1 - 2/28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OMS Elective (4 months)</td>
<td>3/1 – 6/30</td>
</tr>
<tr>
<td>4***</td>
<td>PGY2</td>
<td>General Surgery Intern (8 months)</td>
<td>7/1 – 2/28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anesthesia (4 months)</td>
<td>3/1 – 6/30</td>
</tr>
<tr>
<td>5</td>
<td>PGY3</td>
<td>OMS Junior Resident</td>
<td>7/1 – 6/30</td>
</tr>
<tr>
<td>6</td>
<td>PGY4</td>
<td>OMS Chief Resident</td>
<td>7/1 – 6/30</td>
</tr>
</tbody>
</table>

For a more detailed description of the OMS AEP program, refer to the Oral and Maxillofacial Surgery Residency Handbook, which can be found on the UMMC OMS webpage.

FACULTY

ABDELKARIM, AHMAD, DDS, (Damascus University); MS, (University of Texas Health Science Center at San Antonio); CAGS, (Jacksonville University); PhD, (University of Mississippi) Assistant Professor and Chair, Orthodontics

ADAMS, ROLAND A., BDS, (University of Adelaide); M.S. (Rochester University); MA (Mississippi State University); EdD (University of Mississippi); Associate Professor and Chair, Periodontics and Preventive Sciences

ANDERSON, LEON, DMD, (University of Mississippi); Clinical Professor, Care Planning and Restorative Sciences

BAIN, JENNIFER, DMD, (University of Mississippi); Assistant Professor, Periodontics and Preventive Sciences

BEAVERS, NATHAN, DMD, (University of Mississippi); Clinical Assistant Professor, Pediatric Dentistry and Community Oral Health

BLACK, NAN M., DDS, (University of Tennessee School of Dentistry); Assistant Professor, Advanced General Dentistry

BOTELEER, WILLIAM L., DDS, MS, (University of Tennessee); Clinical Assistant Professor, Care Planning and Restorative Sciences

BRANTLEY, JAMES W., DMD, (University of Alabama); Assistant Professor, Care Planning and Restorative Sciences

BREEDING, LARRY C., DMD, (University of Kentucky); Professor Emeritus, Care Planning and Restorative Sciences

BROWN, JEFFREY S., DMD, (University of Mississippi) Assistant Professor, Oral-Maxillofacial Surgery and Pathology

BUCHANAN, WILLIAM, DDS, (University of California, Los Angeles); MMEdSc, (Harvard University); Professor, Periodontics and Preventive Sciences

BUCHANAN, WILLIAM T., DDS, (University of Tennessee); Professor Emeritus, Care Planning and Restorative Sciences

CALROSS, RON, DDS, MD, (Texas Health Science Center); Associate Professor and Chairman, Oral-Maxillofacial Surgery and Pathology; Director, Oral-Maxillofacial Surgery Residency Program

CARNEY, KAREN, DDS, (Louisiana State University); Clinical Professor, Care Planning and Restorative Sciences

CASKEY, CHARLES, DMD, (University of Mississippi); Clinical Professor, Periodontics and Preventive Sciences

CASWELL, CALVIN W., DDS, (Louisiana State University); MS (University of Texas Health Science Center at San Antonio); Associate Professor, Care Planning and Restorative Sciences

CHANDRAN, RAVI, DMD, PhD, (University of Mississippi); Assistant Professor, Oral-Maxillofacial Surgery and Pathology

COPE, LIVY L., DDS, (University of Tennessee); Clinical Professor, Pediatric Dentistry and Community Oral Health

CREWS, KAREN, DMD, (University of Mississippi); Professor Emeritus, Oral-Maxillofacial Surgery and Pathology

DELLINGER, TRACY M., DDS, (University of Texas at Houston); Professor, Advanced General Dentistry

DEMING, FANASY, DMD, (University of Mississippi); MS (Baylor University); Clinical Assistant Professor, Periodontics and Preventive Sciences

DEW, CARROLL W., DDS, (University of Tennessee); Clinical Professor, Care Planning and Restorative Sciences

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
DUAN, YUANYUAN, DDS, (Fourth Military Medical University, School of Dentistry); PhD, (Fourth Military Medical University, School of Dentistry); Assistant Professor, Biomedical Materials Science

DUNCAN, J. DAVID, DDS, MSD, (University of Tennessee); Professor Emeritus, Care Planning and Restorative Sciences

DUNCAN, WILLIAM K., DDS, (Ohio State University); Professor Emeritus and Interim Chair, Pediatric Dentistry and Community Oral Health

EKUND, Neva Penton, DMD, (University of Mississippi); Associate Professor, Pediatric Dentistry and Community Oral Health

FAWAD, LUBNA, DDS, (de’Montmorency College of Dentistry Lahore); Pakistan; Associate Professor, Pediatric Dentistry and Community Oral Health

FITCHE, JAMES G., DMD, (Southern Illinois University); Professor and Chair, Care Planning and Restorative Sciences

GANDY, STEPHEN R., DMD, (University of Mississippi); Clinical Assistant Professor, Oral-Maxillofacial Surgery and Pathology

GATEWOOD, HIRAM, DMD, (University of Mississippi); Clinical Professor, Endodontics

GATEWOOD, ROBERT SCOTT, DMD, (University of Mississippi); Interim Associate Dean of Academic Affairs and Professor and Chair, Endodontics

GERRETS, THOMAS, DMD, (University of Mississippi); Clinical Associate Professor, Endodontics

GILBERT, JR., BUFDOR O., DMD, (University of Alabama); Professor Emeritus, Endodontics

GOFF, KRISTY D., DMD, (University of Mississippi); Clinical Assistant Professor, Endodontics

GORDY, FRANCES, DMD, (University of Mississippi); Professor Emeritus, Care Planning and Restorative Sciences

GRIGGS, JASON A., PhD, (University of Florida); Associate Dean for Research; Professor and Chair, Biomedical Materials Science

HATHORN, ALICIA ROSE, DMD, (University of Mississippi); Clinical Associate Professor, Care Planning and Restorative Sciences

HEITZMANN, EMILY, DMD, (University of Mississippi); Clinical Assistant Professor, Pediatric Dentistry and Community Oral Health

HENSON, JOHN, DMD, (University of Mississippi); Clinical Professor, Endodontics

HILL, EDWARD E., DDS, (University of Tennessee); MS, (University of Alabama), Professor, Care Planning and Restorative Sciences

HILL, WILLIE J., DDS, (Howard University); Professor Emeritus, Oral-Maxillofacial Surgery and Pathology

HOLDER, RAY, DMD, (University of Mississippi); Professor and Chair, Advanced General Dentistry

HUCKABAY, SABRINA, DDS, (University of Oklahoma); Clinical Assistant Professor, Advanced General Dentistry

HUTTO, DARRELL M., DMD, (University of Mississippi); Assistant Professor, Care Planning and Restorative Sciences

JANORKAR, AMOL V., PhD, (Clemson University); Associate Professor, Biomedical Materials Science

JANORKAR, DEEPTI, BDS, (MGV Dental College and Hospital, University of Pune); Clinical Assistant Professor, Advanced General Dentistry

JOHNSON, ROGER B., DDS, (University of Tennessee); PhD, (University of North Dakota); Clinical Professor, Periodontics and Preventive Sciences

KIRK, PIA CHATTERJEE, DDS, (University of Texas); Associate Professor, Care Planning and Restorative Sciences

KNIGHT, INGE, CDT, Gewerbliche Berufs, Stuttart, Germany; Instructor, Care Planning and Restorative Sciences

KOLODNEY, HAROLD, DMD, (Tufts University); Professor, Oral-Maxillofacial Surgery and Pathology

KRAUSE, DENISE D., PhD, MS, (University of Mississippi); MA, (Monterey Institute of International Studies); Associate Professor, Biomedical Materials Science

KROLLS, SIGURDS, DDS, (University of Illinois); Professor Emeritus, Oral-Maxillofacial Surgery and Pathology

LEHAN, CORNELIUS, DMD, (University of Mississippi); Clinical Assistant Professor, Care Planning and Restorative Sciences

LIVINGSTON, HAROLD MARK, DDS, (University of Tennessee); Professor, Advanced General Dentistry

LOTT, JAMES R., DMD, (University of Mississippi); Assistant Professor, Care Planning and Restorative Sciences

MAGEE, JR., STEVE E., DMD, (University of Mississippi); Assistant Professor, Care Planning and Restorative Sciences

MAY, GEORGE, DMD, (University of Mississippi); Clinical Assistant Professor, Oral-Maxillofacial Surgery and Pathology

MCCRARY, SARAH J., DMD, (University of Mississippi); Associate Professor, Pediatric Dentistry and Community Oral Health

MEHTA, NEETA, DDS, (David B. Kaiser Dental Center New York University, New York); Associate Professor, Advanced General Dentistry

MILNER, MATT, DMD, (University of Mississippi); Assistant Professor, Care Planning and Restorative Sciences

MONTAGUE, LINDSAY J., DMD, (University of Florida); Assistant Professor, Oral-Maxillofacial Surgery and Pathology

MYERS, DEWEY, DDS, (University of Tennessee); Clinical Professor, Care Planning and Restorative Sciences

NELSON, KEVIN M., DMD, (University of Mississippi); Assistant Professor, Oral-Maxillofacial Surgery and Pathology

O’REILLY, WILHELMINA, DDS, (Howard University); Assistant Dean for Student Affairs; Professor, Pediatric Dentistry and Community Oral Health

OWENS, ROBERT, DMD, (University of Mississippi); Clinical Assistant Professor, Endodontics

PAPPA, OSCAR A., DDS, (Universidad Francisco Marroquin); Assistant Professor, Care Planning and Restorative Sciences

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
PHILLIPS, SCOTT M., DMD, (University of Mississippi); Assistant Dean for Clinical Affairs; Associate Professor, Care Planning and Restorative Sciences

PUCKETT, JR., AARON, PhD, (University of Southern Mississippi); Clinical Professor, Biomedical Materials Science

PRECHEUR, HARRY, DMD, (University of Medicine and Dentistry of New Jersey); Professor Emeritus, Oral-Maxillofacial Surgery and Pathology

QAI SI, MOHAMMED, DMD, MD, (Boston University/Louisiana State University); Assistant Professor, Oral-Maxillofacial Surgery and Pathology

QUON, DANIEL, DMD, (University of Mississippi); Clinical Professor, Oral-Maxillofacial Surgery and Pathology

RAMSEY, CHARLES, DMD, (University of Mississippi); Clinical Instructor, Advanced General Dentistry

REEVES, GARY W., DMD, (University of Mississippi); Professor, Care Planning and Restorative Sciences; Dean, Dentistry

REMBERT, ALVIN, DMD, (University of Alabama); Clinical Assistant Professor, Care Planning and Restorative Sciences

RICE, RICHARD T., DDS, (University of Iowa); Associate Professor, Endodontics

ROACH, MICHAEL D., PhD, (University of Mississippi); Assistant Professor, Biomedical Materials Science

ROSE, JERRICK W., DMD, (University of Mississippi); Clinical Assistant Professor, Pediatric Dentistry and Community Oral Health

RUBEL, BARRY, DMD, (University of Kentucky); Professor and Vice Chair, Care Planning and Restorative Sciences

SEAGO, DAVID, DMD, (University of Mississippi); Clinical Assistant Professor, Oral-Maxillofacial Surgery and Pathology

SHAYE, ROBERT, DDS, Dr. med. dent. (New York University); Professor Emeritus, Orthodontics

SMITH, JOHN B., DMD, (University of Mississippi); Assistant Dean for Admissions; Associate Professor, Care Planning and Restorative Sciences

ST. JOHN, KENNETH R., PhD, (Mississippi State University); MS (Clemson University); Associate Professor, Biomedical Materials Science; Director, Biomedical Materials Science Graduate Program; Director, Biomedical Materials Science User Facility

TAYLOR, TRAVIS, DDS, (University of Tennessee); Clinical Associate Professor, Care Planning and Restorative Sciences

THARP, GREGORY, DMD, (University of Mississippi); Clinical Associate Professor, Care Planning and Restorative Sciences

TOLBERT, CHARLES C., DMD, (University of Mississippi); Clinical Associate Professor, Care Planning and Restorative Sciences

TRAVIS, JOANN H., DMD, (University of Pittsburgh); Associate Professor, Care Planning and Restorative Sciences

VANCE, JIMMY DALE, DMD, (University of Mississippi); Clinical Assistant Professor, Care Planning and Restorative Sciences

WALLEY, E., DDS, (University of Tennessee); MS, (St. Louis University); Clinical Professor, Orthodontics

WEHMEYER, MEGGAN M.H., DDS, (University of Iowa); MS, (University of North Carolina); Clinical Assistant Professor, Periodontics and Preventive Sciences

WHITLOCK, ACIE, DMD, (University of Mississippi); Clinical Professor, Endodontics

WILLIAMSON, RANDALL S., PhD, (University of Mississippi); Assistant Professor, Biomedical Materials Science
HISTORY
The Board of Trustees created the School of Pharmacy on July 1, 1908. Although the main campus of the school remains in Oxford, the school established a presence on the University of Mississippi Medical Center campus in 1971 in order to access a larger patient population and to directly interact with other health professional schools. This presence grew and the School of Pharmacy Department of Pharmacy Practice was established on the UMMC campus in 1978. The Department of Pharmacy Practice currently has approximately 25 full-time faculty and 30 part-time faculty on the UMMC campus, and approximately 315 preceptors in 180 practice sites.

MISSION
The mission of The University of Mississippi School of Pharmacy is to improve health, well being and quality of life of individuals and communities by educating students, pharmacy practitioners and pharmaceutical scientists, conducting research, and engaging in service.

We seek to accomplish this by providing:

- Innovative models of practice, with an emphasis on underserved populations and those with health disparities.
- Quality education for current professional and graduate students.
- Quality post-graduate training opportunities.
- Quality continuing professional development opportunities.
- An environment which promotes the generation and dissemination of new biomedical knowledge and technologies through collaborative and interdisciplinary research.
- Opportunities for discovery and dissemination of knowledge of natural products and novel pharmaceuticals.
- Leadership in the development and implementation of advanced pharmacy practice models.
- Service to internal and external stakeholders and the general population.
- Opportunities to conduct practice-based and translational research to address health disparities.

CORE VALUES
Core Values of The School Of Pharmacy (Listed In Alphabetical Order)

- **Collaboration** – By fostering a spirit of teamwork and partnership that is founded on respect for the contributions of others, we seek to create interdisciplinary, synergistic relationships characterized by inclusiveness and flexibility.
- **Creativity** – We seek to encourage and support resourcefulness, originality, imagination, ingenuity, and vision in our students, faculty, and staff.
- **Excellence** – We strive to meet and exceed, through continuous improvement, the highest expectations for achievement as we maintain the highest standards in all of our endeavors.
- **Knowledge** – We value the discovery, acquisition, application, and dissemination of knowledge, and will work to foster these activities in pursuit of our vision and fulfillment of our missions.
- **Leadership** – We encourage and foster the development of leaders who have the ability to influence the thinking, understanding, and attitudes of others and who have the ability and courage to identify and effect solutions.
requires the ability to inspire, enable, instill confidence, build a shared vision, and connect with others through mutual trust, responsiveness, and sincerity.

- **Learning** – We encourage and support student-centered, ability-based learning; the mentoring of new faculty, graduate and undergraduate students; lifelong learning; and intellectual curiosity.

- **Professionalism** – We foster, encourage, and expect the active demonstration of structural, attitudinal, and behavioral attributes of a profession and its members. We believe that there are certain professional attributes that are fundamental to our functioning as learners, educators, researchers, scholars, and practitioners of pharmacy. These attributes include a service orientation, one in which the needs of others are put above personal needs; caring; respect for others; accountability to our stakeholders and responsibility for one’s action; and integrity, honesty, and ethically sound decision making.

- **Social Responsibility** – We value respect for the diversity of people with whom we work and those we serve; the importance we place on our local, state, national and global communities; and our concern for the welfare of humanity and the environment, as evidenced in the way we serve others.

**VISION**

We are a highly-respected community of learners, educators, scientists, and practitioners whose innovative achievements position us as leaders in improving health and wellness.

Indicators:

- Increased funding for research.
- Placements of choice for our graduates, residents and fellows.
- Increase in number of high-impact publications and presentations.
- Increase in number of license agreements and commercialization of technologies.
- Recognition at a national level of faculty, students, student organizations and our programs through awards, scholarships and elected leadership positions.
- Development of collaborations internally and externally.
- Maintaining exceptional NAPLEX performance.
- Improved quality of incoming undergraduate and graduate students and post docs.
- Advancing innovative pharmacy practice models.
- Demonstrating improved health outcomes.

**ORGANIZATIONAL STRUCTURE**

**A. Academic Departments**

The School of Pharmacy is organized into four academic units – Department of Pharmacy Practice, Department of Pharmaceutics and Drug Discovery, Department of Pharmacy Administration and the Department of BioMolecular Sciences. The departments are located on the Oxford campus with the exception of the Department of Pharmacy Practice, which is located on both the Oxford and Jackson campuses.

**B. Division of Pharmacy Professional Development**

The Division of Pharmacy Professional Development is the unit primarily responsible for the professional development activities for pharmacy practitioners. This Division is located on the UMMC campus.

**C. Research Institute of Pharmaceutical Sciences**

Research activities are conducted within each academic department as well as in the Research Institute of Pharmaceutical Sciences (RIPS). The areas of research within RIPS are listed below. The Research Institute of Pharmaceutical Sciences (RIPS) was charted by the Mississippi Legislature in 1964 and exists within the organizational structure of the School of Pharmacy at The University of Mississippi. The Research Institute is organized around the efforts of a core of full-time research faculty. In addition, the academic faculty of the School of Pharmacy may have part-time appointments in the Institute. Activities of the Institute are conducted through the Center for Pharmaceutical Marketing and Management (listed below) and the National Center for Natural Products Research (listed below).

**1. Center for Pharmaceutical Marketing and Management**

The Center for Pharmaceutical Marketing and Management promotes efficiency and effectiveness in the marketing and management of pharmaceutical products and services in all segments of the industry. Through a unique strategic alliance between the School of Pharmacy and the School of Business Administration, the Center for Pharmaceutical Marketing and Management applies The University of Mississippi's distinctive competencies to focused research and innovative educational programs involving health care. The Center for Pharmaceutical Marketing and Management is committed to supporting education at all levels -- undergraduate, graduate, and practicing professionals.

The Center also provides an environment where business and education can come together to exchange real-world research ideas, results, and information. Past, present, and future research includes both applied and theoretical projects in an environment that encourages mutual interaction between industry professionals and the staff and students in the Center.
An open exchange of ideas, collaboration on development of solutions to problems, and dissemination of the findings will be the result. The programs of the Center include: Pharmaceutical Marketing and Management Research, and Pharmacy Entrepreneurship.

2. The National Center for Natural Products Research
The mission of the National Center for Natural Products Research (NCNPR-RIPS) is to improve human health and agricultural productivity through the discovery, development, and commercialization of natural products or derivatives as pharmaceuticals and agrochemical. The National Center conducts basic and applied multidisciplinary research and educational activities in two major programmatic areas: the discovery of potential new drugs for certain infectious diseases, cancer, and immune and inflammatory diseases and the development of phytomedicines as therapeutic agents. Additionally, the National Center conducts research related to the development of medicinal plants as alternative crops for U.S. farmers.

3. Pii Center for Pharmaceutical Technology (Pii Center) Mission
The Pii Center for Pharmaceutical Technology (Pii Center), a unit of the Research Institute of Pharmaceutical Sciences (RIPS) within the School of Pharmacy, conducts interdisciplinary drug/polymer research that provides end stage pharmaceutical products directed at therapeutic conditions, vaccines, antidotes and wound care. This unique Center leverages the existing expertise and resources at The University of Mississippi (UM), including the National Center for Natural Products Research. Utilizing cutting edge thermal processing, the Pii Center collaborates with private industry, government and academia to develop new, improved and expanded drug delivery systems. Many drugs and biological products require special delivery systems. The Pii Center provides problem-solving approaches for the development of cost effective, patient friendly and efficacious delivery systems for existing active pharmaceutical ingredients as well as for new chemical entities. Utilizing solid solutions and dispersions and nanotechnology, the Pii Center develops novel formulations to improve bioavailability and therapeutic efficacy.

PROFESSIONAL PROGRAM
The objective of the Doctor of Pharmacy curriculum is to provide an academic foundation with adequate professional experience to enable a graduate to successfully deliver pharmaceutical care in a variety of practice settings: community practice, institutional practice, managed care organizations, government service, etc. In order to accomplish this objective, the school offers two degree programs, (1) a four-year baccalaureate in pharmaceutical sciences degree, the fourth year of which is also the first of a four-year professional curriculum leading to the (2) Doctor of Pharmacy degree. Previous attainment of a B.S. in Pharmacy from this or another Accreditation Council for Pharmacy Education (ACPE) accredited School of Pharmacy or a B.S. in Pharmaceutical Sciences from this institution is prerequisite for admission into the Doctor of Pharmacy program.

The Bachelor of Science in Pharmaceutical Sciences is not a practice degree, nor does it entitle one to sit for the pharmacy licensure examination. This four-year degree provides the academic preparation for admission into either the Doctor of Pharmacy program, a graduate degree program in the biomedical or pharmaceutical sciences, a professional school, e.g., medicine or law, or a pharmaceutical science or pharmacy-related career path, e.g., pharmaceutical marketing and management, or environmental toxicology. This degree program includes both pre-professional (3 years) and professional (1 year) components.

The Doctor of Pharmacy degree is a practice degree awarded after successful completion of the four-year professional curriculum. The Doctor of Pharmacy degree allows one to sit for the pharmacy licensure examination. The first two years of the professional curriculum, Professional Year 1 (PY1) and PY2, are completed on the Oxford campus. The PY3 year is completed on the UMMC campus and the PY4 year is completed at UMMC and other preceptor sites in Mississippi and beyond.

The University of Mississippi School of Pharmacy is committed to encouraging diversity in its student body and to graduating professionals dedicated to the delivery of compassionate pharmaceutical care to all segments of the diverse population in their communities. The school’s goals are developed to ensure that this commitment is manifested in all aspects of student life so that students are provided access to educational opportunities and social programs that are free from bias. The school expects that all students, faculty, and staff will be treated fairly without regard to race, age, color, gender, religion, national origin, sexual orientation, marital status, handicapped status, or veteran status.

A hallmark of the pharmacy profession is the trusting relationship between the pharmacist and his or her patients. That relationship is sustained by a commitment to the highest levels of professionalism. All students enrolled in the School of Pharmacy are expected to adopt and reflect the characteristics of a professional, which include integrity, empathy, fairness, responsibility, and a commitment to ethical behavior. In addition, students will demonstrate respect for peers, faculty, and staff of the school and exhibit a high level of maturity that reflects their status as a member of the greater pharmacy community. To further emphasize the commitment to professionalism, the school conducts a White Coat Ceremony for students beginning professional course work. At that event, students sign the Pledge of Professionalism.

ACCREDITATION
The School of Pharmacy holds membership in the American Association of Colleges of Pharmacy, an organization of the colleges and schools of pharmacy of the United States, whose objective is to promote pharmaceutical education and research. The Doctor of Pharmacy program was fully reaccredited in 2012 by the Accreditation Council for Pharmacy Education 135 S. LaSalle Street, Suite 4100, Chicago, Illinois 60603; (312) 664-3575, (800) 533-3606; or fax (312) 664-4652.

Over the last five years (2009-2014), graduates had an above average pass rate on the North American Pharmacist Licensure Examination which results in being among the top fifteen percent of schools of pharmacy in the nation.
MISSISSIPPI PHARMACY LAW
The Mississippi Pharmacy Practice Act, enacted by the Mississippi Legislature in 1983, requires that all practitioners obtain a license prior to engaging in the practice of pharmacy.

To obtain a license the applicant shall:
1. Have submitted a written application on the form prescribed by the board;
2. Be of good moral character;
3. Have graduated and received a degree from a program of a school or college of pharmacy accredited by the American Council on Pharmaceutical Education;
4. Have successfully passed an examination given by the board;
5. Have submitted documented evidence of the required practical experience;
6. Have paid the initial licensure fee.

Every prospective registrant must be a B.S. in Pharmacy or Doctor of Pharmacy graduate of a recognized school or college of pharmacy before the registrant may be permitted to take the NAPLEX examination given by the State Board of Pharmacy for registration as a registered pharmacist. The Mississippi State Board of Pharmacy, consisting of seven members who are practicing pharmacists, is charged with the general administration of the laws regulating the practice of pharmacy. Transactions with the Board of Pharmacy are effected through the office of the secretary and executive officer, 204 Key Drive, Suite D., Madison, Mississippi 39110.

INSTRUCTIONAL FACILITIES
Oxford Campus: The School of Pharmacy is located in Faser Hall and in the Thad Cochran Research Center. These facilities contain classrooms, laboratories, offices, and equipment used by the departments of BioMolecular Sciences, Pharmaceutics and Drug Discovery, Pharmacy Practice, and Pharmacy Administration, as well as the Research Institute of Pharmaceutical Sciences, including the National Center for Natural Products Research and Center for Pharmaceutical Marketing and Management. Students complete the four-year B.S. in Pharmaceutical Sciences program on the Oxford campus. The majority of classes in the curriculum are held in technologically advanced auditoria complete with network connections and the ability for teleconference. Rooms dedicated for small group interaction are network ready and contain a variety of technologies used to enhance learning. Three additional years of education are required to obtain the Doctor of Pharmacy degree. The final four semesters of instruction in the Doctor of Pharmacy program are conducted on the UMMC campus in Jackson and at other instructional and professional practice sites.

Jackson Campus: A two-story approximately 30,000 sf SOP building provides a state-of-the-art educational facility in the heart of academic corridor on the UMMC campus. The facility houses the SOP administrative offices, all faculty/staff offices, and education and research space. The building includes 17 small group classrooms for Problem Based Learning (PBL), an auditorium that seats approximately 175, clinical and research laboratory space, student common areas and student organization office space.

PROFESSIONAL ORGANIZATIONS
Students enrolled in the professional pharmacy program have the opportunity to become affiliated with various national professional pharmacy organizations, including chapters of the Academy of Students in Pharmacy (ASP) of the American Pharmacists Association, National Community Pharmacists Association, Academy of Managed Care Pharmacists, American Society of Health-Systems Pharmacists, Christian Pharmacists Fellowship International, Student National Pharmaceutical Association, American College of Clinical Pharmacy and the National Pharmaceutical Association. The school also has chapters of the three professional fraternities: Kappa Psi, Phi Delta Chi, and Kappa Epsilon; a chapter of the Rho Chi Society, the pharmacy honorary society; and Phi Lambda Sigma, the pharmacy leadership society. These organizations provide opportunities for professional development, involvement in service projects, and attainment of leadership skills.

CODE OF PROFESSIONAL AND ETHICAL CONDUCT
As a professional, the first concern of a pharmacist is the health and safety of those to be served. It is essential to the profession and the public that the integrity of all of its members be beyond reproach. The Code of Professional and Ethical Conduct has been established to inculcate appropriate ethical and moral values in students pursuing undergraduate and professional degrees in pharmacy. Details of the Code are available at www.pharmacy.olemiss.edu/Handbook.pdf.

FINANCIAL AID
Information on general financial aid programs is provided in the financial aid section of the University catalog. Inquiries about general financial aid should be directed to the Director of Financial Aid, The University of Mississippi, P.O. Box 1848, University, Mississippi 38677-1848. In addition, scholarships and loans are available specifically to students in the School of Pharmacy. Although School of Pharmacy scholarships are used for recruitment of students, the distribution of these funds is primarily based on academic performance in the professional program. Formal application for these scholarships is not necessary. Questions concerning scholarships and loans available only to pharmacy students should be directed to the School of Pharmacy Associate Dean for Academic Affairs. Scholarship policies are described in detail in the School of Pharmacy Student Handbook found online at http://pharmacy.olemiss.edu/studentaffairs/.
SCHOLARSHIPS

ALTA RAY GAULT MEMORIAL SCHOLARSHIP, established in 1968 to honor Dr. Gault who was a faculty member in the Department of Pharmacology. The award is to assist professional degree students.

AMY B. JAEGGER MEMORIAL SCHOLARSHIP, established in 2006 to honor Dr. Jaeger’s contributions as a member of the School of Pharmacy faculty. The recipient is a PY4 student.

AMIE EWING MEMORIAL SCHOLARSHIP, awarded to a member of the PY2 class who exhibits those characteristics exemplified by Amie Ewing during her enrollment in the School of Pharmacy, namely her determination and participation in University extracurricular activities. The recipient is determined by the Faculty Student Relations Committee. A separate application process is required and the amount is partially funded by proceeds from the sale of the specialty pharmacy automobile license tag.

AMY McELROY RUTHERFORD MEMORIAL SCHOLARSHIP, established in 1994 by Joe B. Rutherford. Recipients shall be full-time students who have been admitted to the professional pharmacy program. First preference is given to students from DeSoto County, Mississippi, and Shelby County, Tennessee.

BARBARA AND DEWEY GARNER SCHOOL OF PHARMACY SCHOLARSHIP ENDOWMENT, awarded to full-time students in the professional pharmacy program with first preference going to members of Kappa Psi Pharmaceutical Fraternity.

BRUCE R. PARKS MEMORIAL PHARMACY SCHOLARSHIP, established in 2003 to honor Dr. Parks’ many contributions to the school and its students during his years of service as a devoted member of the faculty. Recipients will be students in the final two years of the professional program, who in addition to their academic achievement, demonstrate a commitment to community service.

CARDINAL HEALTH ENTREPRENEURIAL SCHOLARSHIP, established in 2012, is awarded to a PY3 student demonstrating continued interest in independent community pharmacy practice.

CHILTON MEMORIAL SCHOLARSHIPS, through the bequest of the late Mr. T.D. Chilton, who for many years operated a pharmacy in Vicksburg, Mississippi, the School of Pharmacy is able to offer annually several scholarships to students in the school. The criteria for selection are scholarship, leadership, and need.

CLYDE STANTON MAXCY MEMORIAL SCHOLARSHIP, established by his family in his memory. Maxcy was a 1981 graduate of the School of Pharmacy. The scholarship is awarded to professional pharmacy students.

C. MILTON O’KEEFE SCHOLARSHIP IN PHARMACY, established in 1985 by friends and relatives of the late Jackson, Mississippi, pharmacist. Students must be in the professional pharmacy program and plan to enter private practice to qualify for this award.

DAWN ALLEN MEMORIAL SCHOLARSHIP, awarded to a member of the PY3 and PY4 class based on scholarship, leadership, and active participation in student-related activities. Preference will be given to graduates of Holmes Community College.

DAWN AND CHALRES SMITH, SR. MEMORIAL SCHOLARSHIP IN PHARMACY, established in 2011 to assist full-time professional pharmacy students (PY1-PY4) who have a minimum GPA of 3.5. First preference is given to Mississippi or Louisiana residents. This scholarship may be retained throughout the professional program as long as the student maintains a grade point average of 3.5.

DIXIE STEELE DAVIS SCHOLARSHIP, established in 2006 in honor of Mrs. Davis who served the Office of the Dean for over 30 years prior to her retirement. The scholarship is to assist professional degree students.

ECKERD CORPORATION PHARMACY SCHOLARSHIP, established in 2003 to benefit pharmacy students who exhibit academic excellence.

FRANCES G. MCDONALD SCHOLARSHIP, established in 1980 for full-time students who are pursuing a pharmacy degree.

GERALD TIMOTHY BELL LIVING SCHOLARSHIP, awarded to full-time students in the second year of the professional program.

GERALDINE ATCHLEY SCHOLARSHIP, established in 2006 to assist female students enrolled in the professional degree program.

GRACE S. AND N.V. “CY” DOTY SCHOLARSHIP IN PHARMACY, established in 1979 by Mr. Arthur W. Doty in honor of his parents to benefit students in the School of Pharmacy. Recipients must be native Mississippian with demonstrated financial need and achievement in the areas of leadership, academics, and professional competence in the field of pharmacy.

HARRIET NAOMI EASLEY COX MEMORIAL SCHOLARSHIP IN PHARMACY, established by Mr. A. Conley Cox of West Point, Mississippi, in memory of his wife. The scholarship is available to students who meet established criteria for the award. Recipients must be Mississippi residents, preferably residing in Clay County.

HARTMAN-JOHNSON MEMORIAL SCHOLARSHIP, established in honor of Dr. Charles W. Hartman, the late dean of the School of Pharmacy, and Dr. W.W. Johnson, the late pharmacy professor. It is awarded annually to a pharmacy student enrolled in the professional program.

HENRY CECIL CALDWELL SCHOLARSHIP, established in 2007 to assist Mississippi residents in the School of Pharmacy.

HENRY MINOR FASER SCHOLARSHIP, established in 1986. Recipients shall be full-time students of at least junior standing, who have been admitted to the professional pharmacy program.

JACK R. DUNN MEMORIAL SCHOLARSHIP, established by his family in memory of Mr. Dunn, who for many years operated a pharmacy in Lexington, Mississippi, this scholarship is awarded to professional pharmacy students.

JAMES O. HOGUE SCHOLARSHIP, established by friends and colleagues of the late Mr. Hogue to honor his memory, while providing scholarship assistance to a senior pharmacy student dedicated to retail pharmacy and who indicates a strong ability in pharmacy management.
JOHNSON-ABDO PHARMACY FAMILIES SCHOLARSHIP ENDOWMENT, awarded to full-time students who have been admitted to the professional pharmacy program.

JOHNSON–CONDON PHARMACY FAMILY SCHOLARSHIP, established in 2005 to assist students in the professional degree program.

LEADERSHIP SCHOLARSHIPS: The School will award $1,000 scholarships to class presidents, class historians, and Student Body officers (4) the year following their election, based on the demonstration of appropriate leadership skills during the year in office. This determination will be made by the Associate Dean for Academic Affairs in consultation with the Assistant Deans of Student Services.

LINTON FAMILY PHARMACY SCHOLARSHIP ENDOWMENT, awarded to full-time students who have been admitted to the professional pharmacy program; Minimum 3.0 GPA; Must have demonstrated financial need; First preference given to students from Humphreys, Lee or Panola counties.

MAMOUD ELSEHLY FAMILY SCHOLARSHIP, established in 2005 to assist students in the professional degree program with preference for students raised in Lafayette County.

MCCASKILL PHARMACY FAMILY SCHOLARSHIP, established in 2005 to assist students in the professional degree program with preference for students raised in Lafayette County.

MCKINLEY R. CLARK SCHOLARSHIP ENDOWMENT, established in 2011 to provide scholarship assistance to deserving students at The University of Mississippi.

PHARMACY ALUMNI CHAPTER SCHOLARSHIP ENDOWMENT, awarded to full-time students who have been admitted to the professional pharmacy program.

PLOUGH PHARMACY SCHOLARSHIPS, named in honor of Mr. Abe Plough, founder of Plough, Inc., and the Plough Foundation, which established the fund. These scholarships are available to professional pharmacy students.

RALPH FRITZ CAMERON, SR MEMORIAL SCHOLARSHIP, established in 2005 to assist professional students with preference for students involved in leadership activities.

RICHARD AND BARBARA WELLS SCHOLARSHIP, established in 2001, is awarded to members of the PY3 and PY4 class based on active participation in student professional activities.

RITE AID PHARMACY SCHOLARSHIP ENDOWMENT, established in 2012 to provide income for scholarship assistance to deserving students enrolled in the School of Pharmacy.

ROBERT W. CLEARY RHO CHI PHARMACY SCHOLARSHIP, established in 2001 by Joan Cleary, in memory of Dr. Robert Cleary, former chair of pharmaceutics. It is awarded to a full-time student admitted to the professional pharmacy program and who is a member of Rho Chi.

QUENTIN ROSS SANDERSON SCHOLARSHIP ENDOWMENT, established in 2011 to assist a full-time professional pharmacy student who has a minimum grade point average of 3.5. First preference is given to students from Warren County. Second preference is given to students from Jones County.

SAMUEL EDWARD WILKS SCHOLARSHIP ENDOWMENT, awarded to full-time students in the professional pharmacy program with first preference given to students from Marion or Walthall counties.

SIDNEY K. ARMSTRONG SCHOLARSHIP IN PHARMACY, established in 1983, is awarded annually by the School of Pharmacy Scholarship Committee.

STAN MAXCY MEMORIAL SCHOLARSHIP ENDOWMENT, established to assist deserving young men and women who are pursuing an education at the University of Mississippi.

TERENCE E. DOWNER SCHOLARSHIP QUASI-ENDOWMENT, established in 2006, is awarded to full-time students selected by a faculty committee of the Center for Pharmaceutical Marketing and Management and the Department of Pharmacy Administration at The University of Mississippi. Recipient will be determined based on grade point average, Pharmacy Administration grade point average, essay submission and an interview.

VICKSBURG HOSPITAL MEDICAL FOUNDATION SCHOLARSHIP, established to assist professional pharmacy students, with preference given to those from the Vicksburg area.

WILLIAM H. BERRY SCHOLARSHIP, established in 1994 through the estate of Mr. Berry. Recipients shall be Mississippi residents already admitted to the professional pharmacy program.

WILLIAM DUNCAN WATKINS SCHOLARSHIP ENDOWMENT IN PHARMACY, awarded to full-time students admitted to the professional pharmacy program.

AWARDS

School of Pharmacy student award presentations occur at Commencement and at the School of Pharmacy Awards Ceremony. The recipients of those awards are chosen by the academic departments or by members of the Faculty, Honors, Awards, and Commencement Committee. Near the end of the spring semester, Phi Lambda Sigma, the Pharmacy Leadership Society, sponsors the Pharmacy School Awards Assembly. In addition to Departmental Awards, all student organizations and classes present their various student awards at the assembly. The exceptions to this are the Teacher of the Year and Hall of Fame awards which are presented at commencement. PY3 and PY4 students are excused in order to attend this assembly. PY4 students not in attendance are to be at their rotation site. Failure to attend either location will result in a $50.00 fine payable to the Student Body.
Special recognition is given to a graduating PY4 student, PY3 student, PY2 student, and a PY1 student who are recipients of the Debbie Mellinger, Charisma Pope, Amie Ewing, and Shawn Bankston Awards respectively. The awards are named after young women who died while enrolled in the School of Pharmacy. The Debbie Mellinger Award was established in 1993 by the members of Phi Lambda Sigma. Ms. Mellinger was a charter member of the local chapter and served as its initial president. The students of the PY4 class determine the recipient and the selection process is coordinated by the class president. The award is presented to an individual who has exhibited courage and a positive attitude in carrying out normal student activities even though confronted by significant personal hardship.

The Charisma Pope Award was established in 2004 by the Magnolia State Pharmaceutical Society. The award recipient is selected by the Magnolia State Pharmaceutical Society and is presented to a rising PY4 student who must be a member of this Society and the Student National Pharmaceutical Association (SNPhA). The criteria for selection are academic performance, financial need, professional goals, and the degree to which applicant shares the unique blend of charismatic characteristics befitting an individual named Charisma, and which resulted in the love and high esteem in which she was held by her student peers.

The Shawn Bankston Award was established by the 2000 PY1 class to honor their deceased class member. The selection of the recipient is coordinated by the PY1 class president. The criteria for selection are the frequent demonstration during the PY1 year of a significant willingness to assist classmates, and the demonstration of an ever present positive attitude at the expense of personal sacrifice of time.

The Amie Ewing award was established by the 2005 Pharm.D. graduating class. Each spring one or more PY2 students are to be selected to receive this scholarship award. The selected student(s) must demonstrate those characteristics that were exemplified in Ewing, who also was a member of the Ole Miss volleyball team in 1999-2002. The recipient(s) must exhibit determination, good citizenship, professionalism and maturity within School of Pharmacy activities and the greater community. The recipients are determined following nominations/applications by the Faculty Student Relation Committee.

The school awards presented at the Awards Ceremony include the following departmental academic awards. Each award is presented to a student completing the PY2 year. A single award is presented by each department.

The BIOMOLECULAR SCIENCES AWARD is given for outstanding scholastic achievement in medicinal chemistry courses.

The PHARMAillator AND DRUG DISCOVERY AWARD is given for outstanding scholastic achievement in pharmaceutics courses.

The PHARMACY ADMINISTRATION AWARD is given for outstanding scholastic achievement in pharmacy administration courses.

The PHARMACY PRACTICE AWARD is given for outstanding scholastic achievement in pharmacy practice courses.

Other student awards whose recipients are selected by the Honors, Awards and Commencement Committee include:

The AINSWORTH FAMILY LEADERSHIP AWARD is presented to a PY3 and a PY4 student who have demonstrated outstanding leadership qualities while enrolled in the School of Pharmacy.

The BRUCE PARKS MEMORIAL MSHP STUDENT AWARD is presented in memory of Dr. Bruce Parks, former professor in the department of pharmacy practice, to a student who exemplifies outstanding integrity, leadership, and a strong desire to enhance the mission of health-system pharmacy in Mississippi.

The CARDINAL HEALTH NATIONAL LEADERSHIP CONFERENCE AWARD is presented a rising PY4 student who has demonstrated a commitment to institutional pharmacy practice and leadership in the local chapter of ASHP. The student is invited to attend the Cardinal Health National Leadership Conference held during the summer following PY3 year.

The ELI LILLY AND COMPANY AWARD FOR LEADERSHIP is awarded to the graduating Bachelor of Science in Pharmaceutical Sciences student who has demonstrated outstanding leadership within the School of Pharmacy and its organizations.

The FACTS AND COMPARISONS AWARD FOR EXCELLENCE IN CLINICAL COMMUNICATIONS is presented to the PY4 student in recognition of effective pharmacist-patient communication skills as a vital aspect of pharmacists’ service to their patients and community.

The MERCK AND COMPANY AWARD FOR SCHOLARSHIP is awarded to three students who have achieved the highest levels of academic excellence based on a combination of the grade point average achieved in their required pre-pharmacy course work, their PY1 professional year, and the total number of college credit hours earned.

The MYLAN INSTITUTE OF PHARMACY EXCELLENCE IN PHARMACY AWARD is presented to a graduating Doctor of Pharmacy student who has demonstrated high academic achievement and a strong commitment to the profession of pharmacy.

The PATIENT CARE AWARD is presented to a student who has demonstrated superior performance in patient care skills during the experiential component of the Doctor of Pharmacy program.

The RHO CHI SCHOLARSHIP AWARD is presented to the student for achieving the highest grade-point average during the four years of the professional program of the School of Pharmacy leading to the Doctor of Pharmacy degree.

The SCHOOL OF PHARMACY HALL OF FAME award, chosen by the graduating Doctor of Pharmacy class, recognizes significant contribution to the school, both scholastically and professionally. Two Hall of Fame members are selected.

The SERVICE AWARD is awarded to a PY3 and PY4 student who have demonstrated outstanding service within the School of Pharmacy and its organizations.

The TEVA PHARMACEUTICALS NON-PRESCRIPTION DRUG THERAPY AWARD is presented to the student who demonstrated high academic achievement in the study of non-prescription drug therapy.
The **UNITED STATES PUBLIC HEALTH SERVICE EXCELLENCE IN PUBLIC HEALTH PHARMACY PRACTICE AWARD** is presented to a PY4 student in recognition of contribution to public health pharmacy practice.

**SCHOOL OF PHARMACY DEGREE PROGRAMS**

(Detailed information regarding the undergraduate/professional program is available in the School of Pharmacy Student Handbook located online at [http://pharmacy.olemiss.edu/studentaffairs/](http://pharmacy.olemiss.edu/studentaffairs/))

I. **Bachelor of Science in Pharmaceutical Sciences Program**

Undergraduate students entering the professional program of the School of Pharmacy will be admitted into the B.S. in Pharmaceutical Sciences program. This is a four-year degree consisting of three years of pre-professional education followed by one year of professional courses, culminating in the awarding of the baccalaureate degree. This degree does not provide eligibility to sit for the licensure examination for pharmacy practice. This program is offered in its entirety on the Oxford campus.

Admission into this degree program can occur in the fall of the freshman year, i.e., “early entry,” but more typically after completion of the three-year pre-pharmacy curriculum at The University of Mississippi or other accredited institution, i.e., “regular entry.”

II. **Doctor of Pharmacy Program**

The Doctor of Pharmacy degree is the entry-level professional degree, requiring a minimum of four years of professional course work. The first year consists of the final year of the B.S. in Pharmaceutical Sciences degree program and is completed on the Oxford campus. The second year is completed on the Oxford campus and the final two years are taken at the UMMC campus and at a variety of practice sites located throughout Mississippi and the mid-South region. The Doctor of Pharmacy degree also may be awarded to practitioners possessing a B.S. in Pharmacy degree after completing additional didactic and experiential education.

Graduates of a B.S. in Pharmacy program, accredited by the Accreditation Council for Pharmaceutical Education (ACPE), and who are licensed to practice pharmacy in Mississippi, and graduates of The University of Mississippi B.S. in Pharmaceutical Sciences program are eligible for admission into the Doctor of Pharmacy program. Requests to transfer to this program from students in good academic standing at other ACPE accredited schools of pharmacy will be considered on an individual basis, as well as on a space-available basis. Such transfers must occur prior to the beginning of the PY3 year, given the unique nature of course design of this program as compared to other schools of pharmacy. Transfer, if approved, likely may result in the student needing to take, at a minimum, an additional semester of course work, given the uniqueness of course sequencing in the various schools of pharmacy.

A. **Application Process**

To be considered for admission into the entry-level Doctor of Pharmacy program, B.S. in Pharmaceutical Sciences students must, during the spring semester of the PY1 year, reapply to the University of Mississippi by completing an UNDERGRADUATE admission application choosing “pre-pharmacy” as the major. Final admission will not occur until after graduation from the B.S. in Pharmaceutical Sciences program. The applicant’s major classification will be updated at that time.

B. **Admission Criteria**

The minimum requirements for provisional admission to the entry-level Doctor of Pharmacy program are as follows:

1. Successful completion of the B.S. in Pharmaceutical Sciences curriculum.
2. A GPA (calculated on all grades earned) of at least 2.65 on all required courses in the PY1 year of the B.S. in Pharmaceutical Sciences curriculum.
3. Grades of at least C in each of the required courses in the PY1 curriculum.
4. Practitioner applicants (other than UM alumni) to the post baccalaureate Pharm.D. program must submit, to the School of Pharmacy and also to the University, an official transcript indicating receipt of the B.S. in Pharmacy degree from an ACPE accredited School of Pharmacy and a copy of their Mississippi Pharmacy license.

C. **Progression Requirements**

A student must have a 2.75 GPA and no grade below C in all required classes in the PY2 curriculum in order to matriculate to the PY3 curriculum. A student who receives two or more grades below C in the PY2 or PY3 or PY4 curriculum will be dismissed from the Doctor of Pharmacy program. Students dismissed from the program must repeat the entire year from which they were dismissed in order to progress in the curriculum. If a PY3 student has not yet completed the semester at the time they have earned the second grade of less than C, they may continue to complete the courses remaining in that semester. However, their enrollment status for those courses will be changed to "Audit". If the student chooses not to remain in the courses, they are to request that the Associate Dean for Academic Affairs withdraw from all non-completed courses. The University of Mississippi Academic Forgiveness Policy does not apply to professional students receiving grades of less than "C" in courses offered by School of Pharmacy academic departments. A student academically dismissed may only be re-admitted one time. No required course may be taken more than two times. All courses must be completed with a grade of C or better to be eligible for graduation. Students have the right to file a written petition with the Dean of the School of Pharmacy seeking waiver of any of these policies.

PY3 students receiving a grade of less than “C” in one of the Knowledge and Comprehension or Problem Solving courses in Blocks I-IV are provided the opportunity to remediate that course in either Winter Intersession or May Intersession. Students receiving a grade of less than C in a PY3 Group course can begin APPE rotations as scheduled, but must drop out of rotations in order to repeat the Group course in the normal block in which the course was failed. This will result in the student being two APPEs behind schedule.
D. Criminal Background Inquiry
Students are required to undergo fingerprinting and criminal history check at two separate times upon pursuit of the doctor of pharmacy degree. The first check will be conducted as part of the process of registration with the Mississippi State Board of Pharmacy as a student extern/intern. Such registration is required for acceptance into the B.S. in Pharmaceutical Sciences program. Specific procedures for this process are outlined in the Backgrounds Check Policy which may be found on the Board’s website. The student and the Board receive the results of the background checks along with explanation letters. Students should keep a copy of all background check letters. If as a result of the investigation there are any issues determined by the Board to prevent the student from being licensed as an extern/intern, that student will not receive final admission into the B.S. in Pharmaceutical Sciences program. The School will accept a copy of the student extern/intern registration card as documentation that background checks have been conducted and Board clearance has been obtained.

Background check information is only considered valid for two years. Therefore, an additional fingerprinting and background check will be conducted upon entry to the University of Mississippi Medical Center campus immediately prior to the PY3 year. Background checks will be scheduled through the University of Mississippi Medical Center Department of Human Resources. The Human Resources Department and the student will receive the results of the background check and explanation letter. The Human Resources Department will only provide students with an ID badge once clearance has been obtained. Therefore, the ID badge serves as documentation that the student has been cleared to be a member of the UMMC community. Students must have said badge to access all UMMC teaching and patient care areas. Therefore, failure to have said badge would prohibit School of Pharmacy students from completing their PY3/PY4 curriculum. As a result, failure to obtain the badge due to issues discovered during the background investigation will result in dismissal from the professional degree program.

Furthermore, students may be requested at any time to undergo another background check or random drug testing by a rotation practice site other than on the UMMC campus, perhaps at the expense of the student. This situation results because not all health care facilities have the same exact policies regarding the background of staff, health care professionals, or students permitted to be on site. In most instances the site would be satisfied with the results obtained by the check administered prior to obtaining the UMMC ID badge. Therefore, students are urged to retain copies of letters indicating the results of prior investigations in order to provide such documentation to preceptors or rotation site directors. If the student is not allowed to complete a rotation due to an issue from the background check, other arrangements will be attempted to allow the student to complete requirements at a different site. However, if no sites will accept the student based on the results of the background check, the student will be dismissed from the program since he or she will not be able to complete the degree requirements.

E. Curricular Philosophy
The curricular philosophy for the entry-level Doctor of Pharmacy program is an amalgamation of four general principles. Completion of the curriculum will (1) prepare practitioners who can effectively participate in the pharmaceutical care in addition to accurate distribution of drugs.

1. Pharmaceutical Care
The curriculum leading ultimately to the Doctor of Pharmacy degree is designed to provide the abilities necessary for the graduate to be capable of providing acceptable levels of pharmaceutical care. Pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient’s quality of life. These outcomes are (1) cure of a disease, (2) elimination or reduction of a patient’s symptomatology, (3) arresting or slowing of a disease process, or (4) preventing a disease or symptomatology.

Pharmaceutical care involves the process through which a pharmacist cooperates with a patient and other professionals in designing, implementing, and monitoring a therapeutic plan that will produce specific therapeutic outcomes for the patient. This in turn involves three major functions: (1) identifying potential and actual drug-related problems, (2) resolving actual drug-related problems, and (3) preventing potential drug-related problems.

Pharmaceutical care is a necessary element of health care, and should be integrated with other elements. Pharmaceutical care is, however, provided for the direct benefit of the patient, and the pharmacist is responsible directly to the patient for the quality of that care. The fundamental relationship in pharmaceutical care is a mutually beneficial exchange in which the patient grants authority to the pharmacist and the pharmacist gives competence and commitment (accepts responsibility) to the patient. The mission of a pharmacy practitioner is the distribution of optimal pharmaceutical care in addition to accurate distribution of drugs.

2. Abilities-based Curriculum
An ability comprises a combination of knowledge, skill, and attitude. The curriculum culminating in the awarding of the Doctor of Pharmacy degree is ability-based, rather than entirely content-focused. Successful completion of the program will ensure the development of both general and professional abilities. Progression through the four-year curriculum provides for the formulation and continuous strengthening of these abilities.
Abilities Fostered by the Curriculum at The University of Mississippi School of Pharmacy

The curriculum culminating in the awarding of the Doctor of Pharmacy degree at The University of Mississippi School of Pharmacy is ability-based. Successful completion of the program will ensure the development of both general and professional educational abilities (listed below). Progression through the four-year curriculum provides for the formulation and continuous strengthening of these abilities. These have been modified from the School’s outcomes delineated in 1998, in order to reflect new emphases present in the 2004 CAPE Outcomes Statement for Pharmacy Education and the 2007 ACPE Guidelines.

UM General Abilities
The following three general educational abilities are emphasized by the Southern Association of Colleges and Schools (SACS); and demonstration of programmatic contribution to these general abilities is desired by The University of Mississippi for all appropriate undergraduate majors.

1. Critical Thinking, Analysis and Decision-Making
   The student can find, understand, analyze, evaluate, and synthesize information and make informed, rational, and responsible decisions.

2. Communication Skills
   The student can communicate with various audiences by written, verbal, and electronic media for a variety of purposes.

3. Mathematical Competence
   The student is proficient in the expression of quantitative relationships and can perform the needed mathematical operations to infer their consequences.

Professional Abilities of the School of Pharmacy

1. Assess patient drug therapy
   a. Collect and organize patient data, medical records, interviews, and psychomotor evaluations
   b. Evaluate and interpret patient data
   c. Apply knowledge of medical terminology and abbreviations
   d. Apply knowledge of specified drugs and drug classes
   e. Apply knowledge of specific physiologic systems
   f. Apply knowledge of specific disease pathology and comorbid conditions

2. Provide contemporary evidence-based patient-specific drug therapy
   a. Apply understanding of indications for pharmacologic and non-pharmacologic therapy
   b. Apply clinical reasoning skills in drug product selection, chemical entity, and dosage formulation based on principles of pharmaceutics, medicinal and natural product chemistry
   c. Develop appropriate dosing regimens, which reflect application of knowledge of pharmaceutical calculations, systems of measurement, initial dose, dose titration, and dosage adjustments
   d. Prepare accurate patient-specific pharmacologic agents, dosage forms and delivery systems
   e. Develop rational plans for monitoring therapeutic outcomes
   f. Develop rational plans for monitoring and managing adverse events
   g. Develop plans for anticipating, avoiding, and resolving drug interactions, drug-drug interaction, drug-food interaction, drug-disease interaction, drug-lab interaction, and drug-procedure interaction
   h. Develop plans for patient education on drug therapy and therapeutic lifestyle changes
   i. Document recommendations and services accurately and comprehensibly

3. Provide contemporary evidence-based population-focused care
   a. Analyze epidemiologic and pharmacoeconomic data, medication use criteria, medication use review, and risk reduction strategies
   b. Apply knowledge of protocol utilization for the initiation and modification of drug therapy
   c. Develop population-based protocols for medication therapy management

4. Manage patient-centered practice with contemporary methods
   a. Appropriately manage resources to maximize economic, clinical and humanistic outcomes for patients, and effectively manage financial, personnel, time, and technology resources
   b. Appropriately manage safe, accurate and time-sensitive medication distribution
   c. Apply ethics and professional principles to assure efficient utilization of resource management and effective treatment choices
   d. Assure that medication use systems minimize medication errors and optimize patient outcomes
   e. Develop proposals for establishing, marketing, and being compensated for medication therapy management and patient care services rendered
   f. Practice in accordance with state and federal regulations and statutes
5. Collaborate with patients, caregivers, and health professionals to engender a team approach to patient care
   a. Employ communication styles and techniques appropriate to the audience
   b. Work effectively within a multidisciplinary/interdisciplinary environment
   c. Include patient and caregiver as integral parts of a treatment plan

6. Retrieve, analyze, and interpret the professional, lay, and scientific literature to provide drug information to patients, their families, other involved health care providers and the public to optimize patient care.
   a. Apply understanding to statistical methods
   b. Apply understanding of research design principles
   c. Evaluate research outcomes for validity
   d. Demonstrate expertise in informatics

7. Demonstrate understanding of health problems specific to diverse populations
   a. Display empathy in patient interactions
   b. Display sensitivity to differences in ethnicity, gender, values, or belief systems (cultural competency)
   c. Apply understanding of contemporary and historical social and economic factors that influence health and health care, including health literacy and health care disparities

8. Provide comprehensible, effective education to patients, health care professionals, and the public
   a. Serve as reliable and credible source of drug information
   b. Effectively educate patients using all appropriate communication modalities (verbal, written, other)
   c. Apply knowledge of roles of advocacy and support organizations (e.g., AA, Epilepsy Foundation) to practice
   d. Present effective educational programs and presentations to public and health care profession audiences

9. Analyze internal and external factors that influence pharmacy and other health care systems
   a. Demonstrate knowledge of the impact of health care systems on pharmacy practice
   b. Demonstrate understanding of the influences of legislation on pharmacy practice
   c. Demonstrate understanding of the roles of professional organizations

10. Promote the availability of effective health improvement, wellness, disease prevention, and health policy, applying population-specific data, quality improvement strategies, informatics, and research processes.
    a. Engage in health-related community outreach activities
    b. Identify public health problems
    c. Suggest solutions for public health problems
    d. Review current health policies and recommend modifications
    e. Participate in the development of drug use and health policy
    f. Help design pharmacy benefits

11. Develop self-learning skills to foster lifelong learning
    a. Take responsibility for gathering new knowledge
    b. Demonstrate an ability to evaluate and utilize information resources
    c. Exhibit self-assessment behaviors

3. Active Learning
   Instructional methodology emphasizes active (independent) rather than passive (dependent) learning. A characterization of active learning is as follows:
   Most students enter pharmacy schools as dependent learners; that is, they enter with the perception that it is the teachers’ responsibility to teach students, while de-emphasizing, if not ignoring, the responsibility of students to learn on their own. Students come to health professional schools adept at memorizing facts, and the teaching methods at most professional schools readily focus on this characteristic. In practice, the practitioner must rely on his or her ability to interpret data in order to reach conclusions and solve problems. There is no “teacher” in practice (except other practitioners and the patient). Consequently, in practice, the responsibility to learn must reside with the learner/practitioner. And so it must be while in the School of Pharmacy. The responsibility to learn must rest with the learner/student, not with the teacher.
   It follows, then, that a major responsibility of pharmacy educators is to shift the burden of learning from the teacher to the student. The transition from a dependent learner to an independent learner must occur as the student progresses through the pharmacy curriculum. Students must understand that to become educated is to know what questions to ask and where the answers may be found.
   Teaching must be achieved through educational processes that involve students as active learners. One measure of achieving this goal is to require participation in cooperative learning projects. Teachers must view themselves as
coaches and facilitators rather than merely as providers and interpreters of information. As students move from the PY1 to the PY4 years, increasing emphasis is placed on active learning strategies.

4. Development of Higher-order Thinking Skills

Closely aligned with the incorporation of active learning strategies is the formatting of class evaluation instruments to include more emphasis on higher-order thinking skills. Different questions require different levels of thinking. Lower-level questions are appropriate for assessing students’ preparation and comprehension or for reviewing and summarizing content. Higher-level questions encourage students to think critically and to solve problems. Various researchers have developed cognitive schemes for classifying questions. Bloom’s system of ordering thinking skills from lower to higher has become a classic and includes the following skills:

a. Knowledge skills (remembering previously learned material such as definitions, principles, formulas): “Define shared governance.” “What are Piaget’s stages of development?”

b. Comprehension skills (understanding the meaning of remembered material, usually demonstrated by restating or citing examples): “Explain the process of mitosis.” “Give some examples of alliteration.”

c. Application skills (using information in a new context to solve a problem, answer a question, perform a task): “How does the concept of price elasticity explain the cost of oat bran?” “Given the smallness of the sample, how would you analyze these data?”

d. Analysis skills (breaking a concept into its parts and explaining their interrelationships; distinguishing relevant from extraneous material): “What factors affect the price of gasoline?” “Point out the major arguments Shelby Steele uses to develop his thesis about affirmative action.”

e. Synthesis skills (putting parts together to form a new whole; solving a problem requiring creativity or originality): “How would you design an experiment to show the effect of receiving the Distinguished Teaching Award on a faculty member’s subsequent career progress?” “How would you reorganize Bloom’s taxonomy in light of new research in cognitive science?”

f. Evaluation skills (using a set of criteria to arrive at a reasoned judgment of the value of something): “To what extent does the proposed package of tax increases resolve the budget deficit?” “If cocaine were legalized, what would be the implications for public health services?”

The School of Pharmacy faculty are committed to increasing the percentage of questions on their examinations that involve higher-level thinking skills. The commitment is based on the assumption that it is the development of these skills that will enable the graduate to provide appropriate levels of patient care.

F. Curriculum Entry-level Doctor of Pharmacy Program

PY2 YEAR

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic and Clinical Pharmacology I (PHCL 443)</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to the Principles of Medicinal Chemistry I (MEDC 416)</td>
<td>3</td>
</tr>
<tr>
<td>Pharmacy Law (PHAD 491)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmacy Management and Business Methods (PHAD 493)</td>
<td>3</td>
</tr>
<tr>
<td>Pharmacy Practice I (PRCT 450)</td>
<td>2</td>
</tr>
<tr>
<td>Practice Skills Laboratory III (PRCT 455)</td>
<td>2</td>
</tr>
<tr>
<td>Elective (professional)</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

WINTER INTERSESSION

<table>
<thead>
<tr>
<th>Course</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Pharmacy Practice Experience (PRCT 477)</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic and Clinical Pharmacology II (PRCT 444)</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to the Principles of Medicinal Chemistry II (MEDC 417)</td>
<td>3</td>
</tr>
<tr>
<td>Natural Product Derived Pharmaceuticals (PHCG 422)</td>
<td>4</td>
</tr>
<tr>
<td>Pharmacoeconomics, Pharmacoepidemiology, &amp; Medicine Safety (PHAD 494)</td>
<td>3</td>
</tr>
<tr>
<td>Pharmacy Practice II (PRCT 451)</td>
<td>2</td>
</tr>
<tr>
<td>Practice Skills Laboratory IV (PRCT 456)</td>
<td>2</td>
</tr>
<tr>
<td>Elective (professional)</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

MAY INTERSESSION

<table>
<thead>
<tr>
<th>Course</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Pharmacy Practice Experience (PRCT 478)</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>
PY3 YEAR

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Care I: Knowledge and Comprehension (PRCT 555)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care I: Problem Solving (PRCT 556)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care I: Group (PRCT 557)</td>
<td>3</td>
</tr>
<tr>
<td>Pharmaceutical Care II: Knowledge and Comprehension (PRCT 558)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care II: Problem Solving (PRCT 559)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care II: Group (PRCT 560)</td>
<td>3</td>
</tr>
<tr>
<td>Community Pharmacy Practice III (Z grade) (PRCT 543)</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacy Skills Laboratory V (PRCT 577)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Care III: Knowledge and Comprehension (PRCT 561)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care III: Problem Solving (PRCT 562)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care III: Group (PRCT 563)</td>
<td>3</td>
</tr>
<tr>
<td>Pharmaceutical Care IV: Knowledge and Comprehension (PRCT 564)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care IV: Problem Solving (PRCT 565)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care IV: Group (PRCT 569)</td>
<td>3</td>
</tr>
<tr>
<td>Institutional Pharmacy Practice III (Z grade) (PRCT 544)</td>
<td>1</td>
</tr>
<tr>
<td>Preventive Medicine and Public Health (PRCT 552)</td>
<td>2</td>
</tr>
<tr>
<td>Specialty Pharmacy Practice Elective (Z grade) (PRCT 545)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

PY4 YEAR

Each student will participate in four required five-week rotations (medicine, ambulatory care, institutional practice, and community practice) and four five-week elective rotations for a total of 40 weeks of experiential education during the period beginning in June following completion of the PY3 year and ending with May commencement of the succeeding year. The electives must be in four different areas of training. Students also must register for Seminar Skills Development II (PRCT 567) during one semester of the PY4 year.

G. Curriculum for Postbaccalaureate Doctor of Pharmacy Program

This degree is for pharmacy practitioners previously receiving a B.S. in Pharmacy degree. Participants in this program also must meet requirements H1, 2, 3, 4 (see next section) for entry-level program participants and the computer requirements detailed for B.S. in Pharmaceutical Sciences students.

FIRST YEAR

FALL SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Care I: Knowledge and Comprehension (PRCT 555)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care I: Problem Solving (PRCT 556)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care I: Group (PRCT 557)</td>
<td>3</td>
</tr>
<tr>
<td>Pharmaceutical Care II: Knowledge and Comprehension (PRCT 558)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care II: Problem Solving (PRCT 559)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care II: Group (PRCT 560)</td>
<td>3</td>
</tr>
<tr>
<td>Pharmacy Skills Laboratory V (PRCT 577)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

SPRING SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Care III: Knowledge and Comprehension (PRCT 561)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care III: Problem Solving (PRCT 562)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care III: Group (PRCT 563)</td>
<td>3</td>
</tr>
<tr>
<td>Pharmaceutical Care IV: Knowledge and Comprehension (PRCT 564)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care IV: Problem Solving (PRCT 565)</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care IV: Group (PRCT 569)</td>
<td>3</td>
</tr>
<tr>
<td>Preventive Medicine and Public Health (PRCT 552)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

SECOND YEAR

Whereas entry-level Doctor of Pharmacy students are required to complete eight rotations, these students are required to complete five five-week rotations (ambulatory care, medicine, plus three electives) given their prior practice experience and previous completion of experiential requirements for obtaining a B.S. in Pharmacy degree. Each of these rotations may be accomplished in a five-week (40 hours/week) or 10-week (20 hours/week) period. These rotations may not be performed at the regular employment site of the student. Students also must register for Seminar Skills Development II (PRCT 567) during one semester of the PY4 year.
H. Additional Program Requirements

1. Basic Life Support for the Health Care Provider Training

Basic Life Support for the Health Care Provider (BLSHCP) training is required of all students. A BLSHCP course trains students how to: perform adult, child and infant cardiopulmonary resuscitation (CPR); manage foreign body airway obstruction in the adult, child and infant; defibrillate utilizing an Automated External Defibrillator. Documentation of this training must be submitted and may be in the form of a photocopy of the course completion card. BLSHCP training is provided for students in the first professional year and the third professional year through skills laboratory courses.

2. Immunization Requirements
   a. Hepatitis B Immunization

   Students are required to show proof of Hepatitis B immunization prior to admission into the School of Pharmacy. Students (at the students’ expense) will be required to demonstrate proof of completion of the three-shot series of hepatitis B vaccinations prior to completion of the PY1 year. If a student has not been immunized previously against hepatitis B, he or she should complete the series of three injections, which are to be administered over a six-month period during the PY1 year. More than 90 percent of students so immunized will demonstrate a positive antibody titer within one month after completion of the injection schedule. Students may want to ascertain their immune status prior to beginning this series of injections.

   b. Negative Tuberculin Skin Test (PPD)

   Proof of a negative tuberculin skin test (PPD) is required annually before students are permitted to complete any experiential rotations. Students having a positive PPD test cannot participate in experiential activities until they demonstrate lack of an active case of tuberculosis (by chest radiograph or immunoassay) or present evidence that they are undergoing active treatment.

   c. Influenza Vaccination

   Proof of receipt of influenza vaccination must be submitted annually before students are permitted to complete any experiential rotations and in compliance with the UMMC Healthcare Professional Student Immunization Requirements Policy. Influenza vaccinations are usually available during the fall of each year and may be available at minimal or no cost to the student at Student/Employee Health on Oxford or Jackson campuses. Students who are located on the Jackson campus must submit documentation to the UMMC Student Employee Health Center.

   d. Varicella Titer

   Students at their own expense must demonstrate either proof of two Varicella (chicken pox) vaccinations separated by one month or proof of titer prior to the end of the fall PY1 semester.

   e. Annual Physical Examination

   Students enrolled in the professional degree program must provide proof that they have undergone a routine physical examination (at the students’ expense) prior to completion of the fall semester of the PY1 year and prior to the beginning of the PY3 year.

3. Liability/Malpractice Insurance

Each professional student (at the student’s expense) will be required to offer proof (for example, photocopy of the certificate of insurance with dates of coverage included) of personal/professional liability coverage (a minimum of $1 million per individual claim, $3 million per incident) extending through the completion of the four year professional program.

4. Medical/Hospitalization Insurance

Hospitalization/medical insurance is required of all professional students enrolled in the School of Pharmacy. Coverage is required throughout the four-year professional program.

5. Extern or Pharmacist Registration with the Mississippi State Board of Pharmacy (MSBP)

All PY1 students must present proof of extern/intern registration with the MSBP prior to receiving final admission into the professional program. Such registration must be maintained throughout the four-year program. A photocopy of the entry-level student’s MSBP extern card is acceptable documentation. Post-B.S. students should submit a photocopy of their most current Mississippi Board of Pharmacy registration card. Fingerprinting and criminal background investigation separate from that provided/required by UMMC upon entry to the PY3 year may be required by the Board to maintain this registration during the completion of the Pharm. D. program.

6. Financial Obligations

All financial obligations to the University, UMMC, and the School of Pharmacy Student Body, including obligations to on-campus chapters of professional student organizations in which the student has accepted membership, must be satisfied in order to receive a diploma. Students enrolled in the Doctor of Pharmacy program (PY3 and PY4 years) are required to pay each semester a UMMC student activity fee, which is billed through the Oxford campus. This fee is included in the tuition for PY3 and PY4 students regardless of the location of the advanced practice experiences. This fee entitles students to full student services and participation in student life activities at UMMC during the PY3 and PY4 years.
7. Programmatic Assessment

Student participation in programmatic assessment activities is required prior to commencement for verification of diploma application to occur. These activities may be University, School and accreditation agency mandated. It is expected that students will take these activities seriously and to perform to the best of their ability. Otherwise, the results of these assessments would be invalid and unreliable and may lead to inappropriate programmatic changes.

COURSES

Department of Medicinal Chemistry (Medc)

NOTE: A grade of at least C is required on all prerequisite courses.

317. PHARMACOGENETICS AND PHARMACOIMMUNOLOGY. A detailed introduction to the basic concepts of molecular genetics, biotechnology, and immunology of life processes that provide an essential foundation for rational drug therapy. Prerequisite: PY1 Classification. (3).

318. CHEMICAL AND BIOLOGICAL TERRORISM. Chemical, biological, radiological and nuclear terrorism poses a considerable threat throughout the world. The expectation of chemical, biological, radiological and/or nuclear violence is recognized as an acute security challenge. The likelihood, over time, of terrorist organizations coming into possession of such unconventional materials, and their use against the United States homeland, is tremendously elevated. The combination of increasing availability of technology and expertise, a mass-casualty attack may be inevitable. Prerequisite: PY1 or PY2 classification. (2-3).

319. COMPUTER-AIDED STRUCTOR BASED DRUG DESIGN (CADD): DATABASE SCREENING AND de novo DESIGN OF POTENTIAL DRUG MOLECULES. Utilization of the art commercial software involving in part manipulating freely available protein x-ray structures from the Protein Data Bank (PDB) as well as carrying out the drawing and energy minimization of small molecule potential ligands for active site of the selected protein. Prerequisite: PY1 or PY2 classification.

415. CHEMICAL NEUROSCIENCE PRINCIPLES OF DRUG ABUSE. This course will cover the Chemical Neuroscience Principles of Drug Abuse including, but not limited to, neurochemistry, neuropharmacology, toxicology, and pharmaco therapy. Pre-requisite: MEDC 415 and PHCL 444. Co-requisite: MEDC 417 and PHCL 444. (1).

416. MEDICINAL CHEMISTRY OF THERAPEUTIC AGENTS I. Introduction to the chemical and physical properties of medicinal agents, relationships of structural properties of drugs to pharmacological properties and metabolism profiles, chemical stability, mechanism of action and clinically significant chemical interactions. Pre-requisite: PY2 Classification (3).

417. MEDICINAL CHEMISTRY OF THERAPEUTIC AGENTS II. Continuation of the introduction to the chemical and physical properties of medicinal agents, relationships of structural properties of drugs to pharmacological properties and metabolism profiles, chemical stability, mechanism of action and clinically significant chemical interactions. Prerequisite: MEDC 416. (3).

418. NEUROSCIENCE PRINCIPLES OF DRUG ABUSE. The content of this course focuses on a fundamental understanding of the chemical and physiochemical properties of drugs of abuse and chemical dependency as it relates to the practice of pharmacy. Prerequisite: PY2 classification. (1).

419. SPECIAL TOPICS IN ONCOLOGY. This course is designed for students to engage in advanced discussions of oncological therapeutic topics to increase their knowledge about the ideology, clinical presentation and management of various solid and hematological malignancies. Prerequisite: PY2 classification. (1).

Department of Pharmaceutics and Drug Discovery- Phar

NOTE: A grade of at least C is required on all prerequisite courses.

330. PHARMACEUTICAL CALCULATIONS. This course introduces the prescription, prescription notation and abbreviations, basic pharmaceutical calculations, statistics, and the mathematics of chemical kinetics and pharmacokinetics. Pre-requisite: PY1 Classification. (1).

331. BASIC PHARMACEUTICS I. This course is designed to teach those basic principles of physics and chemistry that are necessary to understand pharmaceutical dosage forms and their design. Pre-requisite: PY1 Classification. (3).

332. BASIC PHARMACEUTICS II. This course provides an understanding of various dosage forms and drug delivery systems and how medicinal and pharmaceutical substances are incorporated into them. Prerequisites: PHAR 331. (3).

334. BIOPHARMACEUTICS AND PHARMACOKINETICS. Physiochemical and biological factors affecting drug bioavailability; time course of drugs and metabolites in the body; individualizing dosing regimens. Pre-requisite: PY1 Classification. (3).

335. CLINICAL LABORATORY DATA ANALYSIS. The primary purpose of this course is to enhance the student’s skills in clinical lab test interpretation. It will also provide information on common laboratory tests used to screen for or diagnose disease, monitor the effectiveness and safety of treatment, or assess disease severity. The various laboratory tests will be described in terms of its clinical uses, how the lab test relates to the disease, how to interpret the lab test results, and causes for abnormal lab test results. Pre-requisite: PY1 or PY2 Classification. (1).

432. CONCEPTS IN PHARMACEUTICAL BIOTECHNOLOGY. This course provides students with basic concepts, principles and methodologies underlining modern biotechnology and which are applied in the pharmaceutical sciences. Prerequisite: PY2 classification. (1).
433. INDUSTRIAL PHARMACY. This course is designed to introduce students to the manufacturing, documentation, and regulatory aspects of pharmaceutical manufacturing. Prerequisite: PY2 classification. (2).

435. PHARMACEUTICAL STABILITY. This course is designed to introduce the students to the manufacturing, documentation and regulatory aspects of Pharmaceutical Manufacturing. Prerequisite: PY2 classification. (2).

436. PRODUCT DEVELOPMENT. The course is designed to provide an understanding of the development of pharmaceutical dosage forms. Prerequisites: PHAR 332 or consent of instructor. (3).

541, 542. PROBLEMS IN PHARMACUTICS. Investigation of individual problems of current interest in pharmaceutics. Prerequisite: minimum GPA of 2.50 on all professional pharmacy courses attempted and consent of instructor. (1-3, 1-3).

Department of Pharmacognosy- Phcg
NOTE: A grade of at least C is required on all prerequisite courses.

320. SPECIAL TOPICS IN OCEANS AND HUMAN HEALTH. An overview of how the oceans and coast impact human health and well-being. Prerequisite: PY1 or PY2 classification. (2).

321. PATHOGENESIS OF INFECTIOUS DISEASES. This course covers all aspects of infectious diseases, including etiology, epidemiology, and characteristics of disease-causing pathogens, host-pathogen interactions, symptoms and prognosis of specified infectious diseases. Course is only open to pre-pharmacy and Early Entry students enrolled in the School of Pharmacy. Prerequisite: BISC 162, 163. (4).

329. HERBAL SUPPLEMENTS AND ALTERNATIVE THERAPY. This course focuses on the use of plants and other products as herbal dietary supplements. It covers all the herbs used today including all aspects of regulation, activities, purity, and drug-herb interactions. It also covers alternative therapies used in place of and/or with conventional medicine. Prerequisite: PY1 Classification. (2).

422. NATURAL PRODUCT-DERIVED PHARMACEUTICALS. This course covers all aspects of natural products used as pharmaceuticals, including both plant-derived and microbial-derived (antibiotics). Prerequisite: PY2 Classification. (4).

425. POISONOUS PLANTS AND MUSHROOMS. This course is designed to give students a basic knowledge of harmful plants and mushrooms with emphasis on their identification, toxicity, symptoms of intoxication, first aid and poisoning treatments. Pre-requisite: PY2 Classification. (1).

427. DRUG DISCOVERY I. This course focuses on the techniques included in the characterization of drug substance from natural sources (plant, animal, and microorganisms). (3).

428. DRUG DISCOVERY II. This course focuses on laboratory techniques in drug discovery research. In particular, laboratory rotations through plant, marine, and microbe techniques will be emphasized. Prerequisite: PHCG 427. (3).

541, 542. PROBLEMS IN PHARMACOGNOSY. Individual investigation of problems of current interest in pharmacognosy. Prerequisites: minimum GPA of 2.5 on all professional pharmacy courses attempted and consent of instructor. (1-4, 1-4).

Department of Pharmacology- Phcl
NOTE: A grade of at least C is required on all prerequisite courses.

202. ENVIRONMENTAL HEALTH PERSPECTIVES. A survey course emphasizing environmental health issues such as overpopulation, resource management, environmental degradation, and pollution. The course is designed for nonpharmacy majors. Prerequisite: BISC 102, 104, or their equivalents. (3).

340. ANIMAL CELLS: TESTING NEW DRUGS. The aim of this course is to provide an introduction to the multiple biochemical and molecular approaches that explain how cell reacts to foreign organic agents without introducing the names of too many specific drugs. It is intended to develop the subject from the point of view of pharmacologists who are working at the molecular level and trying to understand the problems of drug-cell interactions. Parts of the discussion will be a repetition for some students. However, lectures are concentrated on key theories and novel approaches that have been on a variety of contemporary interdisciplinary fields, which defines pharmacology. Prerequisite: PY1 classification. (1).

341. HUMAN PATHOPHYSIOLOGY I. The students will understand the consequences of disease on normal physiology. An in-depth study of the pathophysiological condition will equip the students to assess multi-organ system dysfunction. These basic understandings will enable the students to progress through the curriculum with a knowledge and analytical base necessary to excel during their practice experiences. Prerequisite: PY1 classification. (3).

342. HUMAN PATHOPHYSIOLOGY II. The students will understand the consequences of disease on normal physiology. An in-depth study of the pathophysiological condition will equip the students to assess multi-organ system dysfunction. These basic understandings will enable the students to progress through the curriculum with a knowledge and analytical base necessary to excel during their practice experiences. Prerequisite: PHCL 341. (3).

343. BIOCHEMICAL FOUNDATIONS OF THERAPEUTICS. A detailed introduction to the chemistry of life processes, structure-activity relationships for biological molecules, and metabolism and its regulation. Prerequisite: Chem 222, Chem 226; Course is only open to pre-professional and Early Entry students enrolled in the School of Pharmacy. (3).

344. PHYSIOLOGICAL FOUNDATION OF THERAPEUTICS. Systemic physiology with a study of organ function and an emphasis on human physiology. The structure and function of the major body systems will be explored including the integumentary, muscular, skeletal, cardiovascular, lymphatic, respiratory, digestive, nervous, endocrine, urinary, reproductive, and body fluids and electrolytes.
Aspects of cell structure, organization and physiology and molecular aspects of cell biology will be covered. The students will gain an understanding of normal physiology of the body at the cell and organ level. These basic understandings combined with critical thinking will enable the students to progress through the curriculum with a knowledge and analytical base necessary for understanding pathogenesis, pharmacological treatments and clinical outcomes. Ultimately, the factual material and the critical clinical thinking ability acquired in the case studies and laboratory sessions will provide the basis and rational for selective pharmacotherapy and the understanding of its use in varying disease states. Prerequisite: Bisc 162, 163. Course is only open to pre-professional and Early Entry students enrolled in the School of Pharmacy. (4).

345. FUNDAMENTALS OF CANCER. Discussions of fundamental, underlying biological changes from normal physiology to cancer. Will include discussions of the cell cycle, cancer genetics, regulation of expression, carcinogenesis, metastasis and more to encompass an understanding of all concerns when considering treatment options in subsequent courses. Prerequisite: PY1 or PY2 Classification. (2).

346. IMMUNOLOGICAL BASIS FOR THERAPEUTICS. This course will provide students with an overview of how immune system works and its involvement in health and disease. Course is only open to pre-pharmacy and Early Entry students enrolled in the School of Pharmacy. (3).

347. INTRODUCTION TO ENVIRONMENTAL TOXICOLOGY. Introduction to chemical nature and reactions of toxic substances; their origins and uses; and the aspects of exposure, transformation, and elimination. The course is designed for biology, chemistry, and pharmacy majors. Prerequisites: BISC 222, 226; and consent of instructor. (3).

348. PRINCIPLES OF LIFE SCIENCE RESEARCH. This course addresses a broad spectrum of activities associated with the conduct of life science research. Students should gain a thorough understanding of the requirements, expectations and responsibilities of life science researchers. Prerequisite: PY1 or PY2 classification. (1).

349. SPECIALIZED TOPICS IN ENVIRONMENTAL HEALTH. This course will consists of focused, in-depth discussion of timely issues related to environmental health. Students will be informed of the issues through reading scientific literature and will be expected to propose solutions through discussion and writing assignments. Topics will be dictated by current events but could include, for example, environmental lead exposure and toxicity, pharmaceuticals in the environment, consequences of climate change, contamination of the food supply, e-waste, etc. Pre-requisite: PY1 or PY2 Classification. (1).

350. INTRODUCTION TO TOXICOLOGY. Biological and chemical factors which influence toxicity. Review of various classes of compounds of industrial, agricultural, therapeutic, and economic importance. Emphasis on the forensic implications of poisoning by these agents. Prerequisites: CHEM 222, 226; and consent of instructor. (3).

400. PHYSIOLOGIC CASE STUDY FOR THERAPEUTICS. The course focuses on problems based physiologic study of organ function and an emphasis on human physiology. The structure and function of the major body systems will be explored including the musculoskeletal, cardiovascular, respiratory, renal, nervous, endocrine, and body fluids and electrolytes. Prerequisite: PY2 classification. (1).

411. PHARMACOLOGY: NOVEL DRUGS IN CLINICAL TRIALS. An in-depth discussion of topics of current importance in pharmacology of commonly occurring diseases is emphasized. Students learn about medicines currently in clinical trials and therapies in development. Prerequisite: PY2 classification. (2).

412. CLINICAL TOXICOLOGY. This course is designed to apply basic pharmacological and toxicological principles to the management of poisoned patients. Several of the drugs commonly encountered in accidental or intentional poisoning are to be covered. The student should be able to recognize signs and symptoms of poisoning, characterize the type and extent of intoxication, and develop a specific management plan. Prerequisite: PY2 classification. (2).

413. BASIC AND CLINICAL PHARMACOLOGY I. Basic principles of pharmacodynamics; pharmacology of drugs acting on the autonomic nervous system; and other drug classes acting on autonomic-innervated organs. Prerequisite: PY1 Classification. (4).

414. BASIC AND CLINICAL PHARMACOLOGY II. Continuation of 413: central nervous system drugs; hematopoietic, immunosuppressant, antineoplastic, and antiallergic drugs; basics of environmental and clinical toxicology. Prerequisite: PHCL 443. (4).

415. NUTRITIONAL PHARMACOLOGY. Discussions of how drugs, nutrients, and disease states interact and affect one another, how nutritional supplements influence drug therapy, nutritional status, and disease processes. Prerequisite: PY2 classification. (1).

Department of Pharmacy Administration- Phad

NOTE: A grade of at least C is required on all prerequisite courses.

390. PROFESSIONAL COMMUNICATIONS IN PHARMACY. Develop an understanding of the nature of communication and the types of communication skills necessary to deliver optimal pharmaceutical services. Prerequisite: PY1 Classification. (2).

391. SOCIAL AND BEHAVIORAL ASPECTS OF PHARMACY PRACTICE. The purpose of this course is to provide the necessary background to understand the complexity of human and social issues that exert a powerful influence on the pharmacy profession. Special emphasis is given to the interdependent roles of the patient, the pharmacist, and the physician in illness and health care. Pre-requisite: PY1 Classification. (3).

392. INTRO TO PHARMACY AND HEALTH CARE SYSTEM. An examination of the structure and organization of pharmacy and the factors involved in the delivery and financing of health care in public and private sectors. (3).

393. LEARNING AND TEACHING: A PROFESSIONAL ELECTIVE. The goal of this course is to provide pharmacy students with a forum to exchange ideas, refine specific skills, and enhance their knowledge of concepts related to teaching and learning. These topics are
relevant to a student’s own personal journey as a lifelong learner, as well as to current and future teaching experiences that individuals may have, either as a pharmacist (patient education) or pharmacy educator (preceptor or faculty member). Perquisite: PY1 or PY2 classification. (1).

394. INTERMEDIATE BIOSTATISTICS FOR PHARMACISTS. This course is designed to provide pharmacy students with an overview of frequently used statistical procedures in the biomedical literature. This course is designed to expand on the principles of biostatistics covered in PRCT 350. The goal is to enhance both the breadth and depth of coverage, while also introducing the use of statistical software packages. Pre-requisite: PRCT 350. (2).

396. MARKETING FOR COMMUNITY PHARMACISTS. This course is an elective focused on exploring the factors affecting use and acceptance of, delivery of, promotion of and pricing of innovative pharmacy products in the community pharmacy setting. The ability of pharmacists to develop innovative services and market them to patients, health care providers, payers, government agencies, and others is crucial to the advancement of pharmacy. Students will be introduced to marketing principles and how they are applied in community pharmacy. Pre-requisite: PY1 or PY2 Classification. (1).

397. SURVEY OF MEDICATION NONADHERENCE. The purpose of this course is to examine patient nonadherence in its many forms in the health care system and to discover best practices that help resolve nonadherence behaviors to ensure optimal therapeutic outcomes. Prerequisite: PY1 or PY2 Classification. (1-2).

491. PHARMACY LAW. Pharmacists’ common-law and statutory obligations under the American constitutional system of dual national and state authority. Prerequisite: PY2 Classification. (2).

492. CURRENT ISSUES IN HEALTH CARE. This elective course is designed to provide pharmacy students an opportunity to broaden their knowledge of current health care issues. Prerequisite: PY2 classification. (1).

493. PHARMACY MANAGEMENT AND BUSINESS METHODS. Pharmacy Management and Business Methods takes foundational management theories and concepts and translates them to the specific challenges faced by today’s pharmacy managers, regardless of the setting. This course will take an integrated didactic and active learning approach to tackle management issues faced by pharmacists such as: Personal resource management, personnel management, general operations management, special management skills, implementation of value-added services and management applications in various practice settings. Pre-requisite: PY2 Classification. (3).

494. PHARMACOECONOMICS, PHARMACOEPIDEMIOLOGY, AND MEDICATION SAFETY. This course is designed to provide students with a comprehensive review of the evaluation of pharmaceutical outcomes. Drug effects issues on patient populations will be examined. Mechanisms and approaches in improving medication in pharmacy practice will be explored.

To meet the general purpose of this course, the course is divided into three separate, but related, modules:

• Pharmacoeconomics: this module will cover basic concepts and techniques in pharmacoeconomics including cost and costing, outcomes assessment and health-related quality of life, cost-of-illness, cost-minimization, cost-benefit, cost-effectiveness, cost-utility analysis and decision analysis using pharmacoeconomic modeling techniques.

• Pharmacoepidemiology: this module will focus on the principles of epidemiology applied to the study of medication use, study designs and data sources in pharmacoepidemiology, and pharmacovigilance; medication adherence and persistence will also be covered.

• Medication Safety: this module is intended to explore the concepts of health care quality and medication safety and the mechanisms to prevent and reduce medication errors in pharmacy practice. Pre-requisite: PY2 Classification. (3).

495. TECHNIQUES OF PHARMACEUTICAL SALES. To introduce various strategies and tactics available to those who represent the pharmaceutical industry to therapy decision-makers. (2).

496. PRINCIPLES OF PHARMACEUTICAL MARKETING. The nature and scope of the pharmaceutical industry, its marketing practices, and environment. Prerequisites: minimum grade of “C” in MKTP 351 or PHAD 391. (3).

497. PERSONAL FINANCE. This course will be a continuation of the basic personal finance concepts learned in PHAD 493. Hands-on experience and projects throughout the semester will give students the tools to evaluate how their money is currently being spent, set short-term and long-term financial goals, reduce their tax liability, adequately insure themselves and their assets, make sound investment choices, prepare for retirement, navigate the stock market, evaluate mutual funds, strategize for major purchases, evaluate and select a financial planner, manage money during major life changes, and prevent theft of their identity. Financial planners will also speak with students in some of these content areas. Pre-requisite: PY2 Classification. (1).

541, 542. PROBLEMS IN PHARMACY ADMINISTRATION. Investigation of individual problems. Prerequisites: minimum GPA of 2.50 on all professional pharmacy courses attempted and consent of instructor. (1-6, 1-6).

Department of Pharmacy Practice (PRCT)

NOTE: A grade of at least C is required on all prerequisite courses. Courses preceded by an asterisk (*) can only be taken after successful completion of PRCT 555, 556, 558, 559, 561, 562, 564, and 565.

* Course registration is limited to PY1 or PY2 students

^350. INFORMATION SKILLS IN PHARMACY PRACTICE. This course is designed to introduce students to drug information resources as well as provide the student with an understanding of principles of biostatistics, epidemiology, and research design with the underlying goal being the acquisition of skills used by pharmacists to seek, appraise, and apply knowledge from the biomedical literature to
improve pharmacy practice and patient care. The course will consist primarily of assigned readings, quizzes, interactive lectures, and group projects. (3).

^353. PHARMACY PRACTICE SKILLS LABORATORY I. This course is the first of a four course series (to be completed in the first four semesters in which a student is enrolled in the professional degree program) which provides introduction to and continuous development of pharmacy practice skills and behaviors, emphasizing active learning for integration and application of curricular content and incremental development of professional and general abilities. Prerequisite: Course is only available to first year students in the professional degree program. (2).

^354. PHARMACY PRACTICE SKILLS LABORATORY II. This course is the second of a four-course series (to be completed in the first four semesters in which a student is enrolled in the professional degree program), which provides introduction to and continuous development of pharmacy practice skills and behaviors, emphasizing active learning for integration and application of curricular content and incremental development of professional and general abilities. (2)

^357. ADVOCACY AND LEADERSHIP IN PHARMACY. This elective course will offer advocacy and leadership development for PY1 and PY2 students. The course will be especially appropriate for officers and members of pharmacy student organizations who are motivated to become leaders in the profession. Students will relate leadership to current health care issues and will have opportunities to explore the advocacy processes. (2.)

^358. GERIATRICS. This elective course is designed to provide the student with the fundamentals of geriatric pharmacy practice. (1).

^359. TOBACCO CESSATION EDUCATION. This elective course will provide students with the knowledge and skills necessary to provide comprehensive tobacco cessation counseling to patients with nicotine dependence. (1).

^360. PERSONAL TIME MANAGEMENT FOR PHARMACY STUDENTS. An elective course that explores several personal time management theories and assists the pharmacy student in developing a system that works for them. (1).

^361. VACCINE-PREVENTABLE ILLNESSES/TRAVEL MEDICINE. This course introduces common illnesses and the vaccines to prevent them. Signs and symptoms of illness are covered as well as proper ways to prevent the spread of illness. Vaccine indications, contraindications, adverse effects, and other associated information are also introduced. Additionally, the course addresses vaccines and other medication therapy which is specifically related to international travel, and it provides students with the opportunity to develop comprehensive vaccine plans for example, patient scenarios. Pre-requisite: PY1 or PY2 Classification. (1).

362. VETERINARY PHARMACY. This course offers the pharmacy student an introduction to veterinary pharmacy. Unique anatomic, physiologic, and metabolic limitations that affect drug distribution in common veterinary species are described. Species variations in pharmacodynamic activity or pharmacokinetic behavior that contribute to differences in drug dosage requirements and adverse drug events are discussed, and attention is given to unusual sensitivity of particular animal species (or breeds) to the effects produced by certain drugs. Differences in a drug’s behavior in humans versus veterinary species are stressed. Common disease states and pharmacologic treatment strategies are covered, including veterinary and human approved products along with appropriate options for compounded medications. Basic and clinical aspects of the more common toxicities that affect domestic animals are considered. The legal aspects of dispensing and compounded prescription drugs for companion animals and food-producing animals are discussed. Upon completion of this course the pharmacy student will be able to demonstrate sufficient knowledge and training to accurately interpret veterinary prescriptions, offer drug information consultations to veterinarians, council pet owners regarding appropriate drug administration and potential adverse drug events, and legally and ethically compound and/or dispense medications for non-human patients. Prerequisite: PY1 or PY2 Classification. (2).

375. INTRODUCTION TO COMMUNITY PHARMACY PRACTICE I. An introduction to medication dispensary process and related patient care activities in a community pharmacy practice setting. (1). (2 grade).

376. INTRODUCTION TO INSTITUTIONAL PHARMACY PRACTICE I. An introduction to the medication dispensary process and related patient care activities in an institutional practice site. (1). (2 grade).

450. PHARMACY PRACTICE I. To provide the student with fundamentals of practice research, diagnostic laboratory tests, nursing home, and hospital pharmacy practice. (2).

451. PHARMACY PRACTICE II. To provide the student with essential skills for ambulatory pharmacy practice, pharmaceutical care, and patient self-care. (2).

455. PRACTICE SKILLS LABORATORY III. This skills laboratory course provides continuous development of practice skills and behaviors introduced in the first professional year curriculum. The course emphasizes active learning for integration and application of curricular content and incremental development of professional and general abilities. (2).

456. PRACTICE SKILLS LABORATORY IV. This skills laboratory course provides continuous development of practice skills and behaviors introduced in the first professional year curriculum. The course emphasizes active learning for integration and application of curricular content and incremental development of professional and general abilities. (2).

477. INSTITUTIONAL PHARMACY PRACTICE II. An introduction (one-week, 40 contact hours) to patient care and related activities in an institutional pharmacy practice setting. Prerequisite: PRCT 375, 376. (1).

478. COMMUNITY PHARMACY PRACTICE II. An introduction to patient care and related activities in a community pharmacy practice setting. Prerequisite: PRCT 375, 376, 477. (1).

541, 542. PROBLEMS IN CLINICAL PHARMACY. Individual investigation of problems of current clinical interest in pharmacy. (1-3, 1-3).

543. COMMUNITY PHARMACY PRACTICE III. An introduction (10 weeks, 4 contact hours/week) to patient care and related activities in a community pharmacy practice setting with additional emphasis in ambulatory care practice experiences. Prerequisite: Pryct 477, 478. (1).
544. INSTITUTIONAL PHARMACY PRACTICE III. An introduction (10 weeks, 4-hour contact hours/week) to patient care and related activities in an institutional pharmacy practice setting with additional emphasis in inpatient specialty pharmacy practice experiences. Prerequisite: Prct 477, 478. (1).

545. SPECIALTY PHARMACY PRACTICE ELECTIVE. An introduction (one week, 40 contact hours) to patient care and related activities in a specialty pharmacy practice experience. Prerequisite: Prct 477, Prct 478. (1).

552. PREVENTIVE MEDICINE AND PUBLIC HEALTH. A multidisciplinary course which will teach the students about concepts of preventive medicine, public health, and epidemiology. Pharmacy students will take the class with medical students. Content will be provided jointly by faculty from the medical school and the pharmacy school. (2).

*553. ADVANCED PRACTICE EXPERIENCE (community). Five-week professional experience program offered at approved community pharmacies. Prerequisite: Pharmacy PY4. (S). (Z grade).

*554. ADVANCED PRACTICE EXPERIENCE (institutional). Five-week professional experience program offered at approved hospital pharmacies. Prerequisite: Pharmacy PY4. (S). (Z grade).

555. PHARMACEUTICAL CARE I: KNOWLEDGE AND COMPREHENSION. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of the core knowledge base required of a pharmacist. Corequisites: PRCT 555, 557. (2).

556. PHARMACEUTICAL CARE I: PROBLEM-SOLVING. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of problem-solving skills. Corequisites: PRCT 555, 557. (2).

557. PHARMACEUTICAL CARE I: GROUP. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of independent learning and communication skills. Corequisites: PRCT 555, 556. (3).

558. PHARMACEUTICAL CARE II: KNOWLEDGE AND COMPREHENSION. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of the core knowledge base required of a pharmacist. Corequisites: PRCT 559, 560. (2).

559. PHARMACEUTICAL CARE II: PROBLEM-SOLVING. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of problem-solving skills. Corequisites: PRCT 558, 560. (2).

560. PHARMACEUTICAL CARE II: GROUP. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of independent learning and communication skills. Corequisites: PRCT 558, 559. (3).

561. PHARMACEUTICAL CARE III: KNOWLEDGE AND COMPREHENSION. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of the core knowledge base required of a pharmacist. Corequisites: PRCT 562, 563. (2).

562. PHARMACEUTICAL CARE III: PROBLEM-SOLVING. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of problem-solving skills. Corequisites: PRCT 561, 563. (2).

563. PHARMACEUTICAL CARE III: GROUP. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of independent learning and communication skills. Corequisites: PRCT 561, 562. (3).

564 PHARMACEUTICAL CARE IV: KNOWLEDGE AND COMPREHENSION. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of the core knowledge base required of a pharmacist. Corequisites: PRCT 565, 569. (2).

565. PHARMACEUTICAL CARE IV: PROBLEM-SOLVING. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of problem-solving skills. Corequisites: PRCT 564, 569. (2).

566. SEMINAR SKILLS DEVELOPMENT FOR HEALTH PROFESSIONALS. Course on developing the basic skills needed for effective presentation of pharmacy-oriented material. Prerequisite: B.S. in Pharmacy or B.S. in Pharmaceutical Sciences (practice track). (1). (Z grade).

567. SEMINAR SKILLS DEVELOPMENT FOR HEALTH PROFESSIONALS II. Continuation of PRCT 566. Course on developing the basic skills needed for the effective presentation of pharmacy-oriented material. Prerequisite: PRCT 566. (1). (Z grade).

569. PHARMACEUTICAL CARE IV: GROUP. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of independent learning and communication skills. Corequisites: PRCT 564, 565. (3).

577. PRACTICE SKILLS LABORATORY V. The purpose of this course is to offer students an expansion on abilities practiced in previous Practice Skills Laboratories at a level commensurate with the PY3 year in the University of Mississippi School of Pharmacy. Completion of Practice Skills Laboratory V will assist in the achievement of each of the 11 core domain competencies required by the ACPE Accreditation Standards and Guidelines Appendix D prior to commencement of fourth year Advanced Pharmacy Practice Experiences. This course aims to fulfill domain competencies in a hands-on, practical manner, with an emphasis on skills needed in situations...
students are likely to encounter in their APPEs. Each activity addresses two or more core domains, with a focus on augmenting clinical knowledge with practical skills needed in various pharmacy settings. Prerequisite: Pharmacy PY3. (2).

*586. ADULT MEDICINE ADVANCED PRACTICE EXPERIENCE. A required course designed to provide in-depth experience and clinical competence in dealing with acutely ill patients in a hospital environment with emphasis on rational therapeutics. Prerequisite: Pharmacy PY4. (5).

*587. AMBULATORY CARE ADVANCED PRACTICE EXPERIENCE. A required rotation in which students gain clinical experience and competence with ambulatory patients by participating as a drug consultant and primary care provider for patients in an outpatient environment. Prerequisite: Pharmacy PY4. (5).

*591, 592, 593. ELECTIVE ADVANCED PRACTICE EXPERIENCE. Five-week blocks of practical experience in specialty practice areas under the coordination of a faculty preceptor. Course may be taken three times for elective credit in specialty area of choice. Prerequisite: Pharmacy PY4. (5).

*AMBC 591. AMBULATORY CARE ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in ambulatory care patients. Prerequisite or corequisite: PRCT 587, Pharmacy PY4. (5).

*ASSN 591. STATE ASSOCIATION MANAGEMENT ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a nontraditional setting of association management. Prerequisite: Pharmacy PY4. (5).

*BARI 591. BARIATRICS PRACTICE EXPERIENCE ELECTIVE. An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a patient care setting of bariatrics. Prerequisite: Pharmacy PY4. (5).

*BIOT 591. BIOTECH PHARMACY SERVICES ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a nontraditional setting in biotechnology. Prerequisite: Pharmacy PY4. (5).

*CARD 591. CARDIOLOGY ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in cardiology patients. Prerequisite: Pharmacy PY4. (5).

*COMM 591. COMMUNITY PHARMACY ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in patients in a community-practice setting. Prerequisite or corequisite: PRCT 553, Pharmacy PY4. (5).

*CRIT 591. CRITICAL CARE ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in critical care patients. Prerequisite: Pharmacy PY4. (5).

*DINF 591. DRUG INFORMATION ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure emphasizing the utilization of drug information resources, both electronic and non electronic, in providing optimal patient care. Prerequisite: Pharmacy PY4. (5).

*EMER 591. EMERGENCY MEDICINE ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents in the emergency care setting. Prerequisite: Pharmacy PY4. (5)

*GERA 591. GERIATRICS ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in geriatric patients. Prerequisite: Pharmacy PY4. (5).

*HOME 591. HOME INFUSION ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a non-direct patient care setting of home infusion. Prerequisite: Pharmacy PY4. (5).

*INAD 591. INSTITUTIONAL ADMINISTRATION ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure to institutional administration. Prerequisite: Pharmacy PY4. (5).

*INDY 591. PHARMACEUTICAL INDUSTRY ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure emphasizing the role and functions of the pharmaceutical industry in providing health care professionals medication information. Prerequisite: Pharmacy PY4. (5).

*INFD 591. INFECTIOUS DISEASES ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in infectious disease patients. Prerequisite: Pharmacy PY4. (5).

*INOP 591. INSTITUTIONAL OU-PATIENT PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a patient care setting of institutional outpatient management. Prerequisite: Pharmacy PY4. (5).

*MANC 591. MANAGED CARE ADVANCED PRACTICE EXPERIENCE. An experiential course consisting of a full-time five-week exposure emphasizing the role of managed healthcare delivery systems, the roles and responsibilities of pharmacy benefits management companies, and basic business and economic concepts. Prerequisite: Pharmacy PY4. (5).

*MGMT 591. PHARMACY MANAGEMENT ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a nontraditional setting of association management. Prerequisite: Pharmacy PY4. (5).

*MEDC 591. MEDICINE ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in medicine patients. Prerequisite or corequisite: PRCT 586, Pharmacy PY4. (5).

*NEON 591. NEONATOLOGY ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a patient care setting of neonatology. Prerequisite: Pharmacy PY4. (5).
**NEUR 591. NEUROLOGY ADVANCED PRACTICE EXPERIENCE.** An experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in neurology patients. Prerequisite: Pharmacy PY4. (5).

**NUCL 591. NUTRITION ADVANCED PRACTICE EXPERIENCE.** An experiential course consisting of a full-time five-week exposure to pharmacy practice in a nontraditional setting of nuclear medicine. Prerequisite: Pharmacy PY4. (5).

**NUTR 591. NUTRITION ADVANCED PRACTICE EXPERIENCE.** An experiential course consisting of a full-time five-week exposure emphasizing the rational use of nutritional support in patient care. Prerequisite: Pharmacy PY4. (5).

**ONCL 591. ONCOLOGY ADVANCED PRACTICE EXPERIENCE.** An experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in oncology patients. Prerequisite: Pharmacy PY4. (5).

**PAIN 591. PAIN MANAGEMENT ADVANCED PHARMACY PRACTICE EXPERIENCE.** An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a patient care setting of pain management. Prerequisite: Pharmacy PY4. (5).

**PEDIA 591. PEDAGOGY ADVANCED PRACTICE EXPERIENCE.** A five-week (40 hours/week) elective experiential rotation in an academic setting that provides senior professional students with opportunities to explore issues in teaching and learning, and to participate directly in facilitating the learning of junior students in the pharmacy professional program. Registrants will be introduced to various teaching methods, including problem based learning and other practice based skills. Registrants will have opportunities to develop and improve teaching skills, with emphasis in evaluation and assessment. Prerequisite: Pharmacy PY4. (5).

**PICT 591. PEDIATRIC ADVANCED PRACTICE EXPERIENCE.** An experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in pediatric patients. Prerequisite: Pharmacy PY4. (5).

**PKIN 591. PHARMACOKINETICS ADVANCED PRACTICE EXPERIENCE.** An experiential course consisting of a full-time five-week exposure emphasizing the applied use of pharmacokinetic principles in providing optimal patient care. Prerequisite: Pharmacy PY4. (5).

**POIS 591. POISON CONTROL ADVANCED PRACTICE EXPERIENCE.** An experiential course consisting of a full-time five-week exposure emphasizing the role and function of a Poison Control Center. Prerequisite: Pharmacy PY4. Prerequisite: Pharmacy PY4. (5).

**PMTM 591. PHARMACY MEDICATION THERAPY MANAGEMENT PATIENT CARE ADVANCED PHARMACY PRACTICE EXPERIENCE.** An advanced practice experiential course designed to provide the student with practical experience in the profession of pharmacy. The course consists of interactions with both patients and healthcare workers across multiple disciplines. Prerequisite: PY4. (5).

**PSYC 591. PSYCHIATRY ADVANCED PRACTICE EXPERIENCE.** An experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in psychiatric patients. Prerequisite: Pharmacy PY4. (5).

**PUBH 591. PUBLIC HEALTH ADVANCED PHARMACY PRACTICE EXPERIENCE.** An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a nontraditional setting of public health. Prerequisite: Pharmacy PY4. (5).

**RSCH 591. RESEARCH ADVANCED PHARMACY PRACTICE EXPERIENCE.** An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a nontraditional setting of pharmacy-related research. Prerequisite: Pharmacy PY4. (5).

**SURG 591. SURGERY ADVANCED PRACTICE EXPERIENCE.** An experiential course consisting of a full-time five-week exposure emphasizing the rational use of therapeutic agents and disease management in surgery patients. Prerequisite: Pharmacy PY4. (5).

**TRAN 591. ORGAN TRANSPLANT ADVANCED PHARMACY PRACTICE EXPERIENCE.** An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a patient care setting of organ transplantation. Prerequisite: Pharmacy PY4. (5).

**VETM 591. VETERINARY MEDICINE ADVANCED PHARMACY PRACTICE EXPERIENCE.** An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a nontraditional setting of veterinary medicine. Prerequisite: Pharmacy PY4. (5).

**WOMH 591. WOMEN'S HEALTH ADVANCED PHARMACY PRACTICE EXPERIENCE.** An elective experiential course consisting of a full-time five-week exposure to pharmacy practice in a patient care setting of women's health. Prerequisite: Pharmacy PY4. (5).

**599. CLINICAL TRIAL SKILLS.** Course instructs how to assess and perform multiple types of clinical trials, and follow up with statistical analysis and publication of results. Prerequisite: PRCT 586. (3).

---

**PHARMACY PRACTICE DEPARTMENT FACULTY**

Leigh Ann Ross, Pharm.D., Associate Dean for Clinical Affairs, Chair
Kim G. Adcock, Pharm.D., Director, Faculty and Academic Affairs
Katie S. McClendon, Pharm.D., Interim Director, Student Affairs
T. Kristopher Harrell, Pharm.D., Director, Experiential Affairs
Meagan A. Brown, Pharm.D., Coordinator, Community Pharmacy Development
Joel R. Pittman, Pharm.D., Coordinator, Continuing Education
Gary D. Theilman, Pharm.D., Coordinator, Instructional Technology

*Professor Emeritus*

Thomas Brown, Pharm.D.  John D. Cleary, Pharm.D., BCPS  Barbara G. Wells, Pharm.D., BCPP
H. Joseph Byrd, Pharm.D.  Brian Crabtree, Pharm.D.

*Associate Professors*

Kim G. Adcock, Pharm.D.  Daniel Riche, Pharm.D., BCPS  Justin Sherman, Pharm.D.
T. Kristopher Harrell, Pharm.D., M.A.  Leigh Ann Ross, Pharm.D., BCPS  Gary D. Theilman, Pharm.D.

---

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
### Assistant Professors
- Katie Barber, Pharm.D.
- Allison Bell, Pharm.D.

### Clinical Associate Professors
- Phil Ayers, Pharm.D., BCNSP
- Lauren Bloodworth, Pharm.D., BCPS

### Clinical Assistant Professors
- Traci Allen, B.S.Ph.
- Jon Arnold, Pharm.D.
- Katherine Lutz Artman, Pharm.D.
- Krista Bachert, Pharm.D.
- Clara Bailey, Pharm.D.
- Anna Baldwin, Pharm.D.
- Sandy Bentley, Pharm.D.
- Donna Bingham, Pharm.D.
- John Bridges, D.Ph.
- Billy Brown, Pharm.D.
- Meagan Minor Brown, Pharm.D.
- Joyce Broyles, Pharm.D.
- Rachelle Carter, Pharm.D.
- Bridgett Chisolm, Pharm.D.
- Gichelle Clark, Pharm.D.
- Ronnie Crosswhite, Pharm.D.
- David Dabbas, Pharm.D.
- Courtney Davis, Pharm.D.
- Todd Dear, Pharm.D., BCPS
- Kimberly Deaton, Pharm.D.
- Tripp Dixon, Pharm.D.
- Alan Dukes, Pharm.D.
- Cindy Dumas, Pharm.D.
- Ben Eddlemon, Pharm.D.
- Robert Ellis, Pharm.D.
- Lori Eschete, Pharm.D.
- Pamela Evans, Pharm.D.
- Joshua Fleming, Pharm.D.

### Clinical Instructors
- Robert Aucoin, Pharm.D.
- Lindsay Adams, Pharm.D.
- Mark Allen, B.S.Ph.
- Jennifer Almon, Pharm.D.
- James Anderson, B.S.Ph.
- Alison Apple, M.S., D.Ph.
- Cheri Atwood, B.S.Ph.
- Bill Austin, B.S.Ph.
- Gary Austin, Pharm.D.
- Tricia Banks, Pharm.D.
- Leslie Bennett Barker, Pharm.D.
- Vishal Barot, Pharm.D.
- Shannon Barrett, Pharm.D.
- Todd Barrett, B.S.Ph.
- Adam Baskerville, Pharm.D.
- Molly Beaug, Pharm.D.
- Gary Berch, B.S.Ph.
- John Bienvenu, Pharm.D.
- Melanie Bishop, Pharm.D.
- Sallie Blair, Pharm.D.

### Clinical Associate Professors
- Laurie W. Fleming, Pharm.D., BCACP
- Jillian Foster, Pharm.D., MBA
- Julie George, Pharm.D., BCPS
- Kristie Gholson, Pharm.D.
- Jody Gibson, Pharm.D.
- David Gregory, Pharm.D., BCPS
- Lee Ann Griffin, Pharm.D.
- Bart Guarr, Pharm.D.
- Paula Hinson, D.Ph.
- Amy Holman, Pharm.D.
- Elizabeth Hood, Pharm.D.
- Anastasia Jenkins, Pharm.D.
- Jeong Jolee, Pharm.D.
- Lindsey Leppard, Pharm.D.
- Anne Marie Liles, Pharm.D.
- Paula Malinowski, Pharm.D.
- Scott Malinowski, Pharm.D., BCNSP
- Brad Marlar, Pharm.D.
- Kim McCrory, Pharm.D.
- Christopher McKenzie, Pharm.D.
- Deborah Minor, Pharm.D.
- Natalie Montgomery, Pharm.D.
- Cindy Noble, Pharm.D., M.P.H.
- Richard Ogletree, Pharm.D.
- Andy Ostrenga, Pharm.D.
- Jennifer Ostrenga, Pharm.D.
- Bobby Owens, Pharm.D.
- Stacie Penkova, Pharm.D.

### Clinical Instructors
- Silva Hanissian, Pharm.D., Ph.D.
- Cheryl Hankins, Pharm.D.
- Tony Hardee, B.S.Ph.
- Whitney Hanks, Pharm.D.
- Megan Hatch, Pharm.D.
- Karen Hays, Pharm.D.
- Donna Heidel, B.S.Ph.
- Ronald Henry, B.S.Ph.
- Lonnie Hicks, B.S.Ph.
- David Hudson, B.S.Ph.
- William Humphrey, B.S.Ph., M.B.A.
- April Hurdle, Pharm.D.
- Lydia Hutchison, Pharm.D.
- Warren Hutto, B.S.Ph.
- Charles Inman, B.S.Ph.
- Anna Jacobs, Pharm.D.
- Heather Jetton, Pharm.D.
- Todd Johnson, B.S.Ph.
- Jessica Johnston, Pharm.D.
- Dinah Jordan, Pharm.D.

### Clinical Associate Professors
- Kayla Stover, Pharm.D., BCPS
- Shirley Hogan, Pharm.D.
- Ann Butler Kemp, M.D.
- Katie McClendon, Pharm.D., BCPS
- Brendan Ross, M.D.
- Wes Pierce, Pharm.D.
- Jay Pitcock, Pharm.D., BCPS
- Joel R. Pittman, Pharm.D.
- Wes Pitts, Pharm.D.
- Krista Riche, Pharm.D.
- Bill Replogle, Ph.D.
- Rachel Robinson, Pharm.D.
- Peter Ross, Pharm.D.
- Cara Scott, Pharm.D.
- Claudia Smith, Pharm.D.
- Brad Somers, Pharm.D.
- Sammy Steele, Pharm.D.
- Linda Strong, B.S.Ph.
- Matthew Strum, Pharm.D., BCACP
- Amanda Summers, Pharm.D.
- Andrew Sweeney, Pharm.D.
- James Taylor, Pharm.D.
- Stephanie Tesseneer, Pharm.D.
- Michael Todaro, Pharm.D.
- Justin Usery, Pharm.D., BCPS
- Michael Warren, Pharm.D.
- Beth Wattigny, Pharm.D.
- Emily White, Pharm.D.
- Jennifer Wilburn, Pharm.D.
- Brian Wood, Pharm.D.
- Julia Woods, Pharm.D.
- Michael Worsham, D.Ph., M.H.A.
- Dereck Young, Pharm.D.
- Bill Mosby, B.S.Ph.
- Eddie Mullins, B.S.Ph.
- Sam Myers, Pharm.D.
- Josette Nelson, Pharm.D.
- Kristi Nesler, Pharm.D.
- Hoai Nguyen, Pharm.D.
- Susan Nichols, Pharm.D.
- Trinity Nichols, Pharm.D.
- Robert Northern, B.S.Ph., M.S.
- Eddie O’Bannon, B.S.Ph.
- Carrie Oliphant, Pharm.D.
- Kimsey O’Neal, B.S.Ph.
- Patrick Parish, Pharm.D.
- John Patridge, Pharm.D.
- Mark Pearson, Pharm.D.
- Steven Pearson, Pharm.D.
- Alania Pendavir, Pharm.D.
- Eric Pittman, Pharm.D.
- Jim Pittman, B.S.Ph.
- Kathleen Poole, Pharm.D.
<table>
<thead>
<tr>
<th>Charles Boggan, B.S.Ph.</th>
<th>Anees Kanorwala, Pharm.D.</th>
<th>Alex Quesenberry, Pharm.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donan Boggess, Pharm.D.</td>
<td>Carole Anne Kennedy, Pharm.D.</td>
<td>Larry Ramsey, B.S.Ph.</td>
</tr>
<tr>
<td>Mary Helen Bowen, B.S.Ph.</td>
<td>Dean Kidd, B.S.Ph.</td>
<td>David Ratcliff, B.S.Ph.</td>
</tr>
<tr>
<td>Kimberly Bradley, Pharm.D.</td>
<td>Stephanie Kile, Pharm.D.</td>
<td>Dennis Read, B.S.Ph.</td>
</tr>
<tr>
<td>Silvia Breakfield, B.S.</td>
<td>Lee Kimbriel, B.S.Ph.</td>
<td>Paul Read, Pharm.D.</td>
</tr>
<tr>
<td>Joy Brewer, B.S.Ph.</td>
<td>Angie Klepzig, B.S.Ph.</td>
<td>Robert Read, B.S.Ph.</td>
</tr>
<tr>
<td>Terrance Brown, Pharm.D.</td>
<td>Elizabeth Koestler, Pharm.D.</td>
<td>Anne Reaves, Pharm.D.</td>
</tr>
<tr>
<td>Robin Bryan, B.S.Ph.</td>
<td>Amy Krauss, Pharm.D.</td>
<td>Brandi Reed, Pharm.D.</td>
</tr>
<tr>
<td>Robert Burford III, B.S.Ph.</td>
<td>Jason Krohn, Pharm.D.</td>
<td>Katy Anna Richardson, Pharm.D.</td>
</tr>
<tr>
<td>Betty Burns, Pharm.D.</td>
<td>Larry Krohn, B.S.Ph.</td>
<td>Carmen Riley, Pharm.D.</td>
</tr>
<tr>
<td>Ginger Burton, Pharm.D.</td>
<td>Jene Landrum, B.S.Ph.</td>
<td>Dennis Roberts, B.S.Ph.</td>
</tr>
<tr>
<td>Gera Bynum, Pharm.D.</td>
<td>Todd Lee, B.S.Ph.</td>
<td>Walt Rogers, B.S.Ph.</td>
</tr>
<tr>
<td>Bridgette Callahan, Pharm.D.</td>
<td>Warren Lewis III, B.S.Ph.</td>
<td>Eddie Rutherford, B.S.Ph.</td>
</tr>
<tr>
<td>Randy Calvert, B.S.Ph.</td>
<td>Brent Lindley, Pharm.D., BCPS</td>
<td>Robert Salmon, B.S.Ph.</td>
</tr>
<tr>
<td>Brian Carter, Pharm.D.</td>
<td>Andrew Lohrisch, Pharm.D.</td>
<td>Craig Sartin, B.S.Ph.</td>
</tr>
<tr>
<td>Richard Cash, B.S.Ph.</td>
<td>David Lohrisch, Ph.D.</td>
<td>Joan Saunders, Pharm.D.</td>
</tr>
<tr>
<td>Andrew Clark, Pharm.D.</td>
<td>Bob Lomenick, B.S.Ph.</td>
<td>Christy Seely, B.S.Ph.</td>
</tr>
<tr>
<td>Linda Clark, Pharm.D., BCPS</td>
<td>Sharon Looney, Pharm.D.</td>
<td>Calvin Seyfarth, B.S.Ph.</td>
</tr>
<tr>
<td>Thomas Cobb, Pharm.D.</td>
<td>Gary Lott, Pharm.D.</td>
<td>Keith Shelly, Pharm.D.</td>
</tr>
<tr>
<td>Amy Cochran, B.S.Ph.</td>
<td>William Russell Love, B.S.Ph.</td>
<td>Joe Simmons, B.S.Ph.</td>
</tr>
<tr>
<td>Adrienne Compston, Pharm.D.</td>
<td>Annette Low, M.D.</td>
<td>Stephanie Sinquefield, Pharm.D.</td>
</tr>
<tr>
<td>Monica Cook, B.S.Ph.</td>
<td>Benjamn Luk, B.S.Ph., M.B.A.</td>
<td>Carla Smith, B.S.Ph.</td>
</tr>
<tr>
<td>B.J. Cougle, Pharm.D.</td>
<td>Laurel Ann Malley, B.S.Ph.</td>
<td>Louie Smith, B.S.Ph.</td>
</tr>
<tr>
<td>Beau Cox, Pharm.D.</td>
<td>Brittany Mallini, Pharm.D.</td>
<td>Nate Smith, Pharm.D.</td>
</tr>
<tr>
<td>William Todd Cox, Pharm.D.</td>
<td>Brad Marlar, Pharm.D.</td>
<td>Ocpivia Stafford, Pharm.D.</td>
</tr>
<tr>
<td>Kamonica Craig, Pharm.D.</td>
<td>Leah Mavromihalis, Pharm.D.</td>
<td>Andy Stepp, B.S.Ph.</td>
</tr>
<tr>
<td>Teresa Crum, Pharm.D.</td>
<td>Andrew Mays, Pharm.D.</td>
<td>Olivia Strain, Pharm.D.</td>
</tr>
<tr>
<td>Steven Dancer, B.S.Ph.</td>
<td>Mona McBride, Pharm.D.</td>
<td>Julie Strickland, Pharm.D.</td>
</tr>
<tr>
<td>J.R. Denton, B.S.Ph.</td>
<td>Laurin McCombs, Pharm.D.</td>
<td>Ricky Strickland, B.S.Ph.</td>
</tr>
<tr>
<td>Daniel DeOrnellas, Pharm.D.</td>
<td>Susan McCoy, B.S.Ph.</td>
<td>Denisa Strong, Pharm.D.</td>
</tr>
<tr>
<td>Grshima Desai, Pharm.D.</td>
<td>Teresa McDaniel, Pharm.D.</td>
<td>Jason Strong, Pharm.D.</td>
</tr>
<tr>
<td>Nate D’Mello, Pharm.D.</td>
<td>Jessica McDonald, Pharm.D.</td>
<td>Cheryl Sudduth, B.S.Ph.</td>
</tr>
<tr>
<td>Michael Dorman, B.S.Ph., M.S.</td>
<td>Laura McFarling, Pharm.D.</td>
<td>Valerie Sullivan, B.S.Ph.</td>
</tr>
<tr>
<td>Dawn Dozier, Pharm.D.</td>
<td>Rocky McGarity, B.S.Ph.</td>
<td>Jennifer Sullivan, B.S.Ph.</td>
</tr>
<tr>
<td>Christina Dukes, Pharm.D.</td>
<td>Nick McKee, Pharm.D.</td>
<td>Rebecca Crane, Pharm.D.</td>
</tr>
<tr>
<td>Ray Dukes, B.S.Ph.</td>
<td>Eric McKinley, Pharm.D.</td>
<td>Jake Tremmel, B.S.Ph.</td>
</tr>
<tr>
<td>Shaina Dunaway, Pharm.D.</td>
<td>John McKinney, B.S.Ph.</td>
<td>Binford Turnage, B.S.Ph.</td>
</tr>
<tr>
<td>David Dykes, B.S.Ph.</td>
<td>Chris McLaurin, Pharm.D.</td>
<td>Susan Turnage, B.S.Ph.</td>
</tr>
<tr>
<td>Reeca Elliott, B.S.Ph.</td>
<td>Lindy McManus, Pharm.D.</td>
<td>Jennifer Twilla, Pharm.D.</td>
</tr>
<tr>
<td>William Ernst, B.S.Ph.</td>
<td>Ross Merideth, Pharm.D.</td>
<td>Michelle Van Horn, B.S.Ph.</td>
</tr>
<tr>
<td>Bart Faulkner, Pharm.D.</td>
<td>Debbie Meyer, B.S.Ph.</td>
<td>Leslie Walker, Pharm.D.</td>
</tr>
<tr>
<td>Chris Finch, Pharm.D.</td>
<td>Darryl Meyers, Pharm.D.</td>
<td>Alex Webb,Pharm.D.</td>
</tr>
<tr>
<td>William Forbes, B.S.Ph.</td>
<td>Pam Miles, Pharm.D.</td>
<td>Timothy Wheat, Pharm.D.</td>
</tr>
<tr>
<td>Rodney Franklin, Pharm.D.</td>
<td>Amanda Dowling Milstead, Pharm.D.</td>
<td>James Whittington, Pharm.D.</td>
</tr>
<tr>
<td>Brandi Freeman, Pharm.D.</td>
<td>Michael Taz Milstead, Pharm.D.</td>
<td>Bob Wilbanks, B.S.Ph.</td>
</tr>
<tr>
<td>Gary Freeman, B.S.Ph.</td>
<td>Leigh Ann Montgomery, B.S.Ph.</td>
<td>Wilma Wilbanks, B.S.Ph.</td>
</tr>
<tr>
<td>James Gable, B.S.Ph.</td>
<td>Lori Moody, Pharm.D.</td>
<td>Todd Williamson, Pharm.D.</td>
</tr>
<tr>
<td>Kathleen Gafford, Pharm.D.</td>
<td>Holly Moore, Pharm.D.</td>
<td>Webb Willmott, B.S.Ph.</td>
</tr>
<tr>
<td>Lawrence Giles, B.S.Ph.</td>
<td>Neeley Moore, Pharm.D.</td>
<td>Desiree Wilson, B.S.Ph.</td>
</tr>
<tr>
<td>Jenni Grantham, Pharm.D.</td>
<td>Timothy Moore, Pharm.D.</td>
<td>Brandi Wise, Pharm.D.</td>
</tr>
<tr>
<td>Dee Guthrie, Pharm.D.</td>
<td>Jonethan Morris, Pharm.D.</td>
<td>Christina York, Pharm.D.</td>
</tr>
<tr>
<td>Keith Guy, B.S.Ph.</td>
<td>Carol Morreale, Pharm.D.</td>
<td>Courtney Young, Pharm.D.</td>
</tr>
</tbody>
</table>

**Professor – Pharmacognosy**
Mark Hamann, Ph.D.

**Professor – Pharmacy Administration**
Alicia Bouldin, Ph.D.