Herbert Wertheim College of Medicine

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Mission Statement
The mission of the Florida International University Herbert Wertheim College of Medicine is to lead the next generation of medical education and continually improve the quality of healthcare available to the South Florida community. The College of Medicine will accomplish its mission by:

- Training physicians to serve South Florida’s diverse population through a patient-centered curriculum instilling cultural competence,
- Providing Florida students greater access to medical education, and
- Fostering research to discover and advance medically relevant knowledge.

History
Herbert Wertheim College of Medicine at FIU arose from a community need for access to medical education and a regional need to address a shortage of physicians. Establishing the college formally began July 5, 2004, when the university first proposed the concept to the Board of Regents. The decision was postponed; later that year the Board of Regents was dissolved by the Governor to be replaced by the Board of Governors.

The university continued to build its case for a medical school based on the need for better access to medical education and patient care as well as the ability to reduce health disparities in the community. In November 2005, the Board of Governors heard FIU presentations for the creation of a new Florida medical school. The decision was postponed until the March 2006 when the South Florida community was awarded a public College of Medicine in Miami at Florida International University. Faculties were recruited and in February 2008 the college received preliminary accreditation from the Liaison Committee on Medical Education (LCME). The college accepted its first class of future doctors in the fall of 2009.

MD Program
The College of Medicine offers a program of study for the Doctor of Medicine degree. The program requires 200 credits divided into four successive periods of 32, 37, 48, and 48 weeks. Basic Medical Science, Clinical Science, Clinical Skills, Professionalism and Social Responsibility are the foundations of the curriculum. Service learning in healthcare delivery and in the community are major components of the program. The college has formal affiliations with healthcare providers in the community, providing settings for supervised clinical practice learning. These affiliations include Baptist Health South Florida, Broward Health, Cleveland Clinic Florida, Jackson Health System (Public Health Trust), Leon Medical Centers, Memorial Healthcare, Mercy Hospital, Miami Children’s Hospital, Mount Sinai Medical Center, and several ambulatory healthcare clinics.

The goal of the MD degree program is to prepare graduates for advancement into postgraduate study and for the practice of medicine in any medical specialty or primary care area. In addition to the 200 credits earned in the curriculum, the Doctor of Medicine program requires demonstrated clinical competency, passing of Step 1 of
the United States Medical License Exam, consistent display of professional behaviors and values appropriate for the practice of medicine, and recommendation from the Medical Student Evaluation and Promotion Committee and the Dean of the College of Medicine.

Admission

Florida International University Herbert Wertheim College of Medicine (HWCOM) participates in the American Medical College Application Service (AMCAS) application process (http://aamc.org/audienceamcas.htm). Applications verified by AMCAS are the first step in the HWCOM applicant screening process. Following receipt and verification of the AMCAS application and its data, each applicant is invited to complete the HWCOM Secondary Application provided they meet the minimum Medical College Admission Test (MCAT) and Grade Point Average (GPA) requirements (MCAT 25, overall GPA 3.0 and Science/Math GPA of 3.0 for regular admissions; MCAT 35 and overall GPA 3.7 and Science/Math GPA of 3.5 for Early Decision Program). A $30 non-refundable application fee is required with submission of the HWCOM Secondary Application. The HWCOM Secondary Application provides additional insight into the applicant, focusing on issues such as the candidate’s desire to become a physician, commitment to Florida, and interest in FIU. Applicants are invited for an interview based on academic factors as well as non-academic factors, such as personal experiences in several of the following – clinical/patient care exposure, research, commitment to service, leadership, and other enriching qualities.

After the interview, the completed file is reviewed by the Admissions Committee. The Admissions Committee then votes to determine the admission status of the applicant. HWCOM maintains an active waitlist until the first day of Orientation in the beginning of August.

Medicine & Society: NeighborhoodHELP™

Green Family Foundation NeighborhoodHELP™ is a Health Education Learning Program that assigns teams of Florida International University (FIU) inter-professional students or FIU outreach personnel to willing households with the following goals: 1.) Improve household members’ health and quality of life and 2.) Provide students with community-based experiences that exposes them to social determinants that impact health care outcomes. To accomplish these goals, students, under the supervision of Family Medicine faculty, work with assigned households to develop and implement a comprehensive plan to improve health. The teams consist of medical, nursing and social work students, and visit their households on a monthly basis. As we learn more about household members’ needs, we can add additional resources from the Colleges of Law, Education, and Public Health. Green Family Foundation NeighborhoodHELP™ does not seek to replace existing healthcare and social services. We offer assistance in using these services by working collaboratively with service providers or, if needed, by making referrals for participating households. Students may invite household members to the North Dade Health Center to receive primary care by FIU faculty and students if needed. Green Family Foundation NeighborhoodHELP™ is part of the vision of the Herbert Wertheim College of Medicine to create a new model of medical education immersed in the local neighborhoods to improve the quality of learning for students while providing service to local communities.

Clinical Services: Health Care Network (HCN)

The FIU-HCN supports the educational and service mission of FIU College of Medicine by managing clinical practice locations where College of Medicine faculty are engaged in the practice of medicine. Florida International University through Herbert Wertheim College of Medicine has created a faculty group practice as a 501(c)(3) corporation that will have multiple practice sites throughout South Florida. The FIU HealthCare Network and its Faculty Practice Plan exists exclusively to support FIU’s mission, and medical education at the Herbert Wertheim College of Medicine. The FIU-HCN provides various administrative functions to support the College of Medicine faculty. These functions include billing and collections, contract management with vendors and insurance companies, provider credentialing, and administration of practice operations. Through the College of Medicine’s strategic recruitment of exemplary physicians, the FIU HealthCare Network will manage practices that render to its patients comprehensive and quality medical care in an environment that is conducive to learning for patients, medical students, residents, and peers.

Research: Biomedical and Clinical

Research universities and medical schools in particular perform the basic medical research that leads to breakthroughs in detection, diagnosis, treatment and eradication of disease and other health problems. FIU scientists will continue conducting important disease-related research. One of the objectives of the research program is to foster synergy between teaching and research. FIU medical students will be aware of the latest medical developments and work alongside researchers to develop research skills.

The College of Medicine has the overall goal of growing the research enterprise to advance FIU into the top-tier of research institutions nationwide. The college opened with a modest cadre of outstanding internationally recognized scientists, all with substantial research funding. This cohort is the foundation of a research enterprise that will develop major research programs in reproductive development, reproductive cancer biology, infectious diseases, and environmental health sciences of special relevance to South Florida’s.

Course Descriptions

Definition of Prefixes

BCC-Basic Clinical Clerkships; BMS-Basic Medical Sciences; GMS-Graduate Medical Sciences; MEL-Medical Science Electives

Courses in the College of Medicine numbered BMSxxxx and BCCxxxx are restricted to students enrolled in the College of Medicine.

BCC 7110 Internal Medicine Clerkship (12). Students will have an integrated rotation of 24 weeks in the Internal Medicine, Surgery, and Emergency Medicine. This rotation will start building the clinical skills, knowledge, and professional behavior necessary to evaluate and care for adult patients with careful supervision from faculty physicians. The clerkship will emphasize basic assessment and management of core common problems in Internal
BCC 7120 Neurology Clerkship (6). This clerkship will provide medical students with experience in general and specialty neurology and neurosurgery. Students will learn to diagnose and treat neurological and neurosurgical emergencies. They will follow patients from the emergency department to the catheterization lab, surgical suite, and/or intensive care unit. Care will continue in the inpatient neuroscience unit, and on to the rehabilitation unit. Students will also develop competencies in diagnosing and treating non-emergent neurological disorders in the outpatient setting. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BCC 7110 Pediatrics Clerkship (6). This clerkship will provide medical students with experience in general and specialty neurology and neurosurgery. Students will learn to diagnose and treat neurological and neurosurgical emergencies. They will follow patients from the emergency department to the catheterization lab, surgical suite, and/or intensive care unit. Care will also develop competencies in diagnosing and treating non-emergent neurological disorders in the outpatient setting. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BCC 7130 Obstetrics and Gynecology Clerkship (6). This clerkship will provide medical students with experience in general and specialty neurology and neurosurgery. Students will learn to diagnose and treat neurological and neurosurgical emergencies. They will follow patients from the emergency department to the catheterization lab, surgical suite, and/or intensive care unit. Care will also develop competencies in diagnosing and treating non-emergent neurological disorders in the outpatient setting. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BCC 7140 Pediatrics Clerkship (6). The Pediatrics Clerkship will provide student with an experience in the evaluation, diagnosis, and management of pediatric patients. Through inpatient and outpatient clinical experiences students will be exposed to a wide variety of pediatric patients presenting with acute illnesses, chronic illness, and health maintenance visits. Students will actively participate in clinical cases, simulated cases, simulation laboratory scenarios, and didactic lectures. The clerkship emphasizes basic assessment and management of core common pediatric problems. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BCC 7150 Psychiatry Clerkship (6). The course introduces medical students to general and specialty psychiatry and will allow students to develop competencies in diagnosing and treating psychiatric disorders. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BCC 7160 Surgery Clerkship (12). This clerkship will provide students with an experience in the medical management of surgical patients and in basic surgical techniques. Students will participate in peri-operative care and operative procedures. The clerkship will provide didactic experiences on management of surgical diseases. Students will also evaluate surgical inpatients and outpatients. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BCC 7170 Family Medicine Geriatric Clerkship (2). The 2013 class will be divided in 2 groups. Each group will be going to Leon Medical Centers approximately twice a month on Mondays from September 2010 to February 2011. Students will be assigned a rotation schedule and are expected to attend a meeting at the Leon Medical Centers to meet his/her preceptor prior to the start of the rotation and to confirm the location, date, and other issues specific to the site. At each Center, students will have the opportunity to attend outpatient clinic, wound care, walk-in clinic, physical therapy, and dermatology clinic. During the rotation, students will also attend Geriatric Core lecture series and discussion of clinical cases at the COM. Students are also required to present a brief discussion of a relevant clinical topic during their Geriatric clerkship. This presentation will be delivered to the faculty and other medical students during the geriatric clerkship. The Second Period Geriatric Clerkship will provide students with an experience in the evaluation, diagnosis, and management of geriatric patients in the outpatient setting. Throughout patient clinical experiences, students will be exposed to a wide variety of geriatric patients presenting with acute illnesses, chronic illnesses, evaluation of disabilities and preventive health maintenance visits. Students will participate in clinical evaluations, simulated cases, simulated laboratory scenarios, and didactic lectures. The clerkship emphasizes comprehensive assessment and management of core common geriatric conditions. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BCC 7175 Family Medicine Clerkship (3). Student will be assigned to a team of FIU faculty family physicians at a community based primary care site, and also in homes. Under the supervision of FIU faculty, the students will be assigned a panel of patients for the year. They will practice communication skills, continuity of care, clinical reasoning, patient education, and documentation, and receive feedback. The course will cover common clinical scenarios and core FM competencies. Students will also continue household visits and community service learning projects as the clerkship is integrated with the Medicine and Society strand. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BMS 6001 Genes, Molecules & Cells (7). This course covers fundamental principles of cell and molecular biology and human genetics and their role in clinical medicine as they relate to health and disease. Prerequisite: currently enrolled in the College of Medicine.

BMS 6002 Human Structure & Function (7). This is an introduction to essential concepts of human structure and function with integration of the anatomical and physiological basis of several important clinical skills and procedures. Prerequisite: currently enrolled in the College of Medicine.

BMS 6015 Clinical Skills I (5). This course focuses on teaching medical students the knowledge, skills and attitudes needed in areas such as communication, the physical examination and documentation. Prerequisite: currently enrolled in the College of Medicine.

BMS 6016 Clinical Skills II (5). Clinical Medicine is a longitudinal “strand” throughout the four-year medical school curriculum. The strand is designed to provide students with the foundations of patient care that will prepare them for their clinical clerkship years. It will also provide them with the tools that will foster a lifetime of clinical competence. Prerequisite: Enrolled in College of Medicine.

BMS 6063 Foundations of Health Care (1). This course will provide the student with a population-based approach to understanding the delivery systems of healthcare. It will
provide an understanding of economic, social and environmental forces facing our health care delivery systems today. Prerequisite: Enrolled in the College of Medicine.

BMS 6064 Health Care Policies and End of Life Care (1). Introduction to Health Care Policies: This course will bring students the awareness they need of all interested parties and how each one of them shapes healthcare policy which in turn will affect all involved in health care. Among other things, this course invites you to examine Florida and U.S. Health Care Policies to determine which major health care issues physicians confront today.

End of Life Care: This course teaches the basic concepts associated with end-of-life care for older adults. Emphasis is placed on symptom management, preparation for death, and support to older adults and their families. The goal is to develop knowledge of specific strategies to support end-of-life care planning among older patients, families and healthcare professionals. Prerequisite: Enrolled in the College of Medicine.

BMS 6065 Quality Improvement and Medical Jurisprudence II (1). Quality Improvement in Health Care: Improving the quality of health care in the US is a public health emergency. This course is designed to convey a sense of urgency and instill a commitment to lifelong quality improvement. A broad quality platform will be presented from the viewpoint of relevant stakeholders. Learners will be armed with critical tools to meet QI responsibilities throughout clinical practice.

Medical Jurisprudence II: This course incorporates the basics of two professions, Medicine and Law. Physicians meet the law face to face every day, which is why students must be clear as to what purpose the law serves and how it affects medical practice. What are the patient’s rights, what are your legal obligations? This course will provide students with a framework for understanding the U.S. legal system’s structure and the application of law to the practice of medicine. Prerequisite: Enrolled in the College of Medicine.

BMS 6066 Evidence-Based Medicine (1). This course is intended for students to acquire and develop both the knowledge and the skills for evidence-based medicine (EBM). The emphasis of the course is on the second, third and four steps of EBM: searching clinical evidence, appraising critically the validity and importance of clinical research evidence, and determining the applicability of evidence into practice. This course content complements the previous activities addressing EBM (BMS 6881) where the students learned how to develop answerable clinical (PICO) questions from patients’ problems. In addition, during this course students will use concepts obtained in previous epidemiology courses as they are applied to help solving clinical problems. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BMS 6071 Team-Based Community (5). The team-based community clerkship is part of the Medicine & Society Strand, the Longitudinal Family Medicine Clerkship and the Green Family NeighborhoodHELP. It provides a longitudinal opportunity for students to apply core knowledge and competencies from all the strands of the HWCOM curriculum. Each medical student is assigned to a medically underserved household in North Miami-Dade County with one nursing student and one social work student. Teams will also have the assistance of students from public health, law, education, and the health sciences (physical therapy, occupational therapy, communication disorders and nutrition). Family medicine faculty will supervise the student teams along with faculty from the other professions. Students work with assigned households to assess household strengths and needs and develop and implement a comprehensive plan to improve health. Students will present their assessments and plans to the students and faculty of their neighborhood. Students will establish relationships with household members and community partners in the neighborhoods and conduct a community asset mapping project to familiarize themselves with the history of the communities they will serve and identify the strengths and resources within the communities for addressing social and health needs. The online “fmCASES” provide students the opportunity for guided independent study of family medicine principles and the management of common clinical cases. Students will begin self-directed work toward the Medicine & Society Capstone. Finally, students will be exposed to the clinical correlations to their community-level and household-level interactions. Prerequisite: Enrolled in the College of Medicine.

BMS 6300 Microbiology, Infection & Immunology (3). This course introduces the general principles of infections, host responses and pathogens evasive maneuvers relevant for a foundation in clinical medicine and important to human disease. Prerequisite: currently enrolled in the College of Medicine.

BMS 6400 Pharmacology (4). This course introduces medical students to the basic principles of pharmacology and to the primary classes of drug therapy including the prototypic agents. Prerequisite: currently enrolled in the College of Medicine.

BMS 6600 Cellular & General Pathology (4). Cellular and General Pathology is designed for first year medical students as an introductory course in the study of disease emphasizing the general pathologic concepts and vocabulary. Prerequisite: currently enrolled in the College of Medicine.

BMS 6631 Hematopoietic and Lymphoreticular Systems (3). This course is designed to provide the fundamental ground knowledge as it relates to the understanding of hematologic diseases, the clinical approach to a patient with an oncologic disease and the initial approach to the use of various chemotherapeutic drugs. Discussions related to: the mechanisms of disease with an understanding of the molecular bases that explain the disease process; the clinical features of the different disorders - genetic or acquired - as well as a description of the morphologic features of these diseases based on the most current available and clinically applicable information will undertaken. Prerequisite: Enrolled in the College of Medicine.

BMS 6632 Endocrine System (3). The Endocrine System course will: (1) Building upon the specific topics discussed in the course Human Structure & Function, introduce medical students to the abnormal processes and principal therapies of endocrine disorders; (2) Advance their knowledge and comprehension of the aforementioned disorders and therapeutic modalities including the
influence and effects of gender, ethnicity, and behavior of patients on specific endocrine diseases. To provide an interactive teaching and learning environment, the course will include ‘question & answer’ sessions interspersed during the lectures as well as case discussions. A solid understanding of normal endocrine processes including the anatomy and function of endocrine organs, hormone synthesis, secretion, action and metabolism are required to successfully master this course. Prerequisite: Enrolled in the College of Medicine.

**BMS 6633 Cardiovascular and Respiratory Systems (6).** The course is an introductory learning opportunity to gain the basic concepts of cardiac and pulmonary medicine. The course will review the cardiopulmonary structures and anatomic and physiologic relationships and their integration to clinical medicine. The course will cover abnormal cardiovascular and pulmonary structures and physiology and the associated mechanisms of the related diseases. The clinical manifestations of derangements of the cardiopulmonary system will be reviewed. The student will be introduced to the diagnostic and therapeutic interventions in cardiopulmonary disease. Case based approach, group discussions, simulations and didactic presentations with some exposure to clinical skill will be used to achieve course objectives. Prerequisite: Enrolled in the College of Medicine.

**BMS 6634 Gastrointestinal System and Nutrition (4).** This course is designed to introduce second year medical students to the principles of diseases affecting the human body’s digestive system. The course will cover conditions affecting the hollow viscera (esophagus, stomach, small intestine and colon) as well as solid organs that are part of the digestive system (liver and pancreas). Clinical cases will be used to introduce students to critical medical thinking and problem-based learning. Integration of anatomy, physiology, immunology and histology will be emphasized. Prerequisite: Enrolled in the College of Medicine.

**BMS 6635 Musculoskeletal Systems and Skin (5).** This course is intended to familiarize the medical student with the normal development, structure and function of the musculoskeletal and integumentary systems. Common pathologic conditions that are congenital and acquired will be presented. The effects of environment, nutrition, exercise and aging on bone and joint homeostasis is emphasized. The opportunity to develop and enhance history taking and physical examination skills is provided. Basic prescribing and interpretation of diagnostic tests and correlation with pathoanatomy will be presented. Practical clinical skills such as joint and soft tissue infiltrations as well as reduction and stabilization of common fractures and dislocations will be taught. Prerequisite: Enrolled in the College of Medicine.

**BMS 6636 Nervous Systems: Brain and Behavior (10).** The Nervous System Brain and Behavior course is designed to build upon vocabulary and concepts learned in Period One. The course will expand upon essential concepts in human structure and function leading to the introduction of growth and development of the human nervous system including embryological, cognitive and emotional aspects, clinical psychiatry, and clinical neurology. The course will integrate the concepts introduced in structure and function with their clinical application. Didactic lectures, small groups and independent study will be utilized as learning opportunities. Virtual patients and computer based simulations will be used as appropriate. Prerequisite: Enrolled in the College of Medicine.

**BMS 6637 Reproductive Systems (3).** Reproductive Systems provides an overview of the development of the male and female reproductive systems with a focus on abnormalities of sexual differentiation and function, the physiology of control of the menstrual cycle, conception, infertility, menopause and pregnancy. In addition, the pathophysiology of the male reproductive system will be covered. Prerequisite: Enrolled in the College of Medicine.

**BMS 6638 Renal Systems (2).** This course is an introduction to the study of the Renal System. It will help the student integrate what they have learned in previous courses (e.g. Anatomy, Physiology, Biochemistry, Genetics, Epidemiology, Histology, and Pharmacology), and with the Renal Minute e-mail, lead to an understanding of the mechanisms of disease involving the kidneys. Prerequisite: Enrolled in the College of Medicine.

**BMS 6820 Complementary and Alternative Medicine (CAM), Humanism, and Medical Jurisprudence I (1).** The course is design to challenge the student to understand the global (east vs. west) interpretation of compassion, empathy and awareness as well as understanding the self. It will provide a broad sense of one’s own awareness of the self as brought forth by ones social, religious, economic, family and education experiences. Prerequisite: Enrolled in the College of Medicine.

**BMS 6826 Ethical Foundations of Medicine (1).** This course will give students a foundation in bioethics and the ethics of medical practice, and will begin preparing them to make daily ethical decisions and respond to the ethical issues, challenges and dilemmas they will encounter as students and physicians. The course will provide historical background on the social and moral foundations of modern medicine, as well as consider some cultural influences. Students will review the major medical oaths and codes; analyze the ethical basis of decision-making; and work through case studies that exemplify ethics in practice. They will also conduct a community visit and begin discussing the social and cultural factors in patient-doctor interaction in the context of medical ethics. Prerequisite: Currently enrolled in the College of Medicine.

**BMS 6827 Addressing the Socio-economic and Cultural Aspects of Health (1).** This course will introduce medical students to the socio-economic and cultural aspects of health through clinical cases. Students will be provided with the tools and skills to address these issues. We will review the basics of cultural competency as a vehicle to improve care to diverse populations. Students will identify ethical concerns and consider broader policies in preparation for an ethical and socially responsive approach to medicine. Prerequisite: Currently enrolled in the College of Medicine.

**BMS 6828 Interprofessional Approaches to Health (1).** This course will provide medical students with the basis of the professional cultures they will come into contact with in their health care practice (including nursing, social work, law, public health, and health sciences). Students start developing collaborative skills to work effectively in teams to address barriers to effective care and maximize
outcomes through case-based problem solving. The course will lay the groundwork for interprofessional collaboration during the NeighborhoodHELP visits and a future of interprofessional practice. The course will be taught in parallel with nursing, with the elective participation of Social Work students. Students will be expected to start identifying both micro (personal) and macro (policy) issues that influence health care delivery and health outcomes. Prerequisite: currently enrolled in the College of Medicine.

**BMS 6880 Introduction to Measurements and Quantitative Methods (1).** This course is an introduction to the study of measurement and quantitative methods as they apply to the practice and research of medicine. Concepts form the sciences of Biostatistics and Clinical Epidemiology will be presented to the student in theory and problem-based scenarios. The course will help prepare the students to understand how clinical processes and information is measured and translated into data for the purpose of research and evaluation; how summary information is produced; how bias, chance, and conditional thinking are translated into research information; and how the above concepts constitute the backbone of a scholarly analysis of medical and public health literature and of good clinical practices. Prerequisite: Currently enrolled in the College of Medicine.

**BMS 6881 Foundations of Clinical Epidemiology and Research (1).** This course provides the elements needed to understand the foundations of clinical epidemiology and research at the clinical setting. It will also provide the fundamentals to understand their relationship with clinical medicine and research. It continues the track established in Professional Development 1 and introduces the student to concepts about clinical epidemiologic research methodology and epidemiologic design. It provides the needed concepts to understand research in essential topics for clinical practice such as risk estimation, diagnosis, prognosis, and treatment. It will deal in more depth with generalization of information, non-generalizable information, as well as notions required to understand the link of epidemiology to EBM and population-based medicine. Prerequisite: currently enrolled in the College of Medicine.

**BMS 6891 Professional Behavior I (1).** Professional Behavior I is a course within Professional Development designed to introduce and teach awareness of certain values, emotions and attitudes, behaviors and self-reflection to the medical student. This course applies the philosophy and general understanding for emotionally preparing the future physician for the many diverse psychological experiences associated with the clinical setting and professional life. Specifically, to have an understanding and awareness of one's behavioral and personal issues, the emotional stress found in practicing medicine, and how these can impact patient care and health outcomes. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

**BMS 6892 Professional Behavior II (1).** This course is a continuation of the Period One Professional Behaviors experience. Where the focus of the course during Period One was on "self-awareness," Period Two goes more into depth in the development of self-awareness and the development of the emerging "MD Identity." Class sessions are structured using the same approach with the introduction, history, development and implications of the Values, Emotions and Attitudes (VEA) on medical practice. However, the vignettes are more evidence-based and discussions include reflections of the student's clinical experiences as they relate to the VEA. Additionally, the VEAs presented in the class session are more comprehensive and identify greater implications for the MD. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

**BMS 7810 Core Concepts in Medicine (7).** Weekly six hour interactive didactic activity, reviewing in a multidisciplinary format core topics across the different disciplines. Emphasis is placed on fostering competence in critical thinking skills, basic science and clinical knowledge, patient care, practice based learning, communication skills, professionalism, system-based practice and social accountably. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

**BMS 8910 Directed Study (1-3).** Medical students engaged in individual research under the supervision of the COM faculty. Prerequisite: Enrolled in the College of Medicine.

**GMS 6904 Introduction to Scientific Writing (3).** The introductory course designed to teach the students to design, write, and present scientific papers and grant applications. Prerequisite: HWCOM Graduate School Enrollment.

**GMS 6939 Graduate Seminar (1).** A weekly seminar/discussion course consisting of research presentations by students, faculty, and visiting scientists in the area of biomedical sciences will form part of a recurring credit. Prerequisite: HWCOM Graduate School Enrollment.

**GMS 6940 Supervised Teaching in Biomedical Science (1).** Students will assist the faculty members who teach either graduate or medical students. Prerequisite: HWCOM Graduate School Enrollment.

**GMS 6942 Laboratory Rotations (1).** Laboratory rotations in specific laboratories of the HWCOM graduate program faculty that will eventually lead to the choice of a thesis laboratory. Prerequisite: HWCOM Graduate School Enrollment.

**GMS 6961 Qualifying Examination (5).** After completion of the mandatory courses, students will be evaluated by completion of the Qualifying Examination (QE). Students will be evaluated on the successfully passing a Qualifying Examination taken during the second academic year and no later than the end of that year. The Qualifying Examination determines, in part, the student's eligibility for admission to candidacy for the Ph.D. degree. The examination is designed to test the student's basic knowledge of biomedical sciences, as well as assess creativity and rationality of research design. Prerequisite: HWCOM Graduate School Enrollment. Corequisites: Completion of all mandatory courses. At least overall 70% score in all mandatory courses.

**GMS 6962 Formation of Committee: Appointment of Dissertation Committee: Preliminary Proposal (1).** The student submits preliminary research proposal approved by his/her committee. Prerequisite: HWCOM Graduate School Enrollment.

GMS 6964 Dissertation Proposal Seminar (1). After completion of the Qualifying Examination (QE) and Dissertation proposal approval the student must present his proposal to the Dissertation Committee. The student will give a PowerPoint presentation the proposed research to the members of the dissertation committee. The dissertation committee will specifically evaluate the following: (i) Has the student demonstrated the ability to design a feasible project? (ii) Has the student shown a reasonable knowledge of the literature regarding the project? (iii) Has the student presented the proposal (both written and oral) in a scholarly fashion? (iv) Has the student demonstrated competent scientific knowledge with respect to overall fundamental principles and applications in biomedical science? and (v) Does the proposed research constitute an acceptable and feasible dissertation project? This will be achieved through an oral question and answer component within the scheduled time of the dissertation proposal exam meeting. The chairman of the dissertation committee will (i) insure that the proposal exam is held to a reasonable length of time; (ii) insure that the student is evaluated fairly and rigorously; and (iii) see that a written evaluation is promptly prepared and sent to the student and to the director of the graduate program. Prerequisite: HWCOM Graduate School Enrollment. Corequisites: Completion of GMS 6961, GMS 6963, and permission of the advisor.

GMS 6979 Research Credits (5). Research conducted in the Ph.D. advisor laboratory. Prerequisite: HWCOM Graduate School Enrollment.

GMS 7980 Dissertation Research Credits (6). Research conducted towards the Ph.D. dissertation. Prerequisite: HWCOM Graduate School Enrollment. Corequisites: Completion of qualifying exams and GMS 7981.

GMS 7981 Dissertation Defense Seminar (1). Dissertation defense seminar. Prerequisite: HWCOM Graduate School Enrollment. Corequisites: Permission of major professor and graduate committee.

MEL 7955 Public Health Elective (1-12). This elective will introduce students to the practice of Public Health for physicians. Students will be placed for a one month internship at the Miami-Dade County Health Department or comparable practice site, and assigned a mentor (MD/PhD or MD/MPH). Experiences and activities will be tailored to individual student interests within the structure of the elective. Students will be evaluated by their site preceptor. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MEL 7957 Medicine and Society Elective (1-12). The Medicine and Society elective is designed for individualized study and further pursuit of topics relevant to the Medicine and Society's mission preparing to improve health outcomes for underserved communities to cultural and social issues in the delivery of care through the educational objectives on social determinants of health and policy. Students will design an independent study experience under the tutelage of Medicine and Society or other Humanities, Health and Society faculty. Potential projects, include pursuit of a policy initiative in collaboration with Law, cultural competency project, or intensive community-based health initiative. The Medicine and Society elective will be offered in all months with maximum of 6 students per year. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.