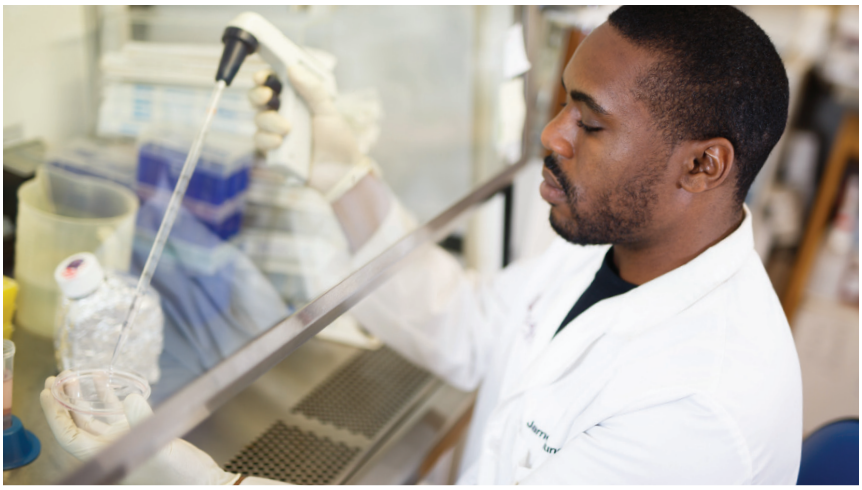
MEHARRY®
MEDICAL COLLEGE

ACADEMIC CATALOG 2019-2020

MEDICINE • DENTISTRY • RESEARCH • PUBLIC HEALTH



We teach health *caring*.

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Medical College

Academic Catalog

Notices

Meharry Medical College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award the following degrees and certificate: Master of Science, Master of Health Sciences, Master of Science in Public Health, Master of Science in Clinical Investigation, Doctor of Dental Surgery, Doctor of Medicine, Doctor of Philosophy, and Certificate in Health Policy. Contact SACSCOC at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 or access online at http://www.sacscoc.org to obtain information about Meharry Medical College's accreditation.

The School of Medicine is a member of the Association of American Medical Colleges (AAMC) and is accredited by the Liaison Committee of Medical Education (LCME) of the American Medical Association and the American Association of Medical Colleges.

The School of Dentistry is a member of the American Dental Education Association and is accredited by the Association's Commission on Dental Accreditation (CODA).

The Masters of Science in Public Health program, which is offered through the School of Graduate Studies and Research, is accredited by the Council on Education for Public Health (CEPH).

Meharry Medical College is an EOE/AA employer and does not discriminate on the basis of gender, age, race, religion, color, national origin, handicap, veteran, or immigrant status in its admissions, employment, and education programs or activities. Inquiries concerning the College's non-discrimination policies may be referred to the Office of the General Counsel, (615) 327-6102.

Disclaimer

The information in this catalog is current and accurate as of May 31, 2019. The College reserves the right to change prerequisites for admission, programs of study, courses, requirements for graduation, tuition, fees, policies, academic programs, lecturers, faculty, teaching staffs and other matters described in the Academic Catalog without prior notice. The Academic Catalog is posted on the College's website. A hard copy of the Academic Catalog may be printed from the College's website or obtained from the Office of Student Services.

Contact Information

College Address

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Nashville, TN 37208-3599 www.mmc.edu

Key Contacts

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Counseling Services (615) 327-6312	Office of the Registrar (615) 327-6223 recordsdepartment@mmc.edu
Department of Public Safety and Security Non-Emergency: (615) 327-6290 Emergency: (615) 327-6666	Office of Student Financial Aid (615) 327-6826 finaid@mmc.edu
Division of Student Affairs (615) 327-6223	Office of Student Life (615) 327-6792 studentservices@mmc.edu
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Human Resources (615) 327-6336 humanresources@mmc.edu	Pastoral Services (615) 327-6975
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Mailroom (615) 327-6278	School of Graduate Studies and Research (615) 327-6533
National Alumni Association, Inc. (615) 327-6266	School of Medicine (615) 327-6204
Office of Admissions and Recruitment (615) 327-6223 admissions@mmc.edu	Student and Employee Health Services (615) 327-5757
Office of Corporate Compliance (615) 327-6552 compliance@mmc.edu	Office of the Ombuds (615) 689-2904 Meharryombuds@gmail.com

Meharry Medical College Overview

Historical Sketch

Fifty years prior to its formal founding, a family of former slaves who lived in rural Kentucky befriended Samuel Meharry, a 16-year-old Ohio farmer. Touched by the kindness and generosity of the poor black family, Meharry promised to repay his debt of gratitude. Meharry and his brothers fulfilled that promise in 1876 by donating cash and property valued at $30,000 toward the establishment of the medical department of Central Tennessee College. The Medical Department was established to educate freed slaves as health care professionals. The Freedmen's Aid Society of the Methodist Episcopal Church and the John F. Slater Fund were also contributors to the new academic institution.

A dental department within the Meharry Medical Department of Central Tennessee College was founded in 1884. This expanded the medical department's mission as the first institution in the deep South to train African-American dentists. The Dental Department also was one of a few colleges in that era to promote the recruitment of women into the profession.

In 1915, Meharry separated from Walden University, the successor institution to Central Tennessee College, and received a charter from the State of Tennessee as an independent, non-profit academic institution. However, Meharry Medical College retained its affiliation with the Methodist Church. In 1916, bylaws for the governance of the College were adopted by an 18-member Board of Trustees. At the same time, the board appointed Dr. George W. Hubbard as the institution's first president.

The School of Graduate Studies and Research at Meharry Medical College began in 1938 as a series of short courses in the basic and clinical sciences. In 1947, a Master of Science Degree program was implemented as the first graduate degree, a Ph.D. program was established in 1972, and an M.D./Ph.D. program in 1982. The Master of Science in Public Health Program at Meharry Medical College was established in 1974 and graduated its first class of one student in 1978.

Over the years, Meharry has maintained its reputation as a leading educator of highly competent physicians, dentists, biomedical scientists, and public health practitioners. Today, Meharry Medical College is the largest private, historically black institution in the United States dedicated exclusively to educating health care professionals and biomedical scientists. The College serves approximately 800 students each year in its Schools of Medicine, Dentistry, and Graduate Studies and Research. It has remained independent and is accredited by the Southern Association of Colleges and Schools Commission on Colleges. The College continues its relationship with what is now the United Methodist Church and receives approval by the Church's University Senate and funding from its Black College Fund.

College Motto

Worship of God through service to Mankind.

Mission Statement

Meharry Medical College is an academic health sciences center that exists to improve the health and health care of minority and underserved communities by offering excellent education and training programs in the health sciences. True to its heritage, Meharry places special emphasis on providing opportunities for people of color, individuals from disadvantaged backgrounds, and others regardless of race or ethnicity; delivering high quality health services; and conducting research that fosters the elimination of health disparities.

2026 Vision Statement

The leadership at Meharry Medical College is committed to enhancing our national reputation and expanding our global reach as a quality-driven academic health center.

In 2026, Meharry Medical College will:

- Have an enrollment of more than 1,700, including 900 medical students, 500 dental students and 300 graduate students.
- Enroll students in:
    - Medicine
    - Dentistry
    - Biomedical science
    - Public health
    - Health policy
    - Health economics
    - Medical sociology
    - Data science
    - Physician assistant studies
    - Biomedical engineering
    - Bioinformatics
- Enroll students from across the U.S. and around the world who aspire to improve the lives of disadvantaged populations.
- Have a residential population of at least 1,200 on the "village campus."
- Be the national model for the delivery of inter-professional training for aspiring students and working professionals.
- Be a leader in data-driven, health equity-focused research in the following areas:
    - Cancer
    - Educational effectiveness and performance
    - Infectious disease
    - Mental and behavioral health/substance abuse
    - Obesity/cardiovascular disease
    - Oral health
    - Precision medicine/health
- Be the trailblazer in defining and implementing a new model for delivering value-based, patient-centered health care:
    - In Nashville
    - In rural Tennessee and the Mississippi Delta
    - In urban communities across the U.S.
- Be a national leader in clinical medicine in:
    - Cancer
    - Infectious disease
    - Mental and behavioral health/substance abuse
    - Obesity/cardiovascular disease
    - Oral health
- Have a network of regional, national and international partners to expand our clinical reach and provide additional educational opportunities for students and residents.
- Have a comprehensive multi-specialty group practice composed of technologically adept primary care and specialist physicians, dentists and oral surgeons, advance practice nurses, physician assistants, pharmacists, optometrists, nutritionists, behaviorists, and community health workers who provide value-based, patient-centered health care.
- Collaborate in the design and implementation of focused synergistic community networks that complement MMC's education, research and clinical missions and provide leverage for service engagement opportunities.

Core Values

Meharry Medical College is a community of scholars and learners committed to excellence.

These are our core values:

- Accountability with transparency
- Equity with inclusion
- Respect with collegiality
- Service with compassion
- Integrity without exception

Strategic Priorities (Goals)

The College has adopted five major initiatives that provide pathways toward fulfilling the mission and vision for the institution. These priorities drive institutional direction, investment of resources, and benchmarks for institutional effectiveness.

- Establish a performance culture based on excellence and accountability.
- Increase the production of diverse health care professionals and researchers.
- Develop distinctive and pioneering approaches to teaching, health care, research, public health and health policy to achieve health equity.
- Strategically expand reach.
- Build a transformed, sustainable institutional economy.

Campus Facilities

The Meharry Medical College campus is located in north Nashville. The campus is comprised of 18 buildings, an outdoor amphitheater, two parking garages, and several surface parking lots. Following are brief descriptions of campus buildings and facilities.

Biomedical Sciences Building

This building houses the Meharry-Vanderbilt Alliance, Internal Audit, and research laboratories for neuroscience and molecular neurobiology investigators.

Dorothy Brown Hall

This is a coed residential building. The building has 27 single suites and laundry facilities for its residents.

Comprehensive Health/Meharry Clinics

This is an administrative/clinical facility. This building houses the Meharry Medical Group, and outpatient clinics for pediatrics, family and preventive medicine, internal medicine obstetrics and gynecology, ophthalmology, dermatology, the Veterans Administration Clinics, and Student and Employee Health Services.

Lloyd C. Elam Mental Health Center and Ross Fitness Center

This building is named in honor of Dr. Lloyd C. Elam, the sixth president of Meharry Medical College. The primary services within this building include psychiatric and associated services for children, adolescents,

adults, and the elderly. In-patient services are located on the first floor and clinical services for outpatients are available on the second floor of the building. The northeast annex of this building houses the Ross Fitness Center, which includes basketball and racquetball courts, an aerobics exercise room, and a weight room.

George Hubbard Hospital (Old Hospital)

Built in 1931 and named in honor of the first president of Meharry Medical College, the George Hubbard Hospital is annexed by the Dental School on the north and the Comprehensive Health building on the south. This building is now a multi-use facility housing the departments of Pediatrics, Family Medicine, Internal Medicine, Obstetrics/Gynecology, Surgery, Psychiatry/Neurology, and some clinical research including Sickle Cell Research and the Nashville General Hospital Clinics. The east and west wings of the fifth floor house the Women's Health Research Center and the Center for AIDS Health Disparities Research labs and offices. The recently renovated front entrance and first floor offices currently house the Human Resources Office.

S.S. Kresge Learning Resources Center

The S.S. Kresge Learning Resources Center is named in honor of the founder of the Kresge Stores and the S.S. Kresge Foundation, which has supported educational initiatives since 1924. The "LRC," as it is known, houses the Meharry Medical College Library and administrative offices. The offices of the President, Executive Vice President, Senior Vice President for Finance, and the Meharry National Alumni Association are located on the upper floors of the building. The ground floor of the building houses the Pamela C. Williams, M.D., Medical Simulation and Clinical Skills Center. The Simulation Center includes 10 exam rooms, surgery, maternity, trauma, and ICU rooms, and Harvey SIM rooms for medical student training and testing.

Meharry Medical College Library (MMCL)

The Meharry Medical College Library occupies three floors of the S.S. Kresge Learning Resource Center. The Library provides online access to an extensive digital collection of electronic journals and e-books. The print collection includes hard copy journals and books. The MMC Library includes classrooms with networked computers to promote interactive teaching and learning, a computer laboratory for student and faculty use, and wireless access throughout all three floors for patrons who prefer to use their own computers. The Meharry Archives is housed in the library.

Hulda Lyttle Hall

Lyttle Hall was constructed in 1934 and is on the registry of the Tennessee Historical Society. This building originally housed the Meharry Medical College School of Nursing, which closed in 1962. A major restoration and renovation project was completed in 2013, and the building is currently occupied by Marketing and Communications, Office of the Journal of Health Care for the Poor and Underserved, Office of the Senior Vice President for Institutional Advancement and Office of the General Counsel, and Legal Affairs.

Morena Place

Morena Place is a campus housing complex that features one and two bedroom apartments, rooftop terraces, gathering spaces on each floor, and a fully equipped fitness center. The gated complex is adjacent to the Meharry campus and includes two four-story buildings.

Henry A. Moses Alumni Hall

Henry A. Moses Alumni Hall was the first new building project on Meharry's campus since 1978. The building opened May 10, 2012. The building consists of approximately 6,000 square feet and is used for seminars, receptions, meetings, and community gatherings. The meeting space will seat 300 to 500 people. This structure pays homage to Meharry's alumni for their dedication to the College's mission of serving the underserved and underrepresented,

Nashville General Hospital at Meharry

Nashville General Hospital at Meharry is the principle site for clinical training. The hospital represents a unique public-private alliance involving Meharry and the Metropolitan Nashville Hospital Authority. This facility was formerly George Russell Tower of Hubbard Hospital; it was renamed in 1994 when the government of Metropolitan Nashville and Davidson County moved its public hospital to Meharry's campus. Here, under the direction of Meharry faculty, students and residents encounter a broad range of medical-surgical experiences. The hospital is accredited by the Joint Commission on Accreditation for Healthcare Organizations (JCAHO). The hospital features in-patient units, a Breast Health Center, cardiac catheterization lab, emergency department, medical imaging, and internal medicine and surgery clinics.

OIT Building

The Office of Information and Technology (OIT) building is the hub of the campus computer network systems. In addition to the technical support center, there are classrooms for computer and network systems training.

Power Plant

The Power Plant Building is the operations center for the Campus Operations Department and the Campus Central Plant for major heating and air conditioning equipment.

Daniel T. Rolfe Student Center/Anna Cherrie Epps Center for Educational Development and Support (CEDS)

The Daniel T. Rolfe Student Center presently serves as the Anna Cherrie Epps Center for Educational Development and Support (CEDS). CEDS provides a variety of academic support services for students and professional development activities for faculty. CEDS provides meeting and study rooms and a large seminar room for student and faculty use.

Royal Towers

Royal Towers is a ten-story residential complex containing 156 one and two bedroom apartments for students and faculty.

School of Dentistry Building

Built in 1979, the School of Dentistry (SOD) Building contains administrative and faculty offices, classrooms, meeting rooms, student lounges, instructional laboratories, dental historical museum, and clinics where students and residents in dentistry provide care to the public. Dental students receive the majority of their didactic education and clinical training in this building. The building is home to the Iris B. and Wendell Cox Auditorium and the Delta Dental Simulation Lab. This computerized lab includes 40 simulation units, a faculty monitoring center, and offices. The Cox Auditorium and Delta Dental Simulation lab were made possible by significant gifts from the named donors.

Clay E. Simpson Jr. Building

The Clay E. Simpson Building houses the Meharry Center for Health Policy and Masters of Science in Public Health program. The Center for Health Policy was established in 2009. It is a collaborative effort with Vanderbilt University. The Center serves as a think tank for pressing health care issues of the day, increase the diversity of health policy scholars with Ph.Ds. who are formally trained in sociology and economics, and provide Meharry's students and faculty with new curricula, research, and academic offerings in health policy. The Center awards a certificate in health policy to Meharry and Vanderbilt students who complete the academic program. The Masters of Science in Public Health program occupies the second floor and basement of the Clay Simpson Building. The building houses faculty offices, study rooms for students, a computer lab, and classrooms for the MSPH program.

Cal Turner Family Center for Student Education

The newest buildings on Meharry's campus is named in honor of Cal Turner Jr., founder and former CEO of Dollar General Stores and a lead donor for the facility. The three story, 80,000 square feet building opened in 2014. It houses the Office of Student Services as well as classrooms, study spaces, a spirit store, an auditorium, executive board room, state-of-the-art kitchen, and 200-seat café-style dining area. The building serves as a hub for small conferences, social events, and educational seminars.

Harold D. West Basic Sciences Building

Named in honor of Meharry's first African American president, the West Basic Sciences Building houses classrooms and teaching laboratories for first- and second-year medical, dental, and graduate students. The building also houses the School's Academic Computing Center, bench research laboratories, core facilities and the animal care facility. The administrative offices of the School of Medicine and the School of Graduate Studies and Research are housed within this facility. The building features a four-story Atrium, which is the site of many campus events as well as informal gatherings of students between classes. It also houses a two-story auditorium with a seating capacity of approximately 500. Study rooms also are available for individual and small-group sessions.

Meharry Practice Sites

The Meharry Clinics adjoin Nashville General Hospital and provide primary and specialty patient care. Meharry also provides patient care at the Total Health Medical and Dental Clinic in Antioch, Tenn.

Affiliated Clinical Facilities

The College also has formal ties with other off-campus health care providers to expand the hands-on experiences available for students and residents. The professional contacts with patients at those sites enrich the quality of training while providing exemplary comprehensive health care. Among these are Vanderbilt University Medical Center, Middle Tennessee Mental Health Institute, Middle Tennessee Medical Center, Alvin C. York Veterans Administration Medical Center in Murfreesboro, Tennessee, and Blanchfield Army Community Hospital at Fort Campbell, Kentucky.

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LaMel Bandy-Neal, M.B.A., Sr. Vice President for Finance and Chief Financial Officer

Ivanetta Davis-Samuels, J.D., Sr. Vice President, General Counsel, and Corporate Secretary

Patrick Johnson, Sr. Vice President for Institutional Advancement

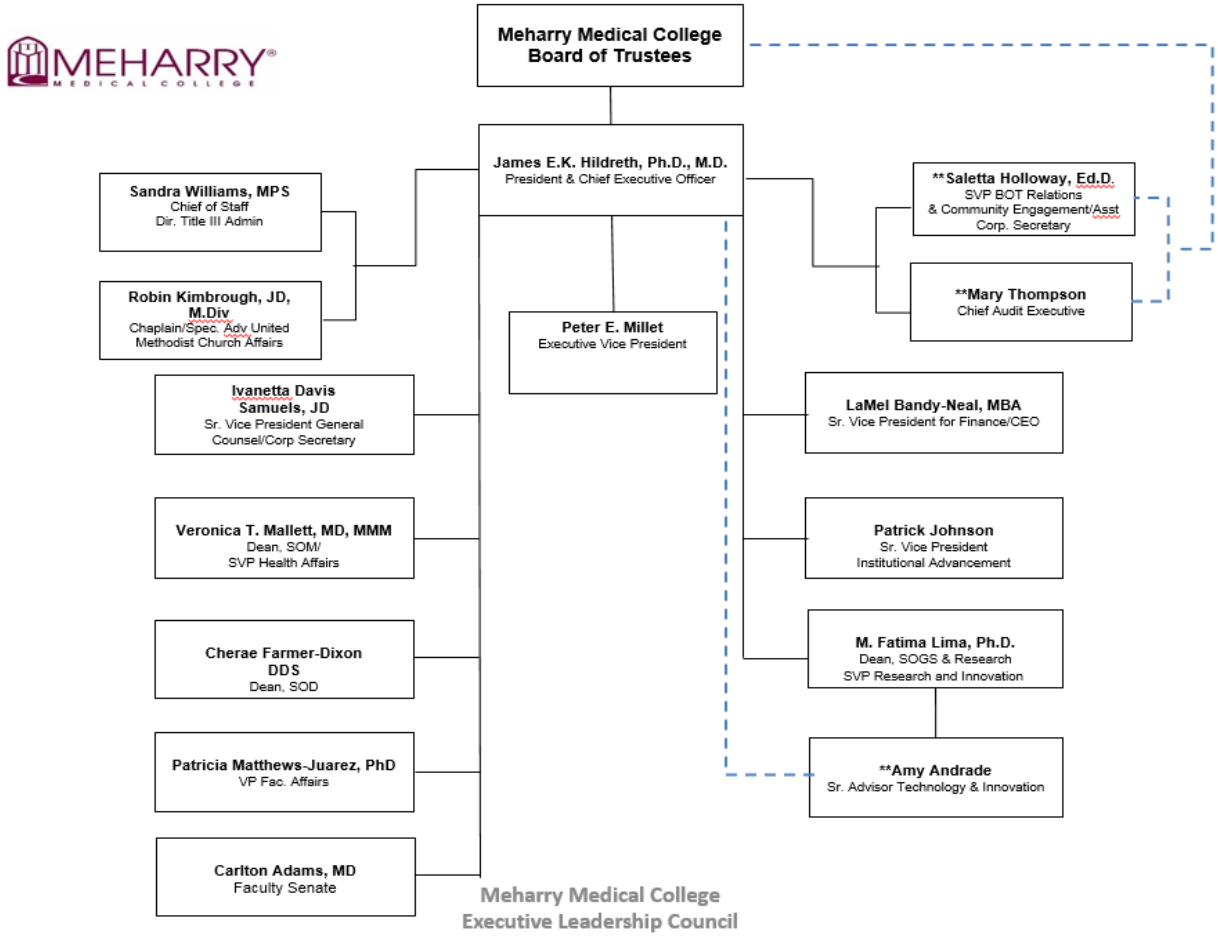
Veronica T. Mallett, M.D., MMM, Sr. Vice President for Health Affairs and Dean, School of Medicine

Cherae M. Farmer-Dixon, D.D.S., M.S.P.H., Dean, School of Dentistry

Maria de Fatima Lima, Ph.D., Dean, School of Graduate Studies and Research and SVP Research & Innovation

Sandra A. Williams, M.P.S., Chief of Staff / Director, Title III Administration

Meharry Medical College Executive Leadership Organization Chart



Life at Meharry Medical College

Located near Nashville's historic Jefferson Street, nestled between two neighboring historically black universities, and near Nashville's thriving downtown, Meharry provides students with a full-range of auxiliary services to make their experience on campus both intellectually stimulating, socially comfortable and enjoyable.

Metropolitan Nashville and Davidson County

Nashville was settled in 1779 and became the state capital in 1843. Nashville and Davidson County are governed by a combined metropolitan government that provides municipal services throughout the county. According to the 2015 census, more than 1.8 million people live in the Nashville metropolitan statistical

area. The city has two nicknames: "Music City USA," for the city's musical heritage, and "Athens of the South," for the city's dedication to fine arts and numerous colleges and universities.

Nashville was recently named America's New Boomtown by Aol.com because of its flourishing health care sector, cultural diversity, business friendly environment, and companies that have relocated their headquarters to Tennessee. Travel and Leisure Magazine has ranked Nashville number three among America's Best Cities, number two for best music scene, and number one in friendliness. According to the Nashville Chamber of Commerce, Nashville consistently ranks among the lowest for cost-of-living rates in comparable cities across the nation. Costs for groceries, housing and utilities are typically below the national average.

The city's leisure and nightlife are characterized by great dining, sports, shopping, music and theater. Known worldwide for country music and the Grand Ole Opry, Nashville also offers fantastic venues for jazz, R&B, rock, Americana, hip-hop, and virtually any music imaginable. The Nashville Symphony is nationally renowned. Nashville has three professional sports teams – the Nashville Predators (NHL), Tennessee Titans (NFL), and Nashville Sounds (AAA baseball). It also offers collegiate team sports (Tennessee State University, Vanderbilt, Belmont, and Lipscomb universities) and the annual Music City marathon and half marathon. The arts scene is alive and thriving with permanent and traveling exhibitions at the Frist Center for the Visual Arts; the Aaron Douglas and Carl Van Vechten Galleries at Fisk University; and the Cheekwood Botanical Garden and Museum of Art. The Parthenon Museum is housed at the world's only full-scale replica of the famed Greek temple. History buffs will enjoy The Hermitage, home of the seventh U.S. president, Andrew Jackson, and scores of preserved homes that are open year-round for tours.
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Student Housing

Housing at Meharry Medical College is managed by Campus Housing. Students interested in campus housing should contact: Campus Housing, 944 21st Ave. N., Nashville, TN 37208-3599; call (615) 327-5751; or email campushousing@mmc.edu. An application for housing is available online at http://www.mmc.edu/prospectivestudents/housing.html. The application can be mailed to students upon written request. Returning residents of College housing are permitted to renew their housing agreement. Incoming students receive priority consideration for the remaining available housing.

Dorothy Brown Hall, located on Albion Street, is a coed facility. The building contains 27 efficiency apartments, laundry facilities, and a study lounge. Each air-conditioned apartment is furnished with a bed, desk and chair, dresser, loveseat, coffee table, and dinette set. Students should bring linen, blankets, and other items they wish to add to the furnishings. A security deposit is required.

Morena Place features one and two bedroom apartments, rooftop terraces, gathering spaces on each floor, and a fully equipped fitness center. The gated complex is adjacent to the Meharry campus and includes two four-story buildings. Each unit features high efficiency appliances, including a washer and dryer. Morena Place units are unfurnished. A security deposit is required.

Royal Towers at Meharry Medical College is a 10-story residential complex. Royal Towers units were renovated in 2014. It contains 154 unfurnished efficiency, one-bedroom, and two-bedroom apartments for Meharry students and their immediate family. Each unit is air-conditioned, carpeted, and furnished with a stove, refrigerator, dishwasher and garbage disposal. Laundry facilities are located on select floors and a community lounge is located on the first floor. A security deposit is required.

Off-Campus Housing: The Office of Admissions and Records sends Apartment Guides to all admitted students to assist them with finding off-campus housing in Nashville and surrounding communities.

Change of Address: Students who change their mailing address after registration should record the change in Banner Student Self-Service as soon as possible. The address logged in this system is considered the official one. Any communication from the College bearing the address on file is considered as properly delivered.

Dining

The Cal Turner Family Center for Student Education houses cafeteria style dining for students, faculty and staff. The facility includes a state-of-the-art kitchen and seating for 200 in the main lobby. Aramark provides daily menu options in the Cafe` as well as catering services for special events. Students may purchase meal cards of varying amounts for the Aramark Café. For all Café needs, contact 615-963-2835; for catering needs contact 615-327-5500.

The Nashville General Hospital at Meharry cafeteria is open to Meharry faculty, students, and staff. Located on the lower level of the hospital, the cafeteria serves breakfast and lunch Monday through Friday. The menu is a la carte, with a variety of individually priced choices. Meals are on a pay-as-you-go system. Breakfast is served from 7:00 a.m. to 9:30 a.m. and lunch is served from 11:00 a.m. to 1:30 p.m.

Snack and beverage vending machines are available in most campus buildings.

Services for Students

Access to Academic Records

Meharry Medical College is subject to the provisions of federal law known as the Family Educational Rights and Privacy Act (also referred to as the Buckley Amendment or FERPA). This act affords matriculated students certain rights with respect to their educational records. These rights include:
The right to inspect and review their education records within 45 days of the day the College receives a request for access. Students should submit written requests to the College Registrar and identify the record(s) they wish to inspect. The College Registrar will arrange for access and notify the student of the time and place where the record(s) may be inspected. If the College Registrar does not maintain the record(s), the student will be directed to the College official to whom the request should be addressed.
Students have the right to request amendment of any part of an education record that they believe is inaccurate or misleading. Students who wish to request an amendment to their educational record should write the College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the student will be notified of the decision and advised of his or her right to a hearing.

The right to consent to disclosures of personally identifiable information contained in the student's education record(s) to third parties, except in situations in which FERPA allows disclosure without the student's consent: One such situation is disclosure to school officials with legitimate educational interests. A "school official" is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including College law enforcement personnel and health staff); a person or company with whom the College has contracted; or a student assisting another College official in performing his/her tasks. A College official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. The Buckley Amendment provides the College the ability to designate certain student information as "directory information." Directory information may be made available to any person without the student's consent unless the student gives notice as provided for below. Meharry Medical College has designated the following as directory information:

- Student name
- Address
- Email address
- Telephone number
- Date and place of birth
- Major field of study
- Dates of attendance
- Classification
- Enrollment status (part or full-time)
- Degrees and awards received
- Participation in officially recognized activities and sports

Any new entering or currently enrolled student who does not wish disclosure of directory information should notify the College Registrar in writing. No element of directory information as defined above is released to students who request nondisclosure except in situations allowed by law. The request to withhold directory information will remain in effect as long as the student continues to be enrolled or until the student files a written request with the Office of the Registrar to discontinue the withholding. To continue nondisclosure of directory information after a student ceases to be enrolled, a written request for continuance must be filed with the Office of the Registrar during the student's last term of attendance.

If a student believes the College has failed to comply with the Buckley Amendment, he or she may file a written complaint with the Division of Student Affairs. Questions about the application of the provision of the Family Educational Rights and Privacy Act should be directed to the Office of the Registrar or to the Office of the General Counsel.

Confidentiality of Student Records: It is the policy of Meharry Medical College to protect the confidentiality of personally identifiable educational records of students and former students as regulated by the Family Educational Rights and Privacy Act (FERPA).

Academic Computing

The Academic Computing Department is committed to promoting excellence in teaching and learning to the students and faculty and staff of Meharry Medical College. Academic Computing provides support and leadership in the effective uses of technologies for enhancing the classroom environment as well as facilitating research and strategic initiatives related to higher education. Academic Computing fulfills its mission by fostering collaboration and innovation with faculty and the College stakeholders in the design, development, and effective use of learning environments and educational media.

Vision. Academic Computing strives to promote best practices on the integration of technologies in the classroom.

Academic Computing Services include:

- One-on-one technology training and/or group training on all features of Blackboard Learn Blackboard Collaborate, Respondus 4.0, Lockdown Browser, I-Clickers, MS Office and other software
- One-on-one technology training and/or group training on all Office 365 programs
- Training on effective presentations
- Promoting and developing new educational methodologies in the curricula
- Collaborating with Meharry Library staff on Web 2.0 technologies used in higher education (Podcasting, Screencasting, and Videocasting, among others)
- Assisting with instructional course design and development
- Evaluating, assessing, and implementing new technologies
- Improving the use of smart classrooms
- Assisting faculty and students with multimedia projects
- Keeping faculty aware of new teaching strategies with focused articles and training opportunities outside of Meharry
- Assisting with the use of digital textbooks through the Meharry Library
- Instruction in classroom IPad usage as well as other technical equipment
- Training on Tablets, Surface Pro, MAC and other Windows or IOS systems
- Introduction of classroom gaming technology to faculty

Technologies

- Blackboard Learning Management System
- Lecture Capturing Technology (Blackboard Collaborate)
- I-Clickers (Assessments)
- Respondus 4.0 (Assessments)
- Respondus Lockdown Browser (Assessment Security)
- MS Office (Word, Excel, PowerPoint, Publisher)
- Office 365 (Skype, MS Planner, One Drive, etc.)
- Kahoot! And other available classroom gaming technologies

The Academic Computing web site highlights supported technologies and also provide tips on technology integration in medical education.

Academic Counseling: Anna Cherrie Epps, Center for Educational Development and Support

The Anna Cherrie Epps, Ph.D., Center for Educational Development and Support (CEDS) is a comprehensive academic support unit that was established to foster an environment that stimulates and nurtures excellence in learning and teaching in the three schools: Medicine, Dentistry and Graduate Studies and Research. The Center is organized into two functional areas: (1) Academic support services for students and (2) Faculty development and support.

CEDS is centrally located on the Meharry campus in the Rolfe Student Center Building. The upper level offers three spacious group study rooms, a classroom with a seating capacity for 35, two small group study rooms, and a resource room. To allow students to relax between studying, a break area is equipped with vending machines. The lower level offers a computer lab for computer based learning, two rooms for group instruction, and six independent study rooms. Three Education Skills Specialists are on duty to work with students by assessing their academic profiles and developing a learning plan appropriate to each student's needs. The staff works together to ensure that a student's academic learning needs are met. CEDS study areas are available to students from 7 a.m. to 1 a.m. daily. For more information about the services provided by the Center for Educational Development and Support, call 615-327-6500.

Among the academic support services offered by CEDS are:

- Skills Profile Assessment
- Skill Improvement Instruction in:
  - Time Management
  - Analytical Reasoning and Critical Thinking
  - Stress Management
  - Self-Confidence Building
  - Reading & Comprehension
  - Test Taking Strategies
  - Note Taking
- Study Techniques
- Individual Skills Development Consultation
- Computerized Student Practice Testing
- Peer Tutoring
- Small Group Intervention Review Sessions
- Small Group Case-Based Review Sessions
- Comprehensive Medical Review Program - USMLE STEP 1 and STEP 2
- Comprehensive Dental Review Program NDBE PART 1 AND PART 2

Students with Disabilities

Meharry Medical College recognizes and supports the standards set forth in Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. These laws are designed to eliminate discrimination against qualified individuals with disabilities. Disabilities may include physical or mental impairments that substantially limit one or more of a person's major life activities, which necessitate modifications. Meharry Medical College is committed to making reasonable accommodations for qualifying students with disabilities as required by applicable laws. Accommodations are tailored to meet the needs of each student with a documented disability. Specific concerns pertaining to services for students with disabilities or any disability issue should be directed to the ADA Coordinator, Jacqueline Gardner, via email at jgardner@mmc.edu, phone (615) 327-6500 or in person at the Anna Cherrie Epps Ph.D. Center for Educational Development and Support (CEDS).

Meharry Medical College complies with the American Disabilities Act in allowing use of service animals for students, staff and visitors. Meharry also complies with the Fair Housing Act in allowing students use of approved emotional support animals as an accommodation. Please contact the College's ADA Department for more information.

Campus Safety and Security

The Department of Campus Safety and Security (DCSS) is located in the building that formally was known as the Salt Wagon Café. The Office is committed to providing an efficient, aesthetically pleasing, safe, and user-friendly environment that promotes teaching, learning, and service delivery.

The DCSS is open 24 hours a day, seven days a week to respond to emergencies and/or reports of criminal activities and to provide security to the campus. The telephone number 615-327-6666 is used to report any emergency. The staff addresses the patrolling, crime prevention, escort services, traffic/parking, investigative and administrative needs of the college community.

The DCSS reports directly to the Executive Vice President. The Department operates three shifts. Members of the staff have prior police/security experience and/or military backgrounds. In addition, the officers attend monthly and semiannual training to gain additional skills. Prior to employment, officers are required to complete a background check, drug test and testing for state certification as security officers.

Security officers have the authority to detain individuals until Metro Nashville Police officers arrive on the premises. The campus community is encouraged to report all campus crimes to the DCSS immediately. Security officers conduct preliminary investigations of all reported situations and refer them to the appropriate law enforcement agency when necessary or mandated by law. An excellent working relationship exists between DCSS and the local, state, and federal law enforcement agencies. The DCSS meets monthly with the security/police departments of other universities in the Nashville area. All violations of state and federal criminal law that come to the attention of the DCSS are reported immediately to the appropriate law enforcement agency for investigation and disposition.

Emergencies: The Meharry Medical College Department of Campus Safety and Security is a professional organization dedicated to the protection and security of Meharry Medical College and its diverse community. The DCSS is committed to providing a safe, secure and accessible campus for students, faculty, staff, patients and visitors. Campus Safety and Security Officers are on duty 24 hours a day, seven days a week and should be contacted immediately if suspicious or potentially dangerous situations occur.

To contact a security officer, please call:
Emergency On campus, dial 6666 or (615) 327-6666
Non-emergency on campus, dial 6254 or (615) 327-6254

To contact Metropolitan-Nashville Police, please call:
Emergency: 911
Non-Emergency: 615-862-8600

Student Identification Badge: All students are required to wear a photo Proximity/ID badge while on campus. Proximity/ID badges are issued during the freshman year and remain active through graduation. If lost during the school year, badges can be replaced; however, a $ 15.00 fee is charged. Students must first receive a signed ID replacement form from the Department of Campus Security, pay the fee in the Treasurer's Office or at the Security Office, and pick up a reprinted badge. If a new photo needs to be taken, students must schedule an appointment with the Department of Campus Security by phoning (615) 327-6254.

Annual Security Report ("Clery" Report). The Chief of Security and Director of Campus Safety and Security in cooperation with the Legal Affairs Office prepares the Meharry Medical College's annual report to comply with the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act. The full text of this report can be located on the MMC website. Additionally, a copy is available for reviewing at all Security Posts on campus (the lobby of West Basic Science Building; lobby of the Stanley S. Kresge Learning Center; lobby of the Dental School). The report is prepared in cooperation with the local law enforcement agencies surrounding our campus, Residential Managers, College Legal Counsel, Deans of each school and the Disciplinary Committee. Annually, a letter is sent to all non-security/police "Campus Security Authorities" informing them of their responsibility to report crimes to the DCSS and/or the local police and asking for information on any crimes not reported. Each entity provides updated information on their educational efforts and programs to comply with the Act.

Traffic and Parking Policy

The following regulations apply to all visitors, students, faculty, staff and others who operate motor vehicles on the campus of Meharry Medical College. We solicit your cooperation in adhering to these regulations for the orderly movement of traffic, parking convenience, and safety of the entire college community.

A. Registration of Vehicles

(1) Any motor vehicle operated on campus by faculty, staff, or students must be registered with the Department of Campus Safety and Security (DCSS). All visitors must also obtain a temporary parking permit from the DCSS. Construction personnel are allowed to park their company vehicle in the MMC designated "vendor" parking, provided the vehicle(s) is clearly marked with the company logo or sign. Generally, unmarked personal or company vehicles are not allowed to park in "vendor" spaces. Exceptions are made for contractors with approval from the Chief of Security, and a "temporary" parking pass has been issued.

(2) Vehicle registration for "new hire" faculty and staff must be obtained within three days of employment. Veteran employees' vehicle registration must be completed no later than the last day of September, annually. Student vehicle registration must be completed no later than the last day of August.

(3) The expiration date on vehicle decals for students and tenants living in campus housing is August 31st of each year. The expiration date on vehicle decals for employees is September 30th each year. Employee decals are designed to "cling' to the windshield, which allows the employee to easily remove the decal and use on another registered vehicle. The DCSS reserves the right to cancel decals, if deemed necessary.

(4) The decal should be affixed to the windshield and displayed on the driver's side at the bottom left corner. In those cases where compliance with the above is not feasible, submit your reasoning to the Chief and Director of Campus Safety and Security for an approved alternative. The permit must be clearly visible through the front windshield when viewed from outside. If in doubt, consult with the Security Dept. for proper placement of the permit. The responsibility of properly displaying the decal rests with the individuals.

(5) Remove expired decal each year.

(6) Vehicle owners must present the following at registration of vehicle:
   a. Proof of insurance
   b. Proof of ownership (on each car to be registered)
   c. Driver's license
   d. College ID or stamped registration for students.

(7) All temporary employees are issued a temporary parking pass in place of a parking decal.

(8) Temporary employees are not eligible to pay for parking via payroll deduction.

(9) Temporary employees must pay parking fees before a temporary pass will be issued.

(10) No student or employee will be allowed to register another person's vehicle or waive their parking fee (this includes spouses).

(11) Report ownership changes; mutilated or defaced decals are to be turned in to the (DCSS).

(12) Changes in registration fees will be announced at the beginning of each academic year for students, and prior to the end of the official registration period for employees.

(13) It is against College policy to borrow or loan your MMC Parking Decal to others.

(14) Non-Meharrians who reside in campus housing facilities must pay a separate monthly fee before parking their vehicle on campus property.

(15) Meharry employees may not park in the parking garage located on Albion Street (across from Nashville General Hospital)

B. <u>Decal Replacement Fee or Second Decal</u>

(1) The student parking rate covers one vehicle/one parking space. Students are issued a less expensive decal and may purchase a 2nd at a prorated fee. However, the initial decal must be returned to the Security administrative office before a replacement will be issued. Lost or stolen student decals can be replaced in two ways:

a. The student may elect to purchase a new decal by paying the full (prorated) cost to cover parking each day for the remainder of the registration period (thru August 31st).

b. The student may elect to receive a "temporary parking pass" to cover the remainder of the parking cycle (thru August 31st). The "pass" must be displayed on the left side of the dashboard while parked on campus. There will be no extra charge for the "pass"; however, the normal "annual fees" would remain in effect.

(2) Only one "clinging" vehicle decal will be issued to an employee or resident. Lost or stolen employee decals can be replaced in two ways:

a. The employee may elect to purchase a new decal by paying the full (prorated) cost to cover parking each day for the remainder of the registration period (thru September 30th). Additionally, the employee would be required to continue paying the original "per pay period" fee, **<u>OR</u>**

b. The employee may elect to receive a "temporary parking pass" to cover the remainder of the parking cycle (thru September 30th). The "pass" must be displayed on the left side of the dashboard while parked on campus. Each of the employee's registered vehicles must be listed on the "pass". There will be no extra charge for the "pass", however the normal "per pay period" fees would remain in effect.

(3) Employees or residents who fail to move the "clinging" decal from one registered vehicle to another must stop by the Security Office and obtain a temporary parking pass before proceeding to the assigned area. Patrol Officers rely on this method to determine who belongs and who doesn't. Failure to comply with this policy will result in ticketing and towing.

(4) Persons wishing to cancel/waive parking assignments may do so by completing the appropriate form and the Security Department will process the request. Students who do not utilize parking must submit a MMC Parking Waiver no later than Sept. 15th of each year. The student or employee who receives a decal is required to remove the decal from his/her windshield and return it to the DCSS.

(5) Reimbursement may be requested of persons on extended leave. Before departure, please complete a MMC Parking Waiver, remove the decal and return it to the DCSS. When the extended leave is not planned in advance, contact the security office and express you desire to waive parking during your absence. Failure to give adequate notice may result in forfeiture of parking fees.

C. General Regulations

(1) All local and state rules and regulations, directional signs and signals governing the use of motor vehicles shall be observed at all times.

(2) The speed limit on campus is 15 mph, unless otherwise posted.

(3) All vehicles must come to a complete stop at intersections where a stop sign is located.

(4) Motorists must give pedestrians the right of way at designated crosswalks.

(5) Unnecessary noise from horns and mufflers is prohibited.

(6) Loading zones and service zones are reserved exclusively for service vehicles.

(7) Motor vehicles must be parked within the marked spaces where provided; not on lines, straddle lines or on curbs.

(8) Possession and display of a decal to which one is not entitled is a violation.

(9) Transferring a decal from one car to another is authorized by employees, provided the vehicle is registered with the DCSS. Student decals are not interchangeable.

(10) Only registrants of vehicles will be responsible for violations pertaining to their vehicle, regardless of who is operating it. The registrant is also responsible for removing the decal when the vehicle is sold or otherwise disposed of or transferred.

(11) Immobilized vehicles will not be left on the campus beyond seven days. Vehicles left on campus beyond the established time will be towed away at owner's expense.

(12) Backing into parking spaces with signage mounted on a pole is prohibited.

(13) Any vehicle in violation of the college parking regulations is subject to ticketing and towing. The DCSS may immediately ticket and tow unauthorized vehicles from handicapped spaces and fire lanes. When vehicles are found illegally parked in handicapped spaces located behind the Dorothy Brown Hall, an attempt will be made to notify the owner before the vehicle is towed. Patrol officers are required to report the make, model and license plate number to the hospital administrator's office (MMG). The vehicle information will also be reported to the General Hospital information desk for announcement over the intercom. If towed, a vehicle can be located by contacting the DCSS at 615-327-6254, and can be reclaimed after the towing cost has been paid. A vehicle cannot be towed without receiving a ticket; thus, a ticket fee is associated with each tow. The ticket fee must be addressed within five business days if appealed, and paid within 14 business days to avoid additional fees. Three or more violations in a 12 month period may result in a vehicle being towed from campus.

(14) **The boot policy is currently not in affect.** The MMC policy to boot a vehicle occurs after three citations are written on a vehicle. This policy will also apply when the owner/driver cannot be identified (Non-Meharrian). Chronic violators with a MMC decal are subject to be booted. Each citation following also receives a boot. A large warning sticker will be placed on the driver's side window as a notice of the boot and with directions to contact the DCSS. The boot fee plus the cost of the original citation and any previous citations that are outstanding must be paid prior to the vehicle boot being removed. Towing fees are paid directly to the towing company.

(Boot – is an immobilizing device that is attached to the wheel of unregistered, unauthorized parking and chronic violations on the Meharry campus. These devices are generally used Monday through Friday, 7:30 a.m. to 5:30 p.m., except on official holidays.)

(15) If a person/vendor is coming on campus to tow, pick up or service your vehicle, call the DCSS and give your name and the person/vendors name that is rendering the service.

(16) Anyone utilizing campus parking facilities and/or parking lots must pay to park. The fee to utilize these areas is subject to change without notice.

D. <u>Penalties and Fines</u>

(1) The revocation of a parking permit and/or disciplinary action recommended is warranted for the following: using a permit not properly issued; transferring or allowing a permit to be transferred to another vehicle.

(2) The DCSS is open twenty-four hours a day, seven days a week for information concerning tickets and fines.

(3) Vehicles improperly parked may be subject to ticketing and towing at any time.

(4) Vehicles illegally parked in loading zone spaces will be ticketed and towed.

(5) Vehicles illegally parked in reserved spaces between the hours of 6:00 am – 6:00 pm will be ticketed and towed.

(6) Vehicles illegally parked in fire lanes will be ticketed and towed.

(7) Violations may be appealed to the Appeals Board within five (5) business days.

(8) In addition to the imposition of penalties and charges hereby established, the DCSS may refer any violator of these regulations/policies to the appropriate administrative official for additional action.

E. <u>Enforcement Hours</u>

Parking restrictions are in effect twenty-four (24) hours a day, seven (7) days a week.

Reserved Parking spaces are enforced from 6:00 am – 6:00 pm.

Students are allowed to utilize reserved spaces in the 21st Avenue Garage (only) from 6:00 pm to 6:00 am.

F. <u>Pedestrians</u>

(1) Cross the street at crosswalks only.

(2) Do not stand in the street and talk to vehicle operators.

(3) Pedestrians have the right of way at all crosswalks.

G. <u>Traffic and Parking Violations</u>

Traffic violations warranting a ticket or ticket and tow include, but are not limited to:

(1) Speeding on campus property

(2) Vehicle not registered

(3) Parked outside permitted areas

(4) Parking in EMERGENCY or ambulance areas

(5) Parked in crosswalk

(6) Blocking driveway/access

(7) Failure to stop at stop sign on campus property

(9) Illegal use of permit

(10) Permit not displayed, or improperly displayed

(11) Disregarding NO PARKING sign

(12) Parked in Fire Lane

(13) Blocking drive, walkways and doors

(14) Unauthorized parking in handicap space

(15) Unauthorized parking in loading zone

(16) Parking on grass

(17) Parking at a yellow curb

(18) Obstructing vehicular traffic

(19) Parking over or beyond curb

(20) Parking in a space or area not clearly designated for parking

(21) Parking in area in which permit does not apply

(22) Parking vehicle and it occupies more than one designated parking space

(23) Exceeding time limit

(24) Backing into parking spaces with signage mounted on a pole is prohibited

(25) Double parking

***It is against state law to illegally park in fire lanes and handicapped spaces.**

H. Parking Fine Collection:

All parking fines are due 14 days after the violation date and are payable at the Meharry Treasurers Office (located on the 5th floor of the LRC Building) or the DCSS. Credit cards **cannot** be accepted at the DCSS administrative office. Parking fines that are not paid on or before midnight on the 14th day will be overdue and the fine will be increased by 50 % on the 15th day after the ticket date.

Example: $10.00 Original Fine
$ 5.00 (50 % penalty of the original fine)
$ 15.00 Amount due after 14th day, but before the 31st day

Parking fines that are 30 days over-due will double (the original ticket fine plus 50 %) on the 31st day after the ticket date.

Example: $10.00 Original Fine
$5.00 (50 % penalty of the original fine)
$ 15.00 Amount due after 14th day, but before the 31st day x 2 Double on the 31st day after the ticket date $ 30.00 Amount due on the 31st date from the ticket date

Parking fines issued to students which are unpaid before or on the 30th day will have a "hold" placed on their student account until the fines are paid in full. Unpaid parking fines will prevent the issuing of a new decal on the decal's expiration date. Unpaid parking fines will restrict students from receiving grades, registering for classes, etc. Additionally, unpaid parking fines by students may result in disciplinary action if the parking rules/policies continue to be ignored after the third violation.

Any vehicle ticketed for a third violation with two outstanding tickets that have not been paid or settled, will be ticketed and towed and will not be released until the full debt has been paid or settled by the Director of Campus Safety and Security.

Fines issued to employees will be deducted from the employee's paycheck following the 31st day of the ticket date. Unpaid parking fines by employees may also result in disciplinary action if the parking rules/policies continue to be ignored after the third violation.

APPEALS:

Students, faculty, residents or staff members cited for a parking violation are provided an opportunity to appeal the citation by submitting a written explanation of the circumstances surrounding the issuance of a citation. The original Parking Citation Appeal Form must be submitted to the administrative section of the Security Department within five (5) business days following the issuance of the citation. If desired, the Appeal Form may be printed in advance or obtained from the DCSS Office. The appeal must include a photo copy of the original citation before it is submitted to the administrative section of the Security Department. The document will be date stamped, logged and the appellant is provided a copy. The original citation will be date stamped, photo copied and returned. Appeals submitted after the five (5) business day limit will not be considered (NO EXCEPTIONS). If an appeal is filed within the limit, the overdue start date of the citation will not begin until the appeal has been decided.

The Director of the DCSS will appoint a five-member board to hear or review all appeals and make a recommendation to the Director. The Director is bound by the recommendation of the board. The board will consist of one student; one MMC staff employee, one MMC faculty member, one DCSS employee (when possible) and the chairperson will be the Director of Campus Safety and Security. The board will review all parking citation appeals on the fourth Wednesday of each month (12pm in the office of the DCSS). A decision will be based upon the merits of the submitted written appeal. The appellant is not required to be present but may elect to make a presentation during the review, before a final decision is

made. The appellant must notify the administrative section of the security office at the time the appeal is filed if he/she plans to attend. This protects the privacy of board members who wish to remain anonymous.

The Board will conduct weighted voting of the options considered. The option receiving the most votes will be the recommendation of the Board. The DCSS will attempt to notify the appellant by phone or the internet of the final decision. However, the appellant has the primary responsibility to follow-up with the administrative section of the Security Office before the 14-day grace period ends. All decisions of the Board and/or the Director of the DCSS are final. The Board may consider, but is not limited to the following options:

(1) Let the citation stand as written along with maximum fines and penalties.
(2) Let the citation stand as written, but consider lesser penalties.
(3) Modify the violation and issue a new citation or warning.
(4) Retire the Citation (file the citation and will only come back up if another violation is received within a year of the ticket date)
(5) Nullify or dismiss the citation.

The Director or the Board does not have the authority to waive towing fees. Towing fees must be negotiated or appealed at the tow company.

Career Counseling

The Offices of Academic and Student Affairs of each school provide career counseling to students. For information about careers in medicine (Careers in Medicine®), dentistry, the biomedical sciences, and public health, please contact these departments within the respective schools. The College's Division of Student Affairs addresses student professional and leadership development. For information on student professional development and student leadership initiatives, please contact the Division of Student Affairs at 615-327-6223.

Counseling Services

Meharry Medical College provides counseling services for students at the campus Counseling Center on the third floor of the Old Hospital. The center is committed to a highly effective counseling support system that complements the educational and human enrichment endeavors of the institution. Counseling services include individual, family, and group therapies, crisis interventions, case management, referrals, coaching, consultation, as well as academic counseling.

The services of the Counseling Center are broad-based and encompass services to partners of students as well as courtesy consultations to faculty, residents, and staff. Appointments can be made by visiting the Counseling Services at Suite #325 of the Comprehensive Health/Meharry Clinics building, or by calling (615) 327-6915 between 8 a.m. and 4:30 p.m. Monday through Friday. Walk-ins are welcome during our business hours. Students can send secure messages to CS staff after hours, and access information about Counseling Services 24/7 by accessing our secure online portal at https://mmc.medicatconnect.com/. Students who are experiencing an emergency after hours should contact 911 or go to the nearest emergency room.

All counseling services and records are confidential as mandated by professional codes of ethics and by law. Counseling records do not become a part of academic records. There are no fees for services. When referrals are made to mental and behavioral health providers, the services are normally covered under the provisions of the student's health insurance policy.

Foreign Student Services

The Office of Admissions and Recruitment coordinates the processing of foreign or international student (F-1) Visas for admission to Meharry Medical College. The office serves as a central resource and point of first contact for all new international students seeking approval for admission. For additional information, contact the Office of Admissions and Recruitment at (615) 327-6998 or via email at admissions@mmc.edu.

Information Technology

The Office of Information Technology (OIT) is located on Dr. D. B. Todd Jr. Blvd. and is between Hulda Lyttle Hall and the Old Hospital entrance. OIT provides a variety of services to support the instructional, research, and administrative activities for Meharry Medical College students, faculty, and staff. OIT is comprised of six support teams: Administrative Computing, Academic Computing, Business Operations, Computer Operations, Support Services, and Clinical and Research Computing.

Administrative Computing. The Administrative Computing team provides support for administrative applications such as Banner, Banner Self-Service, Kronos, Raiser's Edge and ARGOS.

Academic Computing. The Academic Computing team provides training and support (both group and individual) for computer software applications such as Blackboard Learn, Microsoft Office (Word, Excel, and PowerPoint), Office 365, IClickers, Kahoot! Classroom Gaming Software and any other computer software that touches the classroom.

***Business Operations*.** Business Operations provides departments with support in the purchase of software applications, as well as the overall business support of the OIT Department and campus.

Computer Operations. Computer Operations consists of four core areas: HelpDesk, Network Services, and Telecommunications.

Help Desk. The Help Desk provides support to users for computer issues as well as configures and installs new computer equipment. The Help Desk also assists departments in the selection and purchase of computers, peripherals, and software.

Network Services. Servers and network upgrades are maintained by Network Services

Telecommunications. Telecommunications installs and maintains telephone and data networks on campus and three remote locations.

***Clinical and Research Computing*.** Its primary goal is to identify, develop, and integrate technology into the healthcare environment while providing technical support for the day-to-day operations of the Meharry Medical Practice Group and the Meharry Medical College School of Dentistry. It also supports the computing needs of Meharry researchers.

***Support Services*.** Support Services provides computer training, web development, and media services to the college.

Need Assistance? The Help Desk is open Monday – Friday from 8:00 a.m. – 5:00 p.m. The Help Desk may be reached from any campus phone by dialing HELP (4357). The off-campus contact number for the Help Desk is (615) 327-6231 or you may email the Help Desk (helpdesk@mmc.edu).

Mail Services

Mail Services, located on the basement level of the School of Dentistry Building, provides campus post office boxes for approved student groups. These boxes may be used to facilitate United States Postal Services (USPS) mail delivery as well as receipt of packages shipped via UPS and FedEx. Mail Services is open Monday through Friday, 8 a.m. through 4 p.m., and window services hours are 12 p.m. through 4 p.m. Monday through Friday.

Meharry Copy Center

The Meharry Copy Center, located on the basement level of the School of Dentistry Building, provides full-service printing, copying and finishing services. The Copy Center is staffed and operated by DEX Imaging and is open Monday through Friday from 7 a.m. to 8 p.m. Students may use this resource for low-cost black and white printing, full color printing, and a variety of finishing and binding options. Payment for copying services may be rendered in cash, check, or credit card. Please contact the Copy Center at (615) 327-5962 for more details.

Meharry Medical College Library

The Meharry Medical College Library and Archives (MMCL) occupy three floors of the S.S. Kresge Learning Resource Center on Albion Street. The library is regularly open for students and faculty for 117 hours a week for students, faculty, and staff.

Regular Library Hours
8:00 a.m. -- 1:00 a.m., Monday through Friday;
9:00 a.m. – 1:00 a.m. on Saturday and Sunday.

FACILITY
Three handsomely designed floors provide an environment for quiet study, group interactions, research, and reflection, as well as food consumption in a sunny café area. All floors of the library have access to the campus wireless network.

The **Computer Lab**, located on the Library's first floor, provides access to a variety of software including Microsoft Office, Adobe Reader, and a variety of web browsers. The lab is equipped with a printer, office supplies, and Windows and Macintosh computers. A large dry-erase board is also available.

The **Multipurpose Room**, also located on the Library's first floor, includes flexible seating for 40 people and is equipped with a sound system, overhead projector, and a projection screen. It can be reserved in advance by Meharry faculty or staff to provide students a place to plan and rehearse formal presentations.

Scenic views of Nashville can be seen from study tables situated on the **second floor of the Library.** Individual study carrels and desks, strategically placed on the floor, provide amply seating while maintaining a quiet study space.

A **café**, located on the second floor, provides a microwave, counter top, bistro and table seating, and is the designated area for food and beverage consumption in the Library.

The Library's third floor contains a large selection of individual Education and Research Study cubicles, study tables, individual study carrels, group study rooms, and modular moveable seating.

The **MMC Archives** is also located on the third floor and at http://diglib.mmc.edu/omeka/.
By appointment, you may view: Yearbooks dating back to 1942; Catalogs dating back to 1878, Historical photographs, and much more!

COLLECTIONS
The Library boasts an extensive collection of digital resources, including: 5,330+ electronic journals, 6,545 e-books, 258 databases, and 1,000+ web resources links.

CIRCULATING MATERIALS
Books may be checked out for 28 days. Overdue items accrue a fee. Print journals, the local newspaper, New York Times, and Wall Street Journal are available for in-library use only.

SERVICES
Library staff provide both **group and individual instructions** to assist students in learning a variety of databases such as PubMed and Dental Oral Science Sources (DOSS). Library staff can assist students in getting started using RefWorks, a popular citation management software program. The Library institutional subscription provides students free access to RefWorks.

Meharry National Alumni Association

Upon graduation, every Meharry student is invited to join the Meharry National Alumni Association, known as the MNAA. Alumni retain their ties to Meharry, their respective schools and most importantly, their treasured classmates through the MNAA. The MNAA publishes an Alumni Directory every five (5) years and a quarterly magazine. The MNAA serves as a major fund-raiser for the College. In further support of the College, the MNAA sponsors a number of scholarships, assists alumni chapters in hosting local events, sponsors a student mentoring and advising program, fosters collegiality among alumni, recognizes alumni for outstanding achievement, provides support to alumni in a variety of ways as the need arises. The Association operates administratively through a central office located on the Meharry Medical College campus, with chartered chapters throughout the United States. Currently, there are 38 chartered chapters.

Meharry-Vanderbilt Alliance

A strategic partnership leveraging the strengths of Meharry Medical College and Vanderbilt University Medical Center, the Meharry-Vanderbilt Alliance develops and supports collaborative initiatives and programs in biomedical research and clinical science training. The Alliance has provided opportunities for collaboration between Meharry Medical College and Vanderbilt University Medical Center and the communities they serve. The elimination of health disparities is a major focus of Alliance projects.

Consuelo H. Wilkins, MD, MSCI, leads the Alliance in expanding its community-engaged research initiatives while continuing to cultivate its existing programs. Dr. Wilkins holds appointments as Associate Professor of Medicine at both Vanderbilt University School of Medicine and Meharry Medical College. As the Associate Director of the Vanderbilt Institute for Clinical and Translational Science, she oversees programs in team science and community engagement. Dr. Wilkins spearheaded the launch of the Vanderbilt-Miami-Meharry Center of Excellence in Precision Medicine and Population Health, which will enable research using approaches to precision medicine to eradicate health disparities. As Director of the Meharry-Vanderbilt Community-Engaged Research Core in the Vanderbilt Institute for Clinical and Translational Science, she brings together academic researchers and community members to improve health and healthcare through community-engaged research.

Alliance Programs:

Community Engaged Research - Research in the Alliance follows the principles of partnership and community engagement, emphasizing the engagement of patients and community stakeholders in all phases of research, addresses health disparities, health interventions, participant engagement, and patient-centered outcomes in health care. Some aspects of what we do include:

- **Inter-institutional collaborative research support** ○ Connecting faculty; identifying research resources and facilitating resource access; letters of support; providing manuscript, presentation and grant writing support; supporting inter-institutional career development programs for faculty, staff and students
- **Alliance-initiated Community Engaged Research** ○ Patient Centeredness Scale Development ○ Trust in Biomedical Research Scale Development ○ Return of Value--research participant return of results
- **Home for the Precision Medicine and Health Disparities Collaborative -** building and using inter-institutional collaborative resources for understanding precision medicine across racial, ethnic, and socioeconomic status boundaries
- **Community-Engaged Research Core (CERC) -** The Community Engaged Research Core is a shared resource of the Meharry Translational and Clinical Research Center and the Vanderbilt Institute for Clinical and Translational Research. We support community engaged research to improve health practice and policy, reduce health disparities and improve the health of communities across Tennessee.
- **Community Resource Network -** The Meharry-Vanderbilt Community Research Network is a team of health care providers and researchers who recognize the value and necessity of collaborations to improve patient care and care delivery, especially in medically underserved populations.
- **Recent Awards –** Distinguished Service to Translational Scientists
- **Recent Grants Funded-** Robert Wood Johnson Foundation; Building Trust and Mutual Respect to Improve Health Care grant; *All of Us* Research Program Engagement Core Supplement

Community Engagement - MVA's community engagement pillar builds bridges and strategic partnerships across Meharry, Vanderbilt and community organizations to promote health equity. To this end, we:

- Develop and support strategic partnerships focused on health issues of mutual concern.
- Seek to understand issues impacting the community and leverage community assets.
- Foster the use of evidence-based practices and employ a health equity lens in community engagement programming.
- Bring together multisector collaboratives and support community-lead collaboratives to advance community health.
- Engage in teaching and training to build capacity to address health issues of mutual concern and to ensure best practices in community engagement.
- Support mutually beneficial research partnerships and scholarly activities that promote health equity.
- Connect community partners to resources at Meharry and Vanderbilt, including faculty expertise and student service learning opportunities.
- Provide students with opportunities to learn about community health improvement and community engagement, enhancing the ability of students to impact community health.

Examples of collaborative efforts that the Meharry-Vanderbilt Alliance supports include the below:

Nashville Consortium of Safety Net Providers:
In May 2000, the Nashville Consortium of Safety Net Providers was created through memorandums of agreement between all existing primary care safety net providers and six of the nine hospitals in Nashville and the Metro Public Health Department of Nashville and Davidson County (MPHD). The purpose of the Consortium was to provide access to appropriate level of care for the uninsured population of Nashville through the establishment of a system of information and care coordination. By September 2001 the Consortium had expanded to include all dental care, mental health care, and substance abuse care safety net providers. Eventually, all nine hospitals in Nashville also became members. Members of the Consortium are: Centerstone, Charis Health Center, Connectushealth, Faith Family Medical Center, Interfaith Dental, Matthew Walker Community Health System, Meharry Medical College, Meharry-Vanderbilt Alliance, Mental Health America of Middle Tennessee, Mercy Community Healthcare, Mercy Community Healthcare, Metro Public Health Department, Nashville Academy of Medicine, Nashville General Hospital at Meharry, Neighborhood Health, Saint Thomas Health Services, Salvus Center, Siloam Family Health Center, Tennessee Disability Coalition, Tennessee Charitable Care Network, Vanderbilt University Medical Center United . The mission of the Safety Net Consortium is to make Middle Tennessee healthier by bringing together health care providers, public sector agencies, academia and community-based organizations to advocate, build capacity and coordinate efforts to improve the health of the medically underserved. One of the projects of the SNC is My Health Care Home, a website that facilitates connection to medical homes, particularly targeted toward the uninsured and underinsured.

Community Health Worker (CHW) Collaborative was developed in 2016 as a response to an emerging need for education, support, and advocacy of the CHW role and those who CHWs in the state of Tennessee.

Faith and Health Collaborative—A partnership with the Nashville Health Disparities Coalition, the Faith and Health collaborative brings together congregations to recognize faith-based efforts that promote health equity and to build capacity of congregations to address community health.

Diabetes Improvement Project (DIP) - The DIP of the Consortium of Safety Net Providers of Middle Tennessee has been meeting since 2010. The DIP brings safety net clinic providers and community-based organizations together bi-monthly to share lessons learned, promote sharing of information on diabetes management and prevention and to discuss opportunities for collaboration.

Interprofessional Education (IPE) & Inter-Learning Collaborative Learning - Since its inception in 1999, the Meharry-Vanderbilt Alliance has sought to create innovative avenues for interprofessional and educational collaboration that not only allow students and faculty to share and apply their knowledge, but also leave a lasting impact on the community. Our developing programs leverage the strengths of the Meharry-Vanderbilt Alliance and its existing IPE faculty collaborative. This inter-institutional, interprofessional design aims to:

- Support opportunities for shared IPE curriculum
- Utilize community-engaged, service learning platforms to create mutual educational and community benefit
- Build capacity and expose students and educators to interprofessional competencies
- Collaborative Programs - All collaborative projects capitalize on the strengths of health-related programs in the Nashville area and their faculty to foster lasting connections, broaden professional networks and encourage continued communication. Our current faculty collaborations include the use of a professionally diverse inter-institutional committee that guides all collaborative IPE efforts

that extend beyond Vanderbilt and Meharry. Capacity building for partnering institutions and internal IPE programs housed at Meharry and Vanderbilt allows program representatives to work in conjunction with Alliance staff to identify their needs and take an active role in strengthening their program's IPE capacity.

- Student Projects - The IPE Student Project provides students from participating health profession programs the opportunity to collaborate with community partners in a real-world setting and to create a lasting impact on underserved, high-risk populations. Guided by our partnering community organizations, teams of professionally diverse students create and implement plans of action to address real community defined needs.

Meharry-Vanderbilt Student Alliance (MVSA) - To be a model of independent, student-driven interprofessional collaboration that offers opportunities for students across institutions to connect with community partners, work together and share institutional resources to improve population health. The MVSA is an exciting and innovative opportunity for young professionals to shape a student-led organization to meet their emerging professional development needs. Shared resources and opportunities for community engagement provide a uniquely collaborative experience for students seeking to have a meaningful impact on community health.

Who We Are and What We Do –

- **Organizational Leads** – Student representatives from each institution work together to develop and facilitate activities
- **Scholarly Opportunities** – Professional Development; Navigate Resources, Connect with Community Partners, Inter-institutional networking
- **Previous Events** - Back to School Picnic in the Park, Whose Central Line is it Anyway?, Meharry-Vanderbilt Soccer Game, A Film Viewing of "The Immortal Life of Henrietta Lacks" and Panel Discussion, Youth Encouragement Services: Christmas Store

Office of Lifelong Learning

The mission of the Office of Lifelong Learning is to provide relevant continuing medical and dental education for physicians, dentists and other health care professionals based on identified educational needs. This will reflect recent developments in clinical practice in all specialties, biomedical sciences, medical and dental ethics, and health care delivery. Special emphasis is on offering courses on diseases and health conditions that disproportionately affect ethnic minority populations. Students attend some events offered by the Office of Lifelong Learning to complement their academic coursework.

Meharry Medical College is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education CME for physicians. (*AMA PRA Category 1 Credits*). Meharry Medical College School of Dentistry is an *ADA CERP Recognized Provider*. (American Dental Association Continuing Education Recognition Program.)

Religious Accommodations

The Office of the College Chaplain provides effective and comprehensive pastoral care and pastoral counseling to students, faculty, staff, and administration of the College, with a special emphasis on service to students. The College Chaplain serves as the spiritual leader of the institution. The Chaplain's office and a small chapel are located on the first floor of the Cal Turner Family Center for Student Education, Suite 106.

Religious Accommodations Policy Statement. Meharry Medical College acknowledges the diversity of its students and respects the rights of students to observe their religious beliefs and practices. MMC will endeavor to provide reasonable accommodations relating to a student's religious beliefs and practices in response to a formal written request. However, accommodations cannot be guaranteed in instances where such would create an undue burden on faculty, a disproportionate negative effect on other students who are participating in the scheduled educational activity, or jeopardize patient care.

Procedure. Students beginning a new program of study at Meharry Medical College will be advised of the school-, program- or course-specific procedures that should be followed to obtain an accommodation for religious practices or observances. Students are encouraged to be proactive in reviewing college-, program- and course-specific assignments/activities in advance of matriculation/registration to determine whether these requirements might in some way conflict with their religious beliefs, practices or observances. Should such conflicts be in evidence, students should discuss possible options with the appropriate college official or faculty member. Reasonable accommodations may not be feasible in instances where there is a direct and insurmountable conflict between religious beliefs or observances and requirements of a given program. It is the student's responsibility to make arrangements with the course instructor or clerkship/experiential director as soon as possible, but no less than 30 days in advance of the religious holiday during which the student is requesting to be absent. It is also the student's responsibility to meet all course obligations. Such requests are required for any and all educational activities scheduled for the date(s) in question, e.g. classroom exercises, laboratory assignments, exams, clinical/experiential assignments, etc. Finally, students are obligated to abide by the policies and procedures on religious practices and observances of any given patient-care institution (i.e., hospital, clinical setting) in which they are completing a portion of their educational experience. If a potential conflict between a student's religious beliefs, practices or observations and institutional policy is identified, the student is to bring such to the attention of the clerkship/experiential director as soon as possible.

It is the course instructor or clerkship/experiential director's responsibility to negotiate with a student the parameters of reasonable accommodations. The accommodations should be no more difficult than the originally scheduled activity or assignment. Instructors or experiential directors are not obligated to provide materials or experiences to students that would not normally be provided to all other students. In the event a student and instructor or clerkship/experiential director cannot reach an agreement regarding reasonable accommodations, the student may request a review of the request by a designated college official. The decision of the designated college official will be final.

Student Directory Listings

Students are listed in the online directory that is published in Banner Student Self Service.

Change of Address: Students who change their mailing address after registration should record the change in Banner Student Self-Service as soon as possible. The address in this system is considered the official one. Any communication from the College bearing the address on file is considered as properly delivered. Instructions to update your mailing address can be found online:
http://www.mmc.edu/prospectivestudents/prospective_students_docs/studentlifeupdatemailingaddress.pdf

Student Health Insurance

Meharry Medical College sponsors a group student health insurance plan. All students must have health insurance. Waiver of participation may be granted if the student presents proof of coverage and meets the waiver requirements communicated on the waiver form. The student may elect to waive coverage if covered by a parent's or spouse's insurance plan; however, independent plans with high deductibles do not provide comparable coverage. The enrollment and waiver process must be completed online. The group health

insurance plan is designed to defray a major portion of the cost of hospitalization and covers the student when on or off campus.

The plan covers students for one academic year at Meharry Medical College from July 1 to June 30. Insurance coverage must be renewed each year. Below are the 2018-2019 annual premium rates for the bundled health insurance package, which includes medical, vision, dental and the Student Assistance Plan. One-half of the annual premium is billed each semester.

2019 - 2020 Student Insurance Rates

Because of plan design changes and health care reform, a tier was added to separate those covering one child vs. multiple children. Students with dependents are encouraged to view options through the Health Insurance Market Place via HealthCare.gov.

Coverage Level	Annual Premium	Semester Premium	Monthly Premium
Student Only	$3615.24	$1807.62	$301.27
Student + Child	$7325.16	$3662.58	$610.43
Student + Children	$10,669.16	$5334.58	$889.09
Student + Spouse	$7228.08	$3614.00	$602.34
Family (Student, Spouse & Child(ren)	$14,288.99	$7144.00	$1190.66

Medical Insurance Provider: United Healthcare Student Resources, 1-800-767-0700, www.uhcsr.com/mmc

Vision Insurance Provider: United Healthcare, 1-800-638-3120.

Dental Provider: Delta Dental of Tennessee, (800) 223-3104, www.deltadentalTN.com

Student Assistance Plan
New Directions Behavioral Health - Student Assistance Program

- 24/7 Assistance by calling 1-800-624-5544
- You can also visit their website at www.ndbh.com

For more information about the Meharry Medical College group student health insurance plan, please visit https://home.mmc.edu/student-affairs/student-life/student-insurance/ or email studentinsurance@mmc.edu, or call the Office of Student Life, (615) 327-6792.

Student Health Services

The Student and Employee Health Clinic is located in the Meharry Comprehensive Health Building, on the 3rd floor, suite 331. The Clinic is open Monday-Friday, 8 a.m.to 4:30 p.m except major holidays. To better accommodate students' busy schedules, appointments are encouraged. Same-day appointments are available for things such as flu shot or TB skin test. The telephone number for appointment is 615 327-5757.

The student health fee provides all current Meharry students access to the services provided at the Student and Employee Health Clinic. The clinical staff is comprised of a certified family nurse practitioner and clinical faculty from the Department of Family and Community Medicine. The services provided include acute illness and injury management, physical examinations*, laboratory services*, immunizations*, tuberculosis screening, and N95 respirator fit testing.

Services provided in the Student and Employee Health Clinic are not intended to be used in the place of a primary care physician or a specialist. For life or limb-threatening conditions, students should go directly to the nearest emergency department. If students require emergency treatment after normal operating hours or if the clinic is closed for unforeseen reasons, they are encouraged to go to the Nashville General Hospital at Meharry Emergency Department, an area emergency department, or call 911.

* Services are billed to the student's health insurance and subject to co-pays and deductibles.

Physical Examination
Prior to registration, all students entering Meharry Medical College are required to have the Health Surveillance/Physical Examination forms completed by a health care provider. The physical exam should be performed within the last 12 months. If you or your health care provider have questions, please email Student Health Service, shs@mmc.edu for assistance.

Student Immunization Policy

Meharry Medical College is committed to providing a safe environment for the education of its students in the health professions and sciences, particularly those students who work in the hospital or with patients. Students, faculty, and staff in the health sciences setting are vulnerable to communicable diseases such as tuberculosis, measles, mumps, rubella, diphtheria and polio. Students who may be exposed to blood or blood products also have the potential of being infected with hepatitis, HIV, or other viruses. These diseases are susceptible to control by appropriate immunizations.

Prior to registration, all students entering Meharry Medical College must provide a hard copy of an immunization record for measles, mumps, rubella, varicella (chicken pox), tetanus, diphtheria, pertussis, polio and Hepatitis B. A hard copy of the actual lab results of the quantitative serologic titers must also be submitted. Documentation of the results of tuberculosis screening within the last 6 months (PPD) is also required. Student and Employee Health providers will review all documentation submitted to determine adequacy. Students who cannot provide adequate documentation of prior immunization or physiciandiagnosed diseases (as indicated by serological evidence) must receive immunizations to these diseases prior to the beginning of the fall semester of the said academic year.

Required Immunizations and Quantitative Serologic Titers:

- Hepatitis B vaccinations: documented series of 3 vaccines and Hepatitis B surface antibody quantitative serologic titer
- MMR (measles, mumps, rubella): documented series of two doses and quantitative serologic titers
- Varicella: documented series of two doses and quantitative serologic titer or documented date of disease and quantitative serologic titer.
- Tetanus/Diphtheria/Pertussis: documentation of Tdap vaccine after age 19 must be provided
- Polio: documentation of last immunization
- Tuberculosis Screening: within the last 6 months: PPD or IGRA result or documentation of previous positive PPD, subsequent treatment and most recent chest x-ray report (within the last 6 months)

Veteran Students

Veteran Affairs (VA) educational benefits are available to qualified veterans, reservists/guardsmen, spouses and children of 100% service-connected deceased or disabled veterans who apply for funding through the Registrar's Office and are approved by the VA. In order to receive VA education benefits for pursuit of a program of education, students must maintain satisfactory attendance and academic

progress. The VA will discontinue educational assistance to those who do not maintain satisfactory attendance and progress.

To establish eligibility for Veteran Affairs Educational benefits, students must submit an Application for VA Education Benefits to the Department of Veteran Affairs online through VONAPP (http://www.vabenefits.vba.va.gov/vonapp/default.asp). Students must also contact a School Certifying Official (SCO) in the Office of the Registrar and submit the Certificate of Eligibility, Certificate of Release or Discharge from Active Duty form (DD-214), and the VA Enrollment Certification Request form. The VA Enrollment Certification Request form must be submitted to the Office of the Registrar each term to confirm the student's eligibility for and wish to access VA benefits.

The VA Certifying Officials are available to assist students with this process. They can be contacted at recordsdepartment@mmc.edu or (615) 327-6466.

Student Life

Student organizations sponsor many community centered, educational, and social activities each year that are anticipated and appreciated by students. Both informal and formal class celebrations are common after examinations or other academic benchmarks.

Recreational activities provide a change of pace that helps keep the stress of professional and graduate school manageable. Intramural sports are an important part of the social agenda at Meharry. Co-ed softball, co-ed basketball, and other recreational activities such as Zumba, fitness boot camp, and more help keep life interesting and fun for Meharry students.

Recreation facilities are located in the Ross Fitness Center within the Elam Center. The fitness center provides a gymnasium that accommodates all student activities with the exception of softball. In addition, it includes an aerobics room, a weight room with machine weights, free weights, treadmills, and televisions. Surrounding community facilities are utilized to support recreational programs such as softball.

Student Governance

The Pre-Alumni Association is the student government body at Meharry. All Meharry students are members of the Pre-Alumni Association. The student body elects a president, three vice presidents, two secretaries, a treasurer, a student observer to the Board of Trustees, Miss Meharry and Court, and a member-at-large from each school. This organization provides student leadership and an official communication mechanism for students' ideas and opinions concerning the College. The Pre-Alumni Association sponsors many student activities and community service projects.

Student Organizations

With more than 50 approved student organizations, Meharry students have the opportunity to develop and participate in community involvement, social, and cultural activities. Visit http://mmc.campusgroups.com for an updated list of events, meetings and activities hosted by registered student organizations. There are a variety of service, social, honor, Greek letter and special interest student organizations available at Meharry, including:

- Pre-Alumni Association
- Student National Medical Association
- Student National Dental Association
- American Medical Student Association

- American Medical Association-Medical Student Section
- American Student Dental Association
- Ewell Neil Dental Research Society
- Graduate Student Association
- Student Hispanic Dental Association
- Division of Public Health Practice Student Association

Students interested in forming a new campus organization should contact the Office of Student Life.

Student Admission and Enrollment Services

Overview

Through collaborative efforts across the College community, the Division of Student Affairs formulates strategies and develops programs and services designed to achieve success in the enrollment, retention, and graduation goals of the College. The Office of Admissions and Recruitment, more specifically, coordinates recruitment activities for all Schools and provides information about the admission process to both internal and external constituents. The Director of Admissions and Recruitment serves as an ex-officio member of the respective Admissions Committees and works with the Office of the Registrar to maintain the matriculation records that pertain to each first-year student.

Admissions Process

In keeping with the mission of Meharry Medical College and the institutional goals set forth by campus administration, the Office of Admissions and Recruitment coordinates the admission processes for the Schools of Dentistry, Graduate Studies & Research, and Medicine whereby applicants are recruited to the institution, assessed for suitability for admission, offered acceptance, and matriculated into their respective first-year classes. In advancing the College's retention efforts, the ultimate goal is to recruit students who are a strong institutional fit and who will be the strongest carriers of the Meharry legacy.

All applicants must complete the appropriate application for their respective School of interest. Application materials may be obtained online on Meharry Medical College's website under the Admissions section at https:/.home.mmc.edu/admissions/. Additional information may be obtained from the following web sites for the Schools of Dentistry, Graduate Studies & Research, and Medicine.

- ***Dentistry:*** The American Association of Dental Schools Application Service (AADSAS) application is available via the web at www.adea.org. The application deadline for which to submit an AADSAS application to the D.D.S. Degree Program is December 15 of the year prior to matriculation.

- ***Graduate Studies and Research***: The School of Graduate Studies and Research application is available via the web at http://www.mmc.edu/admissions/school-of-graduate-studies-research/. The application deadline is February 16 for the Ph.D. Degree Program and May 16 for the M.S.P.H. Degree Program of the year of matriculation.

- ***Medicine:*** The American Medical College Application Service (AMCAS) application is available via the web at www.aamc.org/amcas. The application deadline for which to submit an AMCAS application to the M.D. Degree Program is December 15 of the year prior to matriculation.

Each applicant must complete the following steps:

- **Complete and submit an Admissions Application**
- **Submit transcripts**. Dental and Medical applicants send transcripts to the application service while Graduate applicants send transcripts directly to the Meharry Medical College Office of Admissions and Recruitment.
- **Complete and submit a Supplemental Application**. Only Dental and Medical applicants are required to complete a Supplemental Application. Medical Supplemental Applications are by invitation only. Once the AADSAS or AMCAS application is received, the Office of Admissions and Recruitment will forward instructions to the applicant for completion of an electronic Supplemental Application.
- **Submit letters of recommendation**. Three letters of recommendation are required for applicants to the Dental and Medical Schools and should be mailed to the respective application services (AADSAS or AMCAS). Two letters of recommendation are required for applicants to the Graduate School and should be mailed directly to the Office of Admissions and Recruitment at Meharry Medical College.
- **Admission Tests.** All applicants are required to take the Admissions Test for the program to which they are applying.

  Dental School: **Dental Admissions Test (DAT):** Dental applicants must take the Dental Admission Test (DAT). DAT exams taken after December 15 of the year prior to matriculation will not be considered for admission. Additionally, DAT scores older than three years of the year of matriculation will not be considered for admission. For more information about the DAT, visit the website: http://www.adea.org/dental_education_pathways/aadsas/Applicants/Pages/RegisterfortheDAT.aspx

  Graduate School—Ph.D. & M.S.P.H.: **Graduate Record Examination (GRE):** Graduate School applicants must take the Graduate Record Examination (GRE). GRE tests taken after February 17 for Ph.D. candidates and May 1 for M.S.P.H. candidates of the year of matriculation will not be considered for admission. Additionally, GRE scores older than three years of the year of matriculation will not be considered. For more information about the GRE, visit the website: http://www.ets.org/gre/.

  Medical School: **Medical College Admissions Test (MCAT):** Medical applicants must take the Medical College Admissions Test (MCAT). MCAT exams taken after December 15 of the year prior to matriculation will not be considered for admission. Additionally, MCAT scores older than three years of the year of matriculation will not be considered for admission. For more information, visit the website: http://www.aamc.org/mcat.

Complete applications are reviewed by the respective Admission Committees and selected applicants are invited for interviews. Once selected for an interview, applicants are notified by the Office of Admissions and Recruitment. Once conducted, an evaluation of the interview is submitted to the Admissions Committee for a final action. Once a final action is made, the Office of Admissions and Recruitment notifies each candidate of his or her admissions status. Applicants receiving an offer of admission are required to submit a letter of acceptance. Dental applicants must submit an $800 deposit and Medical applicants must submit a deposit of $300 at the time of acceptance. The deposit is applied to the tuition of the matriculating student. If the medical applicant withdraws their application on or before April 30, two-thirds of the deposit ($200) is refunded. Dental School deposits are non-refundable.

Inquiries regarding the status of an admission and/or supplemental application should be directed to the Office of Admissions and Recruitment. Additional information regarding the admissions requirements of each school is found in the respective school sections of this catalog.

New Student Orientation

New Student Orientation is coordinated by the Division of Student Affairs and is a mandatory one day program for all incoming first year students. This program is designed to introduce new students to the College. During New Student Orientation, students receive pertinent information that will help them to succeed at Meharry Medical College. All three schools have their respective orientation program beginning the day after New Student Orientation.

Commencement

A student is eligible for graduation if he/she has satisfactorily completed the academic requirements outlined in each school's Academic Policy and Procedures Manual, including the completion of passing of USMLE, Step I and Step 2 exams (SOM), NBDE, Part I and Part II exams (SOD), and submitting a final approved thesis or dissertation (MSPH and Ph.D.).

A favorable vote of the faculty from each of the respective schools with concurrence of the dean is required for candidacy for the M.D., D.D.S., M.S.P.H., M.H.S., M.S.C.I. and Ph.D. degree. Degrees are awarded at the commencement exercise held the third Saturday of May each year. Meharry
Medical College's official degree dates include the date of the May commencement, June 30, October 31, or December 31. May's confirmed graduates are allowed a thirty-day grace period to complete all degree requirements.

Name Change

A currently enrolled student may file a request for a name change with the Office of the Registrar. A notarized Request for Name Change form must be accompanied by supporting documentation such as:

- Birth Certificate
- Court Order
- Divorce Decree
- Marriage Certificate

The College reserves the right to request multiple forms of documentation for verification. A driver's license or Social Security card is not valid documentation for a name change. When the request for a name change is approved, the change will be made in the Banner system. Once students leave the College, no further name changes can be made to the academic record.

The electronic version of the Request for Name Change form can be found on the Office of the Registrar website (http://www.mmc.edu/wp-content/uploads/2017/06/name-change-pdf.

Registration

A student cannot register until he/she has received official notification of admission to the College and confirmed his/her intent to attend. Registration is completed online by students via Banner Student Self Service where applicable or by the Office of the Registrar.

Once registration is completed, tuition, and fees are assessed and the academic registration process is complete. Payment of tuition and fees is handled by Student Financial Services (615) 327-6220. To assess registration status, students can log onto Banner Student Self-Service

(https://luminis.mmc.edu/cp/home/displaylogin) to view all courses scheduled, financial aid awarded, and account balances.

Please note: Submission of a schedule does not validate registration. If holds exist, registration is not permitted. It is the student's responsibility to take care of all outstanding holds prior to registration.

Cross Registration. Meharry Medical College participates with Fisk University, Tennessee State University and Vanderbilt University in cooperative programs among the four participating institutions. Students who desire to cross-register (take courses at a participating school) must determine if the courses are available and obtain the permission of the respective dean and advisor to enroll in such course(s). He/she must then bring a signed statement of permission (schedule) to the Office of the Registrar to complete the registration process**.**

Request for Duplicate Diplomas

A certificate of graduation may be reissued upon receipt of a notarized statement confirming that the degree was lost, stolen, or damaged. An exact duplicate may be given if the officials who signed the original diploma are still associated with the College. If not, a diploma with signatures of current leadership will be issued. A fee of $75 is charged for this service.

All requests may be submitted to: Meharry Medical College, Office of the Registrar, 1005 Dr. D.B. Todd Jr. Blvd., Nashville, TN 37208-3599; office, (615) 327-6466; fax, (615) 327-6228.

Requests submitted by or on behalf of students or alumni with financial holds cannot be processed.

Request for Licensures, Deferments, Verifications, and Transcripts

The completion of deferments, enrollment verification, licensures and all other requests processed by the Office of the Registrar are free. There is a three to five business days processing time for all requests. However, during busier times such as registration and graduation, processing time may vary. Processing time does not include delivery time from the United States Postal Service.

Transcript requests can be submitted online via Banner Student Self-Service for current students and online for alumni via the Registrar's Office website (https://home.mmc.edu/student-affairs/student-life/registrars-office/). All other requests can be submitted online via the Enrollment/Degree Verification form, also found on the Registrar's Office website. Students and alumni must check with the recipient prior to uploading forms to see if they require the original document be submitted, as well as if your original signature (not a scanned/electronic copy) is required.

Meharry Medical College has authorized the National Student Clearinghouse to provide degree/education verifications for third parties requesting degree/education verifications via www.degreeverify.org.

Those who do not have access to the internet may write a letter and mail or fax it to Meharry Medical College Office of the Registrar. The following information should be included with all requests:

- First and last name (include maiden name, if applicable)
- Last 4 digits of Social Security number or Student ID number
- Daytime phone number & e-mail address
- School attended: Medical, Dental, Graduate
- Approximate dates of attendance
- Number of items requested

- Names and complete addresses for all recipients
- Delivery Method: pick-up, email, or mail
- Requester's handwritten signature

General Financial Information

Student Financial Aid

Approximately 90% of Meharry's student body relies on some type of financial assistance to aid them with financing their health professions education. Student financial aid is the monetary support that is available to help students pay educational expenses including tuition, fees, room, board, books, supplies, etc. to attend a college or university. Meharry Medical College's Office of Student Financial Aid assists students by providing an avenue to a broad range of funding sources, which contributes to securing financial options to worthy and qualified students. Most financial aid is awarded in accordance with demonstrated need for assistance, as determined by a federal methodology calculation on the Free Application for Federal Student Aid (FAFSA). Students are advised and counseled on all financial aid programs available. Meharry Medical College's financial aid options include grants, scholarships, loans, and federal work-study to eligible students. Meharry participates in the student aid programs funded by the U.S. Department of Education, the U.S. Department of Health and Human Services, as well as, state and regional funding agencies. Most of the College's institutional scholarships are awarded based on criteria specified by donors, and some others include outstanding academic performance. Recipients are selected by each school's Scholarship Committee. Currently, there is not an application process used in the awarding of Institutional Scholarships.

Degree candidates that are U.S. citizens or eligible non-citizens are eligible to qualify for most federal student aid programs. Contact the Office of Student Financial Aid (615-327-6826 or finaid@mmc.edu) for additional information regarding the financial aid programs that are available at Meharry Medical College. More detailed information regarding student financial aid may be reviewed at the College's website at https://home.mmc.edu/financial-aid/.

Disbursement of Aid
The Office of Student Financial Aid certifies and originates loan funds through the U. S. Department of Education's Federal Direct Lending loan program. Students are no longer able to borrow federal loan funds through private lenders in order to fulfill their cost of attendance. All federal loan proceeds are disbursed under one umbrella and by one lender, the U. S. Department of Education. Financial Aid student loan funds will be disbursed to the student's account on or after the first day of class, at the beginning of each semester. Treasury Services is responsible for the disbursement of funds.

Disbursement of Excess Payments/Living Expense Funds
Funds received in excess of the total tuition and fee charges for the semester (living expenses) will be disbursed (refunded) to the student within five (5) business days after the first day of class each semester. Meharry Medical College participates in Direct Deposit to transfer all student refunds to the student's designated checking or savings account. Students, who have not established a bank account with a financial institution, are encouraged to set up an account with an institution, of their choice; however, they can **elec**t to have their refunds generated by a paper check payable to the student **(this is not recommended**). The Direct deposit agreement, with required support, must be submitted to the Office of Student Financial Aid.

Scholarships

Each year a number of scholarships are awarded to incoming and continuing students. There is no application for these Institutional Scholarships, which includes Honors/Incentives, Awards/Prizes, Named Scholarships and General Scholarships. Meharry Medical College is dedicated to creating a rich and superior academic environment for each student. This environment is enhanced by the inclusion of students who are talented and represent a broad spectrum of society—cultural, social, and economic.

Honor/Incentives Scholarships are awarded with an attached stipulation, in that, the scholarship will continue up to four years of study, as long as students maintain satisfactory academic performance, as specified by the guidelines of the Scholarship Committee of each school.
Awards/Prizes and Named Scholarships are awarded during the annual Convocation ceremony, which is usually held in October each year. Recipients are selected by the respective schools' Scholarship Committees, based on the criteria as determined by the donor. Selected students will generally be notified in late September or early October. A list of scholarships awarded is published in the annual Convocation program booklet.

General Scholarships are awarded annually and may be awarded as funds are available. The Scholarship Committee selects all scholarship recipients.

Additional scholarship information is available in the Office of Student Financial Aid and/or the Offices of Student/Academic Affairs in each school. For more information contact: Office of Student Financial Aid, Division of Student Affairs, Meharry Medical College, 1011 21st Avenue, N., Suite 120, Cal Turner Family Center for Student Education, Nashville, TN 37208; Office: (615) 327-6826; Fax: (615) 327-6951; E-mail: finaid@mmc.edu.

Student Financial Services

Meharry Medical College recognizes the importance of funding a professional school education. The primary responsibility of the Student Financial Services team is to manage all campus-based student loan programs and to receipt and disburse student aid in an accurate, efficient, and timely manner while complying with regulatory requirements. The team is committed to serving each student by assisting with meeting his or her financial needs in any way possible.

The Student Financial Services office consists of two units that provide a broad range of financial and related administrative support service to students. These units are Student Accounts Receivable and Student Campus-Based Loans.

Student Accounts Receivable

Student Accounts acts as a clearinghouse for various charges and credits that are placed directly on the student's tuition account by departments and offices of the College. The office manages the billing and collection of student accounts, provides customer service, and account analysis to students.

***Payment of Tuition and Fees*.** Every student who registers at Meharry Medical College incurs a financial obligation to the College. Payment of tuition and fees is due at the point of registration and are the financial responsibility of the student. Students ineligible for financial assistance in the form of Federal aid, Institutional aid, or Scholarships are considered "Self-Pay" students.

"Self-Pay" students are expected to pay in full at the point of registration for the fall semester and on or before the first business day of the spring semester. Payment may be made by cash, credit card, check, or money order payable to Meharry Medical College. Payments should be remitted to Attn: Student

Financial Services, 1005 Dr. D. B. Todd, Jr. Blvd., Suite 511, Nashville, TN 37208. Monthly invoices are sent via the College's e-mail system. Student accounts delinquent more than 90 days may also be placed with an outside agency for collection and are subject to additional costs of collection expenses and reasonable attorney fees.

Meharry offers a Deferred Payment Contract plan. The deferred payment contract is a semester based plan, requires an initial payment of one-fourth of the balance due plus a $25.00 contract service fee, and must be approved by the Dean of the respective school. Contract participants who fail to make timely payments are assessed a $50.00 monthly late fee. Students whose accounts are delinquent may become ineligible to register for subsequent semesters, receive grades on transcripts, and are ineligible to receive a diploma upon completion of degree requirements.

Billing Schedule. Bills are mailed on the 15th of each month to the student's Meharry Medical College account and are due in full by the first business day of the following month. Charges applied to the student's account during the semester will be due at the point of assessment or upon receipt of the monthly Student Account Statement.

***Payment Information*.** Payments can be made with personal check, cashier's check, money order, wire, or a debit/credit card. Checks should be made payable to Meharry Medical College in U.S. Dollars; for non U.S. funds, the difference in exchange rates and bank collection charges will be charged to the student's account.

***Refund or Credit Balance*.** Any student who has a refundable credit balance will receive a refund within five working days of the creation of the credit balance. The first date for refunds for each semester is in compliance with federal mandates. After the first refund date in each semester, refunds will be processed twice weekly. If an account has a refundable credit balance by noon on Monday, a refund will be processed and available no later than the following Friday. If an account has a refundable credit balance by noon on Wednesday, a refund will be processed and available no later than the following Wednesday via direct deposit.

Delinquent Student Accounts – Financial Holds. Outstanding balances will prevent a student from registering for any subsequent semester and may jeopardize continued enrollment with the College. The College also reserves the right to refuse to furnish grades, transcripts, certificates, diplomas, letters of honorable dismissal or recommendation for students who fail to pay their student account balances.

Mailing Address/Location to Remit Payment: Meharry Medical College, Student Financial Services, LRC Bldg., 5th Floor, Suite 511, 1005 Dr. D. B. Todd, Jr. Blvd., Nashville, TN 37208. Please be sure to include your name and account number on your check when you remit student payments to assure proper credit.

The cashier's window is located on the 5th floor of the Kresge Learning Resource Center. The cashier/disbursement window is open Monday through Friday during the hours of 9 a.m. to 1 p.m. and 2 p.m. to 4 p.m.

Student Campus-Based Loans

This unit of Student Financial Services is responsible for managing and collecting institutional and federal campus-based loan programs. The institutional loans are Edgar G. and Lillian Rios Endowed Revolving Loan and Eloesser Revolving Loan Fund. The campus-based programs include Federal Perkins, Health Professions Student Loans (HPSL), Loans for Disadvantaged Students (LDS), Primary Care Loans (PCL).

A student's account will not be credited with loan funds until the student has completed an on-line entrance interview and signed a Promissory Note. Before leaving the College, a student is required to participate in an exit interview for these loan programs. Students who participate in any federal loan program are required to complete an exit interview.

The Office of Student Financial Aid determines student eligibility for financial aid and awards all federal and campus-based student loans. Award notices are sent to the student by the Student Financial Aid Office. Heartland Campus Services ECSI, our billing servicer, will notify the student by email to complete an entrance interview electronically. Once the student completes all required documentation, and signs the promissory note, the campus-based loan funds are credited to the students' account. If a credit balance is created, a refund is processed.

Once the student/borrower enters repayment, information and applications for deferment, forbearance, and cancellation can be obtained from www.heartlandecsi.com or by contacting our office at Student Financial Services, Division of Finance, Meharry Medical College, Suite 511, Kresge Learning Resources Center, 1005 Dr. D. B. Todd, Jr. Blvd., Nashville, TN 37208; office (615) 327-6220 or fax (615) 327-6406. Student financial managers are available to provide repayment assistance, including information about consolidation and loan habilitation.

Tuition Refund Policy/Return to Title IV Funds (R2T4) Policy

Meharry Medical College has adopted the U. S. Department of Education's refund policy (*Department of Education, Student Financial Aid Handbook, Volume 5, Chapter 1, 2012-2013 Award Year)* for all students who find it necessary to withdraw from the College or take a leave of absence during the academic year. It is a universal policy that applies to all students, those receiving and not receiving federal financial aid. Students who elect to withdraw or take a Leave of Absence during the academic year must submit prior written notification to the appropriate Academic Dean according to the procedures specified in the Academic Catalog for their program. Meharry Medical College may amend its institutional refund policy at any time. Amendments will become effective for the academic year that follows official notification of the amendment. Any questions concerning Meharry Medical College's refund policy should be directed to the Office of Student Financial Aid.

The formula is as follows:

The number of days completed in the semester in question / total days in semester = the percentage (%) of earned aid. If the percentage is greater than 60%, then 100% of the funds are earned and no refund or return is required.

NOTE: 60% of the term usually averages out to be about 2 ½ months.

The same percentage will be applied to tuition and fees with the exception of the following fees, which should be maintained at 100%:

- Registration
- Orientation (first year students only)
- Health insurance (which will continue until the end of the semester)

Students are not entitled to a refund of tuition and/or fees paid by third parties; such will be refunded/returned to the agency.

General Requirements: Federal Student Aid funds are awarded to a student under the assumption that the student will attend the institution for the entire period for which the assistance is awarded. When a

student withdraws, the student may no longer be eligible for the full amount of Title IV funds that the student was originally scheduled to receive.

If a recipient of Federal Student Aid loan withdraws from school after beginning attendance, the amount of Federal Student Aid loan assistance earned by the student must be determined. If the amount disbursed to the student is less than the amount the student earned, and for which the student is otherwise eligible, he or she is eligible to receive a post-withdrawal disbursement for the earned aid that was not received.

Definition of a Title IV Recipient: A recipient of loan assistance is a student who has actually received Title IV funds or has met the conditions that entitle the student to a late disbursement. If the student never began enrollment for the payment period or period of enrollment, the refund policy does not apply. Similarly, if a student began enrollment, but was not and could not have been disbursed Title IV funds prior to withdrawal, the student is not considered to have been a Title IV recipient and the requirements of this refund policy do not apply.

Funds to Include in the Calculation: To determine the amount of funds that have to be returned to the Federal Government, the web-based R2T4 program is used. A calculation of earned/unearned Title IV program assistance loan funds that were disbursed or could have been disbursed to a student based on the length of enrollment for the academic year. This includes the Federal Direct Unsubsidized and Grad PLUS Loan Programs.

Title IV Aid Disbursement: A student's Title IV funds are disbursed when the school credits a student's account with the funds or pays a student directly with Title IV funds received from the William D. Ford Federal Direct Loan Program. A student's aid is counted as disbursed for the calculation if it is disbursed as of the date of the institution's determination that the student withdrew.

Percentage of Title IV Aid Earned: The withdrawal date is used to determine the point in time that the student is considered to have withdrawn so the percentage of the enrollment period completed by the student can be determined. The percentage of Title IV Aid earned is equal to the percentage of the enrollment period completed. If the day the student withdrew occurs on or before the student completed 60% of the enrollment period for which the assistance was awarded, the percentage earned is equal to the percentage of the enrollment period that was completed, and the Return to Title IV (R2T4) Calculation is performed. If the day the student withdrew occurs after the student has completed more than 60% of the enrollment period, the percentage earned is 100%, and no R2T4 Calculation is needed.

Determining a Student's Withdrawal Date at a School Not Required to Take Attendance

The chart below lists the withdrawal date for the various types of withdrawals, as well as, the date of the institution's determination that the student withdrew for each type of withdrawal.

Withdrawal Type	Circumstance	Student's Withdrawal Date*	Date of the Institution's Determination that the Student has Withdrawn
Official Notification	The student begins their respective school's withdrawal process, or the student otherwise provides official notification to the school of their intent to withdraw.	• The date the student begins the school's withdrawal process, or • The date that the student otherwise provides the notification. • (If both circumstances occur, use the earlier withdrawal date.)	The student's withdrawal date, or the date of notification, whichever is later
Official Notification Not Provided	Official notification not provided by the student because of circumstances beyond the student's control. All other instances where student withdraws without providing official notification.	• The date that the school determines is related to the circumstance beyond the student's control. • The midpoint of the payment period or period of enrollment, as applicable.	The date that the school becomes aware that the student has ceased attendance. **
Withdrawal Type	**Circumstance**	**Student's Withdrawal Date***	**Date of the Institution's Determination that the Student has Withdrawn**
Leave of Absence Related	The students does not return from an 'approved' leave of absence, or The student takes an 'unapproved' leave of absence.	• The date that the student began the leave of absence.	The earliest of the dates of the end of the leave of absence or the date the student notifies the school he or she will not be returning to that school. (In the case of an unapproved absence, the date that the student began the leave of absence.)
Withdrawal After Rescission of Official Notification	The student withdraws after rescinding a previous official notification of withdrawal.	The student's original withdrawal date from the previous official notification.	The date the school becomes aware that the student did not, or will not, complete the program period or period of enrollment.

* In place of the dates listed, a school may always use as a student's withdrawal date the student's last date of attendance at an academically related activity, if the school documents that the activity is academically related and that the student attended the activity.
** For a student who withdraws without providing notification to the school, the school must determine the withdrawal date no later than 30 days after the end of the earlier of the (1) payment period or period of enrollment (as appropriate), (2) academic year, or (3) education program.

Title IV Aid to be Returned: If a student receives more Federal Student Aid than the amount earned, MMC, the student, or both must return the unearned funds in a specific order. The amount of Federal Student Aid to be returned is determined by subtracting the amount of earned Title IV aid from the amount of the Title IV aid that was actually disbursed to the student (not including aid that could have been disbursed).

Amount of Unearned Title IV Aid Due from School: When a return of Title IV funds is due, the school and the student both may have a responsibility for returning funds. Federal funds that are not the responsibility of the school to return must be returned by the student. Although this requirement references returning loan funds, a school is not required to return its share before the student. Rather, it is the R2T4 calculation of the amount of assistance the school is responsible for returning to the Title IV accounts that must be calculated first. The student's repayment obligation is determined after the school's share is calculated. The school must return the lesser of: The amount of Title IV funds that the student did not earn; or the amount of institutional charges that the student incurred for the payment period or period of enrollment multiplied by the percentage of funds that was not earned.

Return of Funds by the School*:* A school must return Title IV funds to the program from which the student received aid during the payment period or period of enrollment as applicable, in the following order, up to the net amount disbursed from each source:

- Federal Unsubsidized Stafford Loans
- Federal Subsidized Stafford Loans (Graduate/Professional students are no longer eligible for Subsidized Loans)
- Federal Perkins Loans (2016-2017 was the last year that Graduate/Professional students could receive these funds)
- Federal Graduate Plus Loans

NOTE: A school has 45 days from the date the institution determines that the student withdrew to return all unearned funds for which it is responsible.

Return of Funds by the Student

The student returns funds to loan programs in accordance with the terms of the loan. In other words, the student will repay any unearned loan funds in the same manner that he or she will be repaying earned loan funds.

General Regulations

General Regulations

The faculty and administration of Meharry Medical College expect full cooperation from the student body in the maintenance of high moral and ethical standards. Students should expect and receive courteous and helpful assistance from staff and innovative instruction and research methods from the faculty. If a student breaches the moral and ethical standards of the institution, Meharry Medical College reserves the right to dismiss the student.

The following general regulations apply to all students enrolled at Meharry Medical College:

- Personal integrity and honesty are very important attributes of a professional; therefore, any student involved in irregularity in an examination will be referred to the College Disciplinary Committee for action.

- Any student who withdraws from the College must comply with the College's official withdrawal policy. Students who drop out after the end of the refund period will be assessed full tuition and fees for the semester.

- Use of the name "Meharry Medical College" or any derivative thereof, as the purchaser of goods or services ordered or bought by students is expressly prohibited. Students may use the name "Meharry Medical College" and the address of the institution as the mailing/shipping address for packages and letters.

- Programs for public exercises of entertainment sponsored by the students or student organizations, in which the name of the College is used, must be submitted to the Office of Student Life for approval.

- Meharry Medical College is not responsible for personal property that may be lost or damaged on its premises.

- No student of Meharry Medical College shall treat or prescribe drugs for patients except during regular clinics or dispensaries of the hospitals connected with the College and then only under the supervision of the practitioner of medicine or dentistry who must sign the prescriptions and is licensed in the state in which the hospital or clinic is located. All students must abide by the Meharry Medical College Substance Abuse Policy. The Substance Abuse Policy is available in the Student Handbook at https://home.mmc.edu/student-affairs/student-life/handbooks-policies/.

Attendance

The attendance policy recognizes the responsibilities of the student, the faculty and the administration of the School. The attendance policy is established by each school, managed by the course director for each course, and published in each course syllabus. Students who are absent from classes must work with the faculty to complete course work and make up missed clinic sessions. Excessive absences from required courses may result in loss of grade up to and including failing the course.

Continuous Enrollment

All students must be in an official enrollment status, i.e. registered and enrolled or on an official leave of absence (see Leave of Absence Policy) to be considered a student at Meharry Medical College. Please note, students on a Leave of Absence are not permitted to sit for any Boards (i.e. USMLE, NBDE).
Any student not enrolled for two consecutive semesters and not on an official leave of absence, will be administratively withdrawn. A warning letter will be sent during the first semester of non-enrollment.
Any student administratively withdrawn, must petition their respective School in writing for reinstatement to an active status.

Any student not enrolled for more than three semesters, must reapply for admission through the normal admissions process under the current admissions requirements and standards. Credit for coursework already completed will not be automatically guaranteed.

Leave Of Absence

A leave of absence is an interruption of the normal course of study requested by the student and requiring prior approval by their respective dean. All leaves of absence must be requested in writing and addressed to the dean for academic affairs. In most cases, a leave of absence cannot extend past one calendar year. A request for an extension of the leave will be at the discretion of the School's dean. A leave of absence from the College is given only to students who are in good academic standing. During a leave of absence, the student is not enrolled and therefore not allowed to sit for board examinations, or participate in any academic coursework.

All requests for a return from a leave of absence must be in writing and received by the respective School dean before the expiration of the leave. Additional information about conditions and timelines for requesting and returning from a leave of absence is provided in each school's Academic Policies and Procedures Manual.

Involuntary Leave of Absence

Meharry may place a student on an involuntary leave of absence from their academic program when the student: (1) poses a direct threat to health and safety of self or others; and (2) is not able or not willing to take a voluntary leave of absence. This form of leave may not be used in lieu of disciplinary actions to address any violations of the College's rules, regulations, policies, or practices. A student who is placed on an involuntary leave while on academic and/or disciplinary status will return on that same status.
When an involuntary leave is under consideration, the Dean or the Dean's designee will notify the Senior Vice President of Student Affairs, the Director of the Student Health Center (if relevant); the Director of Counseling Services (if relevant); the Director of Student Housing, and Campus Safety and Security (if relevant). A psychological and/or medical evaluation (at no cost to the student) may be required and completed by the Director of Counseling Services if the conduct giving rise to the involuntary leave was caused by a medical or psychological condition. The student will be asked to provide relevant medical and/or psychological information from his or her health care provider.

Following the review of a completed psychological and/or medical evaluation (if relevant) and upon consideration of recommendations made by any of the College's offices identified above, a decision will be reached by the Dean or the Dean's designee. The student will be informed in writing of the decision and the terms and conditions of the leave and re-enrollment.

If a student is placed on an involuntary leave, the student's Identification card must be returned to the College and access to his or her e-mail computer account may be suspended at the discretion of the

Dean or the Dean's designee. The student must be off the campus during the approved period of leave. Campus Safety and Security will be notified of the student's involuntary leave and will take appropriate steps to limit access of the student during the approved period of the involuntary leave.
The relevant academic program, academic department, or school will be responsible for notifying the appropriate College's offices, administrators, faculty advisors, and instructors of the involuntary leave. The notation "leave of absence" will be entered on the student's transcript.

***Appeal of an Involuntary Leave Decision*:** A student who is placed on an involuntary leave may appeal the decision to the Executive Vice President (or designee) within ten (10) business days (excluding weekends and federal and state holidays) of the decision. The appeal should be made in writing and should set forth the basis for the appeal. The Executive Vice President shall review the record and any additional information submitted by the student. The Executive Vice President has ten (10) business days from receipt of the appeal (excluding weekends and federal and state holidays) to affirm or reverse the decision, which is then considered final. The Executive Vice President may extend the time limits set forth above as necessary.

Duration of Leave: The duration of the leave will be no less than one full academic semester or an equivalent four- month period excluding the semester in which the student is required to leave to a maximum of two academic semesters or the equivalent in months (8 months). An extension or reduction of the leave period may be granted for good cause. Students cannot be reinstated for a particular semester after the registration deadline for that semester has passed.

Return from an Involuntary Leave/Re-enrollment: One month prior to the first day of classes of the semester in which the student seeks to return, the student must notify the Dean (or the Dean's designee) of his or her school, in writing of the intention to return/re-enroll at the conclusion of the leave period. The student also must notify the Campus Housing if seeking on-campus housing upon return. If the conduct giving rise to the involuntary leave was caused by a psychological or medical condition, the student must also notify either the Director of Counseling Services (or his or her designee) or the Director of the Student Health Center (or his or her designee) to schedule an assessment interview, depending on whether the involuntary leave was due to a medical or psychological condition.

If the conduct giving rise to the involuntary leave was caused by a psychological or medical condition, the student must have his or her health care provider complete a "Certificate of Readiness to Return" form and be independently assessed by the Director of Counseling Services (or his or her designee), and/or the Director of the Student Health (or his or her designee) regarding the student's fitness to return/re-enroll. Upon request, the student will authorize his/her health care provider to provide Meharry with additional medical or psychological information relevant to assessing the student's fitness to return/re-enroll.

Following the review of the re-enrollment request and upon consideration of recommendations made by any of the relevant College's offices and information provided by the student's health care provider, a decision will be reached by the Dean or the Dean's designee regarding whether the student may return/re-enroll in his or her academic program and the terms and conditions of such a return. The Dean or Dean's designee will notify the appropriate offices and administrators, including the Campus Safety and Security, as to whether the student is permitted to return.

Appeal of Decision Denying Re-enrollment: A student may appeal a decision denying re-enrollment to the Executive Vice President (or the designee) in writing within ten (10) business days (excluding weekends and federal and state holidays) of receiving the decision. The Executive Vice President shall review the record and any additional information submitted by the student and render a decision within ten (10) business days (excluding weekends and federal and state holidays) of receiving the appeal. The Executive Vice President's decision shall be final.

Non-Academic Disciplinary Action

Student Disciplinary Committee

Appeals involving non-academic violations of the College's Code of Professional Conduct and Honor Code must be transmitted in writing to the College's Student Disciplinary Committee (SDC). The SDC is appointed by the President and is comprised of seven (7) members of the Meharry Medical College community, two (2) faculty members from each school and one (1) student. Members are appointed for a two-year term with the exception of the student member who is appointed for one-year.

The College makes every effort to protect the privacy of the individual(s) involved in disciplinary actions. The location and time of the SDC hearings are not made public and each member is required to sign a confidentiality agreement, which requires that the names of individuals appearing at the committee hearings not be disclosed.

Reporting Ethical and Professional Complaints: Unprofessional conduct and allegations of unethical standards should be reported to the Senior Vice President for Student Affairs. Allegations of violation of the College policies are accepted for consideration when the apparent infractions are observed on college property or other locations where the college provides services or has approved of the activity. Infractions of federal, state or local laws occurring off campus shall be the concern of the civil authorities expect when such actions: (1) directly affect health, safety or security; (2) affect the college's pursuit of its educational purposes; or (3) occur as a direct result of a college connected disruption. Any employee, student or faculty may report an allegation of unprofessional and unethical conduct. Each allegation should be in writing and describe with as much specificity as possible (e.g., dates, names, locations, occurrences), the factual events that constitute the alleged violation. If specific information is unknown, the person making the allegation should supplement as appropriate. Every effort should be made to resolve the situation at that level. If the situation cannot be resolved at Senior Vice President of Student Affairs' level an appeal should be handled by members of the SDC. Only sanctions that result in suspension or expulsion are appealable.

Disciplinary Guidelines: Student discipline may take a variety of forms, including, but not limited to, counseling, oral reprimand, written reprimand, probation, restitution, suspension, and expulsion (with or without the possibility of readmission).

A. ***Investigation and Report:*** Once the SDC has received an allegation the Chair will work closely with the Office of General Counsel and any appropriate body or person to investigate the allegation. An investigation includes gathering and reviewing pertinent documents, interviewing necessary witnesses, and interviewing the student (if he or she agrees to be interviewed).

   Although institutional investigations and hearings are not considered legal hearings, a lawyer can accompany a student during the interview; however, the interview will be conducted only if a lawyer from the College is also present.

   A summary of the facts and evidence supporting the suspected violation of the Code will be submitted to the Chair for review. The Office of General Counsel is available for consultation at any time on any student disciplinary case, as appropriate. If the Chair determines the misconduct is within the range of possible sanctions for the alleged offenses, then he or she will ensure that the case is coordinated with the Office of General Counsel at an appropriate time.

B. ***Notification to Student:*** Once the investigation is completed and a report of findings is submitted to the Chair of the SDC, the Chair will provide the student written notification of the following:

1. The violation(s) to be considered.
2. A summary of the evidence generally indicating that such violation has occurred.
3. The range of disciplinary sanctions that could result.
4. The student's opportunity to exercise any and all of the following rights, which will be waived if not exercised within the periods of time specified:
    a. A right to respond in writing within ten (10) days to explain anything that is factually erroneous about the allegation and/or that there has been no violation;
    b. A right to respond in writing within ten (10) days to explain why a particular disciplinary sanction would be too severe even though a violation has occurred;
    c. A right to submit within ten (10) days all documentary evidence (including statement/affidavits of witnesses, letters of character references, etc.) that support any of the student's positions; and
    d. A right to submit within ten (10) days a written demand for an oral hearing.

Upon lapse of the above ten (10) day period and/or receipt of the written submissions, the SDC will convene to review the evidence and determine the appropriate disciplinary action or determine to dismiss the case.

If the student demands a hearing, then the Chair of the SDC will provide a certified letter of notification with notice of the following:

1. The time of the hearing (no later than five (5) business days from the date of notification).
2. The location of the hearing.
3. The violation(s) to be considered.
4. The range of disciplinary sanctions that could result.
5. The names of witnesses expected to be called by the SDC.
6. The written or documentary evidence that the SDC will consider.
7. That the student may testify at the hearing and present evidence at the hearing through the testimony of witnesses, provided that he or she provides written notice of the identities of these witnesses to the Chair of the SDC at least two (2) days before the scheduled hearing.
8. That the student may submit further written or documentary evidence for the consideration of the SDC, provided documentation is submitted at least two (2) days before the scheduled hearing.
9. The student may be accompanied by an attorney/advisor provided all parties understand the attorney/advisor will not be allowed to address the SDC. A representative from the Office of the General Counsel will also be present.
10. That, at the conclusion of the hearing, the SDC will deliberate privately and, by majority vote, make its decision on the issues of whether a violation has occurred and whether a particular disciplinary sanction should be imposed.

C. ***Decision by the Student Disciplinary Committee:*** After the hearing, the SDC will submit a letter within two (2) business days, via certified mail and email, to the student informing them of the decision. If the student wishes to appeal the decision, they have 72 hours to submit a written appeal to the President of the College. Only sanctions that result in suspension or expulsion are appealable.

D. ***Appeal to the President:*** If the student appeals the SDC's decision to the President, the President will review the entire case file (including all materials submitted by the student in support of his or her appeal), consult with others as appropriate, and provide written notice to the student of final disposition of the case.

Procedures for Review and Appeal of Academic Dismissal Actions

A student's academic status is determined by the Student Evaluation and Promotion Committee (SEPC) in each school. The Registrar (or his/her designee) receives all grades from each of the Schools and provides them to the appropriate Student Evaluation and Promotion Committee, which consists of members of the teaching faculty and is appointed by the Dean. The Dean of the school concerned determines the number and mix of each SEPC. The appropriate SEPC recommends an academic status for each enrolled student based on the School's academic policies.

Procedures for review and appeal of a recommendation for dismissal based on academic performance are established by each school and are outlined in the school's Academic Policies and Procedures Manual.

Requirements for a Degree

A degree from Meharry Medical College's School of Medicine, School of Dentistry, or School of Graduate Studies and Research will be conferred upon those candidates who have met the following requirements:

1. Regular attendance for the prescribed period of academic years of instruction based on degree conferred. For candidates in the School of Medicine and School of Dentistry, a completion of the prescribed period of four academic years or for the prescribed period of five academic years of instruction when permitted by the respective school's Student Evaluation and Promotion Committee (SEPC).

2. Satisfactory completion of curricular requirements for each year of study.

3. Compliance with high standards of professional and moral conduct and adherence to all College rules and codes of conduct.

4. Payment of all financial obligations.

5. Return of all loaned equipment to the respective schools.

6. Successful completion of **all** required national board examinations.

7. Completion of all requirements within five academic years (if matriculation within a traditional four year program) after first enrollment in the program.

    a. The College's Executive Academic Committee must approve any repetition of the academic year or continuation into the trimester due to academic reason, which will cause the student to matriculate for more than five years.
    b. If repetition of the academic year or continuation into a succeeding trimester extends past five years, and is due to disciplinary reasons, the Dean of the respective school or the appointed designee may waive the five-year rule.

8. Only students who have completed all of the above requirements by April 30 will receive a diploma with the published commencement date. Those completing all requirements after April 30 will receive a diploma with the date of June 30, October 31, or December 31.

Student Code of Professional Conduct

Purpose: The Student Code of Professional Conduct of Meharry Medical College is promulgated so that student academic affairs are conducted under the highest standards of individual responsibility. The Student Code of Professional Conduct promotes personal honor and integrity in the best traditions of the health sciences professions. The Professional Code of Conduct promotes academic honesty and integrity in the classroom, laboratory, clinics, and other academic endeavors. The Professional Code of Conduct requires students to uphold its principles of fairness, professionalism, and ethical behavior; and it also provides procedures to adjudicate alleged violations. By their pledge to subscribe to and uphold this Professional Code of Conduct, Meharry Medical College students assume the responsibility for the implementation of the Professional Code of Conduct, and their own academic and professional honesty and integrity. Students are required to sign the Professional Code of Conduct pledge at Meharry Medical College. Faculty and staff also have a responsibility to participate in the implementation, enforcement, and application of the Professional Code of Conduct.

Accountability: By direction of the President, the Office of the General Counsel shall ensure compliance with this policy.

Definitions

1. “Code of professional conduct” is a series of principles and rules that govern professional interactions. Such principles include both obligatory and desirable components. Obligatory behaviors refer to necessary professional behaviors, which are required by ethical principles and which form the foundation of professional practice, teaching, and learning. Desirable professional behaviors refer to components which enhance professional excellence. Honesty is a central element of each component.

2. “Exoneration” is committee clearance of alleged violations.

3. “Suspension” is defined as temporary exclusion from academic, research and/or clinical activities.

4. “Probation” is a period of time which student must remain free of violations prior to reinstatement or removal of restricting conditions.

5. “Reprimand” means written censure for specified college regulatory violations.

6. “Restriction of Privilege” is defined as loss or diminution of academic, research and/or clinical activities for a prescribed period of time.

Policy: Meharry Medical College reserves the right to reprimand, require withdrawal, or to dismiss any student for unprofessional conduct or behavior. Among the behaviors that may lead to disciplinary action are: cheating, deception, sexual harassment, fraud, destruction of property, substance or alcohol abuse, and criminal activity.

Specifications: Accusations involving students will be transmitted in writing to the College's Student Disciplinary Committee. Any individual may inform any committee member of alleged violations. Immediate action may be taken for emergency infractions/violations until a formal disciplinary hearing can be conducted. The Committee will review referred cases and take appropriate action. Students may appeal any discipline committee action by written communication to the President of the College. The procedures for review and appeal of disciplinary actions are published in the Policies and Procedures Manual of each school/division.

As members of the College academic community, students are subject to the obligations and responsibilities that accrue to them by virtue of this membership. The demonstration of appropriate conduct and exercise of applicable responsibilities is expected.

Students, faculty, staff, and/or test administrators must report observed violations to a member of the school Honor Council, in accordance with Honor Code procedures. Any alleged violation shall be immediately reported by the President of the Honor Council, or Faculty Advisor, to the principal clinician or scientific investigator after the alleged violation is received.

Breach of rules, regulations, policies and procedures governed by the disciplinary procedure shall include, but is not limited to:

Furnishing False Information. It shall be a breach of conduct for any student to intentionally:

- Furnish false information to the College with the intent to deceive, forge, or in any way alter or falsify documents or evidence required for admission to the College.
- Give false information or testimony during the investigation or hearing of a disciplinary matter.
- Forge, alter, destroy, damage or misuse College documents, records, or identification.
- Present the work of another individual or source as one's own concepts or ideas;
- Submit for credit any academic work for which credit has previously been obtained or that is being submitted to another course or assignment;
- Falsify or alter any institutional, research, and/or academic record or make use of such forged or altered records;
- Remove or destroy information related to patient treatment or one's own academic or clinical work; and
- File false charges or accusations against another individual.

Theft or Misappropriation of Funds. It shall be a breach of conduct for any student to intentionally engage in the following:

- Theft, destruction, or damage of intellectual or informational property of the College or an affiliate's property;
- Theft or misappropriation of school funds;
- Theft, destruction, or damage of College property;
- Theft, destruction, or damage of the property of another person;
- Theft of supplies, property, equipment or examinations.

Breach of Rules. Breach of recognized ethical and professional standards applicable to health professional schools include, but are not limited to the following:

- Unauthorized entry to College facilities and/or possession of keys to College facilities.
- Failure to comply with directives of College officials acting in the performance of their duties.
- Violation of written College policies and regulations.
- Violation of the terms of probation.
- Attempt to commit or to be accessory to the commission of any act in violation of this or other standards of conduct.

- Breach of any municipal, state, or federal laws, rules, regulations, ordinances on College property.
- Breach of rules of any institution while on rotation at that institution.

Physical Assault. Physical assault of any person on College-owned or controlled property, or conduct which threatens or endangers the health or safety of any person will be considered a breach of conduct.

Examination Dishonesty. Any use of unauthorized assistance during an examination constitutes dishonesty and represents unacceptable examination behavior. Examples of examination dishonesty include:

- Communication with another student in any manner during an examination;
- Copying material from another student's examination;
- Permitting a student to copy from an examination;
- Use of unauthorized books or notes;
- Falsification/misrepresentation of academic or clinical performance;
- Impersonation of another student at any examination or other form of academic work; • Interference with an instructor's administration of an examination,
- Giving and/or receiving aid during an examination.

Improper Patient Care. Improper patient care includes, but is not limited to, the following:

- Failure to provide care for assigned patients or to carry out assigned activities.
- Failure to respect patient and/or professional confidentiality.
- Unsupervised patient care.
- Provision of patient care or conduct of professional activities when physical, mental, or emotional factors may compromise adequate care or results.
- Willful disregard of patient care/other directives from supervising faculty.
- Rendering of patient care or other professional activities when under the influence of alcohol or other drugs.

Sexual Harassment. Sexual harassment is prohibited by College policy and by law. Sexual harassment is defined as any sexual solicitations, advances, remarks, or actions that are demeaning or intimidating. Sexual harassment constitutes any sexual attention that is unwanted, deliberate, and/or repeated advances, requests for sexual favors, or other verbal or physical conduct of a sexual nature when:

- submission of such conduct is made explicitly or implicitly the terms or condition of an individual's employment or academic standing;
- submission to or rejection of such conduct by an individual is used as a basis for employment or educational decision affecting an individual; or
- such conduct has the purpose of unreasonably interfering with an individual's work or academic performance, or of creating an intimidating, hostile or offensive environment for working or teaching and learning.

Responsibility for implementing the Sexual Harassment policy is delegated by the President to the General Counsel for assuring implementation of the policy. The complete policy on sexual harassment is presented in The College Policy Manual and the Academic Policy and Procedure Manual for each school.

Substance/Alcohol Abuse. The following behaviors constitute conduct code violations:

- possession of illegal drugs/substances
- sale of illegal drugs/substances
- drunken or disorderly conduct on the campus or affiliate site

Violation of provisions of the Code of Conduct shall result in the imposition of one or more of the disciplinary actions set forth in the Substance Abuse Policy and Drug-Free Workplace Statement, which is

presented in the College Policy Manual and the Academic Policy Manual for each school. Violation of these standards of conduct may result in severe criminal penalties under local, state, and federal law.

Student Immunization Policy

Meharry Medical College is committed to providing a safe environment for the education of its students in the health professions and sciences, particularly those students who work in the hospital or with patients. Students, faculty, and staff in the health sciences setting are vulnerable to communicable diseases such as tuberculosis, measles, mumps, rubella, diphtheria and polio. Those students who may be exposed to blood or blood products also have the potential of being infected with hepatitis, HIV or other viruses. These diseases are susceptible to control by appropriate immunizations.

Mandatory Immunizations: Prior to registration, all students are required to submit hard copy immunization records for the following:

Required Immunizations and Quantitative Serologic Titers:

- Hepatitis B vaccinations: documented series of 3 vaccines and Hepatitis B surface antibody quantitative serologic titer
- MMR (measles, mumps, rubella): documented series of two doses and quantitative serologic titers
- Varicella: documented series of two doses and quantitative serologic titer or documented date of disease and quantitative serologic titer.
- Tetanus/Diphtheria/Pertussis: documentation of TdaP vaccine within the last 5 years.
- Polio: documentation of last immunization
- Tuberculosis Screening: within the last 6 months: PPD or IGRA result or documentation of previous positive PPD, subsequent treatment and most recent chest x-ray report (within the last 6 months)

Student Health Services will determine whether immunization documentation is adequate. Students, who cannot provide adequate documentation of prior immunization or physician-diagnosed diseases (as indicated by serological evidence) must receive immunization to these diseases prior to the beginning of the fall semester of the said academic year.

Withdrawal from a Course

When a student withdraws from a course, he or she must get the appropriate forms from his/her respective Academic Affairs Office. The student shall be required to get the approval of the respective department head, the Associate/Assistant Dean for Student Academic Affairs, and final approval from their respective Dean. The form must be returned to the Registrar's Office. The criteria for withdrawal are outlined in each school's Academic Policies and Procedures Manual and in the section for each school in this document (Academic Catalog).

Withdrawal from the College

A student may withdraw from Meharry Medical College after completing the official withdrawal form, properly executed with the appropriate signatures, and submitting the form to the Office of the Registrar. Grades for completed courses will be recorded on the official record. If the student desires to return to Meharry Medical College, the formal readmissions application process must be completed.
Each school may have additional policies and procedures for withdrawing from an academic program in conjunction with withdrawing from the College. Additional information regarding withdrawing from a

degree program is found in the respective section of this document and in the Academic Policies and Procedures Manual for each school.

School of Dentistry

Administration

Cherae Farmer-Dixon, D.D.S., M.S.P.H., F.A.C.D., Dean
Alexis Dean, M.B.A., Associate Dean of Finance and Business
Gerald Davis II, D.D.S., M.A., Assistant Dean of Academic Affairs
Machelle Thompson, R.D.H., M.S.P.H., Assistant Dean of Clinical Affairs
Pandu Gangula, Ph.D., Assistant Dean of Research
Julie Gray, D.D.S., M.A., Assistant Dean of Student Affairs
Candice Simmons, B.B.A., Director of Clinical Operations

Department Chairpersons

Jacinta Leavell, M.S., Ph.D., Dental Public Health
Kathy Jefferson, D.D.S., M.S., Endodontics
James Cade, D.D.S., Oral Diagnostic Sciences
Kimberley L. Perkins-Davis, D.D.S., Oral and Maxillofacial Surgery and Graduate Programs
Sandra G. Harris, D.D.S., F.A.C.D., Orthodontics
Ruth Bol, D.D.S., M.P.H., Pediatric Dentistry
Digna Forbes, M.D., Professional and Medical Education
James Tyus, D.D.S., Restorative Dentistry

History of the School of Dentistry

Throughout its illustrious history, it has been known as a national resource for providing a strong curriculum in community-oriented clinical dentistry and basic principles of research. The idea to establish a dental department within the Meharry medical department originated in the minds of a few medical alumni, but it was not until eight years later, in 1884, when the trustees of Central Tennessee College considered the feasibility of adding dental education as part of the medical curriculum. In June of that same year, Dean George Whipple Hubbard, M.D., announced that arrangements for opening the dental department had been consummated.

Officially founded in 1886 as a department that would "provide the Colored people of the South with an opportunity for thoroughly preparing themselves for the practice of dentistry," Meharry's dental program opened its doors to nine students, three of whom were physicians, on October 4, 1886. Initial requirements for admission were that applicants needed to be at least 19 years old and of good moral character. Additionally, they were mandated to "pass a satisfactory examination in reading, writing, arithmetic, spelling, geography, and grammar, or bring satisfactory evidence of having completed a course in some recognized Normal School, Academy, or College." The basic costs of a Meharry dental education included a $30 annual fee and $10 graduation assessment. It bears mentioning that the dental department of Central Tennessee College (Meharry's first home) was launched as the first institution in the South for training African-American dentists.

Over 125 years later, the Meharry Medical College School of Dentistry continues to fulfill Dr. Hubbard's vision, serving not only as one of two historically Black dental schools in the nation, but also as a beacon for underserved populations all over the world who receive quality, compassionate, professional dental care.

Mission of the School

True to its heritage, the Meharry Medical College School of Dentistry exists as a center of excellence to improve the oral health and overall healthcare of minority and underserved communities, with special emphasis on providing opportunities for African Americans, other people of color and individuals from disadvantaged backgrounds by: sustaining an excellent learning environment that promotes inter-professional collaboration, humanistic patient centered care, community service, and research that fosters the elimination of health disparities.

Dental Education at Meharry Medical College

The School of Dentistry (SOD) offers a high quality and exceptionally nurturing educational environment to its students and has an impressive record of accomplishment of graduating students from a variety of socio-economic backgrounds. The School's practice of blending academically gifted students with those who demonstrate great promise but who require academic enrichment is a proven formula for success.

The dental school curriculum is dynamic and is regularly monitored and modified in response to contemporary trends in dental education, research, and oral health and dental practice. This strategy ensures that the educational experience more closely mirrors the actual practice of general dentistry and fully prepares the student with the competencies required for delivery of high quality care.

In addition to its regular dental program, the College has developed a Masters in Health Sciences, which serves as an alternative for admission. Students admitted to this program have graduated from an accredited college or university and show great promise, but lack competitive science grade point averages or Dental Admissions Test scores to be accepted into the dental education program. The program consists

of a structured academic enhancement curriculum for one year to increase the students' level of knowledge in the areas required for admission and successful matriculation and two summer sessions of science and test taking reinforcement. Also, the school offers a combined DDS/PhD program in conjunction with the school of Graduate Studies and Research.

The School also sponsors two post-doctoral programs: One is in Oral and Maxillofacial Surgery (OMFS) and the other is a 12-month General Practice Residency (GPR). Both programs are affiliated with Metropolitan Nashville General Hospital at Meharry and the local Veterans Affairs Medical Centers.

The School of Dentistry is a member of the American Dental Education Association. The undergraduate dental education, GPR, and the OMFS programs are accredited by the American Dental Association's Commission on Dental Accreditation (CODA).

Admissions Procedures

The School of Dentistry participates in the Associated American Dental Schools Application Service (AADSAS) sponsored by the American Dental Education Association (ADEA). The deadline for all applications must be completed by December 15th of the year prior to anticipated matriculation. Applications for regular admission should be submitted through the AADSAS process. Upon receipt of the application from AADSAS, the Office of Admissions will send the applicant a letter acknowledging receipt of the AADSAS electronic data and advising them of materials needed to conduct a preliminary evaluation. A supplemental applicant and an application fee of $65 must be paid to continue the process. This fee is non-refundable and cannot be credited toward tuition if the applicant is accepted.

Persons desiring to submit an application for regular admissions must apply through the AADSAS, 655 K Street, N.W, Suite 800, Washington, D.C. 20001; 1-617-612-2045 (aadsasinfo@aadsasweb.org). Persons applying must instruct ADEA to forward their credentials to the Office of Admissions, Meharry Medical College, School of Dentistry 1005 Dr. D.B. Todd Jr. Blvd., Nashville, TN 37208.

It is the applicant's responsibility to have a report of his/her performance on the Dental Admission Test transmitted to Meharry Medical College Office of Admissions. The test must have been taken within three years of the proposed matriculation date.

Applicants who have been accepted by the Admissions Committee or placed on the waiting list, but who were not enrolled and who wish to enter in a subsequent year, must apply for readmission and must meet all of the requirements in force at the time of the new application.

All credentials received in fulfillment of admission requirements become the property of Meharry Medical College. Falsification of any portion of the data submitted for admission disqualifies the applicant for further consideration by the Admissions Committee.

The Admissions Committee reviews all applications. Candidates presenting credentials that do not meet the minimum requirements are so advised by the Chair of the Admissions Committee and/or the Director of Admissions and Recruitment. Each candidate who presents the minimum requirements is evaluated competitively and is either accepted, placed on the waiting list, or rejected because of relative qualifications. The appropriate admissions officer will inform the applicant of the action of the committee as soon as possible.

Admission Requirements

The Admissions Committee of the Meharry School of Dentistry selects students for admission into the School's academic program. The committee is charged with the responsibility of selecting students who will make suitable candidates for the study and eventual practice of dentistry. One D1 class is admitted at the beginning of each academic year. The number of applicants greatly exceeds the capacity, and all applicants are considered on a competitive basis from the standpoints of scholarship, intelligence, aptitude, character, and general fitness to meet the historic mission of the college. The Admissions Committee will consider the applications of candidates who meet the following minimum qualifications:

1. All matriculating students must have successfully completed at least 96 semester hours/140 quarter hours. All matriculating students must have successfully completed at least 96 semester hours/140 quarter hours from a US or Canadian accredited college or university
2. REQUIRED PREREQUISTITES:

- 6 semester hours (9 quarter hours): English Grammar and Composition or Writing Intensive Course Equivalent
- 3 semester hours (5 quarter hours): Calculus or Statistics
- 8 semester hours (12 quarter hours): General Physics with Labs
- 8 semester hours (12 quarter hours): General Biology/ Zoology with Labs
- 8 semester hours (12 quarter hours): General or Inorganic Chemistry with Labs
- 8 semester hours (12 quarter hours): Organic Chemistry with Labs
- 3 semester hours (5 quarter hours): Biochemistry

3. Additional strongly recommended courses: Anatomy/Physiology, Microbiology and Histology/Cell Biology. Other recommended courses include: Genetics, Molecular Biology, and Pharmacology (online courses are not accepted towards required prerequisites).

4. Students with "conditions" in college courses are not accepted. "Satisfactory Completion" of required courses is interpreted by the Admission Committee as an average grade of at least a B- in each subject field. "Satisfactory Completion" of two years pre-professional education is interpreted as an average grade of at least B- for the entire work of the two years. No student who has attained a general college average below B- will be eligible for consideration.

5. An official record of performance on the Dental Admission Test (DAT). The DAT scores must be no older than three years from the year of application.

   Candidates for admission are evaluated on a competitive basis relative to acceptable scholastic records, satisfactory performance on the DAT, favorable recommendations from their pre-dental committees or from two of their instructors in the natural sciences, a dentist, and other evidence that they will become successful dental students and health care providers.

Veteran Students

Meharry Medical College is authorized to certify the enrollment of veterans, dependents, and other eligible persons to the Veterans Affairs Department. These students are governed by the same policies and regulations as any student seeking admission and as any registered student. For additional information, see the section on Veteran Students in the Services for Students section of this catalog.

Admission to Combined Curriculum

Several colleges and universities approve the combined pre-dental and dental curriculum leading to the baccalaureate degree. A student seeking admission to the combined curriculum should ascertain from the registrar of the institution in which three years of pre-dental work were completed whether the D1 of dentistry taken at Meharry Medical College will be acceptable to that institution as the fourth year toward a baccalaureate degree. An official statement to this effect must be presented with the application.

Joint Fisk/Meharry Program: Fisk University and Meharry Medical College have developed a joint program in the biomedical and health sciences. Outstanding students admitted to this program will complete a three-year curriculum in general education courses and most of the science courses for a major in either biology or chemistry at Fisk University. Such a curriculum will include all prerequisites for entry into the Meharry School of Dentistry.

These students, upon admission to Fisk University, will have a position reserved in the dental program at Meharry Medical College following the successful completion of the prescribed three-year program at Fisk University. Students are eligible for a bachelor's degree from Fisk University following successful completion of the first academic year at Meharry Medical College. It is anticipated that an additional three years will be required to complete training for the DDS degree.

Admission to Advanced Standing

The MMCSOD admits students with advanced standing only if they are transferring from another U.S. / Canada accredited dental school. Meharry does not participate in the ADEA Centralized Application for Advanced Placement for International Dentists (CAAPID), and as such does not accept applicants who have completed their dental requirements from a non-U.S./ Canada accredited dental school. Potential students seeking advanced standing must apply through the regular admissions process through AADSAS.

Transfer applicants will be considered for admission only after the D2 year of dental school. The transfer process will take a significant amount of time and the applicant should submit the request for transfer admission to the Office of Admissions and Recruitment along with a $65.00 non-refundable application fee, no later than December 1st of the year prior to desired matriculation to the MMCSOD. If the transfer student is accepted, an $800.00 non-refundable matriculation deposit will be required of the admitted student by the specified deadline.

The following policies apply to dental students' seeking to transfer to Meharry:

- Transfer students must be reviewed and accepted by the Admissions Committee. There must be a space available in the class to which the transfer student is requesting admission. The recommendation for transfer is submitted from the Admissions Committee to the Dean. The Dean forwards the name (s) to the Office of Admissions and Recruitment with the final decision.
- A transfer student can be accepted only at the end of his/her D2 year in dental school, and must be in good academic standing. A "statement of good standing" must be provided by the Dean or his/her designee of the dental school from which the student wishes to transfer. They must have also taken and passed the National Board Dental Examination Part I (NBDE I).
- The Assistant Dean of Academic Affairs will assess the comparability of curricula between the Meharry School of Dentistry and the transferring institution and shall seek approval of all coursework for from course directors regarding the acceptability of coursework from the transferring institution. Due to the unique nature of the dental curricula, each candidate is assessed on a case by case basis. In the event that courses are not equivalent, the student will

be required to successfully complete the School of Dentistry's D2 year curriculum to achieve advanced standing.

- No courses will be accepted with a grade of "D" or "F" or "N" or "I."
- Prior to matriculation, the transfer student must submit copies of immunization records, official transcripts and all necessary documents to the Meharry Medical College Office of Admissions and Recruitment.
- The transfer student must be evaluated by the preclinical course directors prior to entering into comprehensive patient care.

Credit for coursework that is not eligible for transfer toward a dental degree includes:

- Experiential learning
- Credit by examination
- Advanced placement
- Professional certificates
- Non-credit courses
- Audited courses
- Correspondence or extension courses
- Online courses

Readmission

An application for readmission must be made to the Chair of the Admissions Committee or the Director of Admissions and Recruitment and must be approved by the Admissions Committee. The applicant must meet all requirements in force at the time of submission. If the interruption has exceeded two years, applicants will be required to take examinations in courses for which they desire credit, unless otherwise advised by the Admissions Committee. Students who have been dropped from the rolls of the College are eligible for reconsideration only under extenuating circumstances.

School of Dentistry Academic Program

The School of Dentistry offers a four-year pre-doctoral program in general dentistry, which is designed to prepare the student to provide competent oral health services to the population at large. This is accomplished through an interdisciplinary curriculum of didactic and clinical experiences. These experiences provide a diverse knowledge base, clinical skills and competencies necessary in the practice of modern general dentistry. The program is also geared to provide a solid base for scientific inquiry and for a lifelong pursuit of continuous education.

The first and second year curriculum is devoted primarily to classroom and laboratory instruction in the basic and pre-clinical dental sciences. The D3 and D4 years focus on further development of clinical skills under supervision of the faculty in all areas of dental practice. Emphasis in all years is placed on the concept of comprehensive patient care. The clinical curriculum includes on-campus clinics, hospital experiences, and rotations at nearby community health centers. There are also opportunities to engage in clinical practice and research in locations outside of Nashville.

Successful completion of the prescribed academic/clinical program and evidence of high ethical and moral behavior leads to the Doctor of Surgery (D.D.S.) degree. The School of Dentistry graduate programs in General Dentistry and in Oral and Maxillofacial Surgery accepts Meharry School of Dentistry graduates as well as graduates from other U.S. and Canadian dental schools.

The School of Dentistry reserves the right to modify any portion of the curriculum and will make such changes as necessary with a commitment to maintaining an overall academic program that meets the highest standards.

The study of dentistry is rigorous and demands considerable time, energy, a high degree of self- discipline and effort. It requires a cooperative effort between faculty and students toward the common goal of the student's attainment of the cognitive and psychomotor skills necessary to practice dentistry.

Objectives of the Academic Program

The School of Dentistry is committed to providing a high-quality education in an environment conducive to teaching, learning, and research that will lead to the Doctor of Dental Surgery degree.

The following objectives guide the academic program:

- Provide high quality and contemporary classroom instruction
- Provide high quality clinical instruction producing a competent dental practitioner
- Provide a state-of-the-art physical facility for instruction
- Foster an interest in research development
- Provide mentorship to support students
- Provide academic support services as needed on an individual basis
- Prepare the student to successfully challenge the National Board Dental Examination Part I and Part II
- Prepare the graduate to successfully challenge state and regional licensure examinations

Patient Care

In the dental clinics, Comprehensive Dental Care is defined as a system of clinical instruction and operations which permit the student to provide, or be responsible for, all aspects of a given patient's dental treatment needs in a manner that closely resembles the way the student will provide care in a private practice subsequent to graduation. The concept of comprehensive care forms the foundation for all clinical treatment within the School of Dentistry. This concept is facilitated by two basic approaches including comprehensive patient care and specialty rotations. This broad-based approach enhances the environment in which high quality dental health care can be delivered in a more humanistic manner by students. It is expected that in using this dual approach to care, the barriers, which delay high quality care, will be removed. Systematic treatment planning and a patient referral system permit the student to become aware of the needs of the patient and the skills required to satisfy these needs.

The School of Dentistry retains the sole authority and responsibility for its operations. Patient care rendered by student practitioners is provided under the direct supervision of licensed faculty members. All dental procedures rendered by student providers must be performed in the presence of a licensed supervisor and must be evaluated and approved prior to and during service provision. Periodic and final evaluations are required prior to reappointment and patient dismissal. The supervising faculty must ensure that each treatment encounter is appropriately entered in the patient’s electronic records and signed by the student and the faculty person evaluating the procedure(s).

Research

The Research mission of the School of Dentistry at Meharry Medical College is to bridge Basic Sciences and the Dental clinical practice through research excellence and to educate dental scientists for academic and research leadership positions. Recent advances in basic sciences, the completion of the human genome project, the advancement of genomics and proteomics as well as the interdisciplinary nature of research in oral health and disease processes and treatment, are key to position the School of Dentistry as a leader in the national effort to relate these findings to systemic health, and to translate these advances into improved dental care and oral health especially as they relate to the health of underserved populations and the elimination of oral health disparities.

Continuing Education Coursework

The School of Dentistry annually offers short refresher courses in the different disciplines of dentistry. The refresher courses are of two types: Continuing Education and Enrichment.

Continuing Education courses are designed for general practitioners who are graduates of dental school and who wish to pursue post-graduate studies without becoming candidates for a degree. The courses, hours and fees will be announced in special brochures that are prepared annually and will reflect the desires and needs of the general practitioners.

The Enrichment program is designed to improve the skills of dentists in the discipline(s) requested by a state board, regional testing agency or special request of a dentist. At the conclusion of the enrichment program, each participating dentist will receive either a satisfactory performance evaluation or a statement indicating that he/she has spent the required time in the area(s) specified.

Inquiries regarding either of these training programs should be made to the Office of the Dean. Students in both programs have to register through the Office of Records to receive proper credit and/or grades if required.

Post-Baccalaureate Program

The Meharry School of Dentistry no longer administers a Post-Baccalaureate Program. However, students who have applied to the D.D.S. program and not been admitted may be invited to apply to the Master of Health Science Program administered by the Meharry Medical College School of Graduate Studies and Research.

Academic Regulations

Requirements to Qualify for the D.D.S. Degree

1. Regular dental school attendance for a minimum of four years of academic instruction. Students transferring from other dental schools must matriculate a minimum of two academic years at Meharry Medical College School of Dentistry (see the School of Dentistry Catalog regarding admission and advance standing).
2. Satisfactory completion of both Part I and Part II of the National Board Dental Examinations (NBDE).

3. Satisfactory completion of all didactic and clinical courses, all clinical experiences, practical examinations and all Clinical Competency Examinations - which constitute the prescribed curriculum.
4. Demonstration of high standards of moral and ethical conduct.
5. Payment of all financial obligations to Meharry Medical College and the School of Dentistry.
6. Return of all loaned equipment, patient charts, borrowed items, etc.

Advising

Academic advising is provided through the Office of Academic Affairs. Personal advising assistance is provided through the Office of Student Affairs. Confidentiality is strictly maintained. Appointments are available upon request through both of these offices.

Licensure

The Final Clinical Competency Examinations (FCCE) and Mock Clinical Examinations are designed to allow D4 students to demonstrate clinic competencies and time management.

If the student has applied to participate on a state/regional board examination for licensure, the student will be required to complete the FCCE and clinical boards successfully in all disciplines to be approved to take that state/regional board examination.

Examinations and Grades

Examinations are held at the discretion of the instructor. Grade Point Averages are based on the 4-point system. The symbols A (Excellent), B (Above Average), C (Average), or F (Fail), which appear on the official transcript and on the grade report given to each student at the end of each semester, express the evaluation of the student's work.

Incomplete work is denoted by the "I" grade and indicates: (1) that the student has satisfactorily completed at least three-fourths of the course but, that for legitimate reasons, a small fraction of the work remains to be completed; or (2) that the student's record indicated that he/she can obtain a passing grade, but that he/she lacks a specific requirement such as the final examination because of illness or some other unique or extraordinary circumstances beyond the student's control. A student receiving an "I" must complete the requirements for the Course to remove the "I" by the end of the next semester. If the work is not completed within the specific time, no credit will be given and an "F" will be officially recorded as the final grade.

All final grades shall remain on a student's permanent academic transcript.

The symbols "WV" and "WA" indicate that the student "Withdrew Voluntarily" or was "Withdrawn Administratively."

The symbols "WP" and "WF" indicate that the student "Withdrew Passing" or "Withdrew Failing" respectively. These symbols are to be used only when the student has withdrawn after at least six weeks in attendance.

The grade "B+" (outstanding), "C+" (above average) and "P" (pass) are used in the School. In addition to the letter grades of A, B, C, and F, the following grading symbols are also used in the School of Graduate Studies and Research: "S" (Satisfactory) and "U" (Unsatisfactory).

There are didactic and clinical courses (clinics) that cover one semester or more in duration. Progress is evaluated throughout the year, although final grades are assigned at the end of the final semester. A record of student academic progress is reported at mid-term and at the end of the first semester, using a letter grade. The final grade is reported in the usual manner at the end of the course. Students may request information regarding their progress from the course coordinator at any reasonable time that is convenient for both the student and course coordinator.

All final grades will be recorded on the student's permanent transcript.

Evaluation and Student Performance

Department chairs and course coordinators, and the Clinical Dean establish the examination and grading policies for examinations and all additional forms of student evaluation in the School of Dentistry courses and clinics. These policies are distributed as part of each course syllabus. At the completion of each course, each student enrolled in the course is evaluated by the faculty and course coordinator. Each student is awarded a letter grade for the course. The letter grades correspond to the A, B, C, P or F system.

Academic Performance and Progress

The student's performance and subsequent progress is evaluated at mid-semester and at the end of the semester. These evaluations are based on departmental reports submitted to the Student Evaluation and Promotion Committee (SEAPC) of the School of Dentistry. Each student is informed of his/her progress in each didactic course and clinic and advised in writing of deficiencies. Each clinical department has established criteria for clinical competency (clinical experiences), and standards of adequate performance (see Clinic Manual). Based on the evaluation of the student's performance and progress in each area, a grade is assigned at mid- semester. At the end of the first semester, final letter grades are assigned at the end of the semester when the course ends.

The SEAPC consists of course coordinators, department chairs, the Assistant Dean of Academic Affairs, the Assistant Dean of Student Affairs, and the Associate Dean for Clinical Affairs. There are two Committees: SEAPC D1/D2 and SEAPC D3/D4. The SEAPC meets on a regular basis, minimally at mid semester, at the semester end, and at the end of the summer session, to monitor student performance. This evaluation committee, after careful review of each student, makes recommendations to the Dean relative to student status, academic progress and other student related issues. The deliberations may include recommendations for counseling, intervention, student support, or other student needs. Students may also be referred to the Academic Support Service personnel for additional academic support, e.g. test taking skills, time management, and stress management.

Official grades for courses taken during a semester are provided to the students by the Office of Admissions and Records at the end of each semester.

Satisfactory Academic Progress

In order to attain and/or maintain good academic standing, a student enrolled full-time must satisfy the following conditions:

1. The student must be registered and enrolled in a course load that meets a minimal number of credit hours (fourteen (14) hours) established by the School of Dentistry for full-time student status for any semester.

2. The full-time student must maintain a cumulative grade point average that meets or exceeds the minimally accepted academic standard of "C" (2.0 GPA) Part- time students (taking less than 15 credit hours) in enrichment programs must also meet or exceed the minimally accepted cumulative grade point average (GPA) for the School of Dentistry in courses in which they are enrolled. Each student must maintain a minimum grade point average of "C" (2.0 GPA). A student who has a GPA below “C” (2.0 GPA), is automatically placed on academic probation.

Unsatisfactory Academic Performance

If a student receives one or more failing grades, the SEAPC shall recommend appropriate action in keeping with the academic regulations adopted in the Academic Policies and Procedures manual.

Academic Probation

A student with a semester or cumulative GPA below a “C” (2.0 GPA) will be automatically placed on academic probation. A student who is unsuccessful on the National Dental Board Examination Part I for three attempts will be dismissed with no right to appeal. A student on academic probation is not eligible to hold student leadership positions.

Academic Citations

All citations for outstanding performance in the School of Dentistry are issued by the Awards Committee. Students cited for excellence who have performed at an outstanding level during the academic year are nominated for citation by the appropriately involved faculty.

Dean’s List

A student is eligible for the Dean's List if he/she performs at an exemplary level consistent with the achievement of a cumulative GPA of 3.50 and above during an academic year.

Honor Graduates

The SEAPC faculty recommends to the Dean students for graduation with honors based on the student's scholastic record over the four years of the academic program. A minimum cumulative GPA of 3.50 is required for graduation with honors.

Honors, prizes, and awards are recommended by the Awards Committee. This committee processes awards based on stated criteria of the Donor, the Department, the Dental School, and the College.

Auditing

Students in the School of Dentistry may be required by the Dean, Assistant Dean of Academic Affairs or SEAPC to audit one or more courses previously passed based on academic performance. The students must be officially registered to audit. The 80% required attendance policy as described in subsequent pages of this document applies to audited courses. Auditing students must participate in and complete all phases of an audited course at a passing level. In the event of an unsatisfactory audit, the student will be dismissed for poor academic performance.

Withdrawal from a Course

To withdraw from a course, a student must first obtain approval from the appropriate Instructor/Department Chairperson and Assistant Dean of Academic Affairs. The written approval must then be filed by the student in the Office of Admissions and Records of the College. Only at this point will the student's name be deleted from the official class roster.

A student may not withdraw from a School of Dentistry course unless unusual or extenuating circumstances beyond the student's control make it extremely difficult to complete the course. The form may be obtained from the Office of Admissions & Records.

Withdrawal from Meharry Medical College

A student may withdraw from Meharry Medical College after filing an official Withdrawal Form with the Office of Academic Affairs, and then having the form properly executed by the Office of Records. The student's total performance in all courses will be evaluated at the time of the requested withdrawal in accordance with the policies of the School. Based on the review of the student's performance, he/she may be dropped from the College for poor academic performance. Grades for completed courses shall be recorded on the official transcript. Should the student seek to return to Meharry Medical College following withdrawal, a formal application must be filed with the Office of Academic Affairs and the regular application process followed, for admission to the School of Dentistry.

School of Dentistry Academic Calendar 2019-2020

Friday, May 17, 2019	D1 Registration
Monday, June 3, 2019	D2 - D4 Registration (for Fall 2019 registration)
Monday, June 17 - Thursday, June 20, 2019	D1 Orientation
Friday, June 21, 2019	MAPS Classes Begin
Thursday, July 04, 2019	*** 4th of July Holiday**
Friday, July 26, 2019	MAPS Classes End
Monday, July 29, 2019	D1 Classes Resume
Tuesday, August 6 - Wednesday, August 7, 2019	SOD Faculty Calibration
Friday, August 9, 2019	White Coat Ceremony (1st Year Students Only)
Monday, August 12- Tuesday August 13, 2019	D2 - D4 Orientation
Thursday, August 14, 2019	D2 - D4 Classes Resume and Clinics Open
Monday, September 2, 2019	*** Labor Day Holiday**
Friday, September 13, 2019	Adopt-a-Grandparent Program
Tuesday, September 17, 2019	Constitution Day
TBD	Tennessee Board of Dentistry Coronal Polishing Exam
Friday, October 11, 2019	**Convocation**
Friday, October 11, 2019	Fall Census Date
Monday, October 28 - Tuesday, October 29, 2019	Fall Break
Friday, November 1, 2019	**Allen-Watson Heritage Lecture**
Monday, November 11, 2019	D1 - D4 Spring 2019 Registration
Thursday, November 28 & Friday, November 29, 2019	*** Thanksgiving Holiday**
Friday, December 13, 2019	Fall Semster Ends and Clinics Close
Tuesday, December 17, 2019	All Grades Due in Banner/Registrar's Office
Thursday, December 19, 2019	D1 - D4 SEAPC

Thursday, January 2, 2020	Spring Classes Begin
Friday, January 17, 2020	Rev. Dr. Martin Luther King Jr. Remembrance Program
Monday, January 20, 2020	*** Rev. Dr. Martin Luther King Jr. Holiday**
Monday, February 3, 2020	Children's Dental Health Day
Thursday, February 6 -Friday, February 7, 2020	CITA Mock Exam
Friday, February 7, 2020	**Mobley-Singleton Lecture**
Friday, February 07, 2020	**Dental Match Day Reception**
Friday, February 14, 2020	Spring Census Date
Saturday, February 15, 2020	Carabelli Ball
Friday, February 21, 2020	**Samuel O. Banks Heritage Lecture**
Saturday,February 29, 2020	Oral Health Day (TBD)
Monday, March 9 - Friday, March 13, 2020	Student Research Week
Wednesday, March 11, 2020	Student Research Day
Friday, March 13 - Tuesday, March 17, 2020	ADEA 2020
Monday, March 16- Tuesday March 17, 2020	ADEA/AADR
Monday, March 16 - Friday, March 20, 2020	Spring Break
Friday, March 27, 2020	CITA Manikin Exam
Saturday, March 28, 2020	Impressions Day
Thursday, April 9, 2020	**Turpin Memorial Lecture**
Friday, April 10, 2020	*** Good Friday - Meharry Holiday**
Friday, April 17 - Saturday, April 18, 2020	CITA 2-Day Exam
Monday, April 20, 2020	SOD Diversity Day
Wednesday, May 6, 2020	D4 Clinics End (Graduates)
Friday, May 08, 2020	D4 Grades Due in Banner/Registrar's Office
Monday, May 11, 2020	D1 - D3 Classes End for Didactics
Monday, May 11- Friday, May 15, 2020	Clinics Closed for Commencement
Monday, May 11, 2020	D4 SEAPC (Seniors Evaluation Only)
Saturday, May 16, 2020	Commencement
Tuesday, May 19, 2020	**Summer Clinic Session Begins**
Friday, May 22, 2020	D1 - D3 Grades Due in Banner/Registrar's Office (Didactic Grades)
Friday, May 22, 2020	D3 SEAPC (Consideration for Promotion to 4th Year)
Monday, May 25, 2020	*** Memorial Day Holiday**
Thursday, May 28, 2020	D1 and D2 SEAPC
TBD	CRDTS Examination
Friday, June 19, 2020	D1 Semester Ends
Wednesday, June 24, 2020	D1 Grades Due in Banner/Registrar's Office
Friday, June 26, 2020	D2 and D3 Clinics End
Tuesday, June 30, 2020	D2 and D3 Clinic Grades Due in Banner/Registrar's Office
Friday, July 17, 2020	D1 - D4 SEAPC

Calendar Summary by Class	
June 22, 2019 - June 19, 2020	**D1 -** Including MAPS
August 12, 2019 - June 26, 2020	**D2**
August 12, 2019 - June 26, 2020	**D3**
August 12, 2019- May 6, 2020	**D4**

***Holiday - No Classes**

****D4 students have until June 14, 2020 to complete all cases to be eligible to receive a May diploma. Any D4 student who anticipates not being complete with all degree requirements by Commencement must contact Student Financial Aid by May 10, 2020.**

Financial Information

Tuition and Fees

Tuition and fees are set annually by the Board of Trustees and are subject to review and change without further notice. The School of Dentistry tuition and fees for the 2019-2020 academic year are as indicated below

	D1	D2	D3	D4	Post D4	Board Review
Tuition	$ 55,598.00	$ 53,979.00	$ 53,979.00	$ 52,407.00	$ 26,204.00	$ 5,931.00
Total fees	$ 10,905.00	$ 18,063.00	$ 8,093.00	$ 5,093.00	$ 4,603.00	$ 1,158.00
Total Tuition and Fees	$ 66,503.00	$ 72,042.00	$ 62,072.00	$ 57,500.00	$ 30,807.00	$ 7,089.00

This table does not include expenses for room and board, books & supplies, transportation, and miscellaneous expenses. For additional information regarding these expenses and an itemized list of fees, please contact the Office of Financial Aid or visit the website: http://www.mmc.edu/prospectivestudents/tuition-and-fees/index.html.

Scholarships

A scholarship file is maintained in the School of Dentistry Office of Student Affairs. The file is updated frequently to keep students informed of available scholarships.

Recipients of Scholarships, with the exception of the incentive scholarships, are selected by the Awards Committee (AC) for the School of Dentistry. This committee is composed of faculty and representation from the Office of Academic Affairs. The scholarships are as follows:

Incentive Scholarships- These awards are granted to selected dental students entering with undergraduate grade point average (G.P.A) of 3.50 (B) or above. This scholarship is renewable each year based upon maintaining an academic G.P.A. of 3.50 or above. Recipients are selected by the Admissions Committee Chair in consultation with the Dean.

Cumulative Academic Scholarships- These awards are granted to D2, D3, and D4 year Dental students who have maintained a cumulative academic grade point average (G.P.A.) of 3.50 or above in the designated academic year. They are determined by fund availability. The AC awards these scholarships.

Academic Achievement Scholarships- These awards are granted to students with an academic G.P.A. of 3.50 or above in the designated academic year. The number of scholarships awarded each year is determined by fund availability. The AC awards these scholarships.

American Dental Association (ADA) - A selected number of ADA Endowment Scholarships are awarded annually to Dental students. The National Awards are classified into two categories- underrepresented minority students and the general student population. The AC selects students who will compete for these awards.

National Dental Association Foundation- Colgate-Palmolive Scholarships- These awards are granted to underrepresented minorities. D2, D3, and D4 year students are selected for the award. Recipients are selected by the National Dental Association.

Military Scholarships

Branches of the U.S. Military and Nation Public Health Service Corps offer student scholarships. Obligatory service requirements are associated with scholarship awards. Telephone numbers for these programs are listed below.

National Health Service Corps (NHSC) and Commissioned Officer Student Training and Extern Program (COSTEP), 1-800-221-9393

Military Branch	Contact Information
U.S. Air Force	(615) 298-5487 – local
U.S. Army	(615) 874-5006 – local
U.S. Navy	(615) 332-0755 – local or 1-800-334-4394

Honors and Awards

Convocation Awards- These are presented to students at various levels for outstanding didactic and clinical performance. Students are selected by the AC based on criteria of the donor and procedures and policies established by the School and the College.

Commencement Awards- These are presented to graduating D4 students for outstanding didactic and clinical performance. Students are selected by the AC based on criteria of the donor and procedures and policies established by the School and the College.

Lectureships

The following lectures are presented annually by the School of Dentistry.

1. Allen/Watson Lecture. This annual lecture and program honors Dr. William H. Allen and Dr. William H. Watson. Dr. William H. Allen is a former Dean of the School of Dentistry and Professor Emeritus in the Department of Restorative Dentistry (Prosthodontics Division). Dr. William H. Watson is Professor Emeritus in the Department of Restorative Dentistry (Operative Division). (Inaugurated 1981).

2. Mobley-Singleton Lecture. This lecture and program honors Dr. Eugenia L. Mobley, former Dean of the School of Dentistry and former Chairperson of the Department of Preventive Dentistry and Community Health, and Dr. J. B. Singleton, former Professor and Chairperson of the Department of Oral Maxillofacial Surgery, for dedicated service and leadership to the School of Dentistry, Meharry Medical College, the Nashville Community, Local, State and National organized dentistry (inaugurated 1992).

3. The S. O. Banks, Jr. Lecture. This annual lecture and program honors Dr. S. O. Banks, Jr., Professor in the Department of Oral and Maxillofacial Surgery (inaugurated 1988).

4. Turpin Memorial Day. This annual lecture and program honors Dr. Donley H. Turpin, a pioneer in the School of Dentistry who was a Professor of Prosthodontics and the first Black Dean of the School of Dentistry. This celebration is co-sponsored by Omicron Omicron Chapter of the Omicron Kappa Upsilon (OKU) National Honor Dental Society. At this time, newly elected OKU members from the graduating senior class are presented to the assembly (inaugurated 1947). Honorary and faculty OKU members are also inducted at this time.

5. Occupational Safety and Health Administration (OSHA). This seminar is required for all students at each level of the academic program (D1, D2, D3, and D4).

All classes and clinics are cancelled to allow for mandatory student and faculty attendance at these special programs of the School and College.

Course Descriptions

BASIC SCIENCES

ASDD 310-01 MAPS (Mini-Academic Program for Success) – This D1 course is the first course offered to incoming D1 students, and provides students with early exposure to the major concepts found within the areas of biochemistry, microbiology, dental anatomy, and clinical decision making. **(6 credit hours)**

ASDD 302-01 Biomedical Integration Seminar I – This D1 course integrates the biomedical sciences with the clinical sciences. Case based scenarios are used that require students to correlate the various connections between the foundational biomedical sciences and clinical practice. Additional content is added each semester as the students gain additional knowledge. **(1 credit hour)**

ASDD 403-01 Biomedical Integration Seminar II – This course is offered to the D2 class and also integrates the biomedical sciences with the clinical sciences. Case based scenarios are again used with more content being added from the clinical sciences as they gain information from the pre-clinical courses. Behavioral sciences also begin to be integrated during this course. **(1 credit hour)**

ASDD 504-01 Biomedical Integration Seminar III – In addition to the preceding courses, this D3 seminar requires the students to proceed more in depth when reviewing the clinical cases since they have completed all of their didactic biomedical, behavioral and clinical sciences. This format also assists the students in preparing for case based questions on the National Board Dental Examination. **(1 credit hour)**

ASDD 604-01 Biomedical Integration Seminar IV – In addition to the preceding courses, this D4 seminar requires the students to proceed more in depth when reviewing the clinical cases since they have completed all of their didactic biomedical, behavioral and clinical sciences. This format is designed to provide a

comprehensive summary of all sciences as it relates to direct patient care and other clinical cases. **(1 credit hour)**

MICR 302-01 - Microbiology – This course is required for students enrolled in the School of Dentistry. It is presented with special emphasis on its relation to dental pathology and dental practice. Laboratory exercises are designed to supplement the didactic aspects of the course and to acquaint the student with the basic techniques involved in the isolation and identification of pathogenic organisms. Principles of sterilization, disinfection, immunity antibiosis and transmission of disease are stressed both as separate entities and in their applied aspects throughout the course. The course is offered during the first (fall) semester of the D1 year. **(5 Credit hours)**

ANAT 326-01 – Dental Neurosciences – The goal of the course is to provide the D1 dental students with fundamental knowledge regarding the structure and function of the nervous system. The major areas are Neuroanatomy and Neurophysiology of the sensory systems including special senses, motor systems, autonomic nervous system and higher brain functions. The course is designed to enhance student performance on internal and external National Board Dental examinations and to provide a platform for life-long learning. The course is offered during the second (spring) semester of the D1 year. **(3 Credit Hours)**

PHYS 321-01 – Physiology – The course provides D1 students with a fundamental knowledge of the structure and function of the human body. The major areas involve physiology of cells, muscle, cardiovascular, respiratory, renal, gastrointestinal, endocrine and reproductive systems. It is designed to provide adequate instruction, which enhances student performances on both internal and external National Dental Board examinations while providing a platform for life-long learning as a competent dentist. The course is offered during the second (spring) semester of the D1 year. **(5 credit hours)**

PATH 321-01 – Biology of Diseases - The aim of this course is to provide dental students with an understanding of the structural and physiological changes underlying disease processes. The major components of this course are microscopic anatomy, dental histology and general pathology. The initial component of the course deals with basic cellular histology and pathological processes. The major part of the course is presented in an organ-system-approach. For each system, the normal histology followed by the major pathological processes is presented. The aim is to introduce dental students to diseases as manifestations of disordered function and to begin thinking in term of the pathophysiologic basis of disease. In relevant areas, the impact of disease processes on the management of a dental patient is presented. The course provides the necessary instructions that enhance students' performances on examinations and the platform for life-long learning. The course is offered during the second (spring) semester of the D1 year. **(8 credit hours)**

BICH 321-01 – Biochemistry - This is a basic course in cellular and functional aspects of biochemistry offered to students enrolled in the School of Dentistry. This course covers aspects of the biology of gene expression, chemistry and metabolism of carbohydrates, lipids, proteins, nucleic acids, as well as the roles of enzymes, vitamins, hormones and other factors involved in the control of cellular function. Special topics include acid-base balance, blood chemistry and metals that are relevant to the practice of dentistry (Pb, Hg, Se, etc.). Special efforts are made to provide clinical correlation for the materials presented as well as to provide discussions in conference and small group sessions. The major goal is to foster the understanding of the impact of biochemical principles on disease processes and the clinical management of dental patients. The course is offered during the first (fall) semester of the D1 year. **(6 credit hours)**

ANAT 322-01 – Gross Anatomy- This is a basic course in the gross structure of the human body. Students working in small groups dissect a human cadaver. Didactic and clinically oriented lectures are supplemented by prosections of a cadaver, audiovisual teaching programs, radiologic presentations and surface anatomy

orientation. Clinical correlations are made through periodic patient-oriented presentations. Concepts of structure, functional correlations and mechanisms of development are presented through didactic and clinically oriented lectures, audiovisual aids and periodic clinical correlations. These activities enhance the students' endeavors to reach an understanding of human micro- and ultra-structure that is requisites for correlating structure and function. While special attention is given to the head and neck, this is a comprehensive anatomical course. The course is offered during the first (fall) semester of the D1 year. **(10 credit hours)**

PHAR 411-01 – Pharmacology - The pharmacological basis of therapeutics is presented by means of lectures, clinical conferences, problem-solving exercises and demonstrations. Emphasis is placed on factors governing the absorption, distribution, metabolism and the mechanism of action of drugs. Attention is paid to therapeutics, toxicology, and prescription writing. The course is offered during the first (fall) semester of the D2 year. **(7 credit hours)**

CLINICAL SCIENCES

DEPARTMENT OF ENDODONTICS

Objectives

Endodontics is the branch of dentistry concerned with the morphology, physiology, and pathology of the human dental pulp and periradicular tissues. Its study and practice encompass the basic and clinical sciences, including biology of the normal pulp, the etiology, diagnosis, prevention, and treatment of diseases, and injuries of the pulp and associated periradicular tissues.

The teaching of Endodontics interrelates with the biomedical sciences. The entire curriculum strives to integrate Evidence Based Treatment into all didactic and clinical experiences. Emphasis is placed on developing departmental interrelationships within each clinical discipline to maximize comprehensive patient care. Delivery of Endodontics treatment in a clinical environment is closely integrated with all other health disciplines.

COURSE DESCRIPTIONS

EDPR 431-01 – Pre-Clinical Endodontics - This D2 endodontics core course is designed to introduce the student to Endodontics techniques under simulated conditions on a number of extracted teeth and plastic blocks. The goal of the pre-clinical course is to train the student to perform the mechanical aspects of Endodontics therapy. This course will provide the student with a functional exposure of basic information relative to the practice of clinical Endodontics. During all phases of the course, emphasis will be placed on correlating the basic and clinical sciences. While the majority of the course covers clinical skills, biology of the normal and irreversibly injured pulp will be taught. Included in this course will be preclinical knowledge and skill in the differential diagnosis of pain of pulpal and/or periapical origin, as well as referred pain; the control of pain emanating from the pulp or periapical region; and treatment by pulp capping, or pulpotomy as well as by pulpectomy. The student will also be introduced and trained to use electronic apex locators and rotary instrumentation. **(4 Credit hours)**

EDPR 515-01 - Advanced Concepts in Endodontics - This D3 course has been designed to expand on concepts introduced in the prerequisite EDPR-431-01 and to transfer those concepts to patient care. The course prepares the D3 student to diagnose, assess and treat Endodontics cases in the clinic. This is accomplished by expanding diagnostic concepts introduced in the core Endodontics course and basic Endodontics knowledge in the following areas: (1) diagnostic instruments and their use; (2) Endodontics

surgery; (3) Endodontics pharmacology; (4) microbiology and immunology; (5) Endodontics emergencies, including traumatic dental injuries; (6) periodontal/Endodontics lesions; (7) prognosis and evaluation of success. **(1 Credit hour)**

EDPR 700-01 – Endodontics Clinic – This clinical course serves as a four-semester course spanning the D3 and D4 years. Successful completion of the D2 Endodontics core course and the D3 clinical entrance examination is needed to establish the student's clinical eligibility to treat patients in the Endodontics clinic. The clinical entrance examination is comprised of two parts: (a) clinical activity and (b) diagnostic competency. The clinical activity is measured by completion of the "manikin exercise," which is intended to closely simulate the treatment of an actual patient without the need for anesthesia. The diagnostic competency section consists of performing a series of diagnostic tests and procedures on a classmate.

The student will be exposed to some of the new technology of Endodontics, such as rotary instrumentation, digital radiography, electronic apex locators to name a few. Each student will participate in case presentations, which entails a formal presentation of an Endodontics case completed in the clinic. The student will self-evaluate his or her treatment and defend all modalities of treatment in the Endodontics case presentation. In addition, student will recall previously treated cases in order to determine prognosis and success of treatment rendered. **(2 credit hours)**

DEPARTMENT OF ORAL DIAGNOSTIC SCIENCES

Objectives

Oral Diagnostic Sciences provides instruction in oral medicine, oral and maxillofacial pathology, and radiology. D3 and D4 dental students rotate through an Oral Diagnosis and Radiology Clinic where they learn to apply skills in diagnosis, treatment planning, and radiographic techniques.

COURSE DESCRIPTIONS

ORDG 300-01 – Introduction to Oral Diagnosis – This course introduces D1 students to anatomical oral anatomy and provides them with insight into performing head and neck examinations. **(1 credit hour)**

ORDG 301-01 & ORDG 421-01 - Oral Diagnosis & Radiology - This D1 and D2 course presents radiobiologic theory and physical properties of ionizing radiation and describes the application of radiographic methods in dental practice, radiation safety, and normal radiographic anatomy. Advanced oral and maxillofacial imaging techniques and interpretation, emphasizing deviation from normal, are also introduced. 301-01 **(2 credit hours)**, ORDG 421-01 **(2 credit hours)**

ORDG 420-01 Medically Complex Patient- This D2 course provides a student the opportunity to recognize, diagnose, manage, and treatment plan patients with systemic diseases in the dental office. Common medical conditions are discussed which include etiology, incidence, prevalence, complications, laboratory findings, and clinical presentation of these entities. Students learn the importance of referrals and consultations with various healthcare providers concerning medically complex patients. **(1 credit hour)**

ORDG 405-01 - HIV Rapid Testing & Certification – This D2 course is dedicated to providing students with the needed experience for properly administering an HIV rapid test. **(2 credit hours)**

ORDG 502-01 Oral & Maxillofacial Pathology- This D3 course provides a comprehensive and detailed study into the vast array of pathological conditions that affect the head and neck region with emphasis on the oral cavity. Students will learn the etiology, prevalence, clinical/radiographic presentation and histology

of each entity. Topics include biopsy techniques, vesiculo-bullous lesions, odontogenic/non-odontogenic tumors and cysts, benign and malignant epithelial lesions including salivary gland, benign and malignant mesenchymal lesions, staging systems of malignancies, and adverse effects on the oral cavity from radiation and chemotherapy treatment. Emphasis is placed on formulating a reasonable differential diagnosis and when to refer patients for a biopsy. **(3 credit hours)**

ORDG 523-01 - Advanced Oral Radiology Interpretation II – This D3 course provides students with an overview of concepts relative to advanced radiographs, radiographic techniques, radiographic anatomy, pathological characteristics of inflammatory and infectious lesions of the jaws, cysts of the jaws, genetic and systemic jaw lesions, and benign and malignant lesions of the jaws. **(2 credit hours)**

ORDG 700-01 – Oral Diagnosis & Radiology Clinic – This clinical course serves as a four-semester course spanning the D3 and D4 years. Through participation in this D3 and D4 clinic, students learn to apply skills in history taking, clinical examination and radiographic evaluation. Students independently compose an appropriate treatment plan, which is presented in both written and verbal form. Students are questioned concerning material presented. Additionally, students assess and treat patients with dental pain emergencies. **(2 credit hours)**

ORDG 593-01 – Comprehensive Treatment Planning Council - This D3 course provides a forum whereby students, after applying skills of history taking, clinical examination, and radiographic evaluation, independently compose an appropriate treatment plan, which is presented in both written and verbal form. **(1 credit hour)**

HOSD 521-01 Hospital Dentistry — This D3 course introduces the students to the hospital environment through rotations in the medical simulation laboratory, rotations in the Metropolitan General Hospital Emergency Services and patient interview in the hospital setting. Integrated learning and interdisciplinary education form the basis for the course. **(1 credit hour)**

DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY

Objectives

The Department of Oral and Maxillofacial Surgery, School of Dentistry, Meharry Medical College, is committed to the mission of the SOD. In addition, the department is committed to continuously providing quality controlled didactic and clinical instruction in oral and maxillofacial surgery to all enrolled undergraduate students. This instruction will produce a graduate capable of providing competent, routine independent oral and maxillofacial surgical care; recognition of challenges beyond their skill levels; performing competently on national, state and regional board examinations; and ultimately excelling in the private practice of general dentistry.

COURSE DESCRIPTIONS

ORSG 403-01 - Oral & Maxillofacial Surgery & Anesthesia - This D2 year course in the department that teaches the students all aspects of the administration of local anesthesia. Students are taught the pharmacology, biochemistry, anatomy, and physiological aspects of local anesthesia administration. The students are taught through lectures demonstration and participation the basic local anesthesia injection techniques of infiltration and block anesthesia. The students are exposed to the exodontia which includes history taking, physical evaluation and the armamentarium used in basic uncomplicated exodontia, along with indications and contraindications of exodontia. Lectures and power point presentations will be used. **(2 credit hours)**

ORSG 502-01 - Oral & Maxillofacial Surgery & Anesthesia II - This D3 course, students are introduced to nitrous oxide oxygen administration. The course is designed to teach the students more advanced principles of Oral & Maxillofacial Surgery to include surgical technique, Pre-operative physical evaluation of the patient, surgical complications and emergencies, management of disease, injuries and defects of the oral and para oral structures. Additionally, students will be reacquainted with the anatomy of the head and neck, microbiology and other basic science subjects that will enhance their clinical capabilities. Lectures will be supplemented by power point presentations and demonstrations. **(3 credit hours)**

ORSG 503-01 - Oral & Maxillofacial Surgery & Anesthesia III - This D3 course, two semester hour course is designed to introduce the students to the fundamental of anxiety and pain control. The students are exposed to the different routes of administration of sedatives and hypnotics, the pharmacology of the administered drugs with the expected clinical effect. Recognition and management of complications of administration of anxiolytic drugs are taught by lectures and demonstrations. Students are exposed to the didactic administration of general anesthesia and the actual administration of nitrous oxide inhalation sedation. **(2 credit hours)**

ORSG 700-01 – Oral & Maxillofacial Surgery Clinic – This clinical course serves as a four-semester course spanning the D3 and D4 years. Additionally, this course is designed to permit students to demonstrate competency in performing uncomplicated extractions of erupted teeth and minor oral surgery procedures. The student will gain competence in performing uncomplicated biopsy of hard and soft tissue lesions and surgical extraction of impacted and unerupted teeth. The student is expected to apply to the patient's needs at the chair-side the principles taught in the Oral & Maxillofacial Surgery & Anesthesia didactic courses in addition to Cardiopulmonary Resuscitation. The students will also become competent in administration of nitrous-oxide inhalation sedation. **(2 credit hours)**

ORSG 492-01 AND ORSG 692-01 - Cardiopulmonary Resuscitation (CPR) - This D2 and D4 one semester hour course is designed for certification and re-certification of students in cardiopulmonary resuscitation. The course consists of lectures and demonstrations in the techniques of cardiopulmonary resuscitation. Experience in monitoring vital signs will be gained as part of the exercises by the students. Each student must demonstrate competency in the performance tests for airway obstruction in infants and adult victims and resuscitation of infant and adult victims of cardiac arrest. This course complies with standards of the American Heart Association and the American Red Cross. **(1 credit hour)**

DEPARTMENT OF ORTHODONTICS

Objectives

This division is actively involved in introducing and teaching basic orthodontic theory and principles. The students are introduced to basic philosophy and current concepts in the field of orthodontics. A great emphasis is placed on differential diagnosis, case selection, treatment planning, and patient management. Each student is required to participate in patient treatment and gain clinical experiences in limited orthodontic tooth movement by developing treatment strategies for preventive, interceptive and limited orthodontic problems.

COURSE DESCRIPTIONS

ORTH 422-01 - Orthodontics - This D2 course is designed to introduce the student to the history, concept, and rationale of orthodontic therapy. The student is familiarized with human growth and development, with emphasis placed on the craniofacial complex. The etiologic factors of malocclusion are characterized and elucidated. The student is introduced to orthodontic diagnostic aids and their interpretation in preparation for

clinical orthodontic diagnosis and treatment planning. The laboratory phase of this course includes taking of alginate impressions on students, fabrication of orthodontic models, and tracing of a lateral cephalograph. **(2 credit hours)**

ORTH 521-01 – Orthodontics - This D3 course is designed to advance the students' knowledge of orthodontics and further prepare them for clinical activity. The physical and psychological effects of malocclusion are described and delineated. This course covers biomechanical principles of tooth movement, as well as preventive, interceptive, limited corrective, and surgical orthodontics. The students gain experience in patient management related to preventive, interceptive, and limited corrective orthodontics. **(1 credit hours)**

ORTH 700-01 – Orthodontics Clinic – This clinical course serves as a four-semester course spanning the D3 and D4 years. Emphasis is placed on diagnosis, treatment planning, and treatment strategies for preventive, interceptive and comprehensive orthodontic cases. Additionally, the course provides a review of topics covered in the ORTH 422-01 and ORTH 521-01 courses. When possible, students are encouraged to provide minor tooth movement on patients with simple orthodontic appliances. D4 students must be able to pass a final clinical competency examination to assess their ability to diagnosis various types of malocclusion and determine if it can be treated by a general dentist or referred to an orthodontist. **(2 credit hours)**

DEPARTMENT OF PEDIATRIC DENTISTRY

Objectives

The educational goals of the Department of Pediatric Dentistry are to enable the dental student, at the undergraduate level, to develop a strong competency in pediatric dentistry and to increase the theoretical and clinical judgment, technical skills, and case organizational abilities. The course of study in pediatric dentistry is designed to establish a high standard of oral care based on an appreciation of the intricacies and demands of comprehensive health. The division stresses a strong scientific and behavioral science foundation, strong patient assessment skills, disease control and rehabilitation effectiveness, motivational interviewing with parents, and a strong appreciation for health promotion. Minimal expectations of students to assure demonstrated competencies are emphasized in:

- Preventive services and treatment of conditions to include plaque control, patient education, and emergency treatment of pain and infection.
- Restoration of the primary and permanent teeth to proper form and function, with careful consideration for the health of the pulp and the supporting structures.
- Maintenance and/or restoration of space in the dental arch to achieve or retain adequate esthetics and function.
- Recognition of malocclusion, with priority provided for interceptive services as well as recognition of disfiguring and/or handicapping malocclusions.

COURSE DESCRIPTIONS

PEDN 412-01 - Pediatric Dentistry - Lecture/Laboratory. This D2 introductory course is designed to introduce the basic principles of clinical pediatric dentistry, including growth and development, restorative dentistry, space maintenance, and some general considerations necessary when treating the pediatric dentistry patient. Laboratory exercises will be used to familiarize the student with actual pediatric dentistry techniques. **(3 credit hours)**

PEDN 511-01 - Pediatric Dentistry Seminar - This D3 major didactic course offered in pediatric dentistry offers extended didactic exposure to patient management, caries management, preventive measures, oral surgery, pulp therapy, trauma management, space maintenance, radiographic techniques, medicine, care of the handicapped, nutrition and orthodontics. **(1 credit hours)**

PEDN 700-01 – Pedodontics Clinic – This clinical course serves as a four-semester course spanning the D3 and D4 years. Emphasis is placed on diagnosis, treatment planning, and the comprehensive management of common pediatric dentistry situations. Community dentistry and health promotion exercises also are included in this course. Additional emphasis is placed on emergency management, medical complications, care for the handicapped, and treatment in the hospital. **(2 credit hours)**

DEPARTMENT OF DENTAL PUBLIC HEALTH

Objectives

For dental health professionals to effectively anticipate, assess, initiate, or respond to change they require skills in population-based analysis and knowledge about health service delivery systems, the financing of health services, basic health, and research design.

The pre-doctoral curriculum includes:

- The sociology and psychology of dentistry
- The epidemiology of oral conditions
- Health policy and the planning of oral health services
- The organization and delivery of care to patient populations with special needs
- Knowledge and Skills in Interpersonal Communication
- Needs Assessment and Treatment Planning
- Consultative and Inter-professional Relations
- Quality Assurance
- Coordination of Dental Team Responsibilities
- Principles of Proactive Management
- Cultural Competency

COURSE DESCRIPTIONS

ASDD 301-01 (D1) Analytical Reasoning and Critical Thinking (ARCT) — The Analytical Reasoning and Critical Thinking course is designed to teach students how to evaluate what they hear in lectures and/or read in textbooks in dentistry. The course enables students to raise and answer important questions involved with self-deception. They are taught to distinguish between fact and opinion and to decide which ideas to examine closely during examinations. The difference lies between those students who merely see or hear words and those who see beyond words, achieving a higher level of reasoning and comprehension. Furthermore this course is designed to guide students to recognize problem solving skills. Students will learn critical thinking skills and the application of these skills for their course work in dentistry. **(1 credit hour)**

PDNT 303-01 Introduction to Clinical Research - This D1 class introduces students to the principles of Biostatistics and Epidemiology. This course is concerned with how to find scientific information necessary to sustain and enhance the clinical practice of dentistry and how to interpret that information. In this context, scientific information refers to the published results of clinical research among humans, which provides the rationale for understanding, preventing and treating oral diseases in dental practice and the community. **(1 credit hour)**

PDNT 311-01 Dental Ethics & Jurisprudence – In This D1 course, five ethical paradigms/approaches are provided: utilitarian approach, fairness and justice, common good approach, rights approach, and virtue approach. Students keep a journal about ethical decision making they are making in their personal lives. The class includes group work on the ethical models using biomedical case studies related to patient confidentiality, reporting, treatment of patients with HIV, and cultural competency. Students review the ADA Code of Conduct and its guidance on ethical decision making and professional responsibility. **(1 credit hour)**

PDNT 322-01 Applied Nutrition - The primary focus of this D1 course is on the concepts of human nutrition, their relevance and application to clinical dentistry. The nutritional complications of major chronic diseases are presented. Students participate in classroom exercises designed to provide familiarity with dietary and nutritional assessment methodologies. **(1 credit hour)**

ASDD 322-01 National Board Review Part I – This course is designed to provide the D1 with a review of high yield concepts as it relates to the National Board Dental Examination Part I. The areas discussed include: anatomy, biochemistry, microbiology, pathology, dental anatomy and occlusion, and physiology. **(1 credit hour)**

PDNT 401-01 Introduction to Community Based Education -This D2 course introduces the student to dental public health. This course will also provide the D2 student with the basic principles in promotion, improvement and maintenance of oral health. In addition, students will participate in community outreach programs. **(1 credit hour)**

ASDD 404-01 Comprehensive Clinical Dentistry – This course is designed to expose students to the basics regarding initial patient interaction/screening. It includes discussions around head and neck examinations, documenting SOAP notes, and managing patient's electronic health records in Axium. **(8 credit hours)**

ASDD 410-01 (D2) Analytical Reasoning and Critical Thinking (ARCT) – This course is a continuation of the ASDD 301-01 course. Basic concepts of critical thinking are discussed as they relate to D2 dental courses. The course activities will utilize power point presentations, BlackBoard, group exercises, independent homework assignments, lecture notes and final case assessment. The D2 dental ARCT course will guide the dental student in understanding the elements of critical thinking as they relate to dental course work. Upon completion of the course, the second year dental student will understand and demonstrate the elements of scientific thinking specifically as it relates to D2 course work. **(1 credit hour)**

PDNT 410-01 Dental Jurisprudence & Ethics – This D2 course explores ethical paradigms and introduces dental students to legal terminology related to the practice of dentistry. The course will enable the students to critically think through ethical dilemmas that they may encounter as dental students and later as practitioners in the dental profession. **(1 credit hour)**

PDNT 411-01 Cultural Competency in Healthcare - This D2 course is designed to help students understand theories and skills that prepare them to become culturally competent members in their

communities. Emphasis will be placed on the acquisition and promotion of skills, attitudes, behaviors, and knowledge necessary for students to work respectfully and effectively with patients and each other in a culturally diverse environment. **(1 credit hour)**

PDNT 415-01 Dental Informatics – This course teaches the application of computer and information science to improve dental practice, research, education and management. The concepts of this course, taught during the D2, are widely applicable throughout the student's educational and professional life. **(1 credit hour)**

ASDD 510-01 (D3) Analytical Reasoning and Critical Thinking (ARCT) – This course is a continuation of the ASDD 410-01 course. Basic concepts of critical thinking are discussed as they relate to the D3 courses. The course activities will utilize power point presentations, BlackBoard, independent and group exercises, group assignments, lecture notes and course quizzes. The D3 Analytical Reasoning and Critical Thinking course will engage the students in the critical thinking process through case-based learning from a clinical perspective. **(1 credit hour)**

PDNT 501-01 Practice Management - This D3 course presents information that is essential to establishing or purchasing a dental practice or joining an existing practice as an associate or partner. Models of solo practice, group practice, partnership practice and associateship practice are discussed. Topics are presented that assist in the development of the management skills necessary to operate a dental practice successfully. Personnel management, office design, financing, jurisprudence, managed care organizations, estate planning, business and cost accounting are discussed. **(1 credit hour)**

ASDD 503-01 National Board Review Part II – This course is designed to provide D3 year dental students with a review of high yield concepts as it relates to the National Board Dental Examination Part II. The areas discussed include: restorative dentistry (prosthodontics and operative dentistry), oral diagnosis (oral radiology and oral pathology), endodontics, orthodontics, pediatric dentistry, patient management (public health, behavioral management, and research), oral surgery, periodontics, and pharmacology. **(1 credit hour)**

PDNT 521-01 –Behavioral Management in Dental Practice- This D3 course is designed to provide students an opportunity to develop communication skills for interacting appropriately with patients, peers, and other health care professionals. The course integrates topics such as communication in the healthcare setting, cultural considerations, gift taking/giving, non-verbal communication, the use of assertiveness, persuasion and motivation, managing medically compromised patients. Additional topics include respect, empathy, paternalism, autonomy and abuse/trauma, all of which contribute to understanding the psychological needs of the patient. **(1 credit hour)**

PDNT 522-01 Community Dental Health II- This D3 course focuses on the basic concepts of dental public health as related to the community. The history of dentistry, principles of fluoride and sealant usage, epidemiology of oral diseases and cancer, HIV/AIDS, OSHA guidelines, current issues in health care, social policy and health care economics are discussed. Models of health care delivery systems and quality assurance are presented. The course teaches basic skills in the data collection and interpretation of population-based and community-based surveys and programs. **(2 credit hours)**

PDNT 561-01 Geriatric Dentistry - This multidisciplinary and interdisciplinary D3 course focuses on the oral diagnosis and treatment planning for the older adult. It prepares the student with the essentials of how to evaluate the geriatric patient including the physical, mental, pharmacological, and socioeconomic aspects of assessment. Oral assessment, enhanced by actual case studies, is presented so that the student will have

an understanding of various therapies that are necessary to accomplish the delivery of dental care to the older adult. Ethical issues in geriatric health care and elder abuse will also be discussed. **(1 credit hour)**

ASDD 615-01 Final Clinical Competency Exam (FCCE) – This course represents the final course required to measure competency in a D4 student. It is comprised of an amalgamation of all FCCEs completed by the student in each of their clinical courses. **(2 credit hours)**

DEPARTMENT OF RESTORATIVE DENTISTRY

Objectives

The Department of Restorative Dentistry (Operative and Prosthodontics) presents the concepts and principles that prepare the graduate to deliver dental health care for the restorative dental patient. The department presents the biomechanical and clinical principles necessary to restore the oral cavity to optimum health. Students receive instruction in dental biomaterials, pre-clinical restorative procedures involving caries detection and removal, cavity design, choosing restorative materials, operative dentistry and fixed and removable prosthodontic concepts. The department also correlates the diagnoses and treatment of caries, trauma or pathosis of the dentition as it relates to the various basic sciences and other disciplines of dentistry. Students are also instructed on the restoration of the occlusion. A vital part of the discipline of Prosthodontics, occlusion encompasses the anatomical, physiological, and bio-mechanical relationships of the total masticatory system, the restoration and reproduction of occlusal relationships to their proper function in the system, and the examination procedures that allow proper diagnosis and treatment of the pathologic or dysfunctional states.

COURSE DESCRIPTIONS

PROS 310-01 Dental Anatomy and Occlusion – This course will provide the student knowledge in the anatomical and morphological characteristics of the teeth and related structures. It will also include a study of eruption sequence for the primary and permanent teeth as well as a study of pulp morphology for each type of tooth. Student will gain a thorough understanding of the anatomic relationship that exists between the dynamics of mandibular movement (anatomy and physiology of the stomatognathic system) and occlusal morphology. **(10 credit hours)**

OPDN 320-01 Dental Auxiliary Utilization – This D1 course provides students with the basic in working alongside dental assistants in the operatory. **(1 credit hour)**

OPDN 325-01 Biodental Materials – This D1 course presents the basic chemical and physical properties of dental materials as they relate to their manipulation by the dentist. Students will identify components of the stress strain curve, chemical properties of impression materials, and difference between types of gypsum products. Concepts in colorimetry are also discussed. **(2 credit hours)**

EDPR 401-01 Basic Interdisciplinary Implantology – A D2 course which includes a didactic and a laboratory segment. This course which integrates Restorative Dentistry, Oral Surgery and Periodontics provides an introduction to dental implants. This course examines the implant-bone interface and the concept of osseointergration, along with discussions on evaluating, diagnosing and treatment planning dental implant patients. **(1 credit hour)**

PROS 412-01 Removable Partial Dentures - This D2 course teaches students the principles necessary for utilization of removable partial dentures. Students are exposed to diagnosis and treatment planning for the partially edentulous patient, with emphasis being placed on prognosis with various treatment modalities.

Students gain experience in diagnosis and treatment planning, mouth preparation, impression techniques, survey, design, tooth arrangement, delivery and post-operative care of removable partial dentures. Laboratory procedures and dental materials related to removable partial dentures are reviewed. Students are exposed to concepts that relate other specialty areas to removable partial dentures, such as elective endodontics, fixed prosthodontic abutment preparation, pre-prosthetic surgery, and periodontal considerations. **(2 credit hours)**

PROS 422-01 Complete Dentures - This D2 course is designed to explore and discuss the biological principles related to the fabrication and function of a complete denture prosthesis used to rehabilitate completely edentulous patients. Emphasis is placed on thorough examination, recognition of the problems, and how to make a diagnosis, treatment plan, and prognosis for each patient in a clinical setting. Textbooks, lectures, demonstrations, audio-visual aids, and discussions of the clinical aspects are used to broaden the scope of relative biological and technical knowledge. By the end of the course students gain the thorough, step-by-step, technical know-how of the fabrication of complete dentures. **(4 credit hours)**

PROS 491-01 Fixed Prosthodontics - This D2 course presents the basic principles to prepare dental students for pre-clinical crown and bridge procedures, as well as provides a foundation for students to grasp principles of clinical crown and bridge procedures. It gives students general knowledge in fixed prosthodontic treatment planning, crown preparations and prosthesis fabrication. At the completion of this course, students should be able to fabricate a fixed partial denture that satisfactorily meets the requirements of biomechanics and promotes the health of the remaining oral structures. Textbooks, lectures, demonstrations, audio-visual aids, along with discussions of the clinical aspects are used to broaden the scope of relative biological and technical knowledge. By the end of the course, students gain the thorough, step-by-step, technical know-how of the fabrication of fixed partial dentures. **(13 credit hours)**

EDPR 500-01 Advanced Interdisciplinary Implantology – This D3 course, is designed to expose students to evidence based dental implantology. The students are divided into small groups where discussion of clinical cases occurs. **(1 credit hour)**

PROS 501-01 Fixed Prosthodontics II - This D3 course presents biological and clinical principles to prepare students to restore existing teeth and replace missing teeth, when possible, by means of fixed prosthodontic restorations. The lecture series presents basic principles of crown preparations (specific for porcelain to metal restorations, fabrication of provisional restorations, cast dowel posts, pin retained cores, and the chemical nature of porcelain, color and esthetics in fixed prosthodontics). All clinical procedures presented in lecture will be supplemented by laboratory exercises to prepare the student to perform the procedures in a clinical situation. **(1 credit hour)**

PROS 520-01 – Prosthodontics Seminar – This D3 course provides students with an overview of advanced removable prosthetics. **(1 credit hour)**

PROS 700-01 – Prosthodontics Clinic – This clinical course serves as a four-semester course spanning the D3 and D4 years. Basic prosthodontic treatment modalities are completed by students to integrate the knowledge base gained in the pre-clinical courses with clinical treatment of patients. Students are guided in the diagnosis, treatment planning, and comprehensive care for the edentulous, partially edentulous, and dentate patient; to develop a basic level of competency to deliver prosthodontic dental health care. Several competency-based clinical exercises and examinations are conducted in fixed and removable prosthodontics. **(15 credit hours)**

PROS 511-01 - Occlusal Adjustment - This D3 course emphasizes biological and clinical principles in the preparation of students for diagnosing and treatment planning for psychological, pathological, and physiological problems related to the gnathostomatic system. Laboratory training in the application of occlusal treatment, instrumentation and procedures for occlusal adjustment are also taught in this course. **(2 credit hours)**

OPDN 321-01 - Introduction to Operative Dentistry - This D1 course is designed to teach students to apply the biological, mechanical and esthetic principles, necessary to recognize dental caries and perform proper tooth preparation. **(2 credit hours)**

OPDN 401-01- Pre-Clinical Operative- This D2 technique course is designed to give the D2 dental student a basic background in the biological and manipulative fundamental principles of operative dentistry and make available the opportunity to practice these principles utilizing the various dental protective liners, bases and restorative materials for replacing lost tooth structure as a result of caries or trauma. **(14 credit hour)**

OPDN 421-01 - Biodental Materials Seminar - This D2 course presents the basic chemical and physical properties of dental materials as they relate to their manipulation by the dentist. It is intended to bridge the gap between the knowledge obtained in the basic courses in materials science, chemistry, and physics and the dental operatory. **(1 credit hour)**

OPDN 501-01 - Operative Dentistry Seminar - This course is designed to acquaint the D3 student with clinical procedures and regulations; to relate, review and reinforce the knowledge gained in the pre-clinical Operative Dentistry course and the D2 Biomaterials course to clinical practice; to teach students to distinguish between decayed and normal tooth structure; to aid students with patient management; and to teach additional material and techniques not covered in the D2 course in Operative Dentistry. **(1 credit hour)**

OPDN 700-01 – Operative Dentistry Clinic – This clinical course serves as a four-semester course spanning the D3 and D4 years. The major objective is to give the student practice in diagnosis, treatment planning, and comprehensive restorative care for the patient possessing all or part of the natural dentition. **(19 credit hours)**

DEPARTMENT OF PERIODONTICS

Objectives

The mission of the Department of Periodontics is to train pre-doctoral students in the art and science of periodontology. The Department provides pre-doctoral dental students with laboratory, pre-clinical and clinical instruction in diagnosis, treatment and prevention of periodontal disease.

COURSE DESCRIPTIONS

EDPR 300-01 -- Periodontics – This D1 course, which integrates the didactic material learned by the students during the fall and spring semesters of the academic year. In addition, the course prepares the students for providing dental hygiene activities in the summer clinics at the end of the D1 year. **(3 credit hours)**

EDPR 422-01 - Periodontics - This pre-clinical course is offered in the D2 year. Students are introduced to the principles of periodontal disease prevention, diagnosis, and non-surgical periodontal therapy through

lectures and laboratory, and clinical exercises. Students work in teams of two practicing examination and treatment techniques in the clinic to build the skills necessary to treat patients. **(3 credit hours)**

EDPR 511-01 - Periodontics - This didactic course is offered in the D3 year. The course focuses the various forms of surgical procedures that are performed in Periodontics along with their purposes, indications and expected outcomes. **(2 credit hours)**

EDPR 701-01 - Periodontics Clinic – This clinical course serves as a four-semester course spanning the D3 and D4 years. Throughout the course, students treat patients in the clinic under the supervision of faculty. One-on-one instruction is emphasized to ensure that each student develops the skills to treat Gingivitis, and Mild-to-Moderate Chronic Periodontitis. Students also assist with surgical therapy to foster a familiarity of various surgical techniques. **(8 credit hours)**

DEPARTMENT OF ORAL BIOLOGY AND RESEARCH

Objectives

The mission of the Department of Oral Biology and Research is to bridge Basic Sciences and the Dental clinical practice through research excellence and to educate dental scientists for academic and research leadership positions. Recent advances in basic sciences, the completion of the human genome project, the advancement of genomics and proteomics as well as the interdisciplinary nature of research in oral health and disease processes and treatment, are key to position the department as a leader in the national effort to relate these findings to systemic health, and to translate these advances into improved dental care and oral health especially as they relate to the health of underserved populations and the elimination of oral health disparities.

Division of Graduate Programs

Objectives

The Division of Graduate Studies is committed to establishing graduate training in the recognized specialty areas of dentistry and general practice. The program will prepare the residents to challenge the American Board in their recognized specialty area or similar certification in general dentistry. The training of the postgraduate residents will be consistent with the mission of Meharry and the SOD.

Advanced Training

The Division of Graduate Studies is committed to conducting graduate training in the recognized specialty areas of Dentistry and General Practice. The program will prepare the resident to challenge the American Board in the recognized specialty area or provide similar certification in General Dentistry. The training of the postgraduate residents is consistent with the Mission of Meharry and the School of Dentistry.

There are currently two postgraduate programs in the School of Dentistry:

1. **General Practice Residency Program-** The General Practice Residency program is a one year, accredited program that is affiliated with the Metropolitan General Hospital and the Nashville Veterans Affairs Hospital. The program provides the residents the opportunity to treat a diverse group of patients and gain experience in managing patients in outpatient treatment and hospital inpatient settings. This program provides the opportunity for residents to acquire additional training

and experience in all phases of general dentistry while serving an underrepresented population in dental healthcare.

2. **Oral and Maxillofacial Surgery Program**- The Oral and Maxillofacial Residency program is a four year, accredited program that trains residents in the full scope of oral and maxillofacial surgery. Resident training is both an inpatient and outpatient service of the School of Dentistry, Metropolitan General Hospital and the Nashville Veterans Affairs Hospital. Residents receive a certificate after successfully completing the program and are eligible to apply for American Board Certification by examination.

Continuing Dental Education

The dental education program is organized to promote a continuous learning process in the profession. The pursuit of continuous education is fostered in the academic program through continuing education programs and special lectures.

COURSE DESCRIPTIONS

ASDD 311-01, ASDD 411-01, ASDD 511-01, & ASDD 611-01 Introduction to Lifelong Learning I-IV— The Lifelong Learning course is equivalent to sixteen (16) clock hours. Students must earn a minimum of thirteen (13) clock hours of lifelong learning each year. Attendance at these programs is mandatory for all students. All students must attend eighty percent (80%) of the required programs to complete the Lifelong Learning Course successfully. A record of attendance at these programs is maintained by the Director of Continuing Education for the School of Dentistry and the Associate Dean for Academic Affairs.

These programs also provide an opportunity to invite outstanding academicians and clinicians to the School and to the College to present lectures in areas of contemporary interests and concerns in education, research or clinical practice. They also provide the opportunity for faculty and students to interact with these visitors in an atmosphere of tradition and history. Questions from Heritage Lectures are included in appropriate departmental examinations. In addition, the School of Dentistry along with the College's continuing education program conducts several dental education courses each year for students, alumni, and other dental healthcare professionals as a part of lifelong learning in the dental profession. ASDD 311-01, ASDD 411-01, ASDD 511-01, & ASDD 611-01 **(1 credit hour)**

School of Dentistry Faculty

Department of Dental Public Health

Professors: Jacinta Leavell, Ph.D., Cherae Farmer-Dixon, D.D.S., M.S.P.H
Associate Professors: Machelle Thompson, R.D.H., M.S.P.H.
Assistant Professor: Robin Kimbrough, J.D.; Tiffany Wilson, D.D.S., M.P.H.
Adjunct Associate Professor: Timothy L. Ricks, D.M.D.
Adjunct Assistant Professor: Eleanor Fleming, Ph.D., D.D.S.

Department of Endodontics

Associate Professor: Kathy L. Jefferson, D.D.S., M.S.

Department of Oral and Maxillofacial Surgery

Professors: Daphne Ferguson-Young, D.D.S., M.S.P.H.
Associate Professors: Robin R. Daniel, D.D.S., Kimberley Perkins-Davis, D.D.S; Gibson, Johnson, D.D.S.

Assistant Professors: Joyce A. Barbour, D.D.S, M.B.A.; Joseph Doctora, D.D.S; Armando Aguilera, D.D.S.
Adjunct Assistant Professor: Kim Culbertson, D.D.S.
Instructor: Sarat Mohammadu, D.D.S., M.S.

Department of Oral Diagnostic Sciences and Research

Professor: Hue Xie, D.D.S., Ph.D.
Associate Professors: James Cade, D.D.S.; Pandu Gangula, Ph.D.; Steven Silberg, D.D.S
Assistant Professors: Anita N. Sykes-Smith, D.D.S, M.B.A.; Conrad Douglas, D.D.S; Benita Jackson, D.D.S.; Erwin Ricafort, D.D.S.
Instructor: Ashley Humphrey, D.D.S.; Kesha Burns, D.D.S.

Faculty with Secondary Appointment:
Professor: Billy R. Ballard, M.D., D.D.S.

Department of Pediatric Dentistry
Assistant Professors: Ruth Bol, D.D.S., M.P.H.
Angela W. Southwell, D.D.S., M.A.; Judson R. Wood, D.D.S.;
Professor Emeritus: Edwin H. Hines, D.D.S.

Department of Orthodontics
Associate Professor: Sandra G. Harris, D.D.S

Department of Periodontics
Assistant Professor: Barbara A. Jones, D.D.S., Denise Mustiful-Martin, D.D.S.

Department of Restorative Dentistry
Professor: James E. Tyus, D.D.S.
Associate Professors: William P. Davis, D.D.S., M.S.P.H..; Michael A Yacko, Jr., D.M.D.
Assistant Professors: Thomas E. Brannon, D.D.S.; Norma J. Coleman, D.D.S., M.A.; Gerald E. Davis, II, D.D.S., M.A; Howard T. Dodd, D.D.S.; John M. Douglass, Jr., D.D.S.; Julie A Gray, D.D.S, M.A..; Harold Jackson, D.D.S.; Bobby Larry, D.D.S.; Valencia P. McShan, D.D.S, M.A.; Qi Wang, D.D.S; Eric Williams, D.D.S.;
Instructor: Eric Oates, D.D.S.; Daniel Melamed, D.D.S.
Adjunct Assistant Professors: Kim L. Anadaya, D.M.D.; Veran A. Fairrow, D.D.S.; Shelley Siqur, D.D.S.
Adjunct Instructor: Latresa D. Jackson, D.M.D.; Crystal Manners, D.D.S.; Robyn Turner Mays, D.D.S.; Sarah Vanderbosch, D.M.D.

Division of Graduate Programs

Program Director: Kimberley Perkins-Davis, D.D.S., M.D., Oral and Maxillofacial Surgery Residency
Program Director: Daphne Ferguson-Young, D.D.S., M.S.P.H. General Practice Residency Program

SOM Basic Science Cross-School Core Teaching Faculty

Department of Biochemistry, Cancer Biology, Neurosciences and Pharmacology:
Professors: Salil K. Das, Ph.D. (Biochemistry); Maria de Fatima Lima, Ph.D. (Microbiology) Sanika Chirwa, Ph.D. (Dental Neurosciences); Sukhbir S. Mokha, Ph.D. (Dental Neurosciences, Pharmacology); Twum-Ampofo Ansah, Ph.D. (Dental Neurosciences, Pharmacology)

Department of Microbiology, Immunology and Physiology:
Chairperson: Fernando V. Villalta, Ph.D., Professor (Microbiology, Immunology)
Professors: Zhongmao Guo, Ph.D. (Physiology); Robert G. Holt, Ph.D. (Microbiology) Micheal Hill, Ph.D. (Physiology)

Department of Pathology:
Chairperson: Billy R. Ballard, M.D., D.D.S., Professor (Pathology, Histology)
Associate Professors: Digna Forbes, M.D. (Pathology)

Department of Professional and Medical Education: Chairperson: Digna Forbes, M.D.
Professors: Emmanuel Atta-Asafo-Adjei , Ph.D. (Biochemistry); John T. Clark, Ph.D. (Physiology); Susan A DeRiemer, Ph.D. (Embryology) ; Mohammed A . Maleque, Ph.D. (Pharmacology); Alfred M. Nyanda, Ph.D. (Dental Neurosciences, Pharmacology)
Associate Professors: Carol Freund, Ph.D. (Genetics/Biochemistry), Shyamali Mukherjee, Ph.D. (Pharmacology), Olugbemiga B. Ogunkua, M.D., Ph.D. (Histology), Digna Forbes, M.D. (Pathology), Michael Hill, Ph.D. (Physiology), Larry Alexander, Ph.D. (Physiology)
Assistant Professor: Anita Austin, Ph.D. (Gross Anatomy)
Professor Emeritus: Mukul Banerjee, Ph.D. (Physiology)

Internal Medicine:
Chairperson; Richard Freemont, M.D.
Assistant Professor: Ethel Harris, D.D.S.

School of Graduate Studies and Research

Administration

Maria de Fatima Lima, PHD, Dean
Stephanie Bailey, MD, MSHSA, Sr. Associate Dean, Public Health Practice
Evangeline Motley-Johnson, PHD, Sr. Associate Dean, Biomedical Education
TBA, Director, Master of Science in Clinical Investigation
Tultul Nayyar, PHD, MSCI, Director, Master of Health Sciences
Kimberlee Wyche-Etheridge, MD, MPH, Interim Director, Master of Science in Public Health
A. Dexter Samuels, PHD, MHA, Executive Director, Center for Health Policy,
Director, Health Policy Certificate Program

Graduate Studies and Research Education at Meharry

The School of Graduate Studies and Research (SOGSR) is recognized as a valuable national resource for educating PhDs in the Biomedical Sciences, Masters-level graduates in Public Health (MSPH), graduates of Masters in Clinical Investigation (MSCI) and graduates in Master of Health Sciences (MHS). A Certificate in Health Policy is also offered by the SOGSR. For the past 10 years, Meharry has conferred 53.4% of all the PhD degrees awarded nationally to African Americans in Biomedical Sciences. Graduates of the School serve on the faculties of America's best universities as well as in leadership roles for many of the nation's health, pharmaceutical, and biomedical technology corporations.

The departments and divisions that participate in the graduate programs are housed on three floors of the West Basic Sciences Building (WBSB), in the Clay Simpson Building and in the Clinical area. The WBSB provides some 280,000 square feet of teaching, laboratory, and office space. Each department has a seminar room, a library, small group meeting facilities, faculty laboratories, and offices. The building also houses shared seminar rooms, large lecture halls, and central research core facilities including an animal care facility; a molecular biology core facility that contains a DNA sequencer, an oligonucleotide synthesizer, an Amgen densitometer; an Affymetrix gene array facility; a flow cytometry laboratory; a Biological Safety Level 3 (BL3) facility; a behavioral neuroscience facility which includes an optical animal activity monitoring system, a Morris water maze as well as Y and Radial arm mazes; a molecular neurobiology core and a neurohistological laboratory.

History of the School

The SOGSR at Meharry Medical College began in 1938 as a series of short courses in the basic and clinical sciences. In 1947, a Master of Science Degree program was implemented as the first graduate degree. This led to the PhD program that was established in 1972, and a MD/PhD program in 1982. The PhD program has graduated more than 290 PhDs in the U.S. and currently is the top producer of African-American PhDs in the Biomedical Sciences in the U.S. The Master of Science in Public Health program at Meharry Medical College was established in 1974 and graduated its first class of one student in 1978. To date, the program has graduated more than 350 professionals who occupy positions of leadership in many public and private sectors of the country. The Master of Science in Clinical Investigation program, established in 2004, has graduates who are at the forefront of clinical and translational research. A Health Policy Certificate program was established in 2010 as a collaborative effort between the SOGSR and the Robert Wood Johnson Foundation Center for Health Policy. The Master in Health Sciences program was established in 2012 as a collaborative effort between the SOGSR and the Medical and Dental Schools to enhance the academic credentials of students applying to professional degree programs.

Mission of School

The SOGSR strives to provide unique educational opportunities in basic biomedical research and clinical investigation training and public health service to promising African Americans and other under-represented ethnic minority students through outstanding basic, clinical, and public health oriented research with special emphasis on serving the underserved communities and in diseases and health conditions that disproportionately affect ethnic minority populations. The Certificate Program was established to increase students' marketability for employment opportunities in the health policy arena and the Master in Health Sciences was created to enhance the academic credentials of students applying to professional degree programs.

Objectives of the Academic Program

Upon completion of the Graduate Program, our graduates will:

1. Know current biomedical science and public health, and their historical context, with special emphasis on the diseases and conditions that affect underserved communities.
2. Be prepared to conduct original research: design appropriate experiments, be experts in techniques of life, clinical sciences and public health, and think scientifically and analytically.
3. Be able to translate basic science and public health to address problems of health and society; work collegially; communicate effectively verbally, in writing, and graphically and practice the highest ethical and professional standards.
4. The graduates of the Certificate Program will be more marketable for employment opportunities.
5. The graduates of the Master in Health Sciences program will have knowledge, skills and training to understand, address and inform the public about health problems and issues faced by underserved populations as well as be more competitive for admission into health professional school.

   Our graduates will be creative and confident in exploring new areas and opportunities.

Research

The goal of the training programs in the SOGSR is to translate knowledge from the bench (PhD program) to the bedside (Master in Clinical Investigation) to the community (Master of Science in Public Health). Research is the vehicle that supports training in all of these programs. Currently, investigators in the Basic Science Departments of Biochemistry, Cancer Biology, Neuroscience and Pharmacology, and Microbiology, Immunology, and Physiology are involved in research and train students in the Biochemistry and Cancer Biology, Microbiology and Immunology, Neuroscience, Pharmacology, and Physiology PhD training programs. The PhD programs are designed to be broad, comprehensive, creative, individualized, and integrated to maximize each student's opportunity to develop a strong foundation in the basic sciences. Research supporting the programs leading to the Master of Science in Clinical Investigation translates basic findings into applicable knowledge to patients and their health outcomes. Current clinical areas of research are Women's Health, Cancer, Sickle Cell Disease, and HIVAIDS. At Meharry, our mission is to inform and engage the community to address diseases and health conditions that disproportionately affect ethnic minority populations; research leading to the Master of Science and Public Health addresses access to health and health care, cancer epidemiology, behavior and beliefs affecting treatment and compliance of cancer as well as other diseases and the health of our communities.

Academic Programs

Doctoral (PhD) Program

The Doctor of Philosophy degree opens the door to a career of research and discovery. It also leads to positions of broad responsibility in government, industry, and the academic world. Yet, the motive that drives scientists is not the desire for fame and wealth, prestige or power. Instead, it is curiosity, the unremitting desire to understand how the natural world works. If you share that desire, then you will find our graduate program challenging and exciting. We at Meharry believe these enterprises cannot reach their fullest capacity for human excellence until they draw upon the intellectual resources of all segments of the population. The doctoral program at Meharry leads to the interdisciplinary PhD in biomedical sciences with major emphasis in biochemistry and cancer biology, microbiology and immunology, neuroscience, pharmacology and physiology.

The doctoral program is divided into core, major emphasis, and dissertation phases. The core phase occupies the first-year of study; all students enroll in courses defined as the core curriculum courses. These courses include general biochemistry, cell and molecular biology, and laboratory rotations as well as scientific communications, bioethics and molecular methods. Students may be exempted from core courses by passing examinations prepared by the instructors for each course.

During the major emphasis phase, students complete advanced courses and begin research in one of the following areas: biochemistry and cancer biology, microbiology and immunology, neuroscience, pharmacology and physiology. The major emphasis phase ends when the student passes comprehensive examinations, thereby designating the student a candidate for the PhD degree. Students must be candidates for the degree no later than the fall semester of their third year. During the dissertation phase, the student completes the research begun during the major emphasis phase and writes a dissertation on the research.

In order to be granted the doctoral degree, the student must either publish or have accepted for publication a manuscript as first author in a peer-review journal before presenting a public seminar on the dissertation research, and passing an oral examination testing his or her knowledge of the methodologies and findings of the dissertation project. In addition, five copies of the written document must be submitted to the SOGSR.

Combined Doctor of Medicine (MD)/PhD Program

The MD/PhD program is offered jointly by the School of Medicine and the SOGSR. The program trains leaders in academic medicine by providing education in medicine and immersion in a research program of excellence. Successful completion of the program leads to the MD and PhD degrees.

Students considered for admission to the combined degree program must meet the admission requirements of both the medical and graduate schools. Students enrolled in the MD/PhD program matriculate in the School of Medicine for the first two years of their training. After successful performance on the United States Medical Licensing Exam (USMLE) Part I, students began their research training inclusive of graduate level courses. Once the PhD requirements are successfully completed, inclusive of publishing a manuscript and successfully defending a dissertation, students reenter their medical studies and complete the School of Medicine curriculum. Students receive the MD and PhD degrees concurrently once both programs are successfully completed.

Combined Doctor of Dental Surgery (DDS)/PhD Program

The DDS/PhD program is offered jointly by the School of Dentistry and the SOGSR. This program trains clinical and research professionals seeking to identify and solve significant problems in oral health. Successful completion of the program leads to the DDS and PhD degrees.

Students considered for admission to the combined degree program must meet the admission requirements of both the dental and graduate schools. Students enrolled in the DDS/PhD program matriculate in the SOGSR for the first two years of their training. After successful completion of graduate level courses, and passing the candidacy exam, the students enter the dental program. After completing the dental program, they will return to the Graduate School to complete their research, publish a manuscript and successfully defend a dissertation for completion of the PhD degree. Students receive the DDS and PhD degrees concurrently once both programs are successfully completed.

Master of Science in Public Health (MSPH) Program

The Master of Science in Public Health (MSPH) is offered by the Division of Public Health Practice,. The MSPH degree program is committed to training students who seek optimal health for people, and their communities. The MSPH program supports the World Health Organization's definition of health: "a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity."

Students in the MSPH program receive a foundation in the basics of public health which allows them to work as health professionals in the public, private, and voluntary health agency sectors at the local, state, federal, and international levels. Graduates of the program work in diverse settings in health fields that are / are not involved in the direct provision of health care.

While in the graduate program, students participate in externships that have included the U.S. Centers for Disease Control, Department of Veterans Affairs, Blue Cross/Blue Shield, Tennessee Hospital Association, and the American Cancer Society. These externships lead to excellent opportunities for future employment.

Master of Science in Clinical Investigation (MSCI) Program

The Clinical Research Education and Career Development (CRECD) program at Meharry Medical College offers a two-year fellowship for Physicians and other doctoral-level care professionals leading to a Master of Science for Clinical Investigation (MSCI) degree. The program's ambitions are to expand the cadre of well-trained clinical researchers, particularly minorities, and foster careers in clinical investigation that will address racial and ethnic health disparities.

The curriculum has two major tracks: 1) Patient Oriented and 2) Epidemiology/Health Service research. The program's curriculum includes core didactic, elective and experimental design sessions for clinical research training that spans the spectrum of translational science ranging from molecular medicine to epidemiology to qualitative research providing fundamental skills and methodology required by well-trained independent clinical investigators. Courses are offered at both Meharry Medical College and Vanderbilt University. Each trainee, during the first year, will develop a research project and establish a mentoring committee composed of faculty from both Meharry and Vanderbilt. The mentoring committee will review the project and assist the trainee in design and implementation. Each trainee will conduct the research trial and analyze the data to present a seminar and prepare a research paper.

Master of Health Sciences (MHS) Program

The Master of Health Sciences Program is a 30 credit pre-professional Master's Degree program geared to students who desire to enter into a professional degree program. The program is designed to provide increased academic strength to pre-professional students. While there is no guarantee that completion of this program will lead to acceptance to health professional school, successful matriculation in this program will enhance competitiveness for admission. The program is highly intense in its coursework.

Health Policy Certificate Program

The Health Policy Certificate Program is a collaborative effort between the SOGSR and the Meharry's Center for Health Policy. The 12 credit hour program provides students with an understanding of the intricacies involved in the making of policy and the interconnectedness of society/societal change that ultimately affect health outcomes. Additionally, the Certificate is an asset to those interested in health policy and social science research.

Graduate Certificate in Public Health Program

The Division of Public Health Practice at Meharry Medical College will offer a Graduate Certificate in Public Health. The 15 credit hour program provides students with an overall familiarity with the basics of public health. This Certificate Program is open to students enrolled at Meharry Medical College.

Graduate Certificate in Global Health Program

The Division of Public Health Practice at Meharry Medical College, in conjunction with Vanderbilt University, will offer the Graduate Certificate in Global Health. The 12 credit hour program provides students with an understanding of Global Health. This Certificate Program is limited to first year MSPH Students at Meharry Medical College, who demonstrate a strong interest in Global Health. Competitive applications are accepted in the Fall semester and classes begin in the Spring semester. Limited enrollment.

Admissions

The SOGSR Admissions Committee has the responsibility to review all applications for admission and full authority to accept or reject any applicant. The committee is charged with the responsibility of selecting students who will make suitable candidates for graduate studies. The number of applicants greatly exceeds the capacity, and all applicants are considered on a competitive basis from the standpoints of scholarship, intelligence, aptitude, character, and general fitness to meet the historic mission of the college. The dean, SOGSR, (hereafter referred to as the dean) sends a letter informing the applicant of the committee's decision. This correspondence constitutes the only official and binding notice of acceptance or rejection. An applicant also may be admitted to the graduate program as a special student, auditing student, or with conditional admission.

Applications

The Office of Admissions and Recruitment processes all applications to the PhD and MSPH Programs of the School of Graduate Studies and Research (SOGSR). To be considered for admission as a regular student an applicant must have a complete application. A complete application consists of the following: (1) an application form properly filled out; (2) official transcripts from all colleges the applicant has attended; (3) letters of recommendation from two college instructors in the sciences (for the doctoral program) or two persons who are qualified to assess your work or academic performance (for the MSPH program); (4) a report of the applicant's scores on the Graduate Record Examination and (5) an essay focused on the applicant's academic strengths and career plans.

Procedures for Admission

The deadline for the PhD application is February 16 and the MSPH application deadline is April 15 of the year of anticipated matriculation. There is a $45 application fee to apply to both programs. However, students may request a fee waiver for the PhD Program if they have participated in NIH-NIGMS programs such as Minority Access to Research Careers (MARC), Research Initiative for Scientific Enhancement (RISE), Post baccalaureate Research Education Program (PREP) or other research enhancement programs.

Requirements for Admission

PhD Program: To be admitted to the PhD Program, the applicants must:

- Hold a bachelor's, master's, or advanced degree from an accredited college or university
- Have an overall B average and a B average in science courses
- Submit scores from the General Test of the Graduate Record Examination (GRE); ***the admissions committee will not review any student application until it receives official GRE scores***
- International students must submit TOEFL scores and any education received outside the U.S. must be evaluated by World Education Services
- Submit two letters of recommendation from college instructors in the natural sciences
- Submit an essay that describes their academic background, research experience, career plans and reasons for pursuing graduate studies.

The admissions committee places great emphasis on recommendations. If you have worked on a research project at your undergraduate school or at a major research center, you should ask your research advisor for a recommendation. The admissions committee will give careful consideration to your essay. If you have conducted research, describe the specific problem you investigated, the methods you used to study it, the results you obtained and the conclusions you drew from these results.

It is the applicant's responsibility to have a report of his/her performance on the Graduate Record Examination transmitted to the Office of Admissions. The test must have been taken within five years of the proposed matriculation date.

MD/PHD Program: To be admitted to the MD/PhD Program, the applicants must:

- Be accepted in the School of Medicine
- Have an overall B average, a B average in science courses, as well as a B average in medical school courses
- Submit scores from the Medical College Admission Test (MCAT) and/or GRE
- Submit two letters of recommendation from college instructors in the natural sciences
- Submit a research interest statement
- Participate in a personal interview
- Be evaluated by the PhD Admissions Committee

DDS/PHD Program: To be admitted to the DDS/PhD Program, the applicants must:

- Have an overall B average and a B average in science courses
- Submit scores from the Dental Admission Test (DAT) and GRE
- Submit two letters of recommendation from college instructors in the natural sciences
- Submit a research interest statement
- Participate in a personal interview
- Be evaluated separately by the PhD and the SOD Admissions Committees

MSPH Program: To be admitted to the MSPH Program, the applicants must:

- Hold a bachelor's, master's or advanced degree from an accredited college or university
- Have an overall B average and a B average in science courses
- Submit scores from the General Test of the GRE; ***the admissions committee will not review any student application until it receives official GRE scores***
- Submit two letters of recommendation from college instructors or community workers
- International students must submit TOEFL scores. International students who received education outside the U.S. must have their academic record evaluated by the World Education Services
- Submit an essay that describes their academic background, career plans and reasons for pursuing graduate studies

It is the applicant's responsibility to have a report of his/her performance on the Graduate Record Examination transmitted to the Office of Admissions. The test must have been taken within five years of the proposed matriculation date.

MSCI Program: To be admitted to the MSCI Program, the applicants must:

- Submit a Curriculum Vitae
- Submit three letters of recommendation
- Submit a description documenting commitment to clinical research
- Submit a research plan of 2-3 three pages describing specific research interests (if developed) or areas of interest for consideration of future research projects

- Submit a statement of how this proposed research plan fits into long-term career objectives
- Have a DDS, MD, PhD or equivalent professional degree

MHS Program: To be admitted to the MHS Program, the applicants must:

- Have a bachelor's degree from an accredited institution, with a GPA of 3.0.
- Have applied to Meharry's Medical or Dental Schools to be considered for this program.

Special Student

A person may be admitted by the SOGSR Admissions Committee as a special student to take one or more courses, after obtaining permission from the Dean. Special students are not candidates for degrees at Meharry, but are governed by the same scholastic regulations as regular students. An interview is required with the chairperson of the department where the courses are to be taken. Fees are pro-rated in accordance with the number of hours that the course offers.

Conditional Admission

Conditional admission status may be assigned to an applicant with deficiencies in the quality of admission materials submitted; however, the applicant's conditional status must be recommended by the degree program and approved by the Graduate Admissions Committee. For conditionally admitted students to qualify for regular status, a minimum cumulative grade point average of 3.0 (B), with no grades lower than a "B" in core courses, must be earned during the academic year in which the first 24 graded hours of graduate course work are completed for the doctoral program and 12 hours for the master's program. (Degree programs may specify additional requirements for students granted conditional admission status.) If regular status is not achieved during the first year, the student will be dismissed from the degree program and the SOGSR.

All correspondence concerning admissions should be addressed to the Office of Admissions, Meharry Medical College, Nashville, Tennessee 37208. Each applicant must meet the specific requirements of the SOGSR.

Readmission

An application for readmission must be made to the Director of Admissions and must be approved by the Admissions Committee. The applicant must meet all requirements in force at the time of submission. Students not enrolled in the Graduate School for two consecutive semesters must reapply for admission. Students who have been dropped from the rolls of the College are eligible for reconsideration only under extenuating circumstances.

Transfer Course Credit

Doctoral Program: After a doctoral student begins the major emphasis phase, he or she may petition his or her department to receive credit for graduate work done at other accredited institutions or from Meharry for courses taken before admission to the SOGSR-provided that the total number of credits transferred for core courses and advanced courses does not exceed nine (9) credits. Grades earned on transferred work must be equivalent to a "B" or better. Dissertation credit is not transferable. The department chairperson requests in writing that the Office of Records enter the credits on the student's Meharry transcript. Grades earned in courses at other schools, prior to admission to Meharry are not included in computations of a student's average nor entered on the Meharry transcript. However, grades earned at Meharry before the student matriculates (e.g., bridging, joint programs, etc.) are computed in the student's GPA.

Masters of Science in Public Health Program: Students enrolled in the MSPH Program may receive transfer credit after approval by the Division Director. Students may transfer up to six (6) elective credit hours.

Masters of Science in Clinical Investigation Program: Trainees enrolled in the MSCI program may receive transfer credit after approval by the Director. Up to eight (8) credit hours of MSCI course work may be transferred.
Health Policy Certificate: Students enrolled in the Health Policy Certificate program may not utilize transfer credit toward the completion of the Certificate.

Courses Not Eligible for Transfer Course Credit

Correspondence or extension courses cannot be transferred for credit. Course(s) taken on a pass-fail or satisfactory-unsatisfactory basis are not eligible for transfer credit. Course credit earned in professional school, such as law, medicine, divinity or dentistry may not be transferred for graduate degree purposes. Exceptions from this rule are courses cross-listed as graduate school courses which carry graduate credits at the institution where taken. Students seeking the MS or PhD in addition to the MD or DDS degree may receive graduate credit, with approval of the graduate dean, for some of the courses taken at Meharry.

Other coursework that is not eligible for transfer toward a graduate degree includes:

1. Experiential learning
2. Credit by examination
3. Advanced placement
4. Professional certificates
5. Non-credit courses
6. Audited courses

Enrollment Status

A full-time student must register for a minimum of nine (9) semester hours during the fall and spring semesters and six hours during the summer semester. However, during the dissertation phase of the PhD program and after being admitted to candidacy, a student may be considered full-time even though he or she has registered for less than 9 credit hours of dissertation research. A student in the MSPH program may be considered full-time by registering for less than 9 hours of thesis research only after having completed the required course work and externship. There is no summer semester for the MHS program.

Attendance

No student is allowed to attend a class for which he or she is not officially registered by the Office of Records. No credit is given for coursework taken before official registration. Unexcused absences in excess of 20 percent of the scheduled classes may result in a failure in the course. A dean's excuse may be granted for personal illness, death of a close relative, financial exigencies, etc. If a dean's excuse is granted, the student will not be penalized for work missed during his or her absence from class, although departments may require make-up for the work missed. Requests for dean's excuses are made in the Office of the School of Graduate Studies and Research, and appropriate documentation is required at that time.

Academic Regulations

Requirements for PhD, MSPH, MSCI, MHS

Doctoral (PhD)

To receive the PhD degree a student must (a) complete at least 32 hours of graduate coursework; research courses do not count towards this requirement; not more than 9 credit hours of graduate courses taken at

other institutions may be credited toward the 32 hours (grades earned in courses at other institutions prior to admission to Meharry are not included in computations of the student's average); (b) pass qualifying examinations prepared by his or her major emphasis program; (c) complete a dissertation which meets the approval of his or her committee on instruction (COI), department chair and the graduate dean; d) publish or have accepted for publication in a peer reviewed journal, a manuscript based on the dissertation research of which the student is the first author and e) successfully defend the dissertation in a public seminar. (Note: The requirements above are the minimal stipulations by the SOGSR; the major emphasis program may present additional requirements.)

Master of Science in Public Health (MSPH)

To receive the MSPH, a student must complete the required course work including an externship and either a thesis or a comprehensive examination. The student works closely with his/her advisor to select appropriate courses for the thesis or comprehensive examination option. If the student selects the thesis option, his/her curriculum must include courses and a thesis that meet approval of the student's thesis chairperson and committee, Division Director, Senior Associate Dean and the Graduate Dean, which must be submitted and successfully defended prior to graduation. The completion of the curriculum consisting of 45 credit hours of approved course work, 400-hour externship and a thesis or comprehensive examination leads to the MSPH in Public Health.

Students with medical degrees, who are admitted into the Meharry Medical College General Preventive Medicine Residency or Occupational Medicine Residency programs, can apply to be admitted to the MSPH Program and receive a degree. The Residency program curriculum would be the same as that of a traditional MSPH student.

Master of Science in Clinical Investigation (MSCI)

To receive the MSCI, a student must a) complete 36 hours of the appropriate coursework (27 hours of core curriculum instruction and 9 elective hours), b) develop and conduct original mentored research and must participate on an on-going clinical research project, c) present the research project at a local or national meeting, d) must prepare a manuscript suitable for submission to a peer-reviewed journal in the medical field and e) must have the endorsement of the mentoring committee, program director and graduate dean.

Master of Health Sciences (MHS)

To receive the MHS, a student must: a) complete 30 hours of the appropriate course work, and b) maintain a minimum GPA of 3.0.

Advising

At Meharry Medical College, graduate students are part of a purposeful community in which they are challenged to understand the basics of their study be it biomedical sciences or public health. Their educational experience is directed toward serving the underserved communities and in diseases and health conditions that disproportionately affect ethnic minority populations the students are partnered with others at Meharry Medical College engaged in this mission.

The Graduate School is a caring and supportive community that encourages meaningful collaboration within and outside the College with outside individuals and institutions. There is a culture of freedom and creativity that encourages individuals to fulfill their roles with excellence within a context of purposeful work and work that serves others. Students will be challenged to pursue original research with integrity and high ethical standards. Students will also be supported in their work with academic resources, laboratory resources,

computational resources, a financial stipend or financial aid and have access to the expertise of the scientists and the administration of the school.

Students will have an academic advisor throughout the period of their matriculation. In addition, depending on the student's intended degree and expected culminating experience, the student may engage other members of the faculty to form a committee on instruction (COI), thesis committee or mentoring committee, which will advise the student from the beginning of the student's program to recommending the student for the degree. A congenial and respectful student relationship with the faculty is vital to the progress of the student through graduate school and the continuing development of the student as a professional. The advisors' responsibility is to assist the students in achieving their goals in a timely manner. While the students will become acquainted with the entire faculty, the formal responsibility of advising the students resides with the designated advisors.

Career Counseling

The SOGSR has a Professional Development Office, which provides professional skills training and career counseling to graduate students. PhD students are also advised by their mentors, COI members, and instructors as to possible career options. Students are also given opportunities to meet with invited speakers over lunch to discuss careers. PhD graduate students present their research at major scientific meetings; many scientists at these meetings attend the student's presentations and discuss postdoctoral options with the students. Students also participate in summer internships at NIH and major research institutions where they get advice for their career decisions. Every two years, Meharry Medical College and Vanderbilt University sponsor a career workshop with representatives from industry, government and private foundations.

Advising and career counseling are provided to MSPH students by the Program Coordinator, designated faculty advisor, preceptors and alumni. The Program Coordinator is a full-time position dedicated to student advising, student career counseling and other student services. This individual helps students on matters pertaining to coursework and other academic issues such as externship opportunities and fellowship openings. Faculty, preceptors and alumni also interact with students and provide advice about careers. The Graduate School and the students run a career week every spring in which individuals in the field come to meet and lecture to students about career opportunities.

Examinations and Grades

Grades for didactic courses taken for graduate credit are A, B+, B, C+, C, F, S, U, IP and I. Grades for thesis research in the Ph.D. program are S and U; grades for thesis research in the MSPH program are letter grades. Grade point averages (GPA) are calculated on the basis of A=4, B+=3.5, B=3, C+=2.5 C=2, F= 0. S and U grades are not computed into students' GPA and are not converted to A, B+, B, C+, C, or F grades when students complete the requirements for degrees. All final grades shall remain on the student's permanent transcript. Students receiving a D grade in an off-campus course because of cross-registration will receive a grade of F.

The grade of "I" (Incomplete), indicates that the student has satisfactorily completed at least three fourths of a course, but for legitimate reasons a small fraction of the work remains to be completed; or that the student's record indicates that he or she can obtain a passing grade, but lacks a specific requirement such as the final examination because of illness or some other unique or extraordinary circumstance beyond the student's control. A student receiving an "I" must complete the requirements for the course to remove the "I" by the end of the next semester the course is offered. If the requirements are not completed within the specified time, no credit will be given and the Office of Records will automatically record the final grade as "F".

The symbols "WV" and "WA" indicate that the student "Withdrew Voluntarily" or was "Withdrawn Administratively by the Dean." The symbols "WP" and "WF" indicate that the student "Withdrew Passing" or "Withdrew Failing," respectively. These symbols are used only when the student has withdrawn after at least six weeks of attendance in a course during the fall or spring semester or after two weeks during the summer.

The "IP" (In Progress) is awarded for certain courses that are continuous over more than one semester and, as such, are not finally evaluated until the conclusion of the sequence. Final grades are given in such courses only at the end of the final semester of the course sequence. A record of academic progression, however, shall be reported in the Office of Admission and Records at the end of any given semester using the designation In-Progress (IP). Quality points will be calculated using the total hours of the course.

Academic Standing

A student must maintain an average of 3.0 to remain in good academic standing. A student whose average falls below 3.0 may be dismissed or given up to one calendar year to raise his or her average back to 3.0; during this period the student is said to be on academic probation.

A student whose average does not reach 3.0 by the end of a designated period of academic probation may be dismissed from the SOGSR per the recommendation of the Evaluation Committee and approval by the Dean. In addition, if, in the judgment of the Evaluation Committee, a student fails to make satisfactory progress towards the completion of the degree or to demonstrate sufficient promise in the discipline, the student may not be allowed to continue in the SOGSR. In any academic year, students must pass 70% of coursework (21hrs) with a grade of "B" or higher. A graduate student may become academically ineligible to continue in the SOGSR if he or she receives a grade of "F", or receives more than three grades of "C", depending on his/her academic standing. Receipt of a second "F" grade will result in automatic dismissal. If in any semester, a student enrolled in the MSPH program receives a grade of “C” in any core course or two different courses, then those courses also must be repeated and a grade of “B” or better must be received in each course. A grade of at least a “B” must be obtained in all core MSPH courses. When a course is repeated, the first grade will remain on the student’s transcript and be calculated as part of the student’s grade point average. Students are allowed to repeat a course only once. Students who receive a grade of F in any course in the MHS program will not graduate from the MHS and become ineligible to enter the School of Medicine/Dentistry under this program. After repeating the course when next offered, (next academic year) and upon receiving a grade of B and maintaining a 3.0 GPA, the student will be eligible to receive the MHS degree.

Adding or Withdrawing from Course(s)

If a student wishes to add or drop a course(s), he or she can do so via Banner Self-Service during the designated add/drop period noted on the academic calendar. The student is first required to get the approval of their respective division chairperson or division director and/or academic advisee prior to the add/drop period, and following advisement and approval, will then receive a unique registration pin number to use to add or drop a course(s) via Banner Self-Service. A student may add a course prior to the end of the 3rd week of classes and prior to the end of the 1st week of classes during the summer session. A student may receive a grade of "W" if he/she withdraws from a course prior to the end of the 6th week of classes during the regular semester or prior to the 2nd week of classes during the summer session. However, grades for courses progressed beyond this time period will be recorded on the official record as "WF" or "WP".

Leave of Absence and Withdrawal

A Leave of Absence is an interruption of the normal course of study requested by a student and requiring prior approval by the graduate dean. A student's Leave of Absence shall not extend beyond one calendar year. The official date of leave shall not antedate the date of the student's request. An official Leave of Absence form must be processed and can be obtained from the Office of Records. A student who fails either to register or to obtain an approved Leave of Absence by the end of registration during a given semester will be regarded as having withdrawn and must apply as a new student to resume study. A Leave of Absence from the college is given only to students who are in good academic standing. Any other interruption in the normal course of study constitutes a withdrawal. At the discretion of the dean, a student may be required to take an Administrative Leave of Absence. A student who has obtained an approved Leave of Absence may return

to school by informing the SOGSR in writing before the expiration of the leave. The student will be required to register during the next semester after his/her *leave* expires. If the student does not resume his/her program at this time, has withdrawn from Graduate School or has not registered for two consecutive semesters, he/she must also reapply to the Graduate School. Provided the student left in good standing, in these situations he/she needs only to fill out a new application, write a statement that includes why he/she should be reinstated and have his/her former preceptor write a letter of recommendation. These documents will be reviewed by the SOGSR Admissions Committee who will then make a recommendation to the Dean.

A student in the PhD program who has not been approved for a leave of absence and has not registered for two consecutive years will not be considered for reinstatement or be awarded a PhD degree.

A withdrawal is a permanent cessation of graduate study. If a student withdraws, he or she must reapply to Meharry as a new student and be considered for admission by the SOGSR Admissions Committee to resume graduate work (see above). If a student receives a medical withdrawal, he or she will be required to present medical clearance before being readmitted. A student withdrawing without presenting to the director of Admissions and Records written permission from the dean forfeits all claims for credit or refund.

Application for Graduation

All graduate students anticipating graduation must complete a Diploma Application Card. Cards are available during fall registration and may be picked up from the Office of Records or Student Academic Affairs. The deadline for receipt of the card is given by these Offices. Provided that no use of college faculty time and/or facilities is required, a student need not be registered in the semester in which the degree is to be awarded, unless the thesis or dissertation is defended and/or submitted to the SOGSR during the same semester, since submission constitutes a significant use of College's time and facilities. Master's and doctoral degrees are awarded in May, June, October, and December. Formal commencement exercises are held in May.

Graduation Clearance

Prospective graduates should get the Graduation Clearance Form from the dean's office and secure the appropriate signatures. However, the student must complete the following steps, prior to being issued a Clearance Form:

1. Submit a letter from the Program Director or the Director of Graduate Studies (DGS) informing the dean that all degree requirements have been completed and submit five error-free copies of the dissertation (Ph.D.) or thesis (MSPH or MSCI) to the Dean’s Office;
2. Complete the Graduate Program Self-Assessment Student Questionnaire and return it to the Dean's Office;
3. Complete and return to the SOGSR the National Research Council Survey of Earned Doctorates (PhD graduates only); and
4. Complete the Exit Survey

School of Graduate Studies and Research
2019-2020 Academic Calendars
Doctor of Philosophy – Biomedical Sciences (PhD)

Date(s)	Description
Monday, June 3, 2019	Summer Session Begins (2018-19 AY)
Wednesday, June 12-Monday, June 24, 2019	Returning Students Fall 2019 Registration
Thursday, July 4, 2019	**4th of July Holiday***
Friday, July 26, 2019	Summer Session Ends (2018-19 AY)
Thursday, August 1, 2019	Grades Due in Banner/Registrar's Office (Summer Session)
Thursday, August 1 & Friday, August 2, 2019	First Year Orientation and Registration
Monday, August 5, 2019	Classes Begin
Monday, August 5 – Friday, August 16, 2019	Drop/Add Period
Friday, August 9, 2019	White Coat Ceremony - 1st Year Ph.D. Students
Monday, September 2, 2019	**Labor Day Holiday***
Tuesday, September 17, 2019	Constitution Day
Tuesday, October 1, 2019	Last Day to Publicly Defend Dissertation for December Diploma

Date(s)	Description
Wednesday, October 9, 2019	Daniel T. Rolfe Scholars Memorial Heritage Lecture
Friday, October 11, 2019	**Convocation**
Friday, October 11, 2019	Fall Census Date
Friday, October 25, 2019	Last Day to Submit Dissertation for December Diploma
Monday, November 11, 2019	Spring 2020 Registration Starts
Thursday, November 28 – Friday, November 29, 2019	**Thanksgiving Holiday***
Friday, November 29, 2019	Fall Semester Ends
Friday, November 29, 2019	Last Day to take Qualifying Exam to Participate in Spring Candidacy Ceremony
Wednesday, December 4, 2019	Grades Due in Banner/Registrar's Office
Friday, December 13, 2019	SEAPC for Continuing Students
Thursday, January 2, 2020	Spring Classes Begin
Thursday, January 2 – Friday, January 10, 2020	Drop/Add Period
Friday, January 17, 2020	ML King Remembrance Program
Monday, January 20, 2020	**ML King Jr. Holiday***
Friday, February 14, 2020	Spring Census Date
Monday, March 9 – Friday, March 13, 2020	Student Research Week
Wednesday, March 11, 2020	Student Research Day (no classes)
Monday, March 9, 2020	George H. Howard, Jr. Memorial Heritage Lecture and Candidacy Ceremony
Monday, March 16 – Friday, March 20, 2019	Spring Break
Wednesday, April 1, 2020	Last Day to Publicly Defend Thesis for May Diploma
Wednesday, April 1, 2020	Ralph J. Cazort Heritage Lecture
Friday, April 10, 2020	**Good Friday – Meharry Holiday***
Friday, April 17,2020	Classes End for May Graduates
Friday, April 24, 2020	Classes End for Continuing Students/PhD Research Continues
Friday, April 24, 2020	Last Day to Submit Thesis for May Diploma
Friday, April 29, 2020	Grades Due in Banner/Registrar's Office for May Grads

Friday, May 1, 2020	SEAPC for Graduates
Monday, May 4, 2020	Spring Semester Grades Due in Banner/Registrar's Office for Continuing Students
Saturday, May 16, 2020	Commencement
Wednesday, May 20, 2020	SEAPC for Continuing Students
Monday, May 25, 2020	**Memorial Day Holiday***
Tuesday, May 26 - Friday, May 29, 2020	Returning Students Summer Registration
Monday, June 1, 2020	Summer Session Begins (2019-20 AY)
Monday, June 8, 2020	Returning Students Fall 2020 Registration
Friday, July 24, 2020	Summer Session Ends (2019-20 AY)

Calendar Summary by Class: PhD

First Year Entering Class	Thursday, August 1, 2019 – Friday, April 24, 2020
Continuing Students	Monday, August 5, 2019 – Friday, April 24, 2020
Continuing Students Summer Session	Monday, June 1, 2020 – Friday, July 24, 2020
Graduating Students	Monday, August 5, 2019 – Friday, April 17, 2020

***Holiday – No Classes**

Master of Science – Public Health (MSPH)

Date(s)	Description
Monday, May 13, 2019	Returning Students Fall 2019 Registration
Monday, June 3, 2019	Fall Term including Externship Begins (2019-20 AY MSPH 2)
Thursday, July 4, 2019	**4th of July Holiday***
Friday, July 26, 2019	Externship Experience Ends (2019-20 AY MSPH2)
Thursday, August 1, 2019	Grades Due in Banner/Registrar's Office (Summer Session)
Thursday, August 1 – Friday, August 2, 2019	First Year Orientation and Registration
Monday, August 5, 2019	Classes Begin
Monday, August 5 – Friday, August 16, 2019	Drop/Add Period
Friday, August 9, 2019	Professional Pinning Ceremony (1st Year Students Only)
Monday, September 2, 2019	**Labor Day Holiday***
Tuesday, September 17, 2019	Constitution Day
Tuesday, October 1, 2019	Last Day to Publicly Defend Thesis for December Diploma
Friday, October 11, 2019	**Convocation**
Friday, October 11, 2019	Fall Census Day
Friday, October 25, 2019	Last Day to Submit Thesis for December Diploma
Monday, November 11, 2019	Spring 2020 Registration
Thursday, November 28 – Friday, November 29, 2019	**Thanksgiving Holiday***
Friday, November 29, 2019	Fall Semester Ends
Wednesday, December 4, 2019	Grades Due in Banner/Registrar's Office
Friday, December 13, 2019	SEAPC for Continuing Students
Thursday, January 2, 2020	Spring Classes Begin
Thursday, January 2 – Friday, January 10, 2020	Drop/Add Period
Friday, January 17, 2020	ML King Remembrance Program
Monday, January 20, 2020	**ML King Jr. Holiday***

Friday, February 7, 2020	Written Comprehensive Exam
Friday, February 14, 2020	Spring Census Date
Monday, March 9 – Friday, March 13, 2020	Student Research Week
Wednesday, March 11, 2020	Student Research Day (no classes)
Monday, March 16 – Friday, March 20, 2020	Spring Break
Date(s)	**Description**
Wednesday, April 1, 2020	Last Day to Publicly Defend Thesis for May Diploma
Friday, April 10, 2020	**Good Friday – Meharry Holiday***
Friday, April 17, 2020	Classes End for May Graduates
Friday, April 24, 2020	Classes End for Continuing Students
Friday, April 24, 2020	Last Day to Submit Thesis for May Diploma
Friday, April 29, 2020	Grades Due in Banner/Registrar's Office for May Graduates
Friday, May 1, 2020	SEAPC for Graduates
Monday, May 4, 2020	Spring Semester Grades Due in Banner/Registrar's Office for Continuing Students
Monday, May 11, 2020	Continuing Students Registration Starts
Saturday, May 16, 2020	Commencement
Wednesday, May 20, 2020	SEAPC for Continuing Students
Monday, May 25, 2020	**Memorial Day Holiday***
Monday, June 1, 2020	Fall Term including Externship Begins (2020-21 AY)
Friday, July 24, 2020	Externship Experience Ends (2020-21 AY)

<u>Calendar Summary by Class: MSPH</u>

First Year Students	Thursday, August 1, 2019 – Friday, April 24, 2020
Continuing Students Summer Session (Including Externship Experience)	Monday, June 1, 2020 – Friday, July 24, 2020
Graduating Students	Monday, August 5, 2019 – Friday, April 17, 2020

*__Holiday – No Classes__

Master of Health Sciences (MHS)

Date(s)	**Description**
Thursday, July 4, 2019	**4th of July Holiday***
Thursday, August 1 – Friday, August 2, 2019	Fall 2019 Registration
Thursday, August 1 – Friday, August 2, 2019	Fall 2019 Orientation
Monday, August 5, 2019	Fall Classes Begin
Monday, September 2, 2019	**Labor Day Holiday***
Tuesday, September 17, 2019	Constitution Day
Friday, October 11, 2019	Convocation
Friday, October 11, 2019	Fall Census Day
Monday, November 11, 2019	Spring 2020 Registration Starts
Thursday, November 28 – Friday, November 29, 2019	**Thanksgiving Holiday***
Friday, November 29, 2019	Fall Semester Ends
Wednesday, December 4, 2019	Grades Due in Banner/Registrar's Office
Friday, December 13, 2019	SEAPC for Continuing Students
Date(s)	**Description**
Thursday, January 2, 2020	Spring Classes Begin
Friday, January 17, 2020	ML King Remembrance Program
Monday, January 20, 2020	**ML King Jr. Holiday***

Friday, February 14, 2020	Spring Census Date
Monday, March 9 – Friday, March 13, 2020	Student Research Week
Wednesday, March 11, 2020	Student Research Day (no classes)
Friday, April 10, 2020	**Good Friday – Meharry Holiday***
Friday, April17, 2020	Classes End for May Graduates
Friday, April 24, 2020	Grades Due in Banner/Registrar's Office for May Graduates
Friday, May 1, 2020	SEAPC for Graduates
Saturday, May 16, 2020	Commencement
Monday, May 25, 2020	**Memorial Day Holiday***

Calendar by Summary: M.S. Health Sciences

1-Year Enrollment Term	Thursday, August 1, 2019 – Friday, April 17, 2020

***Holiday – No Classes**

Financial Information

Tuition and Fees (This information for 2019-2020 is not available)

Tuition and fees are set annually by the Board of Trustees and are subject to review and change without further notice. The School of Graduate Studies and Research tuition and fees for the 2019-2020 academic year are as indicated below

	Ph.D. Year 1	Ph.D. Year 2+	Senior Ph.D.	Special Ph.D. Defense	RWJ External	RWJ Internal
Tuition	$18,264	$17,732	$10,446	$1,001	$9,062	$7,500
Total fees	$5,066	$5,066	$5,066	$4,016	$519	
Total Tuition and Fees	$23,330	$22,798	$15,512	$5,017	$9,581	$7,500

	MSPH Year 1	MSPH Year 2+	MSPH Residents	MSCI	MHS
Tuition	$26,793	$22,307	$12,707	$12,707	$33,369
Total fees	$4,016	$4,016	$100	$100	$5,516
Total Tuition and Fees	$30,809	$26,322	$12,807	$12,807	$38,885

These tables do not include expenses for room and board, books & supplies, transportation, and miscellaneous expenses. For additional information regarding these expenses and an itemized list of fees, please contact the Office of Financial Aid or visit the website:
http://www.mmc.edu/prospectivestudents/tuition-and-fees/index.html

Payment of Tuition and Fees

Please see information in the section entitled General Financial Information in this Academic Catalog.

Financial Assistance

The SOGSR and the divisions of the College offer financial assistance in the form of fellowships for students enrolled in the PhD Program. All inquiries concerning the availability of such assistance should be addressed to the dean, the divisional chairperson and/or advisers of the intended major area.

PhD training is a full-time activity. Therefore, students receiving a stipend or fellowship are not permitted to hold outside employment. Violation of this regulation could lead to loss of the fellowship.

Emergency Loan Program

Graduate students may receive emergency loan assistance from the college's loan funds and the graduate school emergency funds. Please contact the Office of the Treasurer at 615-327-6220 or the graduate school dean at 615-327-6533 for additional information.

Honors and Awards

Dean's Award for Scientific Development: This award is given to the doctoral student who has shown the greatest scientific development during the past year.

Dean's Award for Scientific Productivity: This award is given to the doctoral student who has published, or whose work has been accepted for publication, as the best paper in a refereed journal during the past year.

Dean's Award for Excellence in Teaching: This award is given to an outstanding faculty member in the School of Graduate Studies and Research MHS, MSPH and PhD programs for exemplary teaching during the past year.

The National Research Service Award: This award is presented to students who have successfully competed among a national pool of applicants for pre-doctoral fellowship funds provided by the National Institutes of Health, National Science Foundation and Department of Defense.

First-Year Award: This award is presented to a current enrolled second year student in the MSPH and PhD programs who have attained the highest GPA for the immediately preceding academic year.

Program Awards: These awards are given to the top currently enrolled students (exclusive of first-year students) in each PhD training program and the MSPH program.

COURSE DESCRIPTIONS

DOCTORAL PROGRAM: Core Curriculum

COURSE DESCRIPTIONS

ASGS 70001 – Scientific Communication – This course introduces students to the health sciences library, to scientific literature, to scientific writing and to oral presentation of scientific information. The course provides weekly practice in reading and writing about papers in scientific journals and in discussion of papers before an audience. In addition, students will develop various components of the NIH Ruth L. Kirschstein National Research Service Award (NRSA) F31 fellowship proposal. **3 credit hours, Fall & Spring**

ASGS 70101 – Biomedical Sciences IA – Lectures, problem-solving sessions, and experimental labs designed to give the student mastery of the organization, composition, and function of the cell at the molecular level. The basic concepts in genetics will be introduced. The properties and biological functions of carbohydrates, lipids, nucleic acids and proteins will be covered. Enzymes, metabolic pathways and their regulation, protein synthesis and biochemical genetics will be introduced. The goal is to give the students a full appreciation of the fundamentals of enzymology and biochemical and molecular genetics. **8 credit hours, Fall**

ASGS 70301 – Biomedical Sciences IIA – This course provides lectures, problem solving sessions and discussion designed to give the student an understanding of the organization, origin, function and regulation of the cell and its organelles at the molecular level. Major topics covered include the energetics and thermodynamics of life processes; metabolic pathways and their control; membrane structure and function, protein trafficking, the cytoskeleton, and the cell cycle. The goal is to provide sufficient comprehension of molecular cell biology to enable the student to follow current developments in this fundamental and rapidly expanding area of research. **4 credit hours, Fall**

ASGS 70601 – Biomedical Sciences IIIB – The purpose of this laboratory rotations course is to acquaint first-year graduate students with research in progress in the laboratory of three different faculty members. The student is supposed to be a participant in the research and will be exposed to scientific knowledge and techniques at a greater depth than is possible in formal laboratory courses and will participate in the kind of informal discussions which will take place in research laboratories among faculty, students and staff. The first rotation will take place in the fall semester and is eight (8) weeks long. The second and third rotations take place in the spring semester for eight (8) weeks each. It is not intended for students to complete a research project. 2 credit hours per rotation, 3 rotations, total **6 credit hours, Fall & Spring**

ASGS 75101 – Cell Signaling – This course will cover major cellular receptor signaling pathways, which include the receptor that the signaling molecule binds to and a variety of intracellular signaling proteins that distribute the signal to target proteins, which mediate cellular responses. Cellular signaling in the context of normal cellular activities, disease and/or therapeutic approaches to resolution of disease processes will also be covered. The goal of this course is to ensure that all students have a fundamental understanding of the many cell signaling pathways in a multicellular organism, and how these pathways regulate the behavior of cells with the organism. **3 credit hours, Spring**

ASGS 71001 – Introduction to Bioinformatics – This course will introduce students to the fundamentals of bioinformatics and computational approaches towards biomedical research. It will cover topics including DNA and protein sequence alignment, algorithms, genomics, proteomics, graph/network theory, biological data bases, and data-mining of large data sets and repositories. **2 credit hours, Spring**

PHD EMPHASIS PROGRAMS

BIOCHEMISTRY AND CANCER BIOLOGY

Objectives

The goal of the training program in Biochemistry and Cancer Biology is to train the next generation of biochemistry and cancer researchers. Studies in these areas require specific knowledge in multiple fields that have traditionally been independent. Students will receive cancer-oriented training in molecular biology, immunology, functional genomics, cell biology, biochemistry, and proteomics. An emphasis will be placed on hands-on training and students will have his or her course work tailored to their primary interest. Cancer research is a vitally important and growing field of research. Our graduates will be positioned to lead the way to the future prevention and cure of cancer.

COURSE DESCRIPTIONS

BICH 70401 – Topics in Metabolic Regulation – An advanced course on the regulatory mechanisms controlling major metabolic processes in eukaryotes. Prerequisite: Core Curriculum or background in metabolism or cellular physiology. **3 credit hours, Spring**

BICH 70601 – Membrane Biochemistry – This course discusses basic and contemporary literature on the structure and functions of biological membranes and includes topics on membrane dynamics, biogenesis and transport by or through membrane components. The cytoskeleton and the extracellular matrix are also discussed. Prerequisite: Core Curriculum or background in cellular physiology and/or molecular biology. **3 credit hours, Spring**

BICH 71001 – Seminar in Biochemistry – Discussion of contemporary topics in cancer biology, carcinogenesis, biochemistry, cell and molecular biology. **1 credit hour, Fall & Spring.**

BICH 71201 – Directed Studies – Individual instruction designed to meet the specific academic needs of the student. This course may be research or didactic instruction. Prerequisite: Consent of the instructor. The grade awarded in this course is S or U if a research course. **1-3 credit hours, Fall & Spring**

BICH 71301 – Advanced Topics in Biochemistry – Lectures covering specialized areas of inquiry in biochemistry. Prerequisite: Core Curriculum. This course is offered about once in every three years. **3 credit hours, Fall**

BICH 73001 – Cancer Biology I – A multidisciplinary course designed to expose students to the latest and promising areas of basic and translational research. Molecular mechanisms underlying carcinogenesis and tumor progression and their relationship to clinical aspects of the disease are discussed. Prerequisite: Core Curriculum. **3 credit hours, Fall**

BICH 77101 – Cancer Immunotherapy – This course is designed to familiarize students with basic and translational tumor immunology and immunotherapy. The objectives of the course are to: 1) assist students in understanding the evolution of the concept of tumor immunosurveillance and immunotherapy; 2) make students aware of challenges associated with effectively using immunotherapy for cancer care; and 3) review the various approaches by which the immune system can be modulated for the treatment of cancer. Prerequisite: Core Curriculum. **2 credit hours, Spring**

BICH 79901 – Thesis Research – Students are required to conduct original research, culminating in the preparation and defense of a dissertation that is acceptable, at least in part, for publication in a professional journal. **1-12 credit hours, Fall, Spring & Summer**

MICROBIOLOGY AND IMMUNOLOGY

Objectives

Our program uses a wide array of approaches and techniques to explore the realm of molecular biology, microbial physiology, virology, parasitology, immunology, and microbial pathogenesis. An emphasis will be placed on studying immune responses to infectious agents including HIV-AIDS, the molecular and cellular bases of viral, protozoal and bacterial pathogenesis, including microbes of the oral flora, mechanisms underlying mitochondrial transport and the regulation of gene expression in infectious agents. Graduate research in our division provides an opportunity to apprentice with distinguished faculty and emphasizes a close faculty-student relationship that creates a learning environment, which is stimulating, productive, and rewarding for all its participants.

COURSE DESCRIPTIONS

MICR 70701 – Fundamentals of Microbiology – This course explores the importance of microorganisms as both living systems and disease causing agents. Topics will include discussion of selected, bacterial, parasitic, and fungal infections, and mechanisms of disease pathogenesis. **3 credit hours, Spring**

MICR 70801 – Foundations in Research – The goal of this course is for the student to critically review the literature relevant to his/her proposed thesis research. The outcome of the course will be a student prepared paper that provides a thoroughly documented background that supports the rationale for the proposed research project. The choice of the research problem should be determined by the student in consultation with the preceptor. Each student will be guided by a committee of three faculty members that will include the student's preceptor. Each student will be guided by a committee of three faculty members that will include the student's preceptor. **3 credit hours, Fall**

MICR 71001 – Fundamentals in Immunology – This course reviews the basic concepts in immunology. It consists of the immunology lecture and laboratory component of Introduction to Host Defense for medical students and seminar/discussions focused on selected topics in immunology. This course may serve as a pre-requisite for advanced immunology courses offered by the Department of Microbiology.
3 credit hours, Spring

MICR 71301 – Molecular Biology of Animal Viruses – Lecture course with emphasis on mechanisms of viral replication, oncogenic transformation, and virus-host cell interactions. Prerequisite: MICR 715. Fundamentals in Virology. **2 credit hours, Spring, alternate years**

MICR 71501 – Fundamentals in Virology – This course provides a fundamental understanding of the molecular basis of viral replication and virus-cell interactions. The objectives of the course will be accomplished through lecture and journal article discussion. Prerequisite for: MICR 713. Molecular Biology of Animal Viruses. **3 credit hours, Fall**

BSCI 73601 – Readings in Biomedical Sciences – (Directed Studies) – Intensive reading under the guidance of a faculty member in an area selected by the student. The student and faculty member meet weekly to discuss the readings; the student may be required to write a paper on the semester's reading.
1-3 credit hours, Fall & Spring

MICR 73001 – Advanced Topics in Molecular Parasitology – This is an advanced graduate-level seminar course in modern parasitology. The class is focused on the reading and critical evaluation of papers from the current literature selected by the students in cellular and molecular mechanisms of parasitism.
3 credit hours, Spring, alternate years

MICR 85001 – Microbiology Research – Ph.D. Dissertation Research, required for doctoral candidates.
1-12 credit hours, Fall, Spring & Summer

MICR 90001 – Microbiology Seminar – Weekly discussion of current topics in microbiological research and of research within the department. **0-1 credit hour, Fall & Spring**

NEUROSCIENCE

Objectives

This program aims to significantly contribute to the production of the next generation of neuroscientists by training students to conduct basic, translational, clinical, social and behavioral research to generate new knowledge that will contribute to the nation's effort to reduce health disparities in the areas of neurological

disease, mental health as well as drug abuse and addiction, including alcoholism. Students will perform research with faculty whose interests range from the molecular neurobiology of cellular signaling and synaptic plasticity to the neurobiology of complex animal behavior.

COURSE DESCRIPTIONS

NSC1 70001 – Neurobiology of Disease – The course has five modules (1 credit hour each). Five modules are: Parkinson's Disease and Movement Disorders; Alzheimer's Disease and Dementias; Chronic Pain; Addictions; Depression and Mood Disorders. The importance of this course, and the rationale for its development, is to foster preparedness for interdependent collaborative research that spans from bench to beside, and allows laboratory investigators to exploit clinical insights to inform basic science inquiries. The goal is to train scholars for participation in interdependent research across the molecular and cellular to integrative and clinical continuum. The course will foster this interdependence by both the content of the courses as well as the participation in these courses by graduate, medical, postgraduate (MD and PhD) fellows. The selection of the disease themes of this course reflect areas of research interest and strength at both Meharry and Vanderbilt, and also- in their didactic content- will allow students to become familiar with the breadth of experimental strategies and areas of scholarship (including genetics and imaging, for example) that converge to facilitate discovery to translation to clinical diagnosis and intervention. Prerequisite: Graduate Neuroscience**. 1-5 credits, Fall & Spring**

NSCI 70901 – Advanced Neurophysiology – A functional approach to nervous system mechanisms. Topics include sensory and motor mechanisms, sensory motor integration and higher functions. The course will include lectures, selected literature discussions and essay examinations. Prerequisite: Human Physiology.
4 credit hours, Fall

NSCI 71201 – Seminar in Neuroscience – Weekly discussion of current topics in neuroscience research and of research within the Department of Neuroscience and Pharmacology. **1 credit hour, Fall & Spring**

NSCI 71401 – Research in Neuroscience – Participation and credit in this course are arranged by the COI of students working on their dissertations in physiology. Students will receive pass or failure grades until degree requirements have been fulfilled. At that time, a letter grade will be assigned. This course may be repeated for credit. Prerequisite: Core Curriculum. **1-12 credit hours, Fall, Spring & Summer**

NSCI 72001 – Readings in Neuroscience – In this course, the student should complete a comprehensive reading list of subjects specifically associated with his/her area of research before the dissertation defense. There will be no formal meetings or exams; however, relevant material from the readings may be included in the dissertation defense. Pass or fail grades will be registered until degree requirements are fulfilled, at which time the COI will assign a letter grade. Prerequisite: COI approval. **3 credit hours, Fall or Spring**

NSCI 72101 – Dissertation Research – Students are expected to register for this course in their last semester of residence. Course is completed with the approval of the written dissertation by the COI. Prerequisite: COI approval. **1-3 credit hours, Fall, Spring or Summer**

NSCI 72401 – Neuronal Physiology – Advanced study of cellular processes related to nervous system functions will include aspects of neurophysiology, neurochemistry and neuroanatomy. Format will be primarily lectures and selected literature readings. Prerequisite: Core Curriculum. **1-3 credit hours, Fall**

NSCI 73501 – Graduate Neuroscience – This course will help students achieve an integrated and correlated understanding of nervous system structure, function, dysfunction and therapeutics. The required course will cover neuroanatomy, neurophysiology, neuropharmacology, neuropathology and clinical aspects of neuroscience. The course will be taught in the following blocks: 1) excitable cells and synapses, including muscle and the autonomic nervous system; 2) Nervous system anatomy, meninges and vasculature; 3) sensory systems; 4) motor system; and 5) higher function. Each block will be composed of instruction in

Anatomy, Cell Biology, Biochemistry, Physiology, Pharmacology, Pathology, Neurology, Psychiatry and Behavioral Sciences. **5 credit hours, Spring**

PHARMACOLOGY

Objectives

This is an interdisciplinary program leading to the doctoral degree. The objective of the program is to provide students with an intensive knowledge of pharmacology as a science, sufficient exposure to pharmacological research methodology to provide skill in the practice of the science, and adequate opportunity to perform pharmacological research. More broadly, the program instills in its students a problem-solving approach to the understanding of pharmacology, an attitude that simulates reasoned, objective correlation in applying pharmacological and other knowledge to the solution of problems.

COURSE DESCRIPTIONS

PHAR 70201 – Pharmacology Seminar – Weekly discussion of current topics in pharmacology research and of research within the Department of Neuroscience and Pharmacology. **2 credit hour, Fall & Spring**

PHAR 70501 – Cardiovascular Pharmacology – The pharmacology of drug agents exerting major effects on the cardiovascular system will be presented in lectures, discussions, and demonstrations. Mechanism of action, basis for therapeutic application and limiting side effects of the drug agents will be discussed. Research methodology utilized in studying these agents will also be covered. **2 credit hours, Spring**

PHAR 70601 – General Pharmacology – The pharmacological basis of therapeutics is presented by means of lectures, conferences and demonstrations. Emphasis is placed on the factors governing drug action, dose-response relationships, the relationship between chemical structure and pharmacological action, the problems associated with absorption, distribution metabolism and elimination, and the mechanism of action of the common classes of drugs. Attention is also given to contra-indications, side effects and toxic effects of these compounds. **5 credit hours, Fall**

PHAR 70701 – Pharmacokinetics – This course is designed to understand the pharmacokinetics principles that govern the absorption, distribution, metabolism, and elimination of drugs. Basic pharmaco-kinetics parameters are examined using one- and two-compartment modeling. In addition, applications of pharmacokinetics are examined with respect to clinical situations, and students will be introduced to the use of computer programs in pharmacokinetics. **2 credit hours, Spring**

PHAR 71501 – Drug Metabolism – This course will cover in depth the concepts involved in metabolism of lipophillic molecules – identifying Phase I & Phase II enzymes; their location, mechanism, typical substrates, genetic variation, species variation, inhibition and drug interaction and drug design.
2 credit hours, Spring

PHAR 72201 – Neuropharmacology – This course presents an overview of neuropharmacology, including fundamentals of receptor theory, Neurotoxicology, neurophysiology and drug abuse. Mechanisms and problems concerned with neurotransmission will be discussed. Emphasis is given to the neurochemical basis of CNS disorders and drug intervention. Lecturers, current literature, discussions are included.
3 credit hours, Fall

PHAR 72301 – Toxicology – Principles involved in toxicity of drug and chemical agents will be presented. Topics include xenobiotic biotransformation, toxicokinetics, chemical carcinogenesis, neurotoxicology, metal toxicity, toxic response of skin & respiratory system & occupational toxicology. Toxicological mechanisms of action, rationale for therapeutic measures against effects of toxic chemical agents, and the basis for

toxicological pathology, Current issues in toxicology (toxicogenomics) will also be covered. Course format includes lectures, and student involvement in critical review of current literature. **3 credit hours, Spring**

PHAR 73501 – Research Problems in Pharmacology – This is essentially an independent study where qualified students work with individual staff members in areas not covered in other available courses. **1-6 credit hours, Fall & Spring**

PHAR 73601 – Current Topics in Pharmacology – By means of lectures and/or discussion sessions, this course will offer opportunity to evaluate current advances in the field of pharmacology. Each student enrolled will be required to write and submit a critical evaluation of an assigned, current, published research article. **3 credit hours, Spring**

PHAR 73801 – Carcinogenesis & Cancer Therapeutics – This course will cover the mechanisms underlying the carcinogenic process induced by chemical, viral or physical agents. Major emphasis will be focused on the mechanisms exploited in developing therapeutic targets for cancer treatment. Lectures on clinical correlates will be presented by clinical oncologists (cross-listing with Cancer Biology). **3 credit hours, Fall**

PHAR 79901 – Research in Pharmacology – Students are required to conduct original research, culminating in the preparation and defense of a dissertation. **1-12 credit hours, Fall, Spring & Summer**

PHYSIOLOGY

Objectives

The objective of the program is to provide students with a foundation in the physiological function of the body at the level of organs and systems, and allow them to conduct research with faculty who are interested in studying health disparities within the population. The faculty research focuses on the study of the cellular and molecular basis of cardiovascular pathophysiology, and other sub-disciplines such as neurophysiology, gastrointestinal physiology, reproduction and endocrinology. The goal of the program is to produce graduates that are able to integrate physiological sciences and medicine, and ultimately, successfully compete for and fulfill positions in academia, industry, or governmental research.

COURSE DESCRIPTIONS

PHYS 72501 – Physiology I – This course covers cell physiology including excitable cells, the autonomic nervous system, muscle, cardiovascular, pulmonary and renal organ systems. The format of the course will include lectures, discussions, as well as student presentations. Grades will be assigned based on student participation, presentation and performances on examinations. **3 credit hours, Fall**

PHYS 72601 – Physiology II – This course covers the gastrointestinal, endocrine and reproductive systems. The format of the course will include lectures, discussions, as well as student presentations. Grades will be assigned based on student participation, presentation and performances on examinations. **3 credit hours, Spring**

PHYS 70701 – Endocrinology/Gastrointestinal Physiology – This course extends the knowledge base of Endocrine and Gastrointestinal Physiology gained in Human Physiology (PHYS 702). Thus, it will explore the historical and current literature to provide a solid base of knowledge, and enable the students to interpret scientific data and critique experimental design as it relates to endocrine and gastrointestinal physiology. In addition, there will be a number of laboratories in which the structure and microanatomy of the endocrine and gastrointestinal tissues are examined in relationship to function. Advanced concepts and the impact of current

research will be emphasized. Grades will be determined by student participation, examinations, and a review paper. **4 credit hours, Spring**

PHYS 71001 – Advanced Cardiovascular Physiology – This course will start out with basic biophysics of ion channels in cardiac muscle, and describe the heart as a pump in the general dynamics of cardiac function. Hemodynamics of flow will be dealt with, and the interplay of various regulatory mechanisms in vascular reactivity. The course will also include vascular smooth muscle cell function and regulation, and endothelial cell control of vascular tone, oxidative stress and vascular functions. Molecular studies in hypo, hyper and normotensive mice (the implications in human), ischemic heart disease and congestive heart failure, implications in diabetes, endocrine disorders (risk factors in African-American population) and the role of nutrition and behavior in such diseases will constitute an important part of this segment. Student presentations of recent and important literatures on these subjects, a mid-term examination and a final paper will determine the grade. **3 credit hours, Spring**

PHYS 71201 – Seminars in Physiology – Topics relevant to physiology will be presented by faculty, visiting scholars and graduate students. Participating graduate students who have achieved candidacy status will present one seminar per year. This course is required for all graduate students studying for the PhD degree in physiology. Attendance is mandatory to receive a satisfactory grade. **1 credit hour, Fall & Spring**

PHYS 71401 – Research in Physiology – Research opportunities are available from the molecular to systems level physiology on contemporary problems in cardiovascular disease, endocrine and neuroscience. Students will participate in experimental design, research, data analysis and data reporting. Prior approval of supervising faculty member and department chairperson is required.
Students will receive satisfactory or unsatisfactory grades until degree requirements have been fulfilled.
1-11 credit hours, Fall, Spring & Summer

PHYS 72001 – Readings in Physiology – In this course, the student should complete a comprehensive reading list of subjects specifically associated with his/her area of research. There will be no formal meetings or exam but a review article may be required. This course may be taken only once for credit. **3 credit hours, Fall, Spring & Summer**

PHYS 72101 – Dissertation Research – This is a practical course in assembling, analyzing and presenting large quantities of experimental data. Students are expected to register for this course in their last semester of residence. Course is completed with the approval of the written dissertation by the COI. Last semester of residence. **3 credit hours, Fall, Spring & Summer**

MASTER OF SCIENCE IN PUBLIC HEALTH (MSPH)

Objectives

The MSPH program strives to provide unique educational opportunities in public health related professions to students, allowing them to gain competencies to work as professionals in the public and private sector as well as voluntary agencies with special emphasis on serving the underserved.

COURSE DESCRIPTIONS

MSPH 70001 – Epidemiology I (Introductory) – This course is designed to explore principles of investigating the differential distribution of disease among population groups, provide exercises demonstrating epidemiologic techniques and introduce students to the use of data to treat and prevent disease and evaluate health care effectiveness. **3 credit hours**

MSPH 70201 – Biostatistics I (Introductory) – This is an introductory course in the basic statistical concepts, principles, and methods used in the health sciences. Taught as part of the core curriculum for all Master of Science in Public Health students, the broad goal of this component is to enable students to have basic knowledge and its application in the experimental and non-experimental phases of health care administration and medical disciplines. The student should understand the traditional role of biostatistics and its newer role in the computer age and the age of innovative health care delivery systems. **3 credit hours**

MSPH 70301 – Health Planning – This course provides an introduction to the planning processes used in various health care organizations. Includes such issues as allocation of resources and institutional change in the health care environment. **3 credit hours**

MSPH 70501 – Strategic Management – This course provides students with a comprehensive understanding of strategic management in the health care environment. Strong emphasis is placed on the case study method. Healthcare organizations, like other organizations, are presented as ecological units relying on their environments (internal and external) as sources for attaining their various strategic objectives. As a result, students are exposed to the techniques for environmental analysis for the longterm direction of the organizations. **3 credit hours**

MSPH 70701 – Environmental Health – This course is designed to survey those factors that impact upon the environment and human health. The student will be provided a conceptual framework for the study, analysis and control of various environmental problems. **3 credit hours**

MSPH 70801 – Health Economics – This course is designed to acquaint students, through lectures and discussion, with those principles and techniques of economic analysis that are helpful in developing and evaluating health programs. The course will concentrate on selected topics in economics, allocation of public goods and economic dynamics. Case studies will be selected for their special relevance to the health field.
3 credit hours

MSPH 71101 – Health Care Accounting –This intermediate level course exposes students to the process of generating and analyzing financial information in healthcare settings. The course will cover financial, managerial and cost accounting topics. The students will learn about the accounting tools and techniques used in health care organizations through the use of theory and practical examples. The course will also educate the students to the limitations of financial information generated through the traditional processes.
3 credit hours

MSPH 71201 – Health Care Seminar – This seminar is designed to provide students an opportunity to integrate previous course content into a framework relevant to health care. Seminar sessions, utilizing case materials, the graduate faculty and occasional guest lectures, will focus on methods of health research, epidemiology, health economics, poverty and illness, evaluate research, communication skills, etc.
3 credit hours

MSPH 71301 – Quantitative Methods in Health Administration – This course is about managerial decision-making in health care organizations (HCOs). Thus, the quantitative methods selected are regarded as the minimum essential tools that must be a part of the health care manager's repertoire of analytic tools for effective decision-making. There are basic methods as well as advanced methods, and a general understanding of algebra, statistics, financial and managerial accounting, health economics and health services administration. **3 credit hours**

MSPH 71401 – Epidemiology II (Advanced) – This advanced course deals with epidemiology theory and methods in the actual study of disease etiology with particular emphasis upon case control study methods including matching, confounding and selection techniques. Prerequisite: MSPH 70001 Epidemiology I.
3 credit hours

MSPH 71501 – Organization and Human Resource Management – This course is designed to provide a comprehensive, current introduction to the human resources management function as it relates to the delivery of health care and related services. **3 credit hours**

MSPH 71601 – Biostatistics II (Advanced) – This course deals with statistics required for the analysis of medical care data. It covers further techniques for the application of statistical theory to actual data, combining lectures with computational experience. Particular emphasis will be placed upon the analysis of variance (ANOVA), linear and multiple regression, correlation and distribution free methods. Prerequisites: MSPH 70001 Epidemiology I and MSPH 70201 Biostatistics I. **3 credit hours**

MSPH 71701 – Occupational Health I (Introduction) – A general overview of occupational health and safety, including historical development, concepts and a general introduction to recognition, evaluation and control of hazards. The diagnosis, pathophysiology, management, and prevention of work connected illness and accidents are surveyed. **3 credit hours**

MSPH 71801 – Externship/Field Placement – The application of skills gained in the class to actual health agency and community programs. Students will identify and solve real health problems in communities, operating agencies, local and state governments, etc. **3 credit hours**

MSPH 71802 – Externship/Field Placement – Continuation of MSPH 71801 – The application of skills gained in the class to actual health agency and community programs. Students will identify and solve real health problems in communities, operating agencies, local and state governments, etc. **3 credit hours**

MSPH 72001 – Data Management – An introduction to principles needed for processing large data files. Subject material will cover editing, encoding, structuring and manipulating data, as well as timing considerations. Use will be made of the data processing computing equipment at Meharry Medical College. **3 credit hours**

MSPH 72101 – Externship I – The application of skills gained in the class to actual health agency and community programs. Students will identify and solve real health problems in communities, operating agencies, local and state governments, etc. (This course is reserved for the residents externship experience.) **3 credit hours**

MSPH 72201 – Occupational Health II (Advanced) – Workplace relationship of specific hazards such as solvents and metals are examined. Cancer is the main entity covered--its etiology, prevention, diagnosis, treatment and control. History taking (standard and predictive for placement and surveillance), patch treating, treatment trials and protective measures are reviewed. **3 credit hours**

MSPH 72301 – Foundations of Global Health - This course will introduce students to key topics, concepts and methods in Global Health. Health and developmental issues across nations and cultures that require collective (partnership-based) action will be highlighted. The course will be taught by an interdisciplinary faculty using didactic, interactive and practical elements of instruction. **3 credit hours**

MSPH 72401 – Informatics for Global Health – The purpose of this course is to introduce students to medical informatics with an emphasis in global health care. As global health bridges both patient care and public health, so informatics in this context covers both patient based information systems and public health information systems. The course consists of lectures with discussion and analysis as well as hands-on instruction with some software applications and electronic resources. **1 credit hour**

MSPH 72501 – Health Behavior – The purpose of this course is to provide an introduction to the application of the social and behavioral sciences to health. Emphasis will be placed on (1) how theories, empirical research, findings, and methodologies of psychology, sociology, and anthropology apply to health issues, and (2) the major social and cultural determinants of health- related behavior. **3 credit hours**

MSPH 72601 – Ethics in Global Health – This course is an overview of ethical issues and standards in global health, particularly with respect to ethics in international research. Its aim is to provide students in the health professions and others interested in global health a framework in which to recognize, examine, resolve, and prevent ethical conflicts in their international work. **1 credit hour**

MSPH 72801 – Leadership in Global Health – This course is an introduction to leadership theory and practice, directed toward those who seek leadership positions in the area of global health. The course will introduce students to concepts of leadership from an individual and collective perspective with emphasis on roles and responsibilities related to the dynamics of global health. **1 credit hour**

MSPH 73001 – Health Administration – This course introduces the basic principles, concepts and theories of management in the context of the health care delivery system. It emphasizes the facts, problems and issues of health care administration at all levels of the delivery system. **3 credit hours**

MSPH 73101 – Externship II – The application of skills gained in the class to actual health agency and community programs. Students will identify and solve real health problems in communities, operating agencies, local and state governments. (This course is reserved for the residents' externship experience.) **3 credit hours**

MSPH 73201 – Health Finance – This course includes analytic techniques, capital budgeting, cost of capital, evaluation, leverage, aspects of financial planning and control. **3 credit hours**

MSPH 73601 – Research Design – This course is designed as an overview of research design and methodology with specific attention to individual student needs as related to the completion of the thesis. **3 credit hours**

MSPH 73801 – Managed Care – This course is designed to create a basic understanding of the managed health care environment in the United States. The course will cover: the history, growth and development of managed care; the various types of managed care organizations; contracting in the current health care delivery system; medical management; general management; marketing; finance; underwriting; and legal/regulatory issues. The commercial HMOIPPO market, the emerging public HMO market (Medicaid, Medicare, CHAMPUS) and special market segments (such as worker's compensation) also will be covered in the course. The objectives of the course include: preparing students to understand the basic structures, organization and functions of managed care organizations; preparing students to function knowledgeable in a variety of managed care settings; preparing students to understand the relationship between managed care and various health care reform initiatives; and preparing students to negotiate effectively in managed care contracting scenarios. **3 credit hours**

MSPH 73901 – Readings in Public Health – An intensive reading course under the guidance of a division faculty member in an area of public health. The class meets weekly to discuss the selected readings; each student will be required to write a minimum of one research paper on the semester's readings unrelated to the student's thesis, investigating a topic of interest in public health not covered by the required division curriculum for the Master of Science in Public Health degree to provide an opportunity for advanced graduate students to conduct individual readings in public health to broaden their areas of knowledge and potential research opportunities. **3 credit hours**

MSPH 74201 – Organizational Behavior – An advanced seminar on the health care organization in a competitive environment. Concepts and practices of total quality management, new techniques and regulations in personnel management and group development will be discussed. **3 credit hours**

MSPH 74501 – Program Evaluation – This course introduces students to the basics of program evaluation from the public health perspective. Elements of program evaluation will include steps as engaging

stakeholders, describing the program, focusing on the evaluation design, gathering credible evidence, justifying conclusions, and ensuring the use and sharing of lessons learned. **3 credit hours**

MSPH 74601 – Health Promotion and Health Education – This course will provide a basic framework for systematically applying the behavioral and social sciences to address public health problems. Emphasis is placed on the delineation of risk behavior, their determinants, and the design and implementation of appropriately targeted health promotion and education interventions that are likely to impact critical health behaviors and health status. Prerequisites: MSPH 73601 Research Design and MSPH 72501: Health Behavior. **3 credit hours**

MSPH 75301 – Occupational Toxicology – Basic toxicological principles such as dose response, metabolic pathways and factors influencing toxicity are studied. The response of specific organ systems to toxic agents and recognition of clinical manifestations of specific classes of toxicants are emphasized. **3 credit hours**

MSPH 75701 – Industrial Hygiene – This course is a survey of the identification, evaluation and control of those factors of the environment that may cause illness, lack of well-being or discomfort among workers or among the community. **3 credit hours**

MSPH 76001 – Interdisciplinary Seminar – This seminar is designed to provide students an opportunity to integrate previous course content into a framework relevant to community health scientists and practitioners. Seminar sessions utilize case materials, problem formulation, poverty and illness, epidemiology, health economics, evaluation research, etc. **3 credit hours**

MSPH 79001 – Health Law, Policy & Ethics – A seminar designed to introduce the definitions, structures and functions of the law and its effects on and its use in the American health care system. Fundamental legal principles relating to the delivery of health care services in this context are emphasized. Important topics include a primer on administrative law and the medical practice acts, health care practitioners and patient relationships, medical liabilities, hospital practices and the law, economic and social regulation of health care facilities, health antitrust law and important ethics concepts in health care delivery. **3 credit hours**

MSPH 79201 – Health Care Marketing – This course provides students with a comprehensive understanding of health services marketing. Strong emphasis will be placed on developing understanding of carefully selected field projects that will serve to practically apply marketing knowledge to the practitioner environment. **3 credit hours**

MSPH 80001 – Thesis Research – This course will familiarize students with the process of research. The thesis process will help students better understand the effects of the process on providing new knowledge to the field of research (utilizing research design, methodology, and literature search). Prerequisite: MSPH 71801-Externship. **1 - 3 credit hours**

MSPH 76401 – Foundations in Public Health - This course provides an introduction to public health concepts and practice. It examines the purpose, history, organization, functions, activities and outcomes of public health practice at the national, state, and community levels. This course will include faculty and guest lectures, article reviews and practical experiences that aim to explore and discuss important problems and issues facing public health. This course will focus on methods of health research, epidemiology, communication, health economics, and writing skills. **3 credit hours**

MSPH 80201 – Spheres of Ethics - This course will provide a philosophically grounded introduction to ethics. This introductory course discusses ethics' evolution from theology and philosophy to ethics and includes, but not limited to: morality, virtual ethics, bioethics, and public health ethics. Ethical approaches to social justice will provide a unifying framework for examining public health, racial and ethnic health issues, health and health care disparities. The course introduces the students to programmatic and research strategies for shaping individual, group, community engagement, public health and public policy.
3 credit hours

MASTER OF SCIENCE IN CLINICAL INVESTIGATION (MSCI)

Objectives

The Clinical Research Education and Career Development (CRECD) program at Meharry Medical College offers a two-year fellowship for Physicians and other doctoral-level care professionals leading to a Master of Science for Clinical Investigation (MSCI) degree. The program's ambitions are to expand the cadre of well-trained clinical researchers, particularly minorities, and foster careers in clinical investigation that will address racial and ethnic health disparities. The curriculum allows scholars to concentrate their electives to accommodate two major tracts: 1) Patient-oriented and 2) Epidemiology/Health Service research. The program's curriculum includes core didactic, elective and experimental design sessions for clinical research training that spans the spectrum of translational science ranging from molecular medicine to epidemiology to qualitative research providing fundamental skills and methodology required by well-trained independent clinical investigators.

MSCI Program of Study

The Masters of Science in Clinical Investigation (MSCI) Program is a multidisciplinary curriculum designed to provide: (1) a broad set of understandings and capabilities to understand and effectively communicate and collaborate with clinical investigators from a broad range of disciplines and (2) a disciplinary depth to each scholar's area of concentration learning. The curriculum emphasized health care disparities affecting minority and underserved populations to resonate with the mission of the College. The first year will be intensive for this instruction with additional instruction also offered during the second year.

COURSE DESCRIPTIONS

MSPH 70001 – Epidemiology I (Introductory) – This course is designed to explore principles of investigating the differential distribution of disease among population groups, provide exercises demonstrating epidemiologic techniques and introduce students to the use of data to treat and prevent disease and evaluate health care effectiveness. **3 credit hours**

MSCI 702 – Biostatics I – Basic concepts of biostatistics, including probability, sampling distributions (discrete/continuous), hypothesis testing, parameter estimation, and confidence intervals. Classical data analyses for cohort and case-control studies. Incidence density rate definition, estimation, rate-, risk-, and odds-ratios, analysis of cohort and case-control data, and stratified analysis. **3 credit hours**

MSCI 704 – Molecular Medicine – This course links introductions to current and emerging molecular techniques in clinical discovery and diagnosis, to their application in clinical research. Examples include the use of qRT-PCR and SNPs in the identification of genetic risk factors for disease and disease prognosis; pharmacogenomics; the advancing use of biologics, including but not limited to therapeutic antibodies) in a variety of therapeutic areas; the impact of HLA antigen subtypes in tissue matching and in disease outcomes; the use of genomics and proteomics in discovery, diagnosis, and therapeutic monitoring; advances in stem cell biology for therapy and tissue engineering. July and August every other year **3 credit hours**

MSCI 707 – Research Ethics – The focus of this course is to develop expertise in the principles, practices and challenges ensuring the ethical conduct of biomedical research. Ethics will be reviewed in historical and contemporary contexts. This course addresses themes including what makes research design ethical, how federal regulations factor into protecting human subjects, how the goals of informed consent are best achieved, how to recruit and retain research subjects and how issues of discrimination and disparity specific to minority populations should be addressed. The course will respond to current issues in research ethics as they arise, such as regulatory oversight of pharmaceuticals, research using genetic samples, and responding to new drug data that may cause alarm among the public. **2 credit hours** (Offered every other year)

MSCI 710 – Scientific Communication/Grant Writing – This course is composed of a scientific communications module and a Grant Writing Module. Trainees learn how to read and understand a scientific paper, how to describe a data figure, how to present a 10-minute talk and how to present a poster, with talk and poster presentations as part of the coursework. The grant writing module takes place in June and is composed of 8 hours of didactic introductions to grant writing, which results in all MSCI participants writing K Awards. Offered in June of each year with meetings 6 hours each week.
2 credit hours

MSPH 71401 – Epidemiology II (Advanced) – This advanced course deals with epidemiology theory and methods in the actual study of disease etiology with particular emphasis upon case control study methods including matching, confounding and selection techniques. Prerequisite: MSPH 70001 Epidemiology I.
3 credit hours

MSCI 722 – Clinical Research Project – The primary objective is design, implementation, and analysis of a mentored clinical research project. The trainees will coordinate research activities with their Mentoring Committee and be guided in narrowing their research focus, develop a professional identity and identify short and long-term research and career goals. **2 credit hours**

MSCI 723 – Fundamental Principles of Human Research – An overview of human subject research methods This course is designed to cover all the aspects of human subject research methods, includes practical topics and insight for human subject research and an in-depth review of the science of clinical trials with an emphasis on statistical methodology. **3 credit hours**

MSCI 807 – Clinical Health Behavior Methods – (Social and Behavioral Science for Public Health) The course will address two core areas in social and behavioral science for public health: 1) the measurement of knowledge, attitudes and behaviors that are relevant to health behavior research, with a focus on scale development and 2) the dispositional and situational variables that underlie current theories of behavior and behavior change, with current applications. **VU 3 credit hours**

MSCI 810 – Clinical Economics and Decision Analysis – This course will provide an overview of qualitative and quantitative decision making with a dominant focus on quantitative techniques for decision-making, using clinical and economic endpoints and their role in clinical strategies of care and health policy. Topics include: cognitive heuristics, Baye's theorem, ROC analysis, the study of diagnostic tests, meta-analysis, health states and utility measurement using expected value decision-making, decision tree analysis, Markov processes and network simulation modeling, quantitative management of uncertainty, cost theory and accounting, cost-effectiveness and cost-utility analysis. **VU 3 credit hours** The MSCI program allows for nine credit hours of elective courses, which permits trainees to select areas of study related to their specific interest and include:

- Biostatistics (advanced)
- Epidemiology (advanced)
- Health Behavior Methods: Methods and Motivation
- Medical Writing for Clinical Investigators
- Drug and Device Development
- Environmental Health
- Behavioral Methods
- Health Economics; Health Finance; Clinical Economics/Decision Analysis
- Genetic Analysis of Complex Human Traits
- Receptors; Drug Disposition; Pharmacokinetics
- Program/Policy Evaluation
- Cancer Epidemiology
- Maternal and Child Health
- Pharmacoepidemiology
- Infectious Diseases and Vaccines
- Neurobiology of Disease

Other courses approved in the PhD curriculum at MMC or at VUMC, as appropriate.

MASTER OF HEALTH SCIENCES (MHS)

Objective

The goal of this academic program is to academically prepare pre-professional students for the rigors of matriculating in professional programs.

COURSE DESCRIPTIONS

GMHS 70601 – Fundamentals of Microbiology – The overall goal of the course is to help students understand general microbiological principles and properties of microorganisms including a thorough understanding of host-parasite relationships and mechanisms of microbial pathogenicity. Content will include prokaryotic cell structure and function, microbial physiology, fundamentals of macromolecular synthesis and regulation of prokaryotic gene expression. Principles related to immunology, mycology, virology and host-parasite relationships including mechanisms of pathogenicity are also presented.
4 credit hours, Fall

GMHS 70701 – Fundamentals of Biochemistry – This course is designed to present basic concepts in biochemistry. Subject emphasis is placed on the composition, conformation and function of proteins, the generation and storage of energy, control and regulation of metabolism, the biosynthesis of macromolecules and information, storage, transmission and expression. Where germane, the relationship of biochemical disorders to clinical diseases will be discussed. **4 credit hours, Fall**

GMHS 70801 – Neuroscience – This course is a comprehensive introduction to the mammalian nervous system, focusing on the structure and function of the human brain. Anatomical, cellular, chemical, physiological, and molecular aspects of neuroscience will be discussed. Topics that will be covered include: neurons and glia, neuroanatomy, action potentials, synaptic transmission, neurotransmitters, sensory systems (vision, hearing, and touch), motor systems, behavioral responses, development, learning and memory, aging, mental illness, neurodegenerative diseases, and genomics. **4 credit hours, Fall**

GMHS 70901 – Fundamentals of Human Physiology – This course introduces students to the structure and function of the various systems of the human body at a very basic level. Correlative information on selected diseases supplements the presentation. **4 credit hours, Spring**

GMHS 71001 – Cell and Molecular Biology – The overall goal of this course is to provide an understanding of basic cell and molecular biology concepts fundamental to the study of biomedical sciences including medicine and dentistry. The course provides content related to DNA structure and its replication, translation, transcription, regulation of gene expression in eukaryotic cells and recombinant DNA technology. Principles related to protein purification, cell culture, cell cycle control, cancer and cell signaling/communication will also be presented. **4 credit hours, Fall**

GMHS 71101 – Fundamentals of Medical Pharmacology – The course provides an overview of the basic concepts of the pharmacological treatment of various diseases affecting major body systems and the drugs associated with the treatment process, drug therapy, dosages, actions, and drug administration routes.
4 credit hours, Spring

GMHS 71201 – Fundamentals of Gross Anatomy – This course teaches the fundamentals of human anatomical structure. Special emphasis will be given to muscular, skeletal, nervous, endocrine, cardiovascular, and respiratory systems. The structure and related function of each of these body systems

will be examined in detail. The major anatomical structures of other body systems (e.g., gastrointestinal) will also be covered. **3 credit hours, Spring**

GMHS 71501 – Fundamentals of Pathology – This course provides the students with the general concept of Pathophysiology with appropriate reference to the general pathologic processes. An organized system review of the commonest diseases with adequate insight into causes, clinical manifestations, and diagnosis will be covered. **3 credit hours, Spring**

HEALTH POLICY CERTIFICATE

The Health Policy Certificate is a program of the Meharry Center for Health Policy. The mission of the Center is to increase the diversity of health policy leaders in the social, behavioral, and health sciences, particularly sociology, economics, and political science, who will one day influence health policy at the national level.

The Health Policy Certificate offers students who have educational and research interests in health policy and social science research, the opportunity to participate in coursework, seminars and research activities leading to the completion of a Certificate in Health Policy awarded in conjunction with the student's declared academic program degree. External students who are not otherwise enrolled at Meharry may also apply to the Certificate program.

The certificate program offers students from various disciplines the opportunity to expand their knowledge of health policy as it relates to health care planning, health care resource allocation, health maintenance, health promotion, health programs and interventions, and strategies specific to minority and underserved communities. Students learn from faculty of multiple specialties from Meharry Medical College, Vanderbilt University, and other prestigious institutions. The curriculum is 12 credit hours.

Course Director: A. Dexter Samuels, Ph.D., Executive Director of the Meharry Center for Health Policy

Meeting Location: Meharry Medical College, Clay Simpson Building, Meharry Center for Health Policy.

Admission Requirements

Each year there are 10 slots available with full tuition remission towards completion of the health policy certificate. To qualify, current full-time enrollment at Meharry Medical College as a medical, dental, PhD or MSPH student is required (PhD students must have earned candidacy before applying). All requirements for the certificate must be met prior to completion of the regular degree program. External students who are not currently enrolled in a degree program may apply and be admitted to the program but are not eligible for tuition remission. In addition to the abovementioned requirements, students must also:

1. submit a completed application for admission
2. submit a statement of interest (2 page minimum)
3. submit 2 letters of reference
4. have a minimum undergraduate Grade Point Average (GPA) of 3.0

Policies and Procedures

Attendance Policy: The health policy certificate program follows Meharry Medical College's attendance policy of 80 percent. It is the responsibility of the student to become familiar with these policies and adhere to them.

Academic Performance: It is understood that students' first responsibility should be to their primary academic degree program. Should a student fall below the 3.0 GPA required for admission, he/she may not be allowed to continue in the health policy program until such time as improvement in excess of this requirement is met.

Courses in the health policy program are graded as Satisfactory/Unsatisfactory (S/U). Unsatisfactory grades may result in dismissal from the program. Upon successful completion of the 12 credit hours, students' transcripts for their primary academic degree programs will be noted with the completion of the health policy certificate.

COURSE DESCRIPTIONS

One to three of the health policy courses described below will be offered each semester (up to four courses may be offered during the summer) at the discretion of the Center's Executive Director.

GSHP 70101 – The Challenges in Measuring Health Disparities: Politics, Policy and Methods – This course will discuss methodological issues around measuring health disparities and the costs of disparities, as well as the policy implications of this research. The course will address questions such as what is a disparity, how do investigators measure it, what are the data collection challenges, how have researchers overcome data and measurement problems, what is the impact of disparities, what are the kinds of policy strategies that are needed to address them, and how can researchers, advocates, and policymakers collaborate to build support for policy implementation. **2 credits hours**

GSHP 70201 – Race, Ethnicity and Health – Fundamental to this course is the recognition of race and ethnicity as primary social determinants of health in the United States. The primary aim then is to explore the myriad social and behavioral factors that might underlie the associations among race, ethnicity, and health status outcomes. Because research designed to address this issue remains in its formative stages, the focus of the class will be: 1) To investigate state-of-the- science conceptual and methodological approaches to understanding social and behavioral determinants of health disparities; 2) To critically examine the fundamental scientific assumptions underlying health disparities research in an effort to better design future empirical approaches; 3) To characterize the potential intervention, prevention, treatment, and policy implications resulting from findings in the health disparities literatures. **3 credit hours**

GSHP 70301 – Comparative Analysis of U.S. & International Health Care Systems – The course examines health systems from a global perspective. The primary goal of the course is to enable students entering or working within a health care system to describe the parts of systems and their interactions, the environment in which the systems exist, and the internal and external forces, and points of leverage that create opportunities for change. Although health systems vary widely in their structure and performance, there is substantial similarity in the issues they face. Differences between systems are often a matter of degree. The course addresses health systems from a system improvement perspective, and focuses on health systems analysis and evaluation, and health system reform. The course examines metrics used to evaluate health systems and the various components of health systems, including financing mechanisms, payment schemes, workforce, and the organization of health care organizations. **2 credit hours**

GSHP 70401 – Achieving Health Equity: Frameworks, Data Tools, and Policy Interventions – This course equips students with frameworks, data tools, and policy interventions to name, measure, and

address the impacts of racism on the health and well-being of the nation. Lessons learned from understanding racism as a system of structuring opportunity and assigning value are generalized to provide understanding of other systems of structured inequity, including sexism, capitalism, nativism, and heterosexism. **3 credit hours**

GSHP 70501 – Health Disparities & Health Policy I – This course will examine the challenges and methods in the implementation of health disparities research and interventions. It is intended to both complement and expand the knowledge gained in other courses by focusing specifically on minority/underserved populations. The course will explore readings and foster discussions that will include: ethics and research in minority/ underserved communities; issues, barriers and facilitators to engaging minority/underserved communities in health research; examining basic research questions in minority health; understanding the application of research findings to program development; how to integrate theory and research, and issues and challenges of program implementation. An overarching goal is to increase awareness and knowledge of research on minority health, as well as unique issues to consider when engaging in public health research and practice in these communities. **3 credit hours**

GSHP 70601 – Health Disparities & Health Policy II – This course is a continuation of "Health Disparities and Health Policy I." The course will build on content learned in that course. The objective is to introduce students to the policy-making process, and social determinants of health that underlie health disparities. We will gain a better understanding of the relationships of social and environmental phenomena and the health of minority communities, and develop skill to improve effectiveness in the policy arena. In this continuing course students will get experience putting into practice the content learned in the first course. **3 credit hours**

GSHP 70701 – Health Policy & Society I – This course explores the intersection of societal change with health policy. The course incorporates numerous sociological theories (e.g., conflict, symbolic interaction, structural functionalism, etc.) to provide students with an introduction of health policy from societal standpoint. Students will become aware of the complexities of health policies and how it is oftentimes shaped by social change. This course is structured as a seminar. However, students will be actively engaged in discussions of relevant topics. **3 credit hours**

GSHP 70801 Social Dynamics of Mental Health – This course investigates the major sociological issues and research findings in mental health and illness. The objective of the course is to better understand the social factors that determine the onset of mental illness as well as societal attitudes, behaviors and norms regarding those who are mentally ill. The course is a combination of lecture and discussion. **3 credit hours**

GSHP 70901 – Health Policy & Society II: This course is a continuation of Health Policy & Society I. The course delves deeper into the intersection of societal changes in health policy incorporating sociological theories (e.g., conflict, symbolic interaction, structural functionalism, etc.) to provide students with a look at health policy from sociological perspectives. Students will study and explore the complexities of health policies and how they oftentimes shaped and influenced by social changes. This course is structured as a seminar. However, students will be actively engaged in discussions of relevant topics. **3 credit hours**

GSHP 71001 – Public Health, Public Policy, and the Law – The purpose of this course is to explore the intersections of public health, public policy, and law by examining the obligations of public health practitioners, whether working to improve the health of a single patient or an entire population. The course will provide a framework to consider the legal ramifications of public health interventions as well as the policy considerations that underlie such interventions. **3 credit hours**

GSHP 71101 – Race, Class and Access: Contemporary Health Issues – This course will explore the effects of race, and class on access to care. The course will also examine health care delivery systems. Lastly, the course will discuss the health services industry and the future of health care from a health economics standpoint. **3 credit hours**

GSHP 71201 – Health Policy Externship/Field Placement – The primary objective of this course is to enable students to acquire work experiences in a health policy setting, specifically practical experience in a structured health care environment. It is intended to expand the student's learning experience and integrate and reinforce theoretical concepts learned in the classroom. In addition, the course is intended to help students compete more effectively in the job market, provide employers with potential employees, and enable interns to assess the value of working in the health care sector. **3 credit hours**

GSHP 71301– Managed Care – This course provides an overview of managed care and its past and current impact on the U.S. health care system. Topics include the impact of managed care on the role and relationships of primary care, specialist physicians, and hospitals; origins of Health Maintenance Organizations and other managed care organizations; and consumer patient protection laws. This course also explores public policy, regulatory, and financial managed care issues. **3 credit hours**

GSHP 71401 – US Health Policy – This course examines the formal and informal public policy decisionmaking processes as well as the roles of key actors in influencing the organization and delivery of health care services in the U.S. Current problems affecting the delivery of services, alternative delivery systems, and proposals for reform are analyzed. Emphasis is placed on health issues within the context of the more generic system for public policy formulation. The focus is on policy formulation at the national level and consists of six key discussion components. **3 credit hours**

GSHP 71501 – Critical Literature Reviews of Health Disparities I – Students will learn the nature of racial and ethnic disparities in health status, healthcare access, utilization and quality, and become familiar with the health disparities research literature. The course will also focus on critical review of literature. Students will be taught a systematic process for reviewing and evaluating studies and apply that process to the health disparities research literature. The course will be taught in both lecture and seminar format. The instructor will do lectures in some class sessions, but the majority of the course will consist of student-led discussions of the assigned readings. There may also be occasional films and guest lecturers. **3 credit hours**

GSHP 71601 – Implications of Mental Health & Health Policy – The U.S. is considered to have a relatively progressive mental health care system, and the history of its evolution, barriers to mental healthcare, disparities in the mental health care, the current state of the system and various mental health issues relevant to health policy will be discussed during the course. **3 credit hours**

GSHP 71701 – Special Topics in Health Policy – This course is designed to provide students with an in-depth analysis of emerging and important issues and topics in the field of health policy. Topics will be selected based on students' career path and academic interests. **3 credit hours**

GSHP 71801 – Critical Literature Reviews of Health Disparities II – This course is a continuation of Critical Literature Reviews of Health Disparities I. Students will continue/expand their critical reviews conducted during Part I or students opt to start a new project. Students will learn the nature of racial and ethnic disparities in health status, healthcare access, utilization and quality, and become familiar with the health disparities research literature. The course will also focus on critical review of literature. Students will be taught a systematic process for reviewing and evaluating studies and apply that process to the health disparities research literature. The course will be taught in both lecture and seminar format. The instructor will do lectures in some class sessions, but the majority of the course will consist of student-led discussions of the assigned readings. There may also be occasional films and guest lecturers. **3 credit hours**

GSHP 71901 – Leading Change in Population Health – Addressing the public health challenges for the 21st century requires public health leaders to be facile in leading change efforts (on the individual, organizational and system levels) and multi-stakeholder collaborations for measurable results. Lectures are integrated with interactive discussions and hands-on small group exercises to explore how practitioners can translate public health and community knowledge into sustainable solutions. The course provides students

with 21st century leadership skills that prepare them to tackle public health issues in our society from the most simple to very complex. Students are challenged to think differently on many levels and prepared to be agents of change for future generations. **2 credit hours**

GSHP 72001 – Cost Effectiveness Analysis and Decision Making – The objective of this course is to introduce participants to the methods, applications, and limitations of decision analysis and cost-effectiveness evaluation in health and medicine. Topics to be covered include: basic concepts of probability theory; decision tree approaches to structuring choice problems and managing uncertainty; Bayesian probability revision and the value of information; cost-effectiveness analysis and scarce resource allocation; and Markov models to simulate disease prognosis. **2 credit hours**

GSHP 72101 – The Emerging Importance of Arts to Health Policy and Practice – This course explores diverse ideas and practices associated with the visual and performing arts in the allied health fields, toward an understanding of the emerging importance of the arts to health policy and practice. **2 credit hours**

GSHP 72201 – Managing People in Healthcare Organizations and Policy Environments – This course is designed to provide the student an introduction to essential knowledge, skills, and tools to effectively manage oneself, one-on-one relationships with others in the workplace, and the teams of which the student is a member. It provides the student the opportunity to cultivate new insights about him/herself and the way that he/she orients him/herself towards other people. It exposes the student to frameworks for analyzing, assessing, and anticipating the various perspectives of people that he/she may encounter in the workplace. **2 credit hours**

GSHP 72301 –Introduction to Social Epidemiology – This course is designed to introduce students to the field of social epidemiology and its role in understanding the social determinants of population health and health disparities/inequities. **2 credit hours**

Graduate Certificate in Public Health Program

To earn the Graduate Certificate in Public Health, students must successfully complete the following five core Public Health courses (3 credits each), and maintain a GPA of 3.0 in all five courses.

COURSE DESCRIPTIONS

MSPH 70001 – Epidemiology I (Introductory) – This course is designed to explore principles of investigating the differential distribution of disease among population groups, provide exercises demonstrating epidemiologic techniques and introduce students to the use of data to treat and prevent disease and evaluate health care effectiveness. **3 credit hours**

MSPH 70201 – Biostatistics I (Introductory) – This is an introductory course in the basic statistical concepts, principles, and methods used in the health sciences. Taught as part of the core curriculum for all Master of Science in Public Health students, the broad goal of this component is to enable students to have basic knowledge and its application in the experimental and non-experimental phases of health care administration and medical disciplines. The student should understand the traditional role of biostatistics and its newer role in the computer age and the age of innovative health care delivery systems. **3 credit hours**

MSPH 70701 – Environmental Health – This course is designed to survey those factors that impact upon the environment and human health. The student will be provided a conceptual framework for the study, analysis and control of various environmental problems. **3 credit hours**

MSPH 73001 – Health Administration – This course introduces the basic principles, concepts and theories of management in the context of the health care delivery system. It emphasizes the facts, problems and issues of health care administration at all levels of the delivery system. **3 credit hours**

MSPH 72501 – Health Behavior – The purpose of this course is to provide an introduction to the application of the social and behavioral sciences to health. Emphasis will be placed on (1) how theories, empirical research, findings, and methodologies of psychology, sociology, and anthropology apply to health issues, and (2) the major social and cultural determinants of health- related behavior. **3 credit hours**

Graduate Certificate in Global Health Program

This 12 credit hour Graduate Certificate in Global Health Program is limited to first year MSPH Students at Meharry Medical College, who demonstrate a strong interest in Global Health. The courses are taken in collaboration with Vanderbilt University, and therefore, enrollment is limited.

COURSE DESCRIPTIONS

PUBH 5540.01 – Health Services Administration: Leadership and Management in Global Health – This course introduces students to principles of management and leadership of global health programs and organizations in complex and challenging environments. Students will explore diverse health systems, organizational behavior, health policy, program design, and core management techniques. **3 credit hours**

PUBH 5541.01 – Essential Skills in Global Health – This course introduces students to field tools, assessment and implementation techniques, and evaluation methodologies used commonly in the field of Global Health. Various theories and practices that are commonly used to analyze issues and intervene in global health are explored. A key objective of the course is to examine determinants of global health and development from an interdisciplinary vantage point. Health and developmental issues across nations and cultures that require collective (partnership based) action are highlighted. **3 credit hours**

PUBH 5542.01 – Foundations of Global Health – This course introduces students to key topics and concepts in global health, examining determinants of complex issues and exploring multidimensional approaches and interventions with a particular emphasis on low resource settings. Health and developmental issues across nations and cultures that require collective (partnership-based) action are highlighted by an interdisciplinary faculty using didactic, interactive and practical elements of instruction. At the conclusion of the course, students should be able to discuss research and evaluation methodologies commonly used in the field, identify key global health questions and design suitable projects that address the question. **3 credit hours**

NURS 8072 – Fundamentals of Global Health: Addressing Global Health Disparities – This course is designed for graduate students interested in global health and will consist of seven units: Introduction to Global Health, Health Disparities, Health Care Delivery Systems, Evidence-based Practice, Noncommunicable and Communicable illnesses, Trauma and Violence and Effective, Ethical Models for Global Health Engagement. The course will focus on best practices for allocating scarce resources and engaging in interdisciplinary global health work with diverse communities from a cultural, ethical, and clinical perspective. Students will engage in learning through readings, synchronous and asynchronous discussions, case studies, and written assignments. This course is designed for students interested in caring for and empowering underserved populations locally and abroad. **3 credit hours**

School of Graduate Studies and Research Faculty

Division of Biomedical Sciences

Associate Professor: Virginia Brennan, Ph.D.; Amos Sakwe, Ph.D., M.S.C.I.;
Assistant Professors: Smita Misra, Ph.D.; Tultul Nayyar, Ph.D., M.S.C.I.; Jui Pandhare, Ph.D.; Siddharth Pratap, Ph.D.; Carlos K. Virgous, D.V.M.; Letha Woods, Ph.D.

Division of Public Health Practice

Senior Associate Dean, Public Health Practice and Professor: Stephanie Bailey, M.D., M.S.H.S.A Interim **Director, MSPH Program:** Kimberlee Wyche-Etheridge, M.D., MPH
Professors: Chau-Kuang Chen, Ed.D.; M.S.; Mohammad Tabatabai, Ph.D.
Assistant Professors: Leah Alexander, Ph.D.; Vanisha Brown, Ph.D.; Mekeila Cook, Ph.D., M.S.; Kimberlee Wyche-Etheridge, M.D., MPH

Faculty with Adjunct Appointments:

Adjunct Professors: David M. Aronoff, M.D.; William Paul, M.D; Marilyn T. Odom, Ph.D.
Adjunct Associate Professors:; Charles D. Weaver, Ph.D.
Adjunct Assistant Professors: Lea Davis, Ph.D.; Joshua F. Fessel, M.D., Ph.D.; Gerald Frank, Ph.D., Qiana L. Matthews, Ph.D.; Jiliang Wang, Ph.D.

Health Policy Certificate Program

Executive Director and Associate Professor: A. Dexter Samuels, Ph.D. **Instructor:** Mariah L. Cole, J.D.

School of Medicine Faculty with Secondary Appointments

Department of Biochemistry, Cancer Biology, Neuroscience and Pharmacology

Chair and Professor: Samuel E. Adunyah, Ph.D.
Professors: Clivel G. Charlton, Ph.D., Sanika S. Chirwa, Ph.D.; Salil K. Das, D.Sc.; Sakina E. Eltom, D.V.M, Ph.D.**;** Sukhbir S. Mokha, Ph.D., Josiah Ochieng, Ph.D.;
Associate Professors: Zhenbang Chen, Ph.D.; Chandravanu Dash, Ph.D.; Amosy M'Koma, M.D., Ph.D.; J. Shawn Goodwin, Ph.D.; Aramandla Ramesh, Ph.D.; LaMonica Stewart, Ph.D. **Assistant Professors:** Jamaine Davis, Ph.D.

Department of Internal Medicine

Professor: Vladimir Berthaud, M.D., M.P.H.
Associate Professor: Waldemar Popik, Ph.D.

Department of Microbiology, Immunology and Physiology

Chair and Professor: Fernando Villalta, Ph.D.
Professors: Minu Chaudhuri, Ph.D.; Robert G. Holt, Ph.D.; Evangeline D. Motley-Johnson, Ph.D. Raju Ramasamy, Ph.D.
Associate Professors: Donald Alcendor, Ph.D.; Anthony Archibong, Ph.D., Bindong Liu, Ph.D.; Xinhong Dong, Ph.D.

Department of Professional and Medical Education

Associate Professors: Carol Freund, Ph.D.; Shyamali Mukherjee, Ph.D.

School of Dentistry Faculty with Secondary Appointments

Department of Dental Public Health

Associate Professor: Machelle F. Thompson, R.D.H., MSPH

School of Medicine

Administration

Veronica T. Mallet, M.D, Dean and Sr. Vice President for Health Affairs
Stephanie C. McClure, M.D, Senior Associate Dean, Student and Academic Affairs
Digna S. Forbes, M.D., Senior Associate Dean, Medical Education
Monique Bennerman M.D., Associate Dean, Student and Academic Affairs
Cassandra S. Ward, Ed.D. Associate Dean, Curriculum Evaluation and Effectiveness
Susanne Tropez-Sims, M.D., Associate Dean, Clinical Affiliation
Duane Smoot, M.D., Senior Associate Dean, Clinical Affairs
Billy R. Ballard, D.D.S., M.D., Associate Dean, Continuing Medical Education
Richmond Akatue, M.D., Associate Dean, Graduate Medical Education
Roland Jones, DBA, M.B.A., M.P.A., Associate Dean, Business and Finance
Shana Hill, M.Ed. Assistant Dean, Student and Academic Affairs
Sharon D. Turner-Friley, M.S.W., Assistant Dean, Special Programs

Department Chairpersons

Samuel E. Adunyah, Ph.D., Biochemistry,Cancer Biology, Neuroscience & Pharmacology
Lloyda Williamson, M.D., Psychiatry and Behavioral Sciences
Billy R. Ballard, D.D.S., M.D., Pathology, Anatomy and Cell Biology
Xylina D. Bean, M.D., Pediatrics
Digna S. Forbes, M.D., Professional and Medical Education
Alphonse Pasipanodya, M.D., Interim, Surgery
Anthony C. Disher, M.D., Radiology
Gwinnett Ladson, M.D., Obstetrics and Gynecology
Richard D. Freemont, M.D., Interim, Internal Medicine
Fernando Villalta, Ph.D., Microbiology, Immunology, & Physiology
Millard Collins, M.D, Family and Community Medicine

Medical Education at Meharry Medical College

The School of Medicine is the oldest and largest of the three schools at Meharry, and admits 105 students per year. The Graduate Medical Education Program has 96 approved positions in the specialties of Internal Medicine, Family & Community Medicine, Preventive and Occupational Medicine, Obstetrics & Gynecology and Psychiatry. In addition, students from the School of Dentistry and the School of Graduate Studies and Research receive training from School of Medicine faculty.

The School has 13 departments: Biochemistry and Cancer Biology, Microbiology and Immunology, Neuroscience and Pharmacology, Professional and Medical Education, Physiology, Family and Community Medicine, Internal Medicine, Obstetrics and Gynecology, Pathology, Pediatrics, Psychiatry and Behavioral Sciences, Radiology, and Surgery. The School is also home to nationally recognized centers that provide research, training and patient care in women's health and HIV/AIDS. The faculty and students actively serve the community through many programs involving mentoring, counseling and volunteer work to inspire and direct elementary, high school and college students to careers in the health professions.

Nashville General Hospital (NGHM) at Meharry Medical College serves as the index hospital for the School of Medicine. There are also affiliations with the Alvin C. York VA Medical Center, Centennial Medical Center, James H. Quillen Medical School, Middle Tennessee Mental Health Institute, Matthew Walker Comprehensive Health Center, United Neighborhood Health Centers, Skyline Medical Center, Nashville VA Medical Center*, Vanderbilt University Medical Center* (*via the Meharry Vanderbilt Alliance), and other sites currently under negotiation. In addition, there are several community health clinics, and numerous private practice sites in rural and urban underserved areas in the surrounding middle Tennessee area.

Although a historically black medical college, Meharry's student body reflects the diversity of the nation with representation from the Caucasian, Hispanic, Asian and Native American communities. The majority of Meharry's graduates keep the commitment of the principles upon which the College was founded by overwhelmingly choosing to practice in underserved urban and rural communities. Approximately 50 percent of the medical graduates select primary care specialties each year. Meharry continues to be proud of its leadership role in helping to ensure diversity in the nation's health professions work force.

Mission of the School

The School of Medicine of Meharry Medical College pledges to offer a unique, quality, health science education to students of diverse origins, especially African Americans, with emphasis on addressing underserved populations. In addition, the School of Medicine will teach and monitor excellence in the delivery of primary or holistic care, provide a foundation for life-long learning, and conduct research relevant to the health of the disadvantaged.

Educational Competencies

The educational competencies of the medical education program leading to the M.D. degree emphasizes medical knowledge, patient care, interpersonal and communication skills, , professionalism, systems-based practice, and practice-based learning and improvement. The candidate for the M.D. degree will be required to show competence in each of these areas, as follows:

Medical Knowledge

- Normal biological and physiological processes of cells and tissues
- Nature of various agent/mechanisms that produce changes to normal structure/function of cell
- Mechanism of action of drugs and the metabolic and toxic effects
- Mechanisms of normal growth, development, and aging
- Concepts related to normal behavior and mental illness
- The scientific method and the ability to critically analyze data in the identification of disease/treatment
- Determinants of poor health and the psychosocial, economic, and cultural factors that contribute to the development of common maladies

Patient Care

- To obtain history and perform physical exam
- To order and interpret results of diagnostic tests and evaluative procedures
- To draw conclusions from history/physical exam to identify health problems
- To develop and implement appropriate treatment plan for health problems
- To formulate an appropriate differential diagnosis
- To access and evaluate the correctness of clinical decisions and efficacy of therapeutic interventions
- To adjust/modify treatment plan based on new information
- To perform technical procedures specific to a specialty
- Diagnose and participate in treatment of mental illness
- Apply use of drugs in patient care
- Apply psychosocial principles in delivery of health care
- Apply principles of preventive and health maintenance in the delivery of health care
- Interpret laboratory results in identifying diseases/health problems
- Recognize normal growth and development
- Apply principles of evidence-based medicine and critical data analyses to clinical decision making
- Recognize patients with life-threatening conditions
- Integrate basic sciences knowledge in the clinical assessments/management of patients
- The knowledge, skills, attitudes, and behaviors necessary to perform as generalist clinician

Interpersonal and Communication Skills

- Effective interpersonal communication with patients, family, and members of the healthcare team

Professionalism

- The ability to practice in a manner that reflects an outstanding and acceptance of ethical principles and other recognized standards of professional behavior which guide and characterize the actions of physicians
- Knowledge of ethical principles related to research involving human subjects and the responsibilities of the physician
- The ability to interact respectfully and effectively with patients, peers, and other healthcare workers from diverse cultural and religious backgrounds
- The ability to show compassion and respect for the dignity of patients and confidentiality in the delivery of health care

Systems-based Practice

- Demonstrate the ability to work effectively within the larger context and system of healthcare
- Demonstrate knowledge of the various aspects of health care delivery systems including, the social, economic, and political dimensions
- Apply principles of cost containment in the delivery of healthcare

- Work effectively with healthcare teams to enhance patient care and safety

Practice-based Learning and Improvement

- Continuing clinical proficiency and competency in medical practice through the utilization of acquired basic knowledge skills resulting from the process of lifelong learning
- The ability to use information technology to access online information, manage information, and to critically evaluate evidence from the scientific literature in decision making patient care

Strategic Goals for Educational Excellence

The School of Medicine's strategic goals, which specifically address educational excellence include:

1. To provide a comprehensive medical educational program that meets the accreditation standards of the Liaison Committee on Medical Education.
2. To graduate students who are professionally competent, prepared to enter and complete graduate medical education qualified for licensure.
3. To provide a program in medical education rooted in the realities of emerging health care reform and the ethics of health care.
4. To enhance the quality of all accredited residency training programs and improve the educational experiences of our undergraduate matriculants, as well as the quality of resident participation in each of the required undergraduate clerkships.
5. To strengthen the existing biomedical sciences program leading to the Ph.D. degree and the combined M.D./Ph.D. degrees.
6. To sustain and enhance programs in continuing medical education.
7. To establish and maintain a caring, nurturing, and compassionate environment conducive to the successful personal and professional development of students.
8. To develop and implement model recruitment programs and academic enrichment services aimed at improving the quality of the accepted applicant pool and rates of retention and progression.

Academic Program

The School of Medicine is organized into 11 departments that administer the instructional, research and clinical activities of the School. The clinical departments include Family and Community Medicine, Internal Medicine, Obstetrics and Gynecology, Pathology, Pediatrics, Psychiatry and Behavioral Sciences, Radiology, and Surgery. The basic science departments include Biochemistry, Cancer Biology,& Neuroscience and Pharmacology; Microbiology, Immunology, & Physiology , Professional and Medical Education.

The School of Medicine offers a four-year medical education program curriculum. The curriculum promotes a high degree of personal contact between faculty and students.

The Curriculum

Beginning in 2018:
The new strategically integrated curriculum leading to the M.D. degree is a four-year program that is divided into two phases. Phase I consists of the first two years, referred to as the Preclerkship years. The first year starts in June with the six-week course, Medical Immersion Program (MIP) and is a four unit course. The goals of this course is to provide students with an introduction to concepts of medicine through the emergency medicine introduction, foundations of physiology and genetics (the HMX courses) and health coaching (communication patient/physician interaction) to acclimate and immerse then into medical decision making early in their medical education. Moving beyond the MIP course, although there are several courses in the first and second semesters, failure of one course actually impacts the concepts being rendered in others and could result in the repeat of the academic year. For example, the Foundations of Health, Disease, and Management (FHDM) is the core of the Preclerkship curriculum. The other courses generally reflect what is being conducted in the FHDM course. Failure of the FHDM course will result in not moving on into the second semester, resulting in repeating the year. During the first semester students are exposed to the rigors of professional school in a supportive but realistic environment, with potential academic challenges, strengths, and weaknesses being identified. Individualized strategies based on student performance on examinations will be developed to enhance their success with the aim of maximizing student retention and progression during medical school. The second year starts in May with eight weeks of research and then the start of the extension of the FHDM course along with its companion courses.

Pending Curriculum Committee approval at the time of catalog publication: During Phase II, the last two years, third year students are assigned to combined clinical rotations: internal medicine/psychiatry, obstetrics & gynecology and pediatrics, surgery and family medicine. In addition, there are Intersessions, which occur as three one-week separate courses. Students are required to complete all HIPAA and OSHA trainings during Intersession I. The fourth year clinical rotations are divided into clerkships (selectives) and electives. Clinical rotations of four weeks each are required to complete the fourth year. The required rotations are internal medicine subinternship, critical care, radiology, neurology, emergency medicine, ambulatory, capstone and electives that include four units (sixteen weeks).

Classes of 2020 and 2021:
The integrated curriculum leading to the M.D. degree is a four-year program that is divided into two phases. Phase I consists of the first two years, generally referred to as the Basic Sciences years. The first year started in June with the six-week course, Mini Academic Program for Success (MAPS). The overall objective of this course was to provide students with basic science information that is foundational for their overall success in medical school, especially during the first year. Students also received instruction in the areas of bio-informatics, ethics, basic computer skills, test-taking and time management skills. The overall goal of the first year of Phase I was to provide students with a strong background in basic science knowledge, clinical and social skills that are essential for the practice of medicine in the twenty-first century. Individual, discipline-specific courses have been eliminated and replaced by block modules in which basic, clinical and social sciences are presented in an integrated manner to facilitate learning and to meet the overall objectives of the educational program. The overall goal of the second year of Phase I is to provide the opportunity for more in-depth learning of the basic sciences by organizing instruction around a series of organ systems.

During Phase II, the last two years, third year students are assigned to six clinical rotations: internal medicine/neurology, obstetrics and gynecology, pediatrics, surgery, psychiatry and family medicine. In addition, there are Intersessions, which occur as three one-week separate courses in June, September, and March. These serve as a bridge to integrate basic science and clinical science. Students are required to complete all HIPAA and OSHA trainings in June. The fourth year clinical rotations are divided into clerkships (selectives) and electives. Eight clinical rotations of four weeks each are required to complete the fourth year. The required rotations are internal medicine, radiology, fourth year ambulatory, capstone and electives that include four units (sixteen weeks).

The White Coat Ceremony

All entering medical students will participate in the White Coat Ceremony, which is an integral part of the curriculum: professionalism. The ceremony serves to ensure that students understand that healthcare is a noble profession that requires not only technical skill, but compassion as well. An oath will be taken during the ceremony by the entering medical students in front of family members, faculty, school leadership, and among peers to acknowledge their main obligation of caring for the patient. This ceremony will be conducted during the Fall Semester and is designed to establish a psychological contract for medical students to stress the importance of caring as a significant aspect of curing. All medical students who are repeating the first year will again participate in the White Coat Ceremony to bond with the new cohort. This policy applies to students re-entering medical school whether they voluntarily withdrew from classes or were required to repeat the academic year.

Mandatory Attendance

One of the behavioral objectives of the institution is to help the students acquire the discipline and motivation necessary to attain their maximum professional development. In order to facilitate this, students are expected to attend all classes. Punctual attendance is expected. Attendance is mandatory—100% attendance. If a student is absent from an exam, the absence must be substantiated with documentation as to the reason for the absenteeism and presented to the Senior Associate Dean of the Office of Student and Academic Affairs. Recurrent absenteeism, particularly during examination time, will warrant an evaluative meeting with the Senior Associate Dean of the Office of Student and Academic Affairs.

No student is allowed to attend a class for which he/she is not officially registered by the Office of Admissions and Records unless cleared by the Senior Associate Dean to participate in a class when a passing grade is already earned. Without proper official registration, no retroactive credit will be given.

Year 3: Mandatory attendance is required for ALL clinical and didactic activities. There are no exceptions.

Year 4: Mandatory attendance is required for ALL clinical and didactic activities. For the purpose of interviewing, students are allowed no more than three (3) days per rotation.

Admission

Admissions Requirements and Procedures

The Committee on Admissions is responsible for the acceptance of all students entering the first-year class at Meharry Medical College School of Medicine (MMCSOM). Meharry Medical College School of Medicine encourages applications from, and gives full consideration to, all applicants for admission and financial aid without regard to sex, race, handicap, color, creed, sexual orientation, gender identity, or national or ethnic origin. MMCSOM is committed to recruiting, enrolling, and educating substantial numbers of persons from racial minorities, especially African Americans, and those from educationally and socio-economically disadvantaged and underrepresented groups in medicine. The Admissions Committee selects those applicants who are more likely, in its opinion, to become the best students and physicians and fulfill the mission of Meharry Medical College School of Medicine.

Accreditation: The School of Medicine is accredited by the Liaison Committee for Medical Education (LCME).

Selection Factors: The selection of students by the committee is made after careful consideration of many factors. Among them are intelligence, preparedness, motivation and aptitude. In the evaluation, account is taken of the candidate's scores on the Medical College Admission Test (MCAT), evidence of academic achievement, the extent of academic improvement, balance and depth of academic program, difficulty of courses taken and other indications of maturation of learning ability. The Committee is also interested in the activities of the applicant outside of the classroom including the nature of extracurricular activities, hobbies, the need to work, research projects and experiences, evidence of activities that correlates with the school's mission, and evidence of pursuing interests and aptitudes in depth. Finally, the Committee looks for evidence of personal character and responsibility, compassion, honesty, motivation, altruism, and perseverance which, in the Committee's opinion, indicate that the applicant shows the potential of contributing to the advancement of the art, science, and practice of medicine after obtaining the MD degree. The Committee's consideration of these factors is based on all components of the applicant's file including letters of recommendation, the academic record, the supplemental application, and the interview if the latter is granted. Students who have been dismissed from medical school will not be considered for admission. International applicants must have a permanent resident visa. Canadian applicants are given special consideration.

Entrance Requirements: Completion of the baccalaureate degree is required for admission to the MD program. The education of a physician is life-long. The years of formal schooling are only preparation for the self- education that a physician must continue throughout his/her professional life. Applicants are encouraged to have a broad educational background. No specific major is deemed superior to another.

A major goal of undergraduate college work should be the development of the applicant's intellectual aptitudes and to provide for his/her overall development and maturation. The premedical studies required for admission are set in order to provide the student with a firm foundation in subjects considered essential for the study of medical sciences, to provide the Committee on Admissions a means to evaluate aptitude for negotiating the scientific challenges of the medical education curriculum.

At least four full academic years of acceptable college credit earned in a college or institute of technology currently approved by an agency recognized by the Association of American Medical Colleges and by the Council on Medical Education of the American Medical Association. These agencies are:

- North Central Association of Colleges and Secondary Schools
- Middle States Association of Colleges and Secondary Schools
- New England States Association of Colleges and Secondary Schools
- Northwest Association of Colleges and Secondary Schools
- Western Association of Colleges and Secondary Schools
- Southern Association of Colleges and Secondary Schools

The satisfactory completion of three years of pre-medical education by December 15 deadline. Courses and credits include:

General Biology or Zoology with laboratory	8 semester hrs. - 12 quarter hrs.
Inorganic chemistry with qualitative analysis and laboratory	8 semester hrs. - 12 quarter hrs.
Organic Chemistry with laboratory	8 semester hrs. - 12 quarter hrs.
General Physics with laboratory	8 semester hrs. - 12 quarter hrs.
English Composition	6 semester hrs. - 9 quarter hrs.
Biochemistry****	3 semester hrs- 5 quarter hrs

*****New for 2019-20

One academic year equals either three quarters, two semesters; or one semester and two quarters.

Students who do not satisfactorily complete required college courses are not accepted. "Satisfactory Completion" of required courses is interpreted by the Admissions Committee as an average grade of at least "C" in each subject field. "Satisfactory Completion" of three years of pre-medical education is interpreted as an average grade of at least "C" for the entire work of the three years. No student who has attained a general college average falling below "C" will be eligible for consideration.

It is recommended that the applicant supplement the basic requirements with courses in the humanities and the natural and social sciences designed to promote broad cultural development. It is recommended that elective courses be selected from such subjects as comparative anatomy, quantitative analysis, physical chemistry, psychology, sociology, statistics, and logic. Highly specialized courses that occur in the undergraduate curriculum such as neuroanatomy, histology, human anatomy, bacteriology, immunology, and physiology are very helpful but will not be substituted for courses generally required for entry to medical school.

The Committee on Admissions prefers that the required premedical courses not be taken on a Pass/Fail basis, but that grades be received. The committee recommends that, if two or more introductory courses are offered by the undergraduate departments, the applicant take the more rigorous of the basic science courses.

An accepted student is responsible for completing all prerequisite course work prior to matriculation. It is understood that a student accepted by the school will be denied admission if he/she fails to complete all specifically required courses and to maintain a good record of scholastic performance and conduct during the period following acceptance.

All applicants are required to take the Medical College Admission Test (MCAT). Results of the test must be received before an applicant can be completely evaluated by the Committee on Admissions. Applicants are strongly urged to take the test no later than the Spring of the calendar year preceding the year of entrance into the medical school so that the score can be considered early and the test can be taken again if improvements in performance are desired. Those who take the test at a later date may find themselves at a disadvantage in that the class may be filled, or largely so, before receipt of test scores. The committee takes into consideration the number of times an applicant takes the MCAT and the improvement in the scores, therefore repeat attempts are discouraged without adequate preparation. Applications and information about the test may be obtained from college advisors or by writing directly to:

Medical College Admission Test
The American College Testing Program P.O. Box 456
Iowa City, Iowa 52243 (319) 337-1357
For information see: www.aamc.org/students/mcat/start.htm

Students accepted for admission must pay tuition and fees in accordance with MMCSOM policy in order to enter. Students may apply for loans, scholarships, and grants in aid in order to meet these financial obligations. The ability to finance a medical education is not a factor in the selection of candidates for admission. However, the final responsibility for payments of fees and tuition and for the provision of living expenses lies with the student. The School may require proof of financial resources before granting matriculation. Only U.S. citizens or international students holding a permanent resident visa are eligible for financial aid.

Application Procedure: Meharry Medical College School of Medicine participates in the American Medical College Application Service (AMCAS) of the Association of American Medical Colleges.
AMCAS is a centralized procedure for applying to any participating medical school with only one application and one set of official transcripts of academic work. Formal application for admission to the first-year class

must be submitted through AMCAS. The AMCAS application for admission, common to all participating medical schools, is available online only at www.aamc.org. Applicants should follow the AMCAS menu. For more information, applicants may call: (202) 828-0600 or see: http:// www.aamc.org/audienceamcas.htm.

Regular Admission: Meharry Medical College School of Medicine will accept AMCAS applications to the first-year entering class beginning June 1 of the year prior to enrollment. The deadline for having all required credentials into AMCAS is December 1 of the year prior to admission. (This is a receipt date, not a postmark date.) AMCAS applications received after December 1 will not be forwarded to MMCSOM. Upon receipt of the AMCAS application, persons who pass the preliminary screening are sent supplemental applications so that the evaluation process may continue. Applicants are required to submit the electronic supplemental application to the Office of Admissions and Recruitment by January 15 of the year in which admission is sought. All supplemental applications must be accompanied by an electronic processing fee of $65. This fee is not refundable, nor can it be credited toward tuition, if applicant is accepted. Applicants are encouraged to submit materials well in advance of the deadline to allow sufficient time for receipt of all materials requested and to resolve any logistical problems that may occur prior to the deadline. Three (3) individual letters of recommendation, preferably from science faculty who have taught you, or a pre-medical committee composite letter of recommendation are required to complete the application. Once all supplementary materials are received and the application is complete, the applicant's admission credentials are reviewed and evaluated. Selected applicants are invited for a personal interview. Following the interview, if granted, final decisions are made by the Committee on Admissions. Decision notifications begin in November and continue until the class is filled.

Early Decision Admission: This is an optional program for the applicant whose first-choice school of medicine is MMCSOM and who desires an admission decision by October 1st. To receive this special consideration, the applicant must:

1. Submit an AMCAS application as an Early Decision applicant to Meharry Medical College School of Medicine (You will be restricted from applying to any other medical schools until MMCSOM reaches a decision) We strongly advise applicants considering applying as an Early Decision applicant to seek advice from the Director of Admissions in advance;
2. Present an academic program of a minimum of 90 semester/135 quarter hours that indicates completion or plans for completion, of all courses required for admission
3. Have a superior academic record and correspondingly strong scores on the MCAT
4. Submit all required credentials to AMCAS by August 1
5. If invited, appear for a personal interview on a mutually convenient date prior to October 1 and,
6. Accept a position in the class, if offered one.

The AMCAS Application for Admission contains complete instructions regarding the Early Decision Program.

Personal Interview: After all application materials have been received, the completed application is screened for possible interview. The Committee on Admissions would like to interview every applicant who passes the initial evaluation screening process, but since this involves thousands of applicants, that is not possible. Only those students who, on the basis of application data, appear to merit serious consideration for admission are selected for interviews. Approximately 6% of all applicants will be invited to MMCSOM for an interview. Invitations for interviews are by email and in writing, and the Admissions Office schedules all appointments. The interview is at the applicant's expense.

Non-Disclosure Policy: Meharry Medical College's policies applying to the disclosure of information on student records are consistent with federal and state regulations. Applicants should be aware that letters and statements of recommendation or evaluation are prepared, submitted, or retained with a documented understanding of confidentiality and are not subject to inspection by applicants. To ensure that the confidentiality of materials in each applicant's file is protected members of the Admissions and Student

Affairs Office staff will not divulge over the telephone, or in writing, information regarding a decision on an applicant. One exception to this rule is that, if written consent is given, the Admissions Office may inform the student's premedical advisor of action taken on the application by the Committee.

Accepted Applicants: Upon notification of an offer of acceptance for admission to MMCSOM, the applicant is allowed three weeks to accept the invitation and to submit a $100 deposit (certified check or money order only). This deposit is applied to the tuition of the matriculating student. If the student withdraws the application prior to April 30th , the deposit ($100) is refunded.

New Matriculants: Entering students who withdraw to attend another school will be charged applicable fees and tuition.

Transfer Students: Transfer admissions are rare. However, applications are accepted from students in LCME accredited U.S. and Canadian schools of medicine, who are in good academic standing, have the full approval of the dean of their current school, and have a cogent reason for requesting transfer. Admission is contingent upon space availability therefore, academically qualified applicants can still be denied admission due to lack of space.

Former Medical Students: Students are not considered for admission who have previously matriculated in medical school and have been dismissed for academic or disciplinary reasons

BS/MD Program: the 4+4 program

In order to increase the number of culturally competent African-American physicians serving the medically underserved population as well as to help alleviate health-care disparities, Meharry Medical College established the Bachelor of Science/Doctor of Medicine [BS/MD] program.

The program begins in the summer following the freshmen year at select Historically Black Colleges or Universities [HBCU] and will continue during the summer of each year of college. Each level consists of a six-week summer enrichment program with courses sequenced to provide a preview of the most difficult courses in the upcoming year. Participants will receive conditional acceptance into Meharry's School of Medicine upon successful completion of the program.

Through linkages with ten HBCUs [Alabama A & M, Albany State University, Alcorn University, Fisk University, Grambling State University, Jackson State University, Hampton University, Southern University, Tennessee State University, and Virginia Union University], students who matriculated into these universities majoring in the Biological Sciences or Chemistry and who maintained a 3.25 on a 4.0 scale GPA throughout their first year are invited to participate in the Summer Enrichment Program at Meharry Medical College. These students are recommended by the Site Coordinators [pre-med advisors] at each university based on the coordinator's personal knowledge of the students as well as the students' potential to succeed in the program as evidenced by above-average SAT or ACT scores and strong academic performance at the undergraduate level. The final selection to be enrolled in the enrichment program is made by the Meharry Medical College BS-MD Program Director and Staff.

Students are provided with student mentors from Meharry to assist with their acclimation and orientation. Courses usually taught are Pre-Calculus, Cell Biology, Organic Chemistry, Physics, Computer Literacy, Medical Terminology, English, Oral Communication, Written Communication, and applicable MCAT prep depending on level of education. Rising fourth year students participate in the full MCAT Preparation Course.

Technical Standards for Admission, Retention, and Graduation

Medical education requires that the accumulation of scientific knowledge be accompanied by the simultaneous acquisition of skills and professional attitudes and behavior. Medical school faculties have a responsibility to society to matriculate and graduate the best possible physicians. Thus, admission to medical school is offered to those who present the highest qualifications for the study and practice of medicine. Technical standards presented in this document are prerequisite for admission, retention, and graduation from the School of Medicine at Meharry Medical College. All courses in the curriculum are required in order to develop the essential skills required to become a competent physician.

Graduates of medical schools must have the knowledge and skills to function in a broad variety of clinical situations and to render a wide spectrum of patient care. The School of Medicine at Meharry Medical College acknowledges Section 504 of the 1973 Vocational Rehabilitation Act and PL 11-336, the Americans with Disabilities Act (ADA) 1993, but ascertains that certain minimum technical standards must be present in prospective candidates. A candidate for the M.D. degree at Meharry Medical College School of Medicine are considered without regard to disability, but with the expectation that they can complete satisfactorily all parts of the curriculum within the prescribed four-year period. The school does not offer a decelerated curriculum.

A candidate for the M.D. degree must have aptitude, abilities and skills in six areas: observation, communication, motor, conceptual, integrative and quantitative, and behavioral and social. Technological compensation can be made for some handicaps in these areas, but a candidate should be able to perform in a reasonably independent manner, without assistance. The use of a trained intermediary means that a candidate's judgment must be mediated by someone else's power of selection and observation. Therefore, third parties cannot be used to assist students in accomplishing curricular requirements in the six skill areas specified. The School of Medicine provides reasonable accommodations in its academic programs to qualified individuals with disabilities. A reasonable accommodation is one that does not require substantial program modifications or lower academic standards.

Students will be judged not only on their scholastic accomplishments, but also on their physical and emotional capacities to meet the full requirements of the School’s curriculum and to graduate as skilled and effective practitioners of medicine.

Observation: The candidate must be able to observe demonstrations and participate in experiments in the basic sciences including, but not limited to: anatomic, physiologic and pharmacologic demonstrations in cadavers, animals, microbiologic cultures and microscopic studies of micro-organisms and tissues in normal and pathologic states. A candidate must be able to observe a patient accurately at a distance and close at hand. Observation requires not only the use of the sense of vision, but other sensory modalities as well. It is enhanced, for example by the sense of smell.

Communication*:* A candidate should be able to speak, to hear and observe patients in order to elicit information; describe changes in mood, activity and posture; and perceive nonverbal communications. A candidate must be able to communicate effectively and with sensitivity toward patients and other students. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with all members of the health care team.

Motor Coordination or Function: Candidates should have sufficient motor function to elicit information from patients by palpation, auscultation, percussion and other diagnostic maneuvers. A candidate should be able to perform basic laboratory tests (urinalysis, CBC, etc.), carry out diagnostic procedures (protoscopy, paracentesis, etc.) and read EKGs and X-rays. A candidate should be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required of physicians are cardiopulmonary resuscitation, the

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, problem solving, reasoning, analysis and synthesis. Problem solving and the critical thinking skills demanded of physicians require all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relations of structures.

Behavioral and Social Attributes: Candidates must possess the emotional health required for full use of their intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients and the development of mature, sensitive and effective relationships with patients. Candidates must be able to tolerate physically taxing workloads and to function effectively when stressed. They must be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Empathy, integrity, concern for others, interpersonal skills, interest and motivation are all personal qualities that should be assessed during the admission and education processes.

Candidates for the M.D. degree must have somatic sensation and the functional use of the senses of vision and hearing. Candidate's diagnostic skills will also be lessened without the functional use of the senses of equilibrium, smell or taste. Additionally, they must have sufficient exteroceptive sense (touch, pain and temperature), sufficient proprioceptive sense (position, pressure, movement, stereognosis and vibratory) and sufficient motor function to permit them to carry out the activities described in the section above. They must be able to consistently, quickly and accurately integrate all information received by whatever sense(s) employed and they must have the intellectual ability to learn, integrate, analyze and synthesize data.

The Meharry Medical College School of Medicine will consider for admission any applicant who demonstrates the ability to perform or to learn to perform the skills listed in this document. Students will be judged not only on their scholastic accomplishments, but also on their physical and emotional capacities to meet the full requirements of the school's curriculum in order to graduate as skilled and effective practitioners of medicine. The following technical requirements apply:

1. The candidate is able to observe demonstrations and participate in experiments in the basic sciences.

2. The candidate is able to analyze, synthesize, extrapolate, solve problems and reach diagnostic and therapeutic judgments.

3. The candidate has sufficient use of the senses of vision and hearing and the somatic sensation necessary to perform a physical examination and perform palpation, auscultation and percussion.

4. The candidate can reasonably relate to patients and establish sensitive, professional relationships with them.

5. The candidate can communicate the results of an examination to the patient and to colleagues with accuracy, clarity and efficiency.

6. The candidate can learn and perform routine laboratory tests and diagnostic procedures.

7. The candidate can perform with precise, quick and appropriate actions in emergency situations.

8. The candidate displays good judgment in the assessment and treatment of patients.

9. The candidate possesses the perseverance, diligence and consistency to complete the medical school curriculum and to enter the independent practice of medicine.

10. The candidate is able to accept criticism and respond with the appropriate modification of behavior.

11. Able to tolerate physically taxing workloads and have the ability to display flexibility and function effectively when stressed, and function well in the face of uncertainties and in changing environments.

Academic Regulations

Requirements for M.D. Degree

A student is deemed eligible for the M.D. degree after satisfactorily completing all graduation requirements outlined in the Student Academic Policies and Procedures Manual, School of Medicine, including the successful completion of the prescribed course work and attainment of passing scores on the USMLE Step 1, Step 2 Clinical Knowledge and Step 2 Clinical Skills in a timely manner.

An affirmative vote of the executive faculty of the School of Medicine with concurrence of the dean and confirmation by the Board of Trustees is required for candidacy for the M.D. degree. Students who do not complete graduation requirements prior to commencement will receive diplomas when all requirements are completed, at alternative dates approved by the Board of Trustees.

Examination and Grades

Examinations will be scheduled by the Curriculum Committee and coordinated centrally by the Department of Professional and Medical Education for the preclinical years, and on a departmental basis during the clinical years.

The *definitive* evaluation of the student's work is expressed by A, B+, B, C+, C, F, S, U, W/A or W/F which appears on his/her official transcript and on the report from Banner given to each student at the end of each semester. All departments are required to provide a departmental narrative evaluation along with a letter grade for all students. All grades are to be submitted in Banner within three weeks by the department. (*For more information, see Student Academic Policies and Procedures Manual for the School of Medicine)*.

Change of Grade

A **Change of Grade Form** must be submitted with the explanation to the Senior Associate Dean of the Office of Student and Academic Affairs for approval after the student successfully or unsuccessfully completes or remediates the course when there is an " I " grade or in general when a previously submitted final grade was in error. A recommendation for change of grade must include appropriate reasons for the

change requested. The form must be approved and signed by the departmental chairperson and approved by the Associate Dean or Senior Associate Dean of Student and Academic Affairs.

Grades for Off Campus Courses

Students taking selectives/electives will be governed by the grading system (scale) of our institution or course. The grade will be accepted as submitted by the away institution and transposed to Meharry's evaluation system.

Leave of Absence

A leave of absence is an interruption of the normal course of study requested by a student in good academic standing, requiring prior written approval by the Dean or his/her designee, Senior Associate Dean or Associate Dean for Student and Academic Affairs. A student's leave of absence shall not extend beyond one calendar year. The official date of leave shall not antedate the date of the student's request. By College policy, students are not allowed to sit for board exams while on leave of absence unless the leave is to enhance their medical education or professional development, by participating in yearlong research or an additional graduate degree at another institution. An official leave of absence form must be processed and can be obtained from the Office of Student and Academic Affairs. If the situation is appropriate, the Senior Associate Dean of Student and Academic Affairs may place a student on an Involuntary Leave of Absence and the form will be processed.

A leave of absence may be granted upon receipt of a written request for reasons of medical leave, personal and/or family exigencies, financial straits requiring full-time employment, and other such extenuating situations. A Leave of Absence solely due to academic difficulty, i.e., failing courses, exams, and practice tests, will not be granted. Medical Leave requests must include a written statement from a physician that such a leave is indicated in the best interests of the student. The written request and physician statement (if requesting medical leave) will be considered by the Senior Associate Dean of Student and Academic Affairs and may require additional documentation to accompany a request. One month prior to an anticipated return, the student must request in writing, termination of Leave of Absence for reinstatement to active status. The student may be required to provide official documentation to return, including professional documentation of meeting Technical Standards for Admission, Retention, and Graduation, an up to date background check and urine drug screen, and stipulations to abide during matriculation. Extensions of the Leave of Absence may be requested, but not necessarily granted. If granted, the extension will not exceed one additional year. Failure of such requests will result in automatic dismissal.

Leave of Absence: Yearlong Research or Professional Development

LEAVE OF ABSENCE FOR ENHANCEMENT OF MEDICAL EDUCATION

The College may allow eligible students, who are in good standing, to go on a Leave of Absence to enhance their medical education by participating in yearlong research or an additional graduate degree at another institution. Students who enroll in yearlong research might be eligible to receive Meharry Medical College School of Medicine elective course credit, rather than take a Leave of Absence, if the research opportunity meets the standards required as outlined by the Course Director of the course, Medical Scholar Research Experience (ASMD 903 and ASMD 904, 9 credit hours each). Students whose research does not qualify for elective credit and students who are enrolled as full-time students at other institutions for an additional graduate degree, must take a Leave of Absence.

All students must meet with the Senior Associate Dean for approval. For the purpose of sitting for the USMLE Step examination, students in this category will be considered enrolled at Meharry Medical College. Meharry Medical College tuition will not be assessed, but modified fees may apply.

Academic Standards and Policies

All students are required to meet the current academic standards found in the Student Academic Policies and Procedures Manual, School of Medicine. The policies are reviewed with all matriculating students. A copy of the manual or other policies can be retrieved from the School of Medicine website or viewed on Blackboard.

*S*tudent Evaluation and Promotion

The Student Evaluation and Promotion Committee reviews student progress and makes recommendations regarding student advancement (*for more information, see Student Academic Policies and Procedures Manual of the School of Medicine)*.

If at the completion of one year's curriculum, a student has received a passing grade in all courses, the student will be promoted to the next academic level. If a student receives a grade of F in one or more courses which have a total number of credit hours less than or equal to 11 credit hours within a given academic year, the student will be required to repeat the course(s) failed. However, if the failed course is Foundations of Health, Disease, and Management, the student will either be required to repeat the year, if eligible; or otherwise be dismissed due to poor academic performance. Any student receiving a grade of F in courses totaling greater than or equal 22 credit hours in a single academic year, will be recommended for dismissal from the School of Medicine due to poor academic performance or progress.

Any student receiving a grade of F in a course taken a second time and any student repeating a year due to dropped or failed courses, who subsequently earns an F in any of those courses will be referred for dismissal due to poor academic performance or progress. (*Additional information regarding this policy may be found in the Student Academic Policies and Procedures Manual of the School of Medicine.)*

Academic Standing

A student at Meharry Medical College is in good academic standing if he/she is properly registered with the Office of Admissions and Records and is unencumbered by pending action of the Office of Dean pursuant to recommendations from the Student Evaluation and Promotion Committee arising from academic or other difficulties.

Satisfactory Academic Progress

In order to remain in good standing, a student enrolled in the School of Medicine must maintain a cumulative grade point average of a minimum of 2.0 (C average) and has passed the licensure exams (as applicable). The following will be placed on automatic **academic probation** in the School of Medicine: 1) failure to maintain a cumulative grade point average of a minimum of 2.0, 2) any student who received a grade of **F** in courses totaling 11 credit hours, but less than 22 credit hours in an academic year, 3) any student in Phase I who is repeating the year, and subsequently fail any of their remaining courses in Phase I of the curriculum. In addition, when a student is eligible to take USMLE Step 1 or Step 2 (CS and CK) during each semester and fails to do so at least once, the student is considered as failure to academically progress.

No student may remain on probationary academic status any longer than one (1) semester and must be counseled when any probation status is established by the Senior Associate Dean of Student and Academic affairs. No student will be allowed to remain on probation for more than two (2) semesters throughout his or her entire matriculation without being considered for dismissal by the Student Evaluation and Promotion Committee.

Depending on whether or not the student is permitted to enroll in the next regular semester or a subsequent semester, the time permitted for achieving the minimal cumulative grade point average or good academic standing will be limited to one academic year. Any exception to this policy must be justifiable and approved by the Student Evaluation and Promotion Committee and Dean of the School of Medicine with stated reasons for such exception. The academic policies established by the School of Medicine for evaluation of a student's academic progress and standing, along with the judgment of the Dean as to the student's aptitude and suitability for continued enrollment, will be weighed in arriving at a policy exception decision.

Dean's List

This list is compiled by the Student Evaluation and Promotion Committee for approval by the dean. A student shall be eligible for the Dean's List at the end of each academic year if he/she uniformly does outstanding work. Students achieving a weighted grade point average between 3.50 and 4.00 for a given year's curriculum shall be eligible for the Dean's List for that year. Decelerated students are not eligible for the Dean's List until they have completed the first year courses.

Honors

A committee led by the Associate Dean or Senior Associate Dean for Student and Academic Affairs will review student academic progress and receive nominations in review of awards. The Committee's action shall be based upon (a) the rules of the College, (b) the regulations of the School of Medicine, and (c) the conditions set forth by the benefactor.

A minimum cumulative GPA of 3.445 is required for consideration for graduation with honors. An honor is designated by the Office of Admissions and Records and is only for graduation stratification.

Students may designate grades receiving "A" on Curriculum Vitae to denote they have excelled in a course.

The criteria for graduating with Honors are as follows:

Highest Honors	3.945-4.00
High Honors	3.745-3.944
Honors	3.445-3.744

Withdrawal from a Course

When a student wishes to withdraw from a course, he/she shall obtain the appropriate form from the Assistant Dean in the Office of Student/Academic Affairs.

A student will not be permitted to withdraw from a course except for unusual or extenuating circumstances beyond the student's control, which make it impractical or impossible to complete the course. The Senior Associate Dean for Student and Academic Affairs may require documentation to accompany a request for

withdrawal. **Poor academic performance alone does not constitute sufficient basis for withdrawing from a course.** Students permitted to withdraw from a course for medical reasons or other extenuating circumstances before more than half of the course is complete will have a **"WA" (Withdrawal Administrative)** entered on their transcript. The student must obtain the approval of the appropriate department head, the Senior Associate Dean or Associate Dean for Student and Academic Affairs, and file the approved form in the Office of Admissions and Records Students who are failing and withdraw from a course when more than half of the course has been completed will receive a grade of "F".

Withdrawal from the College

A student may withdraw from Meharry Medical College after filing an official Withdrawal Form with the Office of Student and Academic Affairs, and then having the form properly executed, by the Office of Admissions and Records. The student's total performance in all courses will be evaluated at the time of the requested withdrawal in accordance with the policies of the School. Based on the review of the student's performance, he/she may be dropped from the College for poor academic performance. Grades for completed courses shall be recorded on the official transcript. Should the student seek to return to Meharry Medical College following withdrawal, a formal application must be filed with the Office of Admissions and Records and the regular application process followed.

Student Dismissal

The School of Medicine reserves the right to dismiss a student at any time for violation of the student conduct policy, inadequate academic performance and upon determination that a student is, for any reason, unfit to continue as a student or as a potential practicing physician. When a student is recommended for dismissal by action of the Student Evaluation and Promotion Committee, the formal Procedures for Review and Appeal of Academic Actions policy should be followed.

Request for Transfer from the School of Medicine

All activities regarding transfers must occur through the Office of Student/Academic Affairs. Requests for letters of recommendation required for a transfer must be made in writing with a clear statement of the reasons for considering the transfer. Students must have a conference with the senior associate dean for student/academic affairs. Students must present written certification by the Treasurer's Office that no outstanding indebtedness to the College exists, before any letters of recommendation will be forwarded. Letters of recommendation will reflect the academic standing of the student only. Failure to comply with the requirements for transfer will result in non-concurrence with the transfer.

Request for Transfer to the School of Medicine

The following policies apply to medical students seeking to transfer into the Meharry School of Medicine:

- The applicant must be enrolled and in good standing at an LCME-accredited medical school. LCME accreditation assures the institution meets the same expectations for student learning outcomes and training experiences.
- In order to verify the applicant is in good academic standing and eligible to continue training at their present institution, the applicant must submit (1) a dean's letter of evaluation and (2) a letter of reference from another administrator.
- The applicant must be a U.S. citizen, permanent resident (copy of green card required), or U.S. National (supporting documentation required).

- The applicant must be eligible to receive federal financial aid, if needed.
- Applicants must be reviewed and accepted by the Admissions Committee. There must be space available in the class to which the student is requesting admission. The recommendation for transfer must ultimately be approved by the Dean of the School of Medicine.
- The Senior Associate Dean for Student and Academic Affairs and the Preclinical and Clinical Subcommittees of the Curriculum Committee will assess the comparability of curricula between the Meharry School of Medicine and the transferring institution; all coursework will be reviewed in regards to its acceptability from the transferring institution. Transcripts and courses taken will also be reviewed by a representative from the Student Promotion and Evaluation Committee to assure both the student's academic achievement and that courses taken are equivalent to those in the class they are seeking to join.
- Recommendations from the Senior Associate Dean for Student and Academic Affairs, the Admissions Committee, Curriculum Committee representative(s), and the Student Promotion and Evaluation Committee will be submitted to the Dean of the School of Medicine, who makes the final decision as to the applicant's admission status. This decision, along with the student's information, will be sent to the Office of Admissions and Recruitment.
- Due to the new curriculum, a candidate cannot transfer into the second year of medical school.
- To transfer into the third year of medical school, the applicant's transcript must include passing grades in courses containing these disciplines: pathology, physiology, pharmacology, physical diagnosis, psychiatry and behavioral science, biostatistics/epidemiology, and organ systems. A passing score on USMLE Step 1 is also required.
- Courses having a grade of *D*, *F*, *N*, or *I* will not be accepted.
- Prior to matriculation, the applicant must submit copies of all official undergraduate, graduate, and professional school transcripts to Meharry's Office of Admissions & Recruitment.
- Once a student matriculates at Meharry, the Meharry transcript does not record any prior credit hours for the transfer student. However, the transfer student's transcript for the years at another institution is kept in the student's official file in the Office of the Registrar.

Credit for coursework that is not eligible for transfer toward a medical degree includes:

- Experiential learning
- Credit by examination
- Advanced placement
- Professional certificates
- Non-credit courses
- Audited courses
- Correspondence or extension courses

School of Medicine Academic Calendar 2019-2020

Legend

M1 = 1st year medical student
M2 = 2nd year medical student
M3 = 3rd year medical student
M4 = 4th year medical student

Dates	Descriptions
Friday, April 5, 2019	M4 Registration Fall 2019
Wednesday, May 1 – Saturday, June 1, 2019	M1 & M3 Registration
Thursday, May 23, 2019	M2 Registration - Summer Research Eligible
Wednesday, May 29, 2019	M2 Classes Begin - Summer Research Eligible
Monday, June 17, 2019	M1 Orientation
Monday, June 17 - Friday, June 21, 2019	M3 Orientation- Classes Begin: Intersession I
Tuesday, June 18, 2019	M1 Classes Begin
Monday, June 24, 2019	M4 Classes Begin
Thursday, July 4, 2019	*** 4th of July Holiday**
Tuesday, July 30, 2019	M2 Classes Begin for Non-Summer Research Eligible
Friday, August 9, 2019	White Coat Ceremony (M1 Year Students Only)
Monday, September 2, 2019	*** Labor Day Holiday**
Tuesday, September 17, 2019	Constitution Day
Monday, October 7, 2019	**Convocation**
Friday, October 11, 2019	Fall Census Date
November 1 – 29, 2019	M1 - M3 Spring 2020 Registration
Wednesday, November 13, 2019	M4 Registration Spring 2020 Starts
Thursday, November 28 - Friday, November 29, 2019	*** Thanksgiving Holiday**
Friday, December 13, 2019	Fall Semester Ends
Thursday, January 2, 2020	M1 - M2 Spring Classes Begin
Monday, January 6, 2020	M3 – M4 Spring Classes Begin
Friday, January 17, 2020	**Rev. Dr. Martin Luther King Jr. Remembrance Program**
Monday, January 20, 2020	*** Rev. Dr. Martin Luther King Jr. Holiday**
Thursday, February 14, 2020	Spring Census Date
Wednesday, March 11, 2020	Student Research Day (No Class)
Monday, March 16 - Friday, March 20, 2020	M1 Spring Break
Friday, March 20, 2020	**Match Day**
Monday, March 30 - Friday, April 3, 2020	M4 Spring Break
Saturday, April 4 – Monday, April 6, 2020	M2 & M3 Spring Break
Monday, April 13, 2020	M4 Online Registration Begins
Friday, April 10, 2020	*** Meharry Day**
Friday, May 1 - Friday, May 29, 2020	M1 - M3 Registration
Friday, May 15, 2020	M1 Classes/Exam End
Saturday, May 16, 2020	Commencement
Monday, May 25, 2020	*** Memorial Day Holiday**
Friday, June 12, 2020	M2 Semester Ends
Monday, June 15, 2020	AY3 Begins
Friday, June 26, 2020	M3 Rotations End
Friday, June 26, 2020	M4 Classes End (Graduate & Continuing Students)
Calendar Summary by Class	
June 17, 2019 – May 15, 2020	M1
May 29, 2019 – June 12, 2020	M2
Monday, June 17, 2019 - Friday, June 26, 2020	M3
Monday, June 24, 2018 - Friday, June 26, 2020	M4

*** Holiday – No classes**

Financial Information
Tuition and Fees

Tuition and fees are set annually by the Board of Trustees and are subject to review and change without notice. The tentative tuition and fees for the 2019-2020 academic year are listed below.

	M1	M2	M3	M4	Super Year 4	Board Review
Tuition	$52,617	$51,084	$51,084	$49,596	$24,798	$5,868
Total fees	$7,230	$6,804	$6,721	$4,933	$4,678	$4,253
Total Tuition and Fees	$59,847	$57,888	$57,805	$54,529	$29,476	$10,121

The table does not include expenses for room and board, books & supplies, transportation, and miscellaneous expenses. For additional information regarding these expenses and an itemized list of fees, please contact the Office of Financial Aid or visit the website:

Basic Sciences Course Descriptions

DEPARTMENT OF PROFESSIONAL AND MEDICAL EDUCATION

Division of Clinical Skills and Competency

COURSE DESCRIPTIONS

ASMD 336 –Principles & Practice of Medicine I (PPM I) - This course, offered in the fall of the first year, concentrates on the patient-physician encounter; communication skills, history taking and physical examination skills. PPM I focuses on the development of critical thinking skills and clinical reasoning skills. These skills are developed through the use of medical simulation (task trainers, standardized patients and medical simulators). A focus is also placed on patient confidentiality and the development of cultural competency skills and health literacy (styles of communication, cultural competency, and patient confidentiality). Students will utilize the Pamela C. Williams Center for Simulation and Clinical Skills for an introduction to clinical ethics and end-of-life issues. Scheduled sessions will utilize a small group format. Assessment of the students will be performed using skills assessment checklist and Objective Skill Clinical Examination (OSCE). Additional interactive sessions address medicine and societal issues relating to basic science coursework occurring parallel to the PPM course. **(2.0 credit hours)**

ASMD 337- Principles & Practices of Medicine II (PPM II) -- This course is offered during the Spring semester of the first year and builds on the simulated clinical observations made by the students during their time in the Pamela C. Williams Center for Simulation and Clinical Skills. Having participated in simulated clinical interactions with standardized patients mastering clinical skills and techniques as well as taking histories and performing physical examinations, the students continue to develop their own skills in these two key areas. Peer partners, standardized patients, medical simulation and videotaping sessions with feedback are used to help the students perfect their interviewing and examination skills. The physical

examination skills learned during this semester facilitate their transition to PPM III and PPM IV courses.. **(2.0 credit hours) Prerequisites: Principles & Practice of Medicine I (PPM I)**

ASMD 496 and ASMD 497 Principles & Practice of Medicine III & IV (PPM III and PPM IV) – This course provides a bridge for the longitudinal incorporation of the basic sciences and clinical medicine as well as the tools and the experiences necessary to develop competent, compassionate physicians. These two courses build the foundational skills needed for effective patient communication and physical examination techniques. There is an emphasis on professionalism, health literacy, cultural competence and communication of medical information through written and oral presentations. This course will utilize small group activities, simulation activities, skills sessions, standardized patient encounters, practical exposure to physical examination skills and faculty/peer feedback. This course provides regular feedback by faculty and peers. **ASMD 496 – 2 credit hours and ASMD 497- 2 credit hours) Prerequisites: ASMD 336 and ASMD 337- Principles & Practice of Medicine – I and II**

Division of Integrated Didactics

COURSE DESCRIPTIONS

ASMD – 311 Principles & Practice of Research (PPR) – This course will introduce students to a clear understanding of the scientific method. Activities include assembly of a portfolio of materials related to types of research, applications for research opportunities as well as items demonstrating understanding research as applied to clinical medicine. During this course, students will identify a mentor with whom they will work on their hypothesis-driven research activity during the MSRE course. Types of research projects may include laboratory or basic research, clinical research, population-based research or community-based participatory research. In order to successfully complete this course, students must complete or update the CITI online training. **(1 credit hour)**

ASMD 370 – Academic Societies Masters' Colloquium I (ASMC I) This course is designed to develop students' knowledge, attitudes, and skills related to principles of professionalism, ethics, and caring, as students embark on their roles as future physicians. Specific topics include the culture of medicine, physician-patient communication, empathy, humanism, and various controversies in medicine. This course occurs in weekly two-hour sessions, applying active learning methods that focus on facilitated discussions. Sessions may also incorporate video, art, music, poetry, and role-play. Colloquium sessions are deliberately positioned at the end of each instructional week to facilitate reflection on the clinical presentation-based themes of the week and the issues they raise related to the general subjects of the colloquium. Students will learn, teach and lead in groups called Academic Societies, each guided by a designated clinical and non-clinical scientist faculty member. These faculty members will partner with each Academic Society to facilitate the professional development of students, and provide regular feedback to each student in individual meetings. Students will also develop skills of self-evaluation and peer-evaluation in this course, as they practice ownership of their lifelong professional development. **(2 credit hours)**

ASMD 371 – Academic Societies Masters' Colloquium II (ASMC II) This is the second semester of a four-semester sequence. Academic Societies Masters' Colloquium II is designed to develop students' knowledge, attitudes, and skills related to principles of professionalism, ethics, and caring, as students expand their identities as future physicians. Specific topics include telemedicine, research ethics, medical jurisprudence, gender issues, life balance, healthcare economics, end of life care, integrative medicine, and various controversies in medicine. This course occurs in weekly two-hour sessions, applying active learning methods that focus on facilitated discussions. Sessions may also incorporate video, art, music, poetry, and role-play. Colloquium sessions are deliberately positioned at the end of each instructional week to facilitate reflection on the clinical presentation-based themes of the week and the issues they raise related to the general subjects of the colloquium. Students will learn, teach and lead in groups called Academic Societies, each guided by a designated clinical and non-clinical scientist faculty member. These faculty members will partner with each Academic Society to facilitate the professional development of students, and provide

regular feedback to each student in individual meetings. Students will also develop skills of self-evaluation and peer-evaluation in this course, as they practice ownership of their lifelong professional development. **(2 credit hours) Prerequisites: ASMC I**

ASMD 490 and ASMD 491– Academic Societies Masters' Colloquium III and IV (ASMC III and ASMC IV) These are the third and fourth semesters of a four-semester sequence. Academic Societies Masters' Colloquium is a series of weekly 2-hour sessions that occur on Friday mornings for medical students in Year 2. Sessions address issues related to ethics, controversies in medicine, evidence-based medicine, critical thinking, safety and quality improvement, communication, humanism, empathy, wellness, life-long learning, bias, leadership, and professionalism. Four courses (Academic Societies Masters' Colloquium I - IV) span the pre-clerkship years. They employ a variety of learning modalities including ethical analysis and reflection essays, and various types of discussion-based formats (e.g., student led and small group discussions). Every effort is made to arrange session topics to align temporally with the clinical presentations covered in the Foundations of Health Disease and Management Course and/or the students' sessions and experiences in the Social Foundations of Medicine Course. **(ASMD 490- 2 credit hours; ASMD 491- 2 credit hours) Prerequisites: ASMC I and ASMC II**

ASMD 375 Foundations of Health, Disease, and Management I (FHDM I). This course is offered to first year medical students during the Fall semester and is designed to foster the rapid acquisition, integration and application of scientific knowledge fundamental to the practice of medicine. Students will explore human health and disease within individual organ-system based units that are each organized into a series of 'clinical presentations' that reflect the major ways in which a person would present to a physician. This course will also provide the foundation for students to begin to understand the cellular basis for the physiologic and biologic manifestations of disease and the adaptations that the body makes to the changes produced by the disease process.

This first semester course of Year 1 consists of three integrated units: 'Introduction to Health and Disease' (IHD), 'Gastrointestinal System' (GIS), and 'Integumentary, Musculoskeletal, and Nervous Systems' (IMN). In the IHD unit, the molecular and cellular mechanisms underlying homeostasis, cell growth and division, quiescence, senescence and apoptosis will be introduced to provide a foundation for understanding the processes of health and disease. Biochemistry, cell biology, genetics, immunology, microbiology, and pathology are featured prominently in this unit. Highlights include the student's first hands-on experiences in the anatomy and microbiology laboratories. In the GIS unit, students will be introduced to the processes of motility, secretion, digestion and absorption, which form the basis of function in the gastrointestinal system. The numerous functions of the liver will be presented including those that relate to intermediary metabolism, blood detoxification, plasma protein synthesis, and bile production, forming a basis for recognizing, understanding and treating various diseases of the liver and hepato-biliary system. Within each of the clinical presentations, the pathology and etiologies of region specific diseases are explained as they relate to the underlying basic science. In the IMN unit, visual anatomy is featured by way of cadaver dissection, three-dimensional models, radiographs, computer assisted tomography, magnetic resonance imaging, angiograms, ultrasound images, and histological images. The neuroscience of movement and pain, the regulation of skeletal muscle contraction at the cellular and molecular levels, and the scientific principles of peripheral nervous system diseases are some of the themes explored in this unit. **(15 credit hours)**

ASMD 376 Foundations of Health, Disease, and Management II (FHDM II). This course is offered to first year medical students during the Spring semester and is designed to foster the rapid acquisition, integration and application of scientific knowledge fundamental to the practice of medicine. Students will explore human health and disease within individual organ-system based units that are each organized into a series of 'clinical presentations' that reflect the major ways in which a person would present to a physician. This course will also provide the foundation for students to begin to understand the cellular basis for the physiologic and biologic manifestations of disease and the adaptations that the body makes to the changes produced by the disease process.

This second semester course of Year 1 consists of three integrated units: 'Hematologic System' (HEM), Cardiovascular and Respiratory Systems' (CVR), and 'Renal System' (RNL). In the HEM unit, students will learn about the structure and function of the formed elements of blood as well as the components of blood plasma as they apply to health and hematologic diseases. In the CVR unit, students will explore the normal parameters of the cardiovascular and respiratory systems in conjunction with cardiologists, pulmonologists, acute care physicians, and other practicing specialists. Several laboratory experiences are included to emphasize critical physiological concepts underlying the function of the cardiovascular and respiratory systems. The RNL unit will focus on fluids, electrolytes, homeostatic mechanisms and the structure and function of the kidney. **(10 credit hours); Prerequisites: ASMD 375, FHDM I**

ASMD 492 Foundations of Health, Disease, and Management III (FHDM III). This first semester course of Year 2 consists of three integrated units: 'Central Nervous System and Special Senses (CNS), 'Endocrine System' (END) and Reproductive System (REP). The sequence of Clinical Presentations (CPs) within each unit has been structured so that the concepts developed during the study of one topic provide the foundation for subsequent topics. Basic information is provided for each CP including its clinical significance and a schematic representation of the relationships of the potential causes. These provide the basis for discussion of each of the underlying basic science principles. Each clinical presentation includes a set of basic science learning objectives related to the appropriate scientific concepts of anatomy (gross and neuroanatomy, including medical imaging), behavioral science, biochemistry, cell and molecular biology, embryology, genetics, histology, immunology, microbiology, nutrition, neuroscience, pathology, pharmacology and physiology. Discipline experts provide instruction using various teaching methods including lectures, laboratories, and small group discussions. Both basic science and clinical faculty participate in this component of the instructional process. **(10 credit hours); Prerequisites: ASMD 375, FHDM I; ASMD 376, FHDM II**

ASMD 493 Foundations of Health, Disease, and Management IV (FHDM IV). This unit transitions logically from the preceding focus on the male and female reproductive systems,and spans the arc of human development from neonatology to geriatrics. The unit concludes with CPs that explore mental health and mental illness across the lifespan. **(4 credit hours); Prerequisites: ASMD 375, FHDM I; ASMD 376, FHDM II; and ASMD 492, FHDM III**

ASMD 380 – Social Foundations of Medicine I (SFM I) This course focuses on developing the clinical reasoning skills of students, including the application of evidence-based medicine; increasing their knowledge of the complex interactions between patient health and the social structures in their communities; and applying the health coaching skills taught in the Medical Immersion Program. The course is organized into three interrelated modules. In the Clinical Reasoning module, students will develop scientific reasoning and critical thinking skills including the interpretation of biostatistics and epidemiological findings. The Population and Community Health module will explore the social determinants of health and introduce public health principles and strategies. Students, working in teams, will carry out a community assessment to identify the health-related resources and problems in Nashville utilizing observational research, public health databases, and community expert interviews. In the Health Coaching module, students will continue to develop their health coaching skills by interacting with clients in Meharry clinics and by phone. These coaching sessions will count towards the requirements for certification as a health coach. The course is designed to emphasize active learning and will utilize flipped classrooms, team-based learning, small groups, and self-directed learning. In addition to performance on quizzes and exams, students will be required to make oral and written presentations, and to submit documentation of health coaching encounters. **(2 credit hours).**

ASMD 381 – Social Foundations of Medicine II (SFM II) This is the second semester of a four-semester sequence. Social Foundations of Medicine II builds on the knowledge and skills developed in Social Foundations of Medicine I. Clinical Reasoning will introduce more advanced biostatistical tests and the core concepts and skills of evidence-based medicine. Topics will include analysis of scientific papers, interpretation of clinical research data, diagnostic screening interpretation and measurement of healthcare quality and patient safety. In Population and Community Health students will research community-based public health interventions related to a community need they have identified. In teams, they will develop and present a proposal for a community-based intervention. In the Health Coaching module, students will

continue to develop their health coaching skills and to accrue clinical encounters towards the number required for certification. This course utilizes active learning techniques including flipped classrooms, small groups, team-based learning, and self-directed learning. In addition to performance on quizzes and exams, students will be required to make oral and written presentations, and to submit documentation of health coaching encounters. **(2 credit hours). Prerequisite: ASMD 380, SFM I.**

ASMD 494 – Social Foundations of Medicine III (SFM III) This course focuses on preparing the student to work within complex healthcare systems, to understand the ways the current healthcare system deals with special populations and healthcare issues and to apply standard tools for assessing quality and quality improvement in healthcare systems. Students will also continue the practicum phase of Health Coaching and will register for their certification examination. The course will utilize Team-Based Learning, expert panels, student projects, and client encounters. **(3 credit hours). Prerequisite: ASMD 380, SFM I and ASMD 381, SFM II**

ASMD 495– Social Foundations of Medicine IV (SFM IV) This course focuses on preparing the student to work as part of an interprofessional team to deliver patient-centered care utilizing information on factors affecting health behaviors. The course will utilize Team-Based Learning and an Interprofessional Team Training Activity. **(1 credit hour). Prerequisite: ASMD 380, SFM II; ASMD 381, SFM II; and ASMD 494, SFM III**

ASMD 385 Medical Immersion Program (MIP). An intensive six-week pre-clerkship program required for all incoming medical students in the fall semester that consists of four units: Emergency Medicine Introduction (EMI), Health Coaching (HC), HMX genetics and HMX physiology. Each unit has specific components which lead to understanding pathophysiology, genetics/genomics, physiology, and communication skills. The EMI and HMX courses will be an introduction and opportunity to prepare for the demanding coursework, time management and self-discipline of the medical school curriculum. The HMX online short courses allow students to learn fundamental concepts applied to health and disease. Upon successful completion of an HMX unit course, participants will receive a Certificate of Completion or, in the case of exceptional students, a Certificate of Achievement from the HMX System. In order to improve communication skills students will also complete online modules and live sessions in health coaching which will eventually lead to certification as a Health Coach **(9 credit hours)**

ASMD 420 – Board Review Course - The Board Review Course is an extended review of the basic sciences to prepare students to take the United States Medical Licensure Examination (USMLE) Step 1. The course provides participants with concentrated reinforcement and review, as well as access to several question banks with items similar to those seen on USMLE Step 1. Students are encouraged to utilize these items on a daily basis following pre-assessment. A battery of discipline-specific comprehensive exams and practice tests are also used to profile each participant's performance. Individual counseling is affected by utilizing the performance profiles (measured outcomes), enabling feedback and direction for self-study and by providing information to the skills specialist for test-taking mechanics. This customized approach assures the individual adequate time for preparation to eliminate cognitive weaknesses while providing a mechanism to measure proficiency in each area to guide certification progression, graduation and ultimately licensure. **(14 credit hours)**

ASMD 443 – Medical Student Research Experience (MSRE) – Through this course each student undertakes a mentored and evaluated individualized hypothesis-driven research project for a minimum of eight weeks. Projects may be selected based on the student's own preference and may range from basic science laboratory ("bench science") clinical research, population- based research or community based participatory research. Students will be supervised directly by an experienced research investigator, at any institution, pending approval. Students will present a description of their activities in a structured abstract along with a poster presentation. **Prerequisite: ASMD 311 Principles and Practices of Research; and completion of the CITI online training. (9 credit hours)**

ASMD 50101, ASMD 50201, ASMD 50301 – Intersessions I – III - The Intersession courses are offered between clinical rotations during various times throughout the third year. Students revisit basic science concepts, including topics such as: normal and adapted cell, cell Injury and cell death, inflammation and repair, pharmacokinetics/pharmacodynamics, genetic testing, principles of neoplasia, breast cancer, prostate cancer, gastrointestinal diseases, gynecologic oncology, lymphatic and hematopoietic diseases chemotherapy, diagnostic imaging, diseases of immunity, hemodynamic, infectious disease, and environmental and nutritional diseases. In addition, other hot and emerging topics discussed include, medical ethics, bioterrorism, medical errors and physician stress management. **(2 credit hours each)**

ASMD 505 – Board Review Course - The Board Review Course is an extended review of the basic sciences to prepare students to take the United States Medical Licensure Examination (USMLE) Step 1. The course provides participants with concentrated reinforcement and review, as well as access to several question banks with items similar to those seen on USMLE Step 1. Students are encouraged to utilize these items on a daily basis following pre-assessment. A battery of discipline-specific comprehensive exams and practice tests are also used to profile each participant's performance. Individual counseling is affected by utilizing the performance profiles (measured outcomes), enabling feedback and direction for self-study and by providing information to the skills specialist for test-taking mechanics. This customized approach assures the individual adequate time for preparation to eliminate cognitive weaknesses while providing a mechanism to measure proficiency in each area to guide certification progression, graduation and ultimately licensure. **(14 credit hours)**

ASMD 602 – Capstone - The Clinical Management (Capstone) course is a required four-week module in the fourth year. This multidisciplinary course includes lectures and discussions of: preparation for the residency experience: ACGME rules, USMLE Step 3, fellowships, GME rules and regulations, policies on probation and termination, managing stress and balancing career and family; role of interns in patient care: rounds, pre-rounds, sign-out notes, discharge planning, avoiding prescription and other medical errors; fiscal management: financial planning, buying versus renting a home, investment strategies, managing debt and billing for services; legal medicine; ethics, clinical equipoise and patient advocacy; death and dying, palliative care, pain management, hospice, delivering bad news; clinical research and research during residency; evidence-based medicine, how to read a paper, biostatistics; and miscellaneous special topics – cancer, geriatrics, global medicine and the future of health care reform. **(9 credit hours)**

ASMD 607- Medical and Research Ethics- The focus of this course is applied medical ethics in clinical, research and community environments. Course activities include both seminar instruction and clinical experience. Through active engagement with ethical issues in seminars, readings, and clinical settings, students will develop comprehension, applied problem-solving skills, and leadership skills in clinical and research ethics, as well as enhancing their ethical sensitivity to clinical encounters of all kinds. **Prerequisite: completion of pre-clinical courses (9 credit hours)**

ASMD 610 - Service Learning Elective- This is an opportunity for all medical students to provide a pedagogical framework in which students will engage in service learning in the community by providing service in response to community identified concerns and learn about the context in which service is provided, the correlation between service and their academic coursework, and their responsibility as citizens. Service learning activities can occur at any time from matriculation until graduation and may occur longitudinally across academic years. **1 credit Hour (equivalent 200 service hours)**

ASMD 620 – Board Review Course - The Board Review Course is an extended review of the clinical disciplines to prepare students to take the United States Medical Licensure Examination (USMLE) Step 2 CK and CS. The course provides participants with concentrated reinforcement and review, as well as access to several question banks with items similar to those seen on USMLE Step 2. Students are encouraged to utilize these items on a daily basis following pre-assessment. A battery of disciplinespecific comprehensive exams and practice tests are also used to profile each participant's performance.

Individual counseling is affected by utilizing the performance profiles (measured outcomes), enabling feedback and direction for self-study and by providing information to the skills specialist for test-taking mechanics. This customized approach assures the individual adequate time for preparation to eliminate cognitive weaknesses while providing a mechanism to measure proficiency in each area to guide certification progression, graduation and ultimately licensure. **(14 credit hours)**

ASMD 903 and 904 – Medical Scholar Research Experience 1 (903) Fall and 2 (904) Spring– Through these courses each student undertakes a mentored and evaluated individualized hypothesisdriven research project for one year. Projects may be selected based on the student's own preference and may range from basic science laboratory ("bench science") clinical research, population- based research or community-based participatory research. Students will be supervised directly by an experienced research investigator, at Vanderbilt (other institution), pending approval. Students will present a description of their activities in a structured abstract along with a poster presentation. **(ASMD 903- 9 credit hours) and (ASMD 904- 9 credit hours). Prerequisite: ASMD 311 Principles and Practices of Research; and completion of the CITI online training. ASMD 443 Medical Student Research Experience (MSRE)**

ASMD 905 and 906 – Medical Scholar Research Experience 1 (905) Fall and 2 (906) Spring– Through these courses each student undertakes a mentored and evaluated individualized hypothesisdriven research project for a second year. Projects may be selected based on the student's own preference and may range from basic science laboratory ("bench science") clinical research, population- based research or community-based participatory research. Students will be supervised directly by an experienced research investigator, at Vanderbilt or other institution, pending approval. Students will present a description of their activities in a structured abstract along with a poster presentation. **(ASMD 905- 9 credit hours) and (ASMD 906- 9 credit hours) Prerequisite: ASMD 903 and ASMD 904 – Medical Scholar Research Experience 1 (903) Fall and Medical Scholar Research Experience 2 (904) Spring**

Clinical Sciences Course Descriptions

DEPARTMENT OF FAMILY AND COMMUNITY MEDICINE

Objectives

The department's goal is to educate and train physicians in the clinical specialty of family medicine and to encourage all physicians to provide high quality, continuous, comprehensive primary care. The Department provides training with family physicians teaching the basic clinical and academic skills necessary to provide continuing, comprehensive health care unrestricted by age, gender, organ system and location of service.

COURSE DESCRIPTIONS

FAMD 502 - Family Medicine Clerkship - A one-on-one preceptor experience at one of the many approved office practices and health centers located in Tennessee. This clerkship focuses on ambulatory services in a comprehensive, continuing health care program, preferably utilizing a family health care team. Students are under the supervision of a physician preceptor as part of a family health care team. They are expected to share in decision-making and in planning for patients, their families and communities. **(9 credit hours)**

FAMD 600 – Fourth Year Ambulatory Family Medicine – This rotation is a four- week, community-based clinical experience designed to expose fourth year medical students to community-based experiences in underserved communities across the state of Tennessee with a focus on the primary care specialties. This clinical experience occurs under the tutelage of primary care physicians who have

well rounded clinical practices. In addition to theoretical and clinical community-based exposure, this rotation is designed to positively influence medical students to consider locating their own clinical practice in a rural or urban underserved area **(9 credit hours*)* Prerequisite FAMD 502 – Family Medicine Clerkship**

ELECTIVE COURSES

FAMD 602 - Family Medicine Research Elective - This elective is designed to introduce students to clinical research opportunities in Family Medicine. The Department has many ongoing clinical research opportunities requiring the participation of a multidisciplinary team. The student, with supervision of the principal investigator, will participate as a member of the multidisciplinary team on design, data and outcomes of clinical research. **(9 credit hours)**

FAMD 604 - Family Medicine Fourth Year Elective – This elective experience fully utilizes the abundance of ambulatory family and community health care settings available throughout Tennessee. The objective is to progressively and systematically build upon the skills and knowledge previously gained during the first and second years and the clinical clerkship in Family Medicine. Preventive medicine, psychology and social disciplines are structured into the family health team focus. In addition to clinical experiences, students are provided with the opportunity for community involvement so that they gain more insight into the characteristics of the community and the impact environment has on the health of the population served. Our numerous preceptors permit exposure to the broad spectrum of diverse health care practice models that exist in rural and urban areas, in an effort to inculcate an adequate operational concept of health and illness management. **(9 credit hours)**

FAMD 612- Preventive Medicine-This course for fourth year medical students provides practical clinical experience and didactic academic training in general preventive medicine and public health. Students will attain an introductory working knowledge of issues pertaining to direct patient care, administrative, and system-based practice in the specialty of preventive medicine. This knowledge and practical experience will prepare students for future medical school rotations and residency training in preventive medicine or other primary care specialties. Clinical experiences take place at the Alvin C. York Campus of the Department of Veterans' Affairs in Murfreesboro, Tennessee. Didactic sessions will take place on Wednesdays in the Preventive and Occupational Medicine Conference Room at Meharry Medical College as well as through individual and small group sessions with the course director or faculty mentor in the Preventive Medicine Clinic at the VA. Additional activities and locations may be utilized based on opportunities that arise during any given month-long rotation. These assignments will be issued at the discretion of the Preventive Medicine program director and core faculty. **Prerequisite: Successfully completion of all 3rd year medical student rotations. (9 Credit hours)**

DEPARTMENT OF INTERNAL MEDICINE

COURSE DESCRIPTIONS

MEDI 501 – Internal Medicine Clerkship – This is a 12-week core clerkship during which third- year medical students spend four weeks at various clinical sites affiliated with the Department of Internal Medicine. The students spend four weeks on each of the following services: general internal medicine service of the Nashville General Hospital, in-patient service at the Murfreesboro VA Medical Center and at one of numerous rural or urban ambulatory sites. A balanced program of clinical work is designed for students, with emphasis placed upon perfecting the techniques of history taking, physical examination, case presentation and the functional utilization and correlation of basic laboratory and clinical findings. Students participate in rounds regularly with residents and attending physicians. In these settings, the student assumes a role as an accepted and valuable member of the health team and thus plays a major role in the daily evaluation and treatment of patients. Students take night call with their team and attend weekly medical grand rounds, journal club and morbidity/mortality conferences. Daily lectures and

conferences in selected subspecialty areas are given to supplement the educational program. Neurology is incorporated into Internal Medicine clerkship and consists of two weeks. This component teaches the principles and skills underlying the recognition and management of the neurological diseases a general medical practitioner is most likely to encounter in practice. Additional neurology exposure occurs on the consultative neurology service and diagnostic testing at Nashville General Hospital and surrounding hospitals in the Nashville/Murfreesboro region. **(27 credit hours)**

MEDI 600 – MS 4 Ambulatory Internal Medicine – This is a four week elective with a primary focus for the student to gain advanced fundamental clinical knowledge and skills to increase diagnostic and management acumen in outpatient management of young adults to geriatrics and to further the knowledge of students concerning community resources and their integration in the management of the patient holistically. Students will become familiar with appropriate drug usage and side effects. Students will increase communication skills between patients and their families and other healthcare providers. (9 credit hours) Prerequisite: MEDI 501-Internal Medicine Clerkship

MEDI 603 – MS 4 Internal Medicine - This is a four-week clerkship for fourth year medical student, which may be served at either Nashville General Hospital at Meharry or the Alvin C. York VA Medical Center in Murfreesboro, Tennessee. Students are expected to take call and are taught by both medical faculty and residents of internal medicine. The purpose of this clerkship is to acquaint fourth year medical students with the increased level of patient care responsibility required during the first year of graduate training in internal medicine, especially those of day-to- day care and acquisition of the skills for coordinating the ancillary services each patient requires. Strong emphasis is placed on further development of bedside clinical skills, i.e., history taking, physical examination and communication skills. This course fulfills the fourth year internal medicine requirement. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI 617 - Intensive Care Unit Clerkship - This is a four-week clerkship for fourth year medical students, which may be served at either Nashville General Hospital at Meharry or at Alvin C. York VA Medical Center. The primary goal for this clerkship is to enable fourth-year medical students to participate in all aspects of the care and management of critically ill patients. Students will become familiar with detailed aspects of respiratory failure and hemodynamic compromise, as well as the integrated management of these patients. Students may be assigned call duty and will be taught by medical faculty and residents. This course fulfills the fourth year internal medicine requirement. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship.**

ELECTIVE COURSES

MEDI 620 – Cardiology Elective – This course is designed to familiarize fourth year medical students with current trends in cardiac physiology and pathophysiology that are utilized in the diagnosis, treatment and management of patients with a wide range of cardiac diseases. Students are taught to integrate basic science knowledge in the clinical management and problem solving process. Seminars and small group sessions are used to teach students how to interpret electrocardiograms (EKGs) and use other diagnostic modalities to evaluate and treat patients with cardiac diseases. Students must attend the Cardiology Clinic twice weekly and participate in consult service activities. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI 621 – Internal Medicine Elective – This elective (sub-internship) is designed to prepare students to assume the responsibilities of the first year of graduate training in internal medicine, especially those of day-to-day care on the general internal medicine in-patient service. The course also provides opportunities for students to acquire the skills needed to coordinate the ancillary services each patient requires. Strong emphasis is placed on further development of bedside clinical skills, i.e., history taking, physical examination and oral and written communication skills. Sub-interns will be responsible for a

small number of patients ranging from three to six as assigned by senior residents. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI – 622 – Neurology Elective - The general neurology rotation gives the student an opportunity to experience the full breadth of general neurology not seen during the Internal Medicine core clerkship. Student will participate on the inpatient neurology consultation service and in neurology clinics at Nashville General Hospital. In addition, students will participate in neurophysiologic diagnostic services (EEG and EMG) and will attend the Memory Disorders Clinic. Specialized instruction will be provided for epilepsy, stroke, migraine treatment and peripheral nerve disorders. This course cannot be substituted for PSYC 601. **(9 credit hours)**

MEDI 623 – Dermatology Elective – The **elective** in dermatology is designed to familiarize fourth year students with a variety of epidermal and dermal responses, as well as the characteristics of basic dermatologic disorders, thereby becoming knowledgeable about how to make decisions concerning diagnosis and management of most common skin problems. Students may be assigned to a Nashville General Hospital clinic or to an affiliated private practice. **(9 credit hours)**

MEDI 624 – Gastroenterology Elective – A major goal for this elective is to teach both the clinical and academic content of gastroenterology (GI). Students may be assigned to a clinic or at a private practice office. They are expected to become familiar with the scope of gastroenterology and its application to the general care of patients. Students are expected to read assigned topics on gastroenterology and then discuss those topics with the attending physician. They must attend all GI procedures, consultative rounds, informal discussions, conferences and visit other hospitals with their attending physician. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship.**

MEDI 625 – Nephrology – This elective introduces students to clinical problems in nephrology. Included in this elective is the evaluation of patients with glomerular and interstitial renal failure and end-stage renal disease (ESRD). Students are expected to participate in daily rounds and must attend the weekly outpatient clinic in the hospital and at the Dialysis Clinic located on campus. They are assigned readings on topics for nephrology. All teaching conferences involving nephrology must be attended by students for this elective. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI 626 - Pulmonary Diseases - This is an introductory course to acquaint students with the important principles and practices of pulmonary medicine. It is structured to develop competency in making initial evaluations of patients with pulmonary disease; and how to use chest x-rays in evaluating pulmonary problems. In this course, students should become competent in making initial evaluations of patients with pulmonary disease. They will also become familiar with using chest x-rays as an evaluative tool for pulmonary problems and the appropriate treatment of major respiratory diseases. They must also participate in all relevant activities, including daily rounds and clinical conferences. They will also learn the basic principles for treating major respiratory diseases. Students will also learn how to manage patients with acute medical illnesses in the Intensive Care Unit ("ICU"). **(9 credit hours) Prerequisite: MEDI 501 - Internal Medicine Clerkship.**

MEDI 627 - Infectious Diseases – Fourth year - students are introduced to the most common problems of infectious diseases in adolescents and adults and how to manage these problems. The environment for this course includes the emergency room, private practice and the hospital. Students are expected to perform workups on selected patients and then make presentations to the Infectious Disease faculty. They are expected to read cases and/or other assigned literature on infectious diseases and make reports on their findings. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI 628 - Hematology/Oncology - This elective provides exposure to community hematology/ oncology problems in an inpatient and outpatient setting. This course is designed to develop skills for evaluating, diagnosing and treating patients with anemia, solid tumors, common hematologic problems

and other oncologic emergencies. Students are assigned various readings to develop an understanding of the natural history of the different kinds of malignancies. They are expected to learn how to interpret peripheral smears as well as bone marrow aspirations through review sessions with the attending physicians. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI 629 - Endocrinology/Metabolism - This elective will help the student to develop an understanding of basic pathophysiology of endocrine diseases with emphasis on clinical endocrinology, including diabetes mellitus (I & II) and inpatient/outpatient management. It also acquaints the student with home glucose monitoring, insulin therapy and acute/chronic complications of the disease. Students will become familiar with thyroid disorders, pituitary disorders, calcium metabolism, electrolyte disorders and adrenal disease. This elective ma y be served in the clinic, the hospital or in a physician's private office or a combination of sites. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI 630 - Medical Oncology - During this elective, students will learn how to manage common oncology problems such as pain, infection/sepsis/opportunistic disease and emergencies associated with cancer. They will be exposed to the interdisciplinary aspect of oncology and the cooperation necessary between the chemotherapist, radiation therapist and the surgical oncologist. Students will observe and participate in treating cancer patients as it evolves through interactive discussions between patient/family and oncologist and through the use of case studies. Students are expected to attend and participate in weekly tumor boards and breast cancer seminars. Special reading assignments may be made by the attending physician. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI 631 - Emergency Medicine - This course is structured to develop an appreciation of the role of emergency physicians and the emergency department in a medical system and to develop clinical skills appropriate to this type of setting. It provides training in how to quickly develop good rapport with patients to elicit information needed for history-taking. This course is intended to help the student to quickly assess the situation and respond rapidly to diagnose, treat and manage the patient. Students are expected to develop broad-based general medical and surgical skills as well. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship or SURG 501- Surgery Clerkship.**

MEDI 635 - General Medicine - This elective provides an overview of what to expect for the practice of general internal medicine. Students are expected to develop an appreciation of what is required of an attending physician when caring for inpatients as a member of an intern/resident team. Students are expected to perform essentially the same duties of an intern but with half the workload. They will participate in the management of assigned patients under the supervision of a resident. The sub-intern must attend conferences and attend rounds with the team as well as take call. A faculty preceptor is assigned to the student for regular supervision. **(9 credit hours) Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI 637 – Rehabilitation Medicine Elective - Students who elect to take this course will work with York VA Medical Center in Murfreesboro, TN. They will become familiar with the physical consultation services, including trauma (brain injury, spinal cord injury and multiple fractures), neurology, orthopedics and other diagnostic categories. They will have the opportunity to observe physical and occupational therapists, speech pathologists and audiologists individually or in a team approach regarding patient care. Students will also learn how to perform a functional examination and participate on the consult, outpatient clinic and electromyogram (EMG) services. **(9 credit hours) Prerequisites: MEDI 501- Internal Medicine and SURG –501 – Surgery Clerkships**

MEDI 640 – Geriatrics - This course provides the student with the didactic and clinical care experiences associated with the aging patient. It focuses on the interdisciplinary approach for assessment and management of elderly patients from those who are still active, functional and ambulatory, as well as those who are considered frail. Students are introduced to settings that include multiple components of the healthcare continuum such as ambulatory clinics, day hospitals, acute inpatient hospitalization, long-term care facilities and rehabilitation. Students work with health professionals from a variety of disciplines

to develop skills in evaluating and treating medical problems unique to the elderly. **(9 credit hours) Prerequisites: MEDI 501- Internal Medicine**

MEDI 643 - Medical Research - This elective in clinical research guides the student in activities, which may ultimately produce a manuscript that is suitable for submission to a peer review journal. Students participate in chart and/or literature reviews and assist in designing and conducting clinical research studies. If the manuscript is suitable, it may be submitted in abstract form to a scientific meeting for possible presentation. This elective may take longer than the normal 4-week period based on the project selected, and is prearranged between a clinical researcher in the Department of Internal Medicine and the student. **(9 credit hours)**

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

COURSE DESCRIPTIONS

OBGY 501 - **Obstetrics and Gynecology Clerkship** - This course is designed to help medical students become familiar with many of the usual and unusual gynecological and obstetrical problems that will confront them, especially during their postgraduate training periods and to encourage them to cultivate the initiative and sober judgment necessary in the mastery of these problems. To achieve this objective, students are assigned to smaller groups, which rotate alternately on the obstetrical or gynecological service while gaining specific exposure to various aspects of the field. Students are required to attend weekly grand rounds, daily bedside rounds, weekly clinical pathology conferences and perinatal mortality conferences. Emphasis is placed on history-taking, physical examination, case presentation, diagnosis, clinical management, testing and laboratory. Audiovisuals, student-controlled seminars, lectures and clinical demonstrations are used liberally. **(18 credit hours)**

OBGY 600 – Obstetrics & Gynecology Ambulatory - The ambulatory course in obstetrics and gynecology is to reinforce competence in medical history and physical examination taking into account the female patient's social, demographic, ethical, and culturally significant factors. This outpatient course is structured to provide ample opportunity for the senior student to apply learned measures to assess and manage the female patients concerns. The student will develop strength in evaluating and managing common obstetrical and gynecological problems, the menstrual cycle, family planning, and sexual health care needs. The student will be introduced to a range of patients and become familiar with female health care from preconception through menopause. The goal is for the student to identify and evaluate patient concerns and to develop strength in management and treatment plans for health maintenance. (**9 credit hours) Prerequisite: OB/GYN 501 – Obstetrics and Gynecology Clerkship. Preceptor – Clerkship Director**

OBGY 602 - Obstetrics and Gynecology Electives - Four-week elective courses in obstetrics and gynecology are offered each rotation during the academic year. The course is open to students in the fourth year. The primary objective of the elective is to stimulate interested students, at an early stage of their career, in the field of obstetrics and gynecology. Each student is responsible for reviewing the anatomy and physiology of the female reproductive system. The fourth year student choosing an elective in OB/GYN is expected to gain advanced experience closely akin to an internship (sub-internship). External electives require approval by the departmental chairperson or clerkship director. **(9 credit hours) Prerequisite: OB/GYN 501** - **Obstetrics and Gynecology Clerkship**

OBGY 603 - Reproductive Endocrinology and Infertility Elective - Over a four week period, students engaged in this elective will be expected to gain a thorough fundamental knowledge of reproductive endocrinology, infertility and related topics as outlined in the Education Objectives of the Association of Professors of Gynecology and Obstetrics (APGO). These objectives include an understanding of normal and abnormal puberty, amenorrhea, hirsutism and virilization, normal and abnormal uterine bleeding,

dysmenorrhea, climacteric, infertility and premenstrual syndrome. **(9 credit hours) Prerequisite: OB/GYN 501** - **Obstetrics and Gynecology Clerkship**

OBGY 604 – Research Elective – This is an eight to 12 week elective, depending on the area of interest and allows the student to implement a research project with a faculty member from the Department of OB/GYN. Students will be trained in the basic skills necessary to do research, including observation, development of hypotheses, experimental design, statistical analysis, interpretation of results, drawing of conclusions and writing of a research report. The student is required to present data at student research day or a national meeting. **(9 credit hours)**

OBGY 605 - Maternal and Fetal Medicine - This four-week maternal and fetal medicine (MFM) elective will consist of the following: office ultrasound, dating and fetal anatomy survey, exposure to fetal malformations, biophysical profile, prenatal care, amniocentesis, perinatal consultation, genetic consultation and periconceptual counseling. Students will participate in night calls and obstetrical procedures, including episiotomy, instrumental delivery, caesarean sections and cerclage procedures. Students will learn when to refer high-risk obstetrical patients to MFM, to perform obstetrical pelvic exams and to offer prenatal care. Additionally, students will analyze and interpret fetal surveillance, such as monitoring ante partum and intrapartum. Students will participate in all didactic sessions for obstetrics, as well as participate in high risk obstetrical conferences, perinatal/neonatal conferences, weekly case presentations and other departmental continuing medical education programs related to obstetrics. Students will choose a clinical topic for research, conduct a literature review and submit a paper suitable for publication. **(9 credit hours) Prerequisite: OB/GYN 501** - **Obstetrics and Gynecology Clerkship**

OBGY 606 – Gynecological Surgery Elective - This is a four week course which has an emphasis on gynecological surgical procedures. Over a four week period the student will be assigned to various operative procedures two to three days per week and to gynecological clinic. The students will participate in all pre-operative inpatient and outpatient rounds and preparation. The student will be expected to follow the patient throughout the rotation. The student will be introduced to operative approach and methods to include open and laparoscopic procedures. The student is expected to participate in all pre-operative conferences, morbidity and mortality rounds, and pathology presentations. It is expected that the student will be introduced to a wide range of gynecological surgical procedures for both benign and malignant conditions. (**9 credit hours) Prerequisite: OB/GYN 501 – Obstetrics and Gynecology Clerkship. Preceptor – Clerkship Director**

DEPARTMENT OF PATHOLOGY, ANATOMY AND CELL BIOLOGY

Objectives

The department's objective is to imbue students with the desire to maintain a state-of-the-art proficiency in pathology, professional responsibility, and a life-long commitment to the expanding reservoir of scientific ideas. Objectives are designed to further enhance the collective ability to deliver superior undergraduate and graduate medical education, and to effectuate the best possible patient care and other service-related responsibilities.

Elective Courses

Electives are designed and offered with the aim of broadening the pathobiological and pathophysiological knowledge sphere of both undergraduate and postgraduate students in the health sciences. Courses are offered by prearrangement, with full participation of all members of the faculty.

COURSE DESCRIPTIONS

ANAT 602 – Gross Anatomy Elective- Specialized sessions arranged for advanced study or research in specific anatomical areas utilizing small group activities, which facilitate teacher- student interaction. **(9 credit hours)**

PATH 602- Surgical Pathology- This four week course for fourth year medical students is designed to provide students with an understanding and appreciation of the central role of the surgical pathologist in patient management based on evaluations of tissue samples, including biopsies, fine needle aspirates, and cytology, removed for diagnostic purposes, and organs or portions of organs removed during surgery procedures. During this rotation, the student will participate in the surgical pathology rotation at Nashville General Hospital and will experience the spectrum of responsibilities of a surgical pathologist including interactions with clinicians. The student will work closely with the attending pathologist on service. **Prerequisite: Successfully completion of all 3rd year medical student rotations. (9 Credit hours)**

PATH 605- Forensic Pathology-This four-week course is designed to help fourth year medical students apply medical knowledge and gain diagnostic skills to diagnosis a cause of death. The course will cover the following topics: use of autopsy and microscopic techniques to delineate the cause of death, medical legal issues in reporting certain deaths, role of medical examiner, identifying factors to distinguish the cause of death, and proper techniques for photographs, documentation and preservation of evidence. Training will take place at the Davidson County Medical Examiners' office. **Prerequisite: Anatomy, and preference 3rd year clerkships. (9 Credit hours)**

DEPARTMENT OF PEDIATRICS

Objectives

The general objective of the Department of Pediatrics is to equip students with a broad insight into the principles and problems of pediatrics. The aim is also to imbue students with a propensity and readiness for the application of basic science principles in the analysis and study of the clinical problems of pediatric patients.

COURSE DESCRIPTIONS

PEDI 501 - Pediatric Clerkship - During a period of eight weeks, students are assigned to clinical duties in the inpatient and outpatient settings. Students obtain patients on rotation as they are admitted to the Nashville General Hospital, Vanderbilt Children's Hospital, East Tennessee State University, LeBonheur Children's Hospital in Memphis, and Centennial Hospital. They also see patients in the Meharry Pediatric Clinic, Matthew Walker Comprehensive Health Center and private office settings. Students have the opportunity to perform Clinical Laboratory Improvement Amendments (CLIA) wavered laboratory tests in the work-up of their cases. To ensure greater depth and more insight into the clinical problems presented by their cases, students are required to engage in certain unique supplementary diagnosis and therapeutic exercises in completing the study of the problems that the patient presents. Apart from formal lectures by the faculty on common pediatric problems, small group conferences, preferably at the bedside, are held and at that time the student's work and understanding of the patient's disease processes are discussed and evaluated. Demonstrations of the techniques of examining infants and children are given and supervised practice opportunities are provided so that each student achieves some degree of proficiency. In addition, students are given computerized cases to complete weekly. A simulated skills lab is available and allows for procedural techniques to be perfected. Attendance is required at ward rounds, ambulatory clinics and the weekly pediatric grand rounds, pediatric x-ray conference, case (morbidity and mortality) conferences and Clinical Pathology Conference (CPC). **(18 credit hours)**

PEDI 600 – **Fourth Year Ambulatory Pediatric Elective** is a four week elective with a primary focus for the student to gain advance fundamental clinical knowledge and skills to increase diagnostic and managerial acumen in children from birth through adolescents; to further the knowledge of students concerning community resources and their integration in the management of the patient holistically. ***Prerequisite: Pediatrics 501 preferably*** **(9 credits hours)**

ELECTIVE COURSES

Electives in pediatrics are available to fourth year medical students. These electives can be tailor- made to suit students desiring to increase expertise in ambulatory, primary care, endocrine, newborn intensive care unit (NICU) or research. The student must submit personal goals and objectives of skills and knowledge they foresee obtaining from these electives. The student is expected to participate in all didactic lectures and conferences as available.

PEDI 602 – Ambulatory Adolescent/Health Department- is a four week elective offering the opportunity to advance expertise in gynecological skills in the adolescent age group. The elective is spent in Meharry adolescent clinic and Health Department Sexually Transmitted Infection clinic. This elective focuses on increasing skills in sexual history taking and physical exam skills, as well as improving diagnostic acumen and management of adolescents with GYN issues and STI. **Prerequisite: Pediatrics 501 (9 credit hours)**

PEDI 605- Pediatric Research -This is an elective offered to a student to expose them to research in the pediatric age group. Students are expected to complete a CITI program for research and participate in a chart and /or literature review. If time permits, they must write a proposal that is to be IRB approved. Depending on the length of the research project, faculty PI will obtain IRB approval. The student submits a required research paper/abstract suitable for oral or poster presentation. This elective is prearranged between a clinical faculty researchers in Pediatrics with the student. **(9 credit hours).**

PEDI 606- Pediatric Neonatal ICU-This course provides students the clinical care experience in the neonatal intensive care unit. Student must submit personal goals and objectives for this course. The course focuses on didactics and clinical management of premature infants and infants with congenital anomalies. Students learn interdisciplinary approach to the neonate and discern growth, development, and complications due to prematurity. Students are introduced to ventilator management and other multiple components of health care of the premature infant. Students are expected to give an oral presentation of a clinical patient and provide an evidence based management critique and recommendation of that patient. **Prerequisite PEDI 501. (9 credit hours).**

PEDI 608- Pediatric Dermatology- This is an elective course to delve more deeply in to diseases of the skin and recognize the skin manifestations of chronic illnesses in the pediatric age group. Didactic and clinical exposure is offered in the private practice office. Students are expected to provide personal goals and objectives to the career purpose of taking this course and must provide an oral presentation of a clinical case providing evidence based management critique and recommendations of case. **(9 credit hours).**

DEPARTMENT OF PSYCHIATRY AND BEHAVIORAL SCIENCES

Objectives

The teaching of clinical psychiatry has two major goals: 1) imparting knowledge about psychiatric conditions and 2) cultivating sensitivity to the patient as an individual whose unique attitude toward self and the physician often play an important part in the physician's ability to diagnose and treat the patient. This sensitivity characterizes the good physician in every specialty of medicine.

COURSE DESCRIPTIONS

PSYC 501 - Psychiatry Clerkship – The third year clerkship period is four weeks during which students spend ten weekdays at one of several different inpatient psychiatric facilities learning about acute psychiatric patients and their management. The facilities include the VA Medical Center - Murfreesboro, Middle Tennessee Mental Health Institute and Tennessee Christian Medical Center. **(9 credit hours)**

ELECTIVE COURSES

PSYC 602 - Forensic Psychiatry - The forensics unit at Middle Tennessee Mental Health Institute incarcerates individuals who have been convicted of murder and have chronic psychiatric diseases. A second unit is an observation unit for individuals who have murder charges pending and the court system has ordered observation for the individual suspected of having a psychiatric illness. Activities include new patient assessment, follow-up and active participation in team meetings. Students may assist preceptors in the preparation of expert testimony in criminal cases. **(9 credit hours) Prerequisite: PSYC 501 - Psychiatry Clerkship**

PSYC 603 – Addiction - Students will be exposed to a wide variety of clientele to receive detoxification treatment for various substances as well as suffering from a variety of mental illnesses. The center offers inpatient and outpatient adult drug and alcohol detoxification programs, including the Rainbow Unit (a residential detoxification program for addicted and pregnant women and their new babies). Students actively participate in treatment team meetings, group therapy, new patient assessments and work with physicians in several ongoing substance abuse research assessment projects in data collection and analysis. **(9 credit hours) Prerequisite: PSYC 501 - Psychiatry Clerkship**

PSYC 604 – Psychiatry Research – This is a four- to twelve-week elective depending on the project selected. Students will have opportunities to assist in research in the following areas: psychometrics, college-age binge drinking, substance abuse, psychopharmacology and the elderly, forensic psychiatry and forms of abuse leading to subsequent mood disorders. **(9 credit hours)**

DEPARTMENT OF RADIOLOGY

Objectives

The objective of the Department of Radiology is to provide a basic understanding of imaging methods used to diagnose and treat disease. Radiographs of normal and pathological findings of the chest, gastrointestinal tract, bone, genitourinary, vascular and the neurological systems are discussed. Integration of imaging studies with knowledge of the basic and clinical sciences is stressed in evaluating diagnostic radiographic examinations. Also included are formal lectures covering radiation therapy, radiation biology, interventional radiology, nuclear medicine, ultrasonography, computed tomography, magnetic resonance imaging and current radiation safety during the rotation. In addition, the risks and cost benefits of the various imaging techniques are reviewed and analyzed in light of health care reform and cost containment.

COURSE DESCRIPTIONS

RADI 601 - Fourth Year Radiology Clerkship - This is a four-week required clerkship that is offered four times a year. The format includes lectures and presentations that are held in the Learning Resources Center four hours each morning. An organ system approach is utilized and incorporates all imaging modalities. Students are also encouraged to attend interdisciplinary conferences that are held jointly with other clinical departments. Emphasis is given to the evaluation of the various imaging modalities and the formulation of a differential diagnosis by the clinic delivering primary or specialty care to the patient. The

emphasis of the course is the development of a series of basic concepts on how to use imaging studies for the improvement of patient care, particularly in the managed care environment. Opportunities are also given to publish cases in current radiology journals. **(9 credit hours) Prerequisite: MEDI 501- Internal Medicine**

ELECTIVE COURSE

RADI 602 - Radiology Elective - Electives in radiology are offered to students in their fourth year. The students are introduced to the various subspecialty areas of radiology, including diagnostic, ultrasound, CT, MRI and nuclear medicine in actual clinical settings. The opportunity to evaluate imaging studies as they are being performed and interpreted is the focus of this elective. Emphasis is placed on proper selection and sequencing of studies as well as the differential diagnostic approach to interpretation. Students are assigned topics to research from the literature based upon clinical discussions. Students are also given the opportunity to participate in conducting clinical trials in radiology research such as interviews and database analysis. To participate students, must complete the CITI training and NIH certification at least 1 week before the elective begins. **(9 credit hours) Prerequisite: RADI 601 - Fourth Year Radiology Clerkship**

DEPARTMENT OF SURGERY

COURSE DESCRIPTIONS

SURG 501 – Surgery Clerkship - The third year surgical clerkship is served in a twelve-week block in the third year of medical school. During this time, students are exposed to general surgery, the surgical subspecialties and the emergency medicine division at Nashville General Hospital, the Alvin C. York Veterans Administration Medical Center and East Tennessee State University. Principles of acute trauma life support are incorporated into the rotation. Students are exposed on a rotating basis to evening call and the emergency room. In this role, they serve as a part of the health care team with active participation in the patient's care, under adequate supervision of staff and full and part-time surgical specialists. **(27 credit hours)**

ELECTIVE COURSES

SURG 611 – Orthopedics - The student will gain a basic knowledge of the anatomy, physiology and pathology of the musculoskeletal system and a basic understanding of diagnostic imaging studies that are useful in the evaluation of musculoskeletal problems. The student will be instructed in foundational information about the etiology, clinical presentation and treatment regarding diseases and disorders (trauma or non-trauma) encountered in an orthopedic practice. **(9 credit hours) Prerequisite: SURG – 501 – Surgery Clerkship**

SURG 614 – Urology - The student is expected to acquire a basic fundamental knowledge regarding the etiology, presentation and management of common urologic conditions. Materials for reading and review will be provided to the student at the outset of the rotation. The student will be expected to participate on hospital rounds and assist in the operating room. **(9 credit hours) Prerequisite: SURG – 501 – Surgery Clerkship**

SURG 615 – Anesthesiology - The goal of this course is to train students in the skill of basic airway management. This includes supplemental oxygen support, bag-mask ventilation and tracheal intubation. Intravenous catheter placement is taught, and the student is expected to develop an understanding of inhalation, intravenous and local anesthetics. The student also is expected to actively participate in the perioperative evaluation and management of patients undergoing general and regional anesthesia. Prerequisite: **(9 credit hours) prerequisite: SURG – 501 Surgery Clerkship**

SURG 616 - General Surgery - This fourth year elective rotation is four weeks in duration and can be taken upon successful completion of the third year clerkship. The experience is designed to approximate that of an intern and consists of assignments to the operating room, outpatient clinics and inpatient service. Evaluation is made by direct observation of the attending staff. Students are required to keep a log of their surgical cases and clinical experiences. **(9 credit hours) Prerequisite: SURG – 501 – Surgery Clerkship**

SURG 619 - Emergency Surgery - The basic purpose of this clerkship is to familiarize the student with the diagnostic and therapeutic skills for managing medical emergencies. The student is expected to learn the basic principles of emergency medical care. The student is required to research and present a topic in emergency medicine. **(9 credit hours) Prerequisite: SURG – 501 – Surgery Clerkship**

SURG 620 – Rehabilitation Medicine - The student should have a basic knowledge of the anatomy, physiology and pathology of the musculoskeletal system. Students will participate in the outpatient evaluation and management of patients, hospital rounds and will assist in the clinic with spinal cord injury patients. **(9 credit hours) Prerequisites: MEDI 501- Internal Medicine and SURG – 501 – Surgery Clerkship**

SURG 639 – Ophthalmology - The student is required to review the ocular/orbital anatomy y and learn the differential diagnosis of red eye, acute visual loss and chronic visual loss. The student will be taught to recognize the ocular manifestations of systemic disease, especially diabetes mellitus. Also the student will be an active participant in the OR and observe ophthalmic and laser surgeries performed in the clinic. **(9 credit hours) Prerequisites: MEDI 501- Internal Medicine and SURG – 501 – Surgery Clerkship**

SURG 640 - Vascular Surgery - Senior surgery 1 month elective in Vascular Surgery with outpatient, inpatient, special procedures, and operating room experience. This 4 week elective will **p**romote the student's attainment of vascular surgical knowledge base**, i**ntroduce the student to vascular surgical procedures**, f**acilitate understanding of a surgical approach to clinical problem solving**, p**romote acquisition of vascular surgical diagnosis and management capabilities **and p**romote the continued development of the student's professional attitudes and behavior. **(9 credit hours) Prerequisites: MEDI 501- Internal Medicine and SURG – 501 – Surgery Clerkship**

School of Medicine Faculty

Basic Sciences Departments

Department of Biochemistry / Cancer Biology / Neuroscience / Pharmacology

Chairperson: Samuel E. Adunyah, Ph.D., Professor
Professors: Clivel Charlton, Ph.D.; Sanika S. Chirwa, Ph.D.; Salil K. Das, DSc; Sakina E. Eltom, D.V.M, Ph.D.; Sukhbir S. Mokha, Ph.D.; Josiah Ochieng, Ph.D.
Associate Professors: Zhenbang Chen, Ph.D.; Chandravanu Dash, Ph.D.; Shawn J. Goodwin, Ph.D.; Amosy M'Koma, M.D., Ph.D.; Olugbemiga Ogunkua, M.D., Ph.D.; Aramandla Ramesh, Ph.D.; Anil Shanker, Ph.D.; Deok-Soo Son, D.V.M., Ph.D.; LaMonica Stewart, Ph.D.
Assistant Professors: Jamaine S. C. Davis, Ph.D.; Akiko Shimamoto, Ph.D.
Professor Emeritus: Manuel Valenzuela, Ph.D.

Department of Microbiology / Immunology / Physiology

Chairperson: Fernando Villalta, Ph.D., Professor
Professors: Minu Chaudhuri, Ph.D.; Zhongmao Guo, M.D., Ph.D.; Robert G. Holt, Ph.D.; Bindong Liu, Ph.D.; Evangeline D. Motley- Johnson, Ph.D.; Raju Ramasamy, Ph.D.; Hong Yang, M.D.
Associate Professors: Donald Alcendor, Ph.D.; Anthony Archibong, Ph.D.; Xinhong Dong, Ph.D.; Pius Nde, Ph.D.; Byeongwoon Song, Ph.D.
Assistant Professor: Dorin B. Borza, Ph.D.
InstructorS: Emmanuel Okoro, M.D.; Girish Rachakonda, Ph.D.; Ujjal Singha, Ph.D.
Secondary Appointment: Hua Xie, Ph.D., Professor
Professor Emeriti: Etheleen M. Hill, Ph.D.; Hubert K. Rucker, Ph.D.

Department of Professional and Medical Education

Chairperson: Digna Forbes, M.D., Associate Professor

Division of Integrated Didactics:

Professors: Emmanuel Atta-Asafo-Adjei, Ph.D.; George W. Bates, M.D.; John T. Clark, Ph.D.; Susan DeRiemer, Ph.D.; Maria de Fatima Lima, Ph.D., Mohammed A. Maleque, Ph.D.; Alfred A. Nyanda, Ph.D.
Associate Professors: Larry Alexander, Ph.D.; Carol Freund, Ph.D.; Michael F. Hill, Ph.D.; Miranda M. Huffman, M.D.; Paul Madubuonwu, M.D.; Shyamali Mukherjee, Ph.D.
Assistant Professors: Anita Austin, Ph.D.; Brenda Y. Lemus, M.D.; Vernita Tucker, M.D.; Cassandra Ward, Ed.D.
Instructors: Rosemary B. Bassey, Ph.D.; Tiffany M. Turner, Ph.D.
Professor Emeriti: Mukul Banerjee, Ph.D.; Mark E. Levitch, Ph.D.; Henry A. Moses, Ph.D.; James J. Mrotek, Ph.D.; Dolores Shockley, Ph.D.; James Townsel, Ph.D.

Division of Clinical Skills and Competencies Director: Ayodeji Oso, M.D., Associate Professor

Associate Professors: Regina Offodile, M.D.; Carolyn Szetela, Ph.D.
Assistant Professors: Elochukwu J. Ezekakpu, M.D.; Adrienne Hicks, M.S.N.
Instructor: Jacqueline Gardner, M.A.
Professor Emerita: Annie W. Neal, Ph.D.; Linda D. Sander, Ph.D.

Clinical Departments

Department of Family and Community Medicine

Chairperson: Millard Collins, M.D., Associate Professor
Professors: Paul Juarez, Ph.D.; Patricia Matthews-Juarez, Ph.D.; Vincent Morelli, M.D.; Maureen Sanderson, Ph.D.
Associate Professors: Muktar H. Aliyu, M.D., Dr.PH; Wansoo Im, Ph.D.; Medhat Kalliny, M.D.; Matthew C. Morris, Ph.D.; Heather M. O'Hara, M.D.
Assistant Professors: Sylvia Akohoue, Ph.D.; Kathrine Y. Brown, Ed.D.; Cyree Collier, M.D.; Robert Cooper, Ph.D.; Michelle R. Etling, Ph.D., M.D.; Ashley Hicks, M.D.; Concepcion Martinez, M.D.; Jayashree Nathan, M.D.; Paul Ngo, D.O.; Ruth Stewart, M.D.; Fatima B. Syed, M.D.
Instructor: Carol Ziegler, M.S.N.
Adjunct Associate Professors: Kendall R. Brune, Ph.D.; David Horowitz, M.D.; Kristen M. Rager, M.D.
Adjunct Assistant Professors: Robert G. Bishop, M.D.; Chyala M. Chasten, M.D.; Christopher D. Holloway, M.D.; George L. Holmes, III, M.D.; Steven P. Johnson, M.D.; Eszter Volgyi, Ph.D.

Department of Internal Medicine

Interim Chairperson: Richard D. Fremont, M.D., Associate Professor
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Instructor: Keisha Ashmeade, M.S.P.H., M.S.N.
Professor Emeritus: James Potts, M.D.
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Department of Obstetrics and Gynecology

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Department of Pathology

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Department of Pediatrics

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Department of Psychiatry and Behavioral Sciences

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Department of Radiology

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Adjunct Professor: Harold Thompson, M.D.

Department of Surgery

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