

MEDICINE (MDR)

MDR 1000. RMC Shoulder Orthopedic Surgery. 2-4 Credit Hours.

This is a 2 or 4 week elective intended to expose the senior medical student to a comprehensive experience in orthopedic shoulder surgery. During the 2 or 4 week rotation, the student will spend approximately 50% of the time in an office clinical setting evaluating patients with shoulder disorders and 50% of the time in the operating room gaining surgical experience and insight. The surgical experience will be 60% arthroscopic shoulder surgery and 40% open shoulder surgery. The elective will be spent under the direction of one surgeon. There will be on-call responsibilities though not burdensome. For those students interested in a 4 week elective, there will be clinical outcomes research opportunities, and the opportunity to work with other orthopedic specialists within the group.

Components: MOD.

Grading: GRD.

MDR 1001. RMC Developmental and Behavioral Pediatrics. 2 Credit Hours.

This is an outpatient private practice rotation is at the office of Dr. Aronson-Ramos in Coconut Creek, located in northern Broward county. This busy private practice sees children, teens, and young adults with diverse neuro-developmental issues. The practice has a family centered approach and considerable time is spent interviewing family members and observing and interacting with patients. Students will learn about diagnostic assessments and treatment planning for the most common pediatric neuro-developmental problems. Common conditions the student will encounter include: autism spectrum disorders, ADHD, developmental delays, anxiety disorders, mild depression, syndromes, disruptive behavioral disorders, obsessive compulsive disorder, among other clinical issues.

Components: MOD.

Grading: GRD.

MDR 1002. RMC Pediatric Otolaryngology. 2-4 Credit Hours.

1. This clinical elective will expose students to the subspecialty of Pediatric Otolaryngology—Head and Neck Surgery. i) Students will have the opportunity to learn by seeing patients in our private office as well as assisting in the operating room. 2. This elective is designed with two different types student interests in mind, and will be individually tailored to the individual students interests i) PRIMARY CARE TRACK (1) For students interested in entering medical fields with a primary focus on treating children (a) E.g. Pediatrics, Family Practice, etc. (2) Students will learn evidence-based medical management of acute and chronic problems of the ears, nose, and throat in children (3) Students will hone their diagnostic skills in pediatric otoscopy, rhinoscopy, and throat examinations with direct feedback (4) Student will be exposed to common Pediatric ENT surgical procedures, so they can understand firsthand exactly what they involve ii) SURGICAL SPECIALTY TRACK (1) For students interest in becoming Otolaryngologists, or other related surgical fields (a) E.g. pediatric surgery, neurosurgery, ophthalmology, plastic and craniofacial surgery, neuroradiology (2) Students will complete all the objectives of the Primary Care Track (3) Students will be exposed to surgical decision making and the criteria for medical vs. surgical management of Pediatric ENT disorders (4) Students will experience performing pre-operative work-up and post-operative management of surgical cases (5) Students will assist in more complicated Pediatric ENT surgical procedures (6) Students will have the option of performing inpatient Pediatric ENT consultations

Components: MOD.

Grading: GRD.

MDR 1003. Public Health Clerkship. 2 Credit Hours.

This is a 4-week required rotation for students in the MD/MPH track. This sub-internship will expose them to the professional responsibilities and work flow of a physician trained and practicing public health. Each week the student will be rotating through various clinics within the health department. They will also have weekly interaction with the Department of Health preventive medicine residents. The student will spend time at the Palm Beach County Health Department administrative offices interacting in didactic sessions and journal club presentation with the Preventive Medicine Residents. The didactic curriculum will be linked to the residency program curriculum. Students will be scheduled to rotate through the health department's HIV and sexual health clinics (OB/GYN, STD and family planning). Students will also rotate in the JFK Internal Medicine Residency continuity clinic. They will participate in the residency clinic ambulatory didactic, journal club and interdisciplinary psychology conferences. Students will also have dedicated time to complete their fieldwork and capstone during the rotation. Students will receive a final grade (P/F), based on clinical evaluations, participation in didactics, assigned tasks and a final journal club presentation.

Components: MOD.

Grading: GRD.

MDR 1004. Remediation / Make Up Place Holder. 0 Credit Hours.

Remediation / Make up place holder.

Components: CLN.

Grading: NON.

Typically Offered: Fall & Spring.

MDR 1005. Healthcare System Quality Improvement. 2 Credit Hours.

This elective was conceived out of the recognition for the need for medical students to broaden their knowledge of the healthcare system, and their role in facilitating change within this structure. In order to be well rounded physician-leaders, students should have a basic understanding of their role in the team of healthcare professionals within the framework of our healthcare system. As such, this course aims to provide students with a better understanding of how health care disciplines outside of medicine (such as nursing, pharmacy, laboratory, etc) as well as business, administration and public health fields interact. One way to study this cross-disciplinary intersection is through familiarizing oneself with the basics of process improvement as it applies to health care. This elective provides an opportunity for third and fourth year medical students to gain knowledge of the fundamentals of healthcare quality and process improvement through a combination of didactic learning sessions and hands-on experience. Students will expand their learning environment beyond the typical classroom and clinical settings in order to complete a practical, relevant quality improvement project working in collaboration with health care administrators, allied health professionals and physicians leaders at our institution. This longitudinal experience provides students the opportunity to receive two weeks of elective credit by completing online coursework through the Institute for Healthcare Improvement Open School, classroom-based didactic sessions, "field work" outside of patient-physician encounter, and, ultimately, a scholarly project in a quality/process improvement area of their choosing.

Components: MOD.

Grading: GRD.

MDR 1006. HCH Colorectal Surgery. 2-4 Credit Hours.

This is a 2 or 4 week elective that will provide students with an exposure to a private practice specializing in colorectal surgery. The student will be one-on-one with a colorectal surgeon. Dr. Schochet specializes further in high resolution anoscopy, HIV-related anal disease and minimally invasive surgery.

Components: MOD.

Grading: GRD.

MDR 1007. RMC Plastic Surgery. 2-4 Credit Hours.

This is a 2 or 4 week rotation intended for the senior medical student who is interested in plastic surgery as a career choice or simply wants exposure to the field. The rotation will provide a comprehensive exposure to all facets of aesthetic plastic and reconstructive surgery in a community setting.

Components: MOD.

Grading: GRD.

MDR 1008. WPB VAMC Pathology. 2-4 Credit Hours.

This is a 2 or 4 week rotation intended to give the student a global concept of how the ancillary medical discipline of Pathology integrates into the patient's diagnosis and ongoing management. The student, who already has a basic working knowledge of clinical medicine, will be able to appreciate the value of appropriate choice of laboratory tests to help patient management from a laboratory perspective.

Components: MOD.

Grading: GRD.

MDR 1009. RMC Medical Education Elective. 2 Credit Hours.

This elective is grounded in the University of Miami Miller School of Medicine MD/MPH track course work. It offers students who are interested in medical education the opportunity to become familiar with what is required to build and maintain a medical curriculum as well as hone their educational skills in the classroom and clinical setting. The MD/MPH curriculum is able to provide an excellent environment for learning about medical education as it incorporates both problem-based learning and didactic lectures on the Miami campus as well as integrated and traditional clerkship models at the regional campus. This elective will allow senior students the opportunity to gain further insight into the overall goals of medical education and receive a well-rounded immersion in the areas of teaching and curriculum development.

Components: MOD.

Grading: GRD.

MDR 1010. University of Miami School of Medicine Bridge Course. 0 Credit Hours.

The intention of the new Bridge Course is to facilitate the transition of medical students from IMU to UMMSM. Students will be joining the incoming second year class after successful completion of this four week course.

Components: MOD.

Grading: GRD.

Typically Offered: Fall.

MDR 1013. Med-Peds. 4 Credit Hours.

Combined Internal Medicine and Pediatrics is a unique specialty that trains physicians in the care of patients of all ages. The elective aims to give students exposure to Med/Peds in an urban primary care practice setting. Students will see routine care of newborns, infants, children, adolescents and adults, as well as care of patients with complex pediatric diseases as they transition into adulthood.

Components: MOD.

Grading: GRD.

MDR 1014. Jupiter Medical Center Cardiothoracic Surgery. 2-4 Credit Hours.

This elective in cardiothoracic surgery will provide students the ability to learn in a preceptor based model about the management of diseases of the thorax. The student will work as an active member of the thoracic team; engaging with patients in the thoracic clinic, performing preoperative and post-operative assessment, as well as hospital rounds. The student will be introduced with hands on experience with leading edge technologies as EndoBronchial Ultra-sound (EBUS), Navigational bronchoscopy, Robotic surgery as well as VATS and open procedures.

Components: MOD.

Grading: GRD.

MDR 1015. RMC Dermatology. 2 Credit Hours.

This is a two-week elective is intended to expose the senior medical student to a spectrum of experiences in a private practice outpatient dermatology setting. During the two-week rotation, the student will spend time in a private practice dermatology office and will take part in patient visits and observe common outpatient dermatologic procedures including surgical and cosmetic procedures.

Components: MOD.

Grading: GRD.

MDR 1016. RMC Interdisciplinary Women's Health. 4 Credit Hours.

Students will be exposed to all aspects of women's health, both benign and malignant disease. This rotation is suitable for students considering careers in Primary Care, OB/GYN, GYN Oncology, Breast Surgery, General Surgery or Surgical Oncology.

Components: MOD.

Grading: GRD.

MDR 1017. RMC Interdisciplinary Women's Oncology. 4 Credit Hours.

Students will be exposed to all aspects of women's oncology, including breast, ovarian and other women's cancers, including patients with genetic risk of breast or ovarian cancer. Suitable for students considering careers in Primary Care, OB/GYN, GYN Oncology, Breast Surgery, General Surgery or Surgical Oncology.

Components: MOD.

Grading: GRD.

MDR 1018. Pediatric Mobile Clinic. 2-4 Credit Hours.

This is an outpatient rotation on the University of Miami Pediatric Mobile Clinic (PMC). The PMC is a clinic on wheels that delivers comprehensive pediatric primary care primarily to uninsured children from birth to 21 years of age throughout Miami Dade County free of charge. The PMC provides care for some of the neediest children in communities including Little Havana, West Dade, Homestead, Florida City, Little Haiti/North Miami, Sweetwater, Kendall and Miami Beach. Patients encountered reflect the diverse population of Miami-Dade County. Many are new immigrants and non-English speaking patients accessing medical care for the first time. Thirteen percent of children served have complex medical needs; 20% of the children have disabilities or developmental concerns. Clinic activities include sick and well-child care and follow up for chronic conditions. Students will work independently and responsibilities will include taking histories, conducting physical exams and discussing assessment and plans of care with the entire unit team including resident and attending physicians, nurse practitioners, social worker, therapist, and psychologist. Students also have the opportunity to do basic procedures such as throat swab, urinalysis, phlebotomy and administration of immunizations and provide counseling and education to patients and families. The students will have an opportunity to participate in telehealth and medical-legal clinics on the unit as well as special projects that are taking place. In addition, students will learn about the public health issues related to caring for uninsured, underserved populations and the social determinants that play a role in health and accessing health care. They will also learn about community resources available to underserved populations.

Components: MOD.

Grading: GRD.

MDR 1019. Senior Capstone Course: Transition to Residency. 2 Credit Hours.

The Senior Capstone Course: Transition to Residency offers fourth-year medical students an opportunity to review and hone core concepts, diagnostic/therapeutic algorithms, procedural skills, and communication tools in preparation for their first-year of residency. This is an elective course offered to a maximum of 20 students per class.

Components: MOD.

Grading: GRD.

MDR 1020. WPB VAMC Radiology. 2 Credit Hours.

Students will be able to take a 2 week elective block during their fourth year in diagnostic radiology. During the block, students will spend their time in the department of radiology with the faculty and radiology technicians. They will be responsible for working with radiologists and compiling the medical history as appropriate for the imaging modality.

Components: MOD.

Grading: GRD.

MDR 1021. HCH Interventional Radiology. 2-4 Credit Hours.

Students will be able to take a 2-4 week elective during their fourth year in diagnostic and interventional radiology. During the block, students will spend their time in the department of radiology with the faculty and radiology technicians. They will be working with radiologists on diagnostic imaging, interventional procedures, imaging and compiling the medical history as appropriate for the procedure. They should also attend any conferences or other teaching seminars offered in radiology during their assigned time.

Components: MOD.

Grading: GRD.

MDR 1022. HCH Infectious Disease. 2-4 Credit Hours.

Infectious Disease Medicine requires an understanding of the microbiology, prevention and management of diseases caused by viral, bacterial, fungal and parasitic infections, including the appropriate use of antimicrobial agents, vaccines and other immunobiologic agents. The Infectious Disease fourth year elective at Holy Cross Hospital will provide students with the skills to begin to appropriately provide preventive, diagnostic and therapeutic care for many infections. There will also be specific experiences in HIV clinics to learn about the management of patients with HIV infection.

Components: MOD.

Grading: GRD.

MDR 1024. Forensic Psychiatry. 2-4 Credit Hours.

This is a 4-week elective intended to expose the senior medical student to a spectrum of experiences in forensic psychiatry. The student will spend a portion of each week in various hospital and community settings that involve the clinical practice of aspects of forensic psychiatry.

Components: MOD.

Grading: GRD.

MDR 1025. OB/GYN Boot Camp – Transition to Residency. 2 Credit Hours.

The purpose of this course is to allow all M4 students who match in OB/GYN or related residencies to enter their intern year with a solid knowledge base and set of procedural skills related to women's health, obstetrical care and gynecologic surgery. Participation in the two-week course will allow students to practice procedural and basic surgical skills, enhance their OB/GYN knowledge, and review APGO practice guidelines. This course is intended to consolidate and expand upon skills learned on the core clerkship and OB/GYN M4 electives.

Components: MOD.

Grading: GRD.

MDR 1027. RMC Venous Vascular Disease. 2-4 Credit Hours.

Phlebology is an innovative medical specialty in the diagnosis and treatment of disorders of venous origin. This elective will introduce the subspecialty of Phlebology to medical students interested in careers in vein disease and their related specialties (vascular surgery, general surgery, interventional cardiology, cardiology, cardiothoracic surgery and interventional radiology) and to the basic understanding of fundamental venous diseases pertinent to the practice in the primary care setting of internal medicine and family medicine. Phlebology pushes the forefront of medicine into a new direction by offering diagnostics, treatment options, and research and development opportunities not previously available for the patients with venous disease. This elective is intended to expose the medical student to a spectrum of experiences in a private practice outpatient phlebology office and will take part in patient visits and observe common outpatient venous procedures including office-based surgical and cosmetic procedures in Palm Beach County.

Components: MOD.

Grading: GRD.

MDR 1028. HCH Medicine Sub-I. 4 Credit Hours.

The objective of this rotation is to provide students with hands on clinical experiences that are specifically designed to mirror their upcoming roles as interns in postgraduate training. The medical Sub-intern will master specific core competencies and basic principles of inpatient medical care. The sub-I will be a member of a medical ward team that consists of an attending, two residents, and two interns. The sub-intern will work specifically with one resident on the team who will directly oversee the sub-I and the care of his/her patients. They will focus on delivery of inpatient care to general medical patients as well as collaborate with medical and surgical subspecialties and develop efficient hand offs of care. They will attend daily afternoon report and attending rounds as well as participate in daily sign out/hand off rounds. Sub-Interns will attend weekly academic half days, weekly grand rounds, and weekly sessions with sub-internship coordinators to review key inpatient topics. Typical days begin at 7am, and alternate ending at 4pm and 7 pm. You will have one day off every week. There is no night coverage during this rotation.

Components: MOD.

Grading: GRD.

MDR 1029. Plastic Surgery SUB-I. 4 Credit Hours.

The primary objective of this rotation is to promote the development and mastery of clinical core plastic, aesthetic, and reconstructive competencies and to review common reconstructive and cosmetic conditions. The practice of evidence based medicine is promoted by encouraging students to conduct literature search for current guidelines.

Components: MOD.

Grading: GRD.

MDR 1030. Transition to Clinical Rotations. 1 Credit Hour.

Overview: a) Students will take part in mandatory activities, including didactic, experiential and independent activities to prepare them to take part in clinical rotations; b) This experience is required for all students prior to participating in the third year rotations. Course Design - a)

Components: MOD.

Grading: GRD.

MDR 1031. Minimally Invasive Gynecologic Surgery. 2-4 Credit Hours.

The objective is for the student to gain experience in the diagnostic and therapeutic approaches for various obstetrical scenarios through participating in direct patient care. Students will enhance interpersonal skills and professional conduct in the female pregnant patient encounter setting. After completing the rotation, students should feel comfortable with the management of an uncomplicated vaginal delivery and also gain insight into the management of the complicated obstetrical patient.

Components: MOD.

Grading: GRD.

MDR 1032. Pediatric Palliative Care. 2-4 Credit Hours.

OVERVIEW This is a 2-4 week elective intended to expose the senior medical student to a spectrum of life-threatening and complex medical illnesses in pediatrics. The student will work directly with a faculty physician and the Palliative Care Nurse Coordinator and interface with a broad spectrum of pediatric sub-specialties. **COURSE DESIGN** The student will spend time at Holtz Children's Hospital on the Palliative Care consult service, seeing patients in consultation and follow-up, and discussing them with the fellows and attending on rounds. Patients may also be seen in an Outpatient Clinic setting and during Home Visits as needed. All students will meet with Dr. Cantwell, the rotation coordinator, and interact with faculty overseeing the Palliative Care initiative. Students are expected to attend the weekly Palliative Care Interdisciplinary Conference

Components: MOD.

Grading: GRD.

MDR 1033. Introduction to Orthopedic Surgery. 2 Credit Hours.

Orthopedic Surgery is an increasingly competitive field for medical students to match into. Appropriate evaluation of the students' aptitude, interest in the field, compassion for patient treatment and strength of application is important to thoroughly guide students through the residency application process. While there are multiple facets considered in an application, many students applying to residency often lack insight into their relative competitiveness and need more concrete advice as how to improve their chances of matching. The goal of this rotation is to provide qualified students who are interested in pursuing a career in Orthopaedic Surgery an opportunity to work clinically with faculty mentors (Associate Program Director/Faculty Advisor to Orthopaedic Surgery Interest Group), both of whom have special interest in student education. In addition to this clinical experience, the faculty will provide recommendations, guidance, and mentorship towards a possible application to orthopedic residency programs. The mentors will provide comments regarding the students' performance to the Chairman/Program Director of the Orthopaedic Surgery program here at the University of Miami.

Components: MOD.

Grading: GRD.

MDR 1034. Pediatrics Boot Camp - Transition to Residency. 2 Credit Hours.

Overview: Our immersive course offers the unique opportunity to learn what it means and what is required to become a pediatrician. It includes review of key concepts and knowledge, common pediatric physiology and pediatric illnesses, practice of common procedures, and hopes to generate self-reflection and guidance on human aspects such as professionalism, communication with families, patients, and team members, leadership, wellness, and life management skills (coping with challenges and stress of residency). **Course Design:** This 2-week elective course uses highly interactive didactics such small group case discussions, procedural skills labs, group-based simulations, team building exercises, and lectures. It provides one-on-one conversations with current PGY1's (who will be on the cusp of completion of their intern year), Chief Residents, and pediatric faculty. It is divided equally into one inpatient and one outpatient week. A sample schedule is provided with this course description (see below).

Components: MOD.

Grading: GRD.

Typically Offered: Spring.

MDR 1035. Developmental-Behavioral Pediatrics. 4 Credit Hours.

Overview: This is a 4-week elective to expose the medical student to a spectrum of experiences in developmental and behavioral pediatrics. The student will rotate through different clinic/community settings and see patients based on the emphasis at that location. **Course Design:** The student will spend time at the Mailman Center for Child development as well as the pediatric University of Miami Hospital Clinics. The student will gain exposure to developmental-behavioral pediatrics through observation and participation in the Behavioral Pediatrics Clinic, the Interdisciplinary Developmental Service, the Developmental Screening clinic, and various aspects of the Leadership Education in Neurodevelopmental and related Disabilities (LEND) trainee program. At the various clinics, the student will learn the aspects included in a comprehensive developmental pediatrics history as well as participate in discussions to help decide treatment options. Finally, the student will complete the LEND program by attending weekly classes at the Mailman Center and creating a leadership/advocacy project.

Components: MOD.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 1036. Point Care of Ultrasound Elective. 2-4 Credit Hours.

This is an intensive 2-week elective, which will teach the senior medical student point-of-care, bedside emergency ultrasound. The medical student will gain knowledge and competency, through supervised and independent scanning with an ultrasound machine in the JMH Emergency Department, online modules, scholarly articles, image review and a final US presentation. This elective is opened to students applying into all specialties of medicine, not just emergency medicine. No Emergency Medicine SLOE's will be written based off this elective rotation.

Components: MOD.

Grading: GRD.

MDR 1037. Emergency Medicine Boot Camp - Transition to Residency. 2 Credit Hours.

The Emergency Medicine Boot Camp – Transition to Residency elective offers fourth-year medical students matching into emergency medicine the ability to enhance their critical thinking and clinical skills at the level expected of an incoming emergency medicine intern. With an effort to maximize our students' focus for successful preparation and transition into residency, this elective will review undifferentiated clinical presentations for common ED chief complaints, infuse in specialty-specific, basic science anatomy, physiology and pharmacology review, expand on the students' repertoire of procedural and clinical skills and allow for small group collaboration within the course and interdisciplinary collaboration with other specialty-specific capstone bootcamps. Elements of resident professionalism, wellness, time management and personal organization will also be addressed. This elective course is offered to all Miami and Regional Campus emergency medicine bound students. This Emergency Medicine Bootcamp elective is part of the larger Senior Capstone Courses focused on the Transitions to Residency educational initiative. While emergency medicine students can enroll in this course independently, the highest yield is if completed in conjunction and after the broader Senior Capstone Course: Transitions to Residency (MDR 1019).

Components: MOD.

Grading: GRD.

MDR 200. Medical Curriculum 2. 18 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 500. Medical Curriculum 5 MD/PHD Research. 18 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 501. Fundamentals of Biomedical Science: Molecular Basis of Life. 4 Credit Hours.

The Fundamentals of Biomedical Science: Molecular Basis of Life is a course that gives the students the fundamental elements of medical biochemistry, molecular and clinical genetics. The medical biochemistry section includes the basic fundamentals of amino acids, vitamins, proteins, lipids and carbohydrates. The pathways of metabolism and energy production are also studied. The fundamentals of molecular and clinical genetics are discussed. The concepts such as translation, transcription, mutation, single and multiple gene effects are discussed.

Components: MOD.

Grading: GRD.

MDR 502. Fundamentals of Biomedical Science: Cellular Function and Regulation I. 2 Credit Hours.

The Fundamentals of Biomedical Science: Cellular Function and Regulation I course is an introductory course into normal cellular physiology and the general principles of pharmacology. Mechanisms of normal cellular function that are fundamental to all cellular systems are taught during this course. The general concepts of pharmacokinetics including drug delivery, distribution in the body, metabolism, and elimination are discussed during the introduction to pharmacology.

Components: MOD.

Grading: GRD.

MDR 503. Fundamentals of Biomedical Science: Host Defense, Pathogens, and Pathology. 6 Credit Hours.

The Fundamentals of Biomedical Science: Host Defense, Pathogens, and Pathology course is an introductory course that deals with the general principles of immunobiology and microbiology. It also provides students with an introduction to the principles of pathology. Students are introduced into the normal functioning of the immune defense system and abnormal functioning during disease such as HIV and cancer. The microbiology section of the course deals primarily with prototypical pathogens of bacterial, viral, fungal or parasitic origin. The pathology section deals with the fundamentals of pathological process such as inflammation, necrosis, neoplasia and thrombosis.

Components: MOD.

Grading: GRD.

MDR 504. Human Structure I. 7.5 Credit Hours.

The Human Structure I course contains 4 sections that include gross anatomy of the human body, histology of tissues, introduction to cell biology, and introduction to embryology. In the gross anatomy section students are expected to learn the various structures of the human body and their relationships to each other. The gross anatomy course uses dissection of human cadavers and body imaging in the form of CT and MRI to assist in the teaching process. The microscopic anatomy of the various structures of the body are studied in the histology section of the course. The cell biology section introduces the students to various components of the cell and the various functions of these organelles. In the embryology section students learn about the development of the human from the union of the egg and sperm to the birth of the baby.

Components: MOD.

Grading: GRD.

MDR 505. Human Structure II. 0.5 Credit Hours.

The Human Structure II course contains 4 sections that include gross anatomy of the human body, histology of tissues, introduction to cell biology, and introduction to embryology. In the gross anatomy section students are expected to learn the various structures of the human body and their relationships to each other. The gross anatomy course uses dissection of human cadavers and body imaging in the form of CT and MRI to assist in the teaching process. The microscopic anatomy of the various structures of the body are studied in the histology section of the course. The cell biology section introduces the students to various components of the cell and the various functions of these organelles. In the embryology section students learn about the development of the human from the union of the egg and sperm to the birth of the baby.

Components: MOD.

Grading: GRD.

MDR 506. Neuroscience and Behavioral Science. 8 Credit Hours.

The Neuroscience and Behavioral Science module is an interdisciplinary approach to the study of the nervous system. It incorporates the basic sciences of neuroanatomy, neurophysiology, neurochemistry, pharmacology, neuropathology, microbiology, immunology, and behavioral psychology. Students learn the basic structure and function of the nervous system from the brain to the muscle and motor units. Common disease processes that affect the nervous system are discussed with respect to the basic science of the system. The basic and clinical aspects of behavioral science are also a major portion of the module. Students are introduced to the basic science of behavioral medicine and the common diseases that are encountered. The clinical sciences of neurology, neurosurgery, otolaryngology and psychiatry are represented and offer the clinical applications of the basic sciences.

Components: LEC.

Grading: GRD.

MDR 507. Cardiovascular System. 8 Credit Hours.

The Cardiovascular System module is an interdisciplinary approach to the study of the cardiovascular system including the heart and blood vasculature. The basic sciences of anatomy, physiology, pharmacology, biochemistry, pathology and immunology are integrated with the clinical sciences of cardiology in the study of cardiac function and its response to changes in the body with aging from birth to the elderly. The principles of preload, afterload, cardiac output, cardiac failure, EKG, echo and stress testing are discussed. The effects of congenital defects and the surgical procedures to correct these defects are also discussed.

Components: LEC.

Grading: GRD.

MDR 508. Problem Based Learning I. 0.25 Credit Hours.

The Problem Based Learning I course has the following objectives: 1) integrate different key concepts in human structure, biochemistry, genetics, microbiology and immunology within a case based, problem-centered format and 2) promote self-directed learning and problem solving. PBL I employs small group teaching, with trained facilitators, where students engage in applying basic science principles to clinical problems.

Components: MOD.

Grading: GRD.

MDR 509. Problem Based Learning II. 0.25 Credit Hours.

The Problem Based Learning II course has the following objectives: 1) integrate different key concepts in basic sciences related to medicine within a case based, problem-centered format and 2) promote self-directed learning and problem solving. PBL II employs small group teaching, with trained facilitators, where students engage in applying basic science principles to clinical problems.

Components: MOD.

Grading: GRD.

MDR 510. Fundamentals of Biomedical Science: Cellular Function and Regulation II. 2 Credit Hours.

The Fundamentals of Biomedical Science: Cellular Function and Regulation II course is an introductory course into normal cellular physiology and the general principles of pharmacology. Mechanisms of normal cellular function that are fundamental to all cellular systems are taught during this course. The general concepts of pharmacokinetics including drug delivery, distribution in the body, metabolism, and elimination are discussed during the introduction to pharmacology.

Components: MOD.

Grading: GRD.

MDR 511. Clinical Skills I. 0 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 512. Geriatrics I. 0 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 513. Foundations in Population Health and Health System Sciences. 2 Credit Hours.

The focus of this course is to address current issues in public health with special attention to individual populations and also to provide an introduction to the workings of the health system as a whole.

Components: LEC.

Grading: GRD.

MDR 516. Complimentary Medicine and Nutrition. 0 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 517. Systems Based Care Theme. 0 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 518. Physicianship I. 4 Credit Hours.

Include eight themes which are: Behavioral Medicine and Special Populations, Clinical Skills, Complementary and Alternative Medicine, Evidence-Based Medicine, Geriatrics - Pain Management and Palliative Care, Population Health, Professionalism and Systems-Based Care.

Components: MOD.

Grading: GRD.

MDR 519. Physicianship II. 4 Credit Hours.

Include eight themes, which are: Behavioral Medicine and Special Populations, Clinical Skills, Complementary and Alternative Medicine, Evidence-Based Medicine, Geriatrics - Pain Management and Palliative Care, Population Health, Professionalism and Systems-Based Care.

Components: MOD.

Grading: GRD.

MDR 520. Symptoms, Signs, and Disease 1. 5 Credit Hours.

The Symptoms, Signs, and Disease course series (SSD 1-5) provides a symptom-oriented and case-based approach to the pathophysiology of diseases frequently seen in patients by the generalist physician. This is accomplished through active learning that develops clinical knowledge organized into discrete symptom units, integrating foundational basic science disciplines together with clinical correlates in the arenas of radiology, pharmacology, diagnostic testing, pathology and exposure to patient panels. Students learn clinical reasoning skills incorporating common symptoms, clinical signs, diagnostic tests, and an initial differential diagnosis. SSD-1 focuses on allergy/clinical immunology, infectious disease, and common disorders of the skin.

Components: MOD.

Grading: GRD.

Typically Offered: Fall.

MDR 521. Symptoms, Signs, and Disease 2. 4 Credit Hours.

The Symptoms, Signs, and Disease course series (SSD 1-6) provides a symptom-oriented and case-based approach to the pathophysiology of diseases frequently seen in patients by the generalist physician. This is accomplished through active learning that develops clinical knowledge organized into discrete symptom units, integrating foundational basic science disciplines together with clinical correlates in the arenas of radiology, pharmacology, diagnostic testing, pathology and exposure to patient panels. Students learn clinical reasoning skills incorporating common symptoms, clinical signs, diagnostic tests, and an initial differential diagnosis. SSD-2 focuses on the pathophysiological processes of rheumatic, musculoskeletal and hematologic diseases.

Components: MOD.

Grading: GRD.

Typically Offered: Spring.

MDR 522. Symptoms, Signs, and Disease 3. 6 Credit Hours.

The Symptoms, Signs, and Disease course series (SSD 1-6) provides a symptom-oriented and case-based approach to the pathophysiology of diseases frequently seen in patients by the generalist physician. This is accomplished through active learning that develops clinical knowledge organized into discrete symptom units, integrating foundational basic science disciplines together with clinical correlates in the arenas of radiology, pharmacology, diagnostic testing, pathology and exposure to patient panels. Students learn clinical reasoning skills incorporating common symptoms, clinical signs, diagnostic tests, and an initial differential diagnosis. SSD-3 focuses on the pathophysiology of acute and chronic diseases of the cardiovascular, respiratory and renal systems and their collective roles in the homeostasis of oxygen delivery and utilization.

Components: MOD.

Grading: GRD.

Typically Offered: Spring.

MDR 523. Symptoms, Signs, and Disease 4. 3 Credit Hours.

The Symptoms, Signs, and Disease course series (SSD 1-6) provides a symptom-oriented and case-based approach to the pathophysiology of diseases frequently seen in patients by the generalist physician. This is accomplished through active learning that develops clinical knowledge organized into discrete symptom units, integrating foundational basic science disciplines together with clinical correlates in the arenas of radiology, pharmacology, diagnostic testing, pathology and exposure to patient panels. Students learn clinical reasoning skills incorporating common symptoms, clinical signs, diagnostic tests, and an initial differential diagnosis. SSD-4 focuses on the pathophysiological processes that occur during disease states within the digestive organs and the gastrointestinal system.

Components: MOD.

Grading: GRD.

Typically Offered: Spring.

MDR 524. Symptoms, Signs, and Disease 5. 6 Credit Hours.

The Symptoms, Signs, and Disease course series (SSD 1-6) provides a symptom-oriented and case-based approach to the pathophysiology of diseases frequently seen in patients by the generalist physician. This is accomplished through active learning that develops clinical knowledge organized into discrete symptom units, integrating foundational basic science disciplines together with clinical correlates in the arenas of radiology, pharmacology, diagnostic testing, pathology and exposure to patient panels. Students learn clinical reasoning skills incorporating common symptoms, clinical signs, diagnostic tests, and an initial differential diagnosis. SSD-5 focuses on the physiologic and pathophysiologic processes of the central and peripheral nervous system, including principles related to vision and hearing. SSD 5 integrates normal and abnormal emotional and behavioral development.

Components: MOD.

Grading: GRD.

Typically Offered: Spring.

MDR 525. Symptoms, Signs, and Disease 6. 5 Credit Hours.

The Symptoms, Signs, and Disease course series (SSD 1-6) provides a symptom-oriented and case-based approach to the pathophysiology of diseases frequently seen in patients by the generalist physician. This is accomplished through active learning that develops clinical knowledge organized into discrete symptom units, integrating foundational basic science disciplines together with clinical correlates in the arenas of radiology, pharmacology, diagnostic testing, pathology and exposure to patient panels. Students learn clinical reasoning skills incorporating common symptoms, clinical signs, diagnostic tests, and an initial differential diagnosis. SSD-6 focuses on the pathophysiology of endocrine disease and the physiologic and pathophysiologic processes of reproductive organs. SSD 6 integrates the pathophysiology of multiple organ systems and diseases.

Components: MOD.

Grading: GRD.

Typically Offered: Fall.

MDR 526. Biomedical Principles of Health I. 10 Credit Hours.

Biomedical Principles of Health is an active learning-centered course designed to provide an interdisciplinary foundation for the basic biomedical science disciplines relevant to clinical medicine. Students participate in self-regulated learning as preparation for in-class small group discussions. This course is the first of two 6-week foundational courses that include genetics, embryology, pharmacology, immunology and microbiology. Basic anatomy, histology, and physiology of the cardiovascular, respiratory, renal, gastrointestinal and endocrine systems are explored and discussed in relation to healthy patients. Clinical correlations relative to patient care will be paramount. Key topics from this course will be expanded in parallel in the simultaneous Medicine as a Profession course.

Components: MOD.

Grading: GRD.

Typically Offered: Fall.

MDR 527. Biomedical Principles of Health II. 5 Credit Hours.

Biomedical Principles of Health II (BMPH 2) is the sequential active learning-centered course designed to provide an interdisciplinary foundation for the basic biomedical science disciplines relevant to clinical medicine. Students participate in self-regulated learning as preparation for in-class small group discussions. This course is the second of two 6-week foundational courses that include genetics, embryology, pharmacology, immunology and microbiology. Basic anatomy, histology, and physiology of the cardiovascular, respiratory, renal, gastrointestinal systems are explored and discussed in relation relevance to healthy patients. Clinical correlations relative to patient care will be paramount. Key topics from this course will be expanded in parallel in the simultaneous Medicine as a Profession course.

Components: MOD.

Grading: GRD.

Typically Offered: Fall.

MDR 530. Epidemiology I. 1 Credit Hour.

The principles of epidemiology including the distribution, determinants of disease frequency and their investigation. There is a review of the biostatistics to help with the evaluation of scientific investigations.

Components: LEC.

Grading: GRD.

MDR 531. Medicine as a Profession 1. 4 Credit Hours.

Medicine as a Profession is a series of courses throughout medical school that focus on the broad themes introduced during the Introduction to the Medical Profession (IMP) course. The MAP courses encompass a wide variety of knowledge, skills, and attitudes that are essential to the practice of clinical medicine and to becoming transformative leaders in education, research, and policy/health systems. MAP content is divided into 7 key themes. Most MAP learning will occur in a Learning Community of 8-9 students that meets the same afternoon, once per week, with a clinical faculty member (Longitudinal Clinical Educator = LCE). On any given afternoon, you may participate in small-group discussions, work with standardized patients, attend larger group activities (50 students), or go into clinical and community settings with your LCE. You will also have substantial independent work to complete, individually or as part of a team, each week. These assignments will be reviewed and discussed in Learning Community meetings with your peers and your LCE.

Components: MOD.

Grading: GRD.

Typically Offered: Fall.

MDR 532. Medicine as a Profession 2. 4 Credit Hours.

MAP 2 occurs in the afternoons during spring semester of the first year of medicine school. As in MAP 1, most learning will occur in your Learning Community with peers and your LCE (Longitudinal Clinical Educator). You will continue to complete independent work each week to review with your peers and your LCE. Some key learning objectives for MAP 2 include the ability to tailor the patient interview and physical exam to the patient's presenting concern; to develop a plan to improve health/prevent disease for one of Miami's communities; and to help a person navigate the health care system of South Florida. At the end of MAP 2, you will begin training in the basic knowledge and skills necessary to be an emergency medical technician (EMT), including ride-alongs with fire-rescue personnel in the community.

Components: MOD.

Grading: GRD.

Typically Offered: Spring.

MDR 533. Medicine as a Profession 3. 1 Credit Hour.

MAP 3 occurs in the afternoons during the two months of fall semester before beginning clinical clerkships in October. You will continue training in the basic knowledge and skills necessary to be an emergency medical technician (EMT), including ride-alongs with fire-rescue personnel in the community. You will also have the opportunity to review and to teach key clinical skills. MAP 3 provides opportunities to deepen your understanding of the 7 key MAP themes.

Components: MOD.

Grading: GRD.

Typically Offered: Fall.

MDR 535. Introduction to Scholarly Concentration. 3 Credit Hours.

A key element in preparing for a career in medicine is developing the skills needed to develop a research question and evaluate the evidence generated from systematic scholarly inquiry into that topic. The Pathways of Emphasis within the Scholarly Concentration component of the NextGenMD curriculum provide students a structured framework for more deeply developing knowledge in an area of interest, conducting a research project under the mentorship of a faculty mentor, and presenting the results of this inquiry to the research community. The Introduction to Pathways of Emphasis course provides the base knowledge and skills for students entering one of the individual pathways of emphasis. The course will meet for at least 15 hours during the spring semester of the first year of medical school, usually during the period set aside for Scholarly Concentration activities. These meetings will consist of didactic sessions, active learning activities, seminars and journal clubs, and discussions with faculty mentors designed to match students to research projects of interest to them. Each Pathway of Emphasis will develop its own schedule of sessions and course syllabus specific to that Pathway. While each Pathway will offer sessions tailored to the discipline covered, each section of the course will have the same learning objectives.

Components: MOD.

Grading: GRD.

Typically Offered: Spring.

MDR 536. Scholarly Concentration I. 0 Credit Hours.

A key element in preparing for a career in medicine is developing the skills needed to develop a research question and evaluate the evidence generated from systematic scholarly inquiry into that topic. The Pathways of Emphasis within the Scholarly Concentration component of the NextGenMD curriculum provide students a structured framework for more deeply developing knowledge in an area of interest, conducting a research project under the mentorship of a faculty mentor, and presenting the results of this inquiry to the research community. The Introduction to Pathways of Emphasis course provides the base knowledge and skills for students entering one of the individual pathways of emphasis. The course will meet for at least 15 hours during the spring semester of the first year of medical school, usually during the period set aside for Scholarly Concentration activities. These meetings will consist of didactic sessions, active learning activities, seminars and journal clubs, and discussions with faculty mentors designed to match students to research projects of interest to them. Each Pathway of Emphasis will develop its own schedule of sessions and course syllabus specific to that Pathway. While each Pathway will offer sessions tailored to the discipline covered, each section of the course will have the same learning objectives.

Components: MOD.

Grading: GRD.

Typically Offered: Spring.

MDR 537. Scholarly Concentration II. 1 Credit Hour.

A key element in preparing for a career in medicine is developing the skills needed to develop a research question and evaluate the evidence generated from systematic scholarly inquiry into that topic. The Pathways of Emphasis within the Scholarly Concentration component of the NextGenMD curriculum provide students a structured framework for more deeply developing knowledge in an area of interest, conducting a research project under the mentorship of a faculty mentor, and presenting the results of this inquiry to the research community. The Introduction to Pathways of Emphasis course provides the base knowledge and skills for students entering one of the individual pathways of emphasis. The course will meet for at least 15 hours during the spring semester of the first year of medical school, usually during the period set aside for Scholarly Concentration activities. These meetings will consist of didactic sessions, active learning activities, seminars and journal clubs, and discussions with faculty mentors designed to match students to research projects of interest to them. Each Pathway of Emphasis will develop its own schedule of sessions and course syllabus specific to that Pathway. While each Pathway will offer sessions tailored to the discipline covered, each section of the course will have the same learning objectives.

Components: MOD.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 550. Introduction to the Medical Profession. 3 Credit Hours.

The IMP course is the first introduction to the fundamental aspects of being a physician- the knowledge, skills, and attitudes that are the basis for practicing medicine. Our goal is to help you become an altruistic, dutiful, culturally humble, and ethical physician, one who is committed to compassionate, respectful patient care and dedicated to excellence and life-long learning. During IMP, you will learn some basics of clinical skills such as communication, interviewing techniques, and physical examination, and we will introduce broad themes about community health, ethics, and systems of care. We will emphasize the benefits of independent, self-directed learning, as well as small group, team-based learning. The course will be an introduction to the Physicianship course which is organized into 7 overlapping themes: Clinical Skills, Professionalism, Communication Skills, Population Health, Health systems Science, Nutrition and Wellness and Personal Development.

Components: MOD.

Grading: GRD.

MDR 551. CMC Fundamentals of Biomedical Science I. 8 Credit Hours.

The course covers the basic concepts and vocabulary in the disciplines of cell biology and physiology, genetics and biochemistry, immunology, microbiology, anatomy, histology, pharmacology, and pathology. This course will meet for about 20 hours per week with approximately 10 hours of lecture per week and 10 hours per week of small group or other non-lecture sessions. Week-long clinical cases will cover specific learning objectives for the various basic science disciplines, are facilitated by a faculty tutor and lectures are designed to complement the clinical cases. FBS I is a prerequisite for FBS 2 and 3. CMC stands for Continuity Medicine Curriculum.

Components: LEC.

Grading: GRD.

MDR 552. CMC Integration of Public Health and Medicine II. 2 Credit Hours.

The IPHM I course is designed to allow students to develop their fundamental clinical skills (communication, history taking and physical exam skills) in continuity of care environments (community practice setting and Department of Health clinics). The IPHM I course will meet for 4-5 hours per week and is closely coordinated and integrated with the PS course. Community and faculty preceptors will supervise and evaluate students longitudinally. IPHM I is a prerequisite for IPHM II. CMC stands for Continuity Medicine Curriculum.

Components: MOD.

Grading: GRD.

MDR 553. CMC Physicianship Skills I. 2 Credit Hours.

The PS course will expose students to competencies that physicians must master to provide high quality and effective care in today's health care system. The course covers the fundamentals of process evaluation, quality management, outcomes assessment, patient satisfaction, patient safety, systems-based care, interprofessional team care, and complex chronic disease management. The PS course will meet for 4 - 5 hours per week. PS I is a prerequisite for PS II. CMC stands for Continuity Medicine Curriculum.

Components: LEC.

Grading: GRD.

MDR 554. CMC Fundamentals of Biomedical Science II. 5 Credit Hours.

FBS 2 continues from FBS1 with the basic concepts and vocabulary in the disciplines of cell biology and physiology, genetics and biochemistry, immunology, microbiology, anatomy, histology, pharmacology, and pathology. This course will meet for about 20 hours per week with approximately 10 hours of lecture per week and 10 hours per week of small group or other non-lecture sessions. Week-long clinical cases will cover specific learning objectives for the various basic science disciplines, are facilitated by a faculty tutor and lectures are designed to complement the clinical cases. CMC stands for Continuity Medicine Curriculum.

Components: LEC.

Grading: GRD.

MDR 555. CMC Fundamentals of Biomedical Science III. 6 Credit Hours.

FBS 3 continues from FBS2 with the basic concepts and vocabulary in the disciplines of cell biology and physiology, genetics and biochemistry, immunology, microbiology, anatomy, histology, pharmacology, and pathology. This course will meet for about 20 hours per week with approximately 10 hours of lecture per week and 10 hours per week of small group or other non-lecture sessions. Week-long clinical cases will cover specific learning objectives for the various basic science disciplines, are facilitated by a faculty tutor and lectures are designed to complement the clinical cases. CMC stands for Continuity Medicine Curriculum.

Components: LEC.

Grading: GRD.

MDR 556. CMC Integration of Public Health and Medicine II. 2 Credit Hours.

The IPHM II course is designed to allow students to develop their fundamental clinical skills (communication, history taking and physical exam skills) in continuity of care environments (community practice setting and Department of Health clinics). The IPHM II course will meet for 4-5 hours per week and is closely coordinated and integrated with the PS course. Community and faculty preceptors will supervise and evaluate students longitudinally. IPHM I is a prerequisite for IPHM II. CMC stands for Continuity Medicine Curriculum.

Components: MOD.

Grading: GRD.

MDR 557. CMC Physicianship Skills II. 3 Credit Hours.

The PS course will continue to expose students to competencies that physicians must master to provide high quality and effective care in today's health care system. The course covers the fundamentals of process evaluation, quality management, outcomes assessment, patient satisfaction, patient safety, systems-based care, interprofessional team care, and complex chronic disease management. The PS course will meet for 4 - 5 hours per week. PS I is a prerequisite for PS II. CMC stands for Continuity Medicine Curriculum.

Components: LEC.

Grading: GRD.

MDR 558. CMC Neuroscience and Behavioral Science. 8 Credit Hours.

The module is an interdisciplinary approach to the study of the nervous system. In the context of the principles of continuity medicine and chronic illness, the module includes neurophysiology, neurochemistry, pharmacology, neuropathology, microbiology, immunology, and behavioral psychology. Progressing from neuroanatomy to gross anatomy, students learn the structure and function of the nervous system from the head/brain, and neck, to the muscle and motor units. Students are introduced to the basic science of behavioral medicine and the common diseases that are encountered. Finally, the basic sciences are integrated to the clinical sciences of neurology, neurosurgery, otolaryngology and psychiatry. A combination of didactic, small-group and laboratory methods are used.

Components: MOD.

Grading: GRD.

MDR 559. CMC Cardiovascular System. 8 Credit Hours.

The module is an interdisciplinary approach to the study of the cardiovascular system including the heart and blood vasculature. The basic sciences are intergrated with the clinical sciences of cardiology in the study of cardiac function and its response to changes in the body with aging from birth to the elderly. The module seeks to place cardiovascular disease and management into the context of continuity medicine and chronic illness using a combination of didactic, small-group and simulation teaching methods.

Components: MOD.

Grading: GRD.

MDR 600. Medical Curriculum 6. 18 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 601. Sexual Issues in Medical Practice. 2 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 602. Immunobiology. 2 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 603. Pathology. 6 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 604. Clinical Skills II. 6 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 605. Mechanisms of Disease I. 9 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 606. Mechanisms of Disease II. 9 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 607. Pharmacology. 6 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 608. Microbiology. 6 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 609. Introduction to Psychiatry. 1 Credit Hour.

Components: LEC.

Grading: GRD.

MDR 610. Respiratory System. 5 Credit Hours.

The module is an interdisciplinary study of the respiratory system and includes the anatomy, physiology, immunology, pathology, radiology and biochemistry of the system. The pathophysiology is illustrated with clinical vignettes. Students are also exposed to the evaluation of normal physiological measurement of the respiratory system and the principles of artificial ventilation. Students should be able to solve clinical problems in pulmonary medicine and critical care by the end of the module.

Components: LEC.

Grading: GRD.

MDR 611. Accl Basic Science Curriculum. 18 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 612. Renal System. 5 Credit Hours.

The module is an interdisciplinary course of the renal system. Students study the structure, function and pathophysiology of the kidneys and genitourinary tract. General concepts of acid-base and electrolyte balance are studied in the normal and diseased states. The course provides a foundation for dealing with the various diseases of the renal system encountered during the clinical years.

Components: LEC.

Grading: GRD.

MDR 613. Endocrine and Reproductive System. 5 Credit Hours.

The module is an interdisciplinary course that deals with the normal endocrine development, function, pathophysiology and disease processes. Students are exposed to problems solving of clinical cases involving endocrine and reproductive medicine. Students will be exposed to various evaluation and treatment tools available at this time.

Components: LEC.

Grading: GRD.

MDR 614. Gastrointestinal System and Nutrition. 5 Credit Hours.

The module is an integrated course on the molecular and cellular processes that involve the digestive system and its associated organs. The module covers the normal structure and function and the pathophysiological processes that occur during disease states of the digestive organs. Nutrition and the clinical aspects of obesity and bariatric surgery are discussed.

Components: LEC.

Grading: GRD.

MDR 615. Hematology and Oncology. 5 Credit Hours.

The module is an introductory course that covers basic hematology that is essential to the practice of medicine. Students are introduced into the variations in hematological parameters that are used in the diagnosis and monitoring of common hematological diseases. The second half of the module serves as a basic overview of cancer and includes basic concepts of oncogenesis, epidemiology, biology of cancer, pathology and the role of the immune system. Students are introduced to the various treatment modalities.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 616. Dermatology and Ophthalmology. 2 Credit Hours.

The Dermatology and Ophthalmology module is an introductory course that covers the basic pathophysiology and clinical aspects of dermatology and ophthalmology that are essential for a general physician. The module covers the normal structure and function of skin, and eye. Common disease diseases of the skin and eye are discussed.

Components: MOD.

Grading: GRD.

MDR 618. Respiratory. 4 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 619. Inflammation and Infectious Disease. 4 Credit Hours.

During this four week segment of the curriculum students are divided into small groups and will work with a faculty facilitator who has been trained in small group learning. Students work as a group on clinical scenarios. They are expected to work as both teacher and student during this time. Students are to focus on clinical cases involving rheumatological and infectious disease problems. They receive guiding questions with each case to assist with their learning process. The students will have opportunities to interact with experts in the various areas covered in the cases during consultation sessions. The small group sessions are case driven. The facilitator is there to assist with group dynamics and not to serve as a teacher. The student groups work through a clinical scenario during the three two-hour sessions a week.

Components: LEC.

Grading: GRD.

MDR 620. Problem Based Learning I. 0.25 Credit Hours.

During this segment of the curriculum, students are divided into small groups and will work with a faculty facilitator who has been trained in problem based learning. Students work as a group on clinical scenarios. They are expected to work as both teacher and student during this time utilizing the knowledge that they have gained during the core and organ system modules to work through these cases and develop a differential diagnosis and treatment plan for the patients. The small group sessions are student driven. Self-directed learning is emphasized. This allows the students to use their knowledge of basic sciences and to hone the skills of presentation to a clinical team in preparation for their clinical years.

Components: MOD.

Grading: GRD.

MDR 621. Problem Based Learning II. 0.75 Credit Hours.

During this segment of the curriculum, students are divided into small groups and will work with a faculty facilitator who has been trained in problem based learning. Students work as a group on clinical scenarios. They are expected to work as both teacher and student during this time utilizing the knowledge that they have gained during the core and organ system modules to work through these cases and develop a differential diagnosis and treatment plan for the patients. The small group sessions are student driven. Self-directed learning is emphasized. This allows the students to use their knowledge of basic sciences and to hone the skills of presentation to a clinical team in preparation for their clinical years.

Components: MOD.

Grading: GRD.

MDR 622. Behavioral and Special Populations II. 0 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 623. Evidence Based Population Medicine II. 0 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 624. Clinical Skills II. 0 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 625. Geriatrics End of Life Theme II. 0 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 626. Complimentary Alternative Medicine Theme. 0 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 627. Systems Based Care Theme. 0 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 628. Physicianship III. 4 Credit Hours.

Include eight themes which are: Behavioral Medicine and Special Populations, Clinical Skills, Complementary and Alternative Medicine, Evidence-Based Medicine, Geriatrics - Pain Management and Palliative Care, Population Health, Professionalism and Systems-Based Care.

Components: LEC.

Grading: GRD.

MDR 629. Physicianship IV. 2 Credit Hours.

Include seven themes: 1.Clinical Skills(interviewing the patient,physical examination, clinical reasoning) 2.Professionalism(ethics, health care law,physician behavior, policy/advocacy) 3.Communication skills(interpersonal,interprofessional, group dynamics) 4.Population Health(social determinants of health, role of culture/bias in health outcomes, health equity) 5.Health Systems Science(informatics, population health management,evidence-based medicine, electronic health record, patient safety, quality improvement) 6.Nutrition and Wellness(personal wellbeing, patient health promotion and preventive medicine 7.Personal Development(learning how to learn, career and scholarly development, becoming a transformational leader

Components: LEC.

Grading: GRD.

MDR 630. Epidemiology II. 1 Credit Hour.

The principles of epidemiology including the distribution, determinants of disease frequency and their investigation. There is a review of biostatistics to help with the evaluation of scientific investigations.

Components: LEC.

Grading: GRD.

MDR 650. CMC Gastrointestinal System and Nutrition. 5 Credit Hours.

The course continues the interdisciplinary approach to the study of all the systems included are the gastrointestinal system and the liver, and the normal structure-function and the pathophysiological processing during disease states of the digestive organs. The course seeks to place GI disease and nutrition management into the context of continuity medicine and chronic illness using a combination of didactic, and small-group teaching methods.

Components: LEC.

Grading: GRD.

MDR 651. CMC Respiratory System. 5 Credit Hours.

The course continues the interdisciplinary approach to the study of all the systems. It builds upon the knowledge of respiratory anatomy from the FBS course sequence and covers physiology, immunology, pathology, radiology, and biochemistry of the system. Students are also exposed to the evaluation of normal physiological measurement of the respiratory system and the principles of artificial ventilation. The course seeks to place acute and chronic respiratory disease into the context of continuity medicine using a combination of didactic, clinical case presentations and small-group teaching methods.

Components: LEC.

Grading: GRD.

MDR 652. CMC Renal System. 5 Credit Hours.

The course continues the interdisciplinary approach to the study of all the systems. The structure, function and pathophysiology of the kidneys and genito-urinary tract are covered. General concepts of acid-base and electrolyte balance are studied in the normal and acute and chronic diseased states. The course seeks to place renal disease into the context of continuity medicine and chronic illness and care, and uses a combination of didactic, clinical case presentations, simulation and small-group teaching methods.

Components: LEC.

Grading: GRD.

MDR 653. CMC Inflammation and Infectious Diseases. 4 Credit Hours.

The course uses an interdisciplinary approach to present basic concepts of rheumatology (inflammation) and uses these disciplines to present the basic concepts of infectious processes and disease. The course uses a combination of didactic, clinical case presentations, and small-group teaching methods.

Components: LEC.

Grading: GRD.

MDR 654. CMC Hematology and Oncology I. 3 Credit Hours.

The course presents basic hematology concepts essential to the practice of medicine. Variations in hematological parameters used in diagnosis and monitoring of common hematological diseases are presented and integrated with a basic overview of cancer. This includes basic concepts of oncogenesis, epidemiology, biology of cancer, pathology and the role of the immune system. The course seeks to place hematological disorders and cancer into the context of continuity medicine and chronic illness and care, and uses a combination of didactic, clinical case presentations and small-group teaching methods.

Components: LEC.

Grading: GRD.

MDR 655. CMC Endocrinology and Reproductive System. 5 Credit Hours.

The course is an interdisciplinary approach to the study of normal endocrine, function, pathophysiology and disease processes. Students are exposed to problem solving of clinical cases involving endocrine and reproductive medicine. The course seeks to place endocrine disorders and management into the context of continuity medicine and chronic illness using a combination of didactic and small-group teaching methods.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

MDR 656. CMC Integration of Public Health and Medicine III. 1 Credit Hour.

The IPHM III course is designed to allow students to apply their clinical skills (communication, history taking and physical exam skills) in continuity of care environments (community practice setting and Department of Health clinics). The IPHM III course will meet for 4-5 hours per week and is closely coordinated and integrated with the PS3 course. Community and faculty preceptors will supervise and evaluate students longitudinally.

Components: MOD.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 657. CMC Physicianship Skills 3. 5 Credit Hours.

The PS3 course exposes students to more advanced competencies that physicians must master to provide high quality and effective care in today's health care system. The course reviews and expands upon the process of evaluation, quality management, outcomes assessment, patient satisfaction, patient safety, systems-based care, interprofessional team care, and complex chronic disease management. The PS3 course will meet for 4-5 hours per week.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 658. CMC Hematology and Oncology II. 2 Credit Hours.

The course presents basic hematology concepts essential to the practice of medicine. Variations in hematological parameters used in diagnosis and monitoring of common hematological diseases are presented and integrated with a basic overview of cancer. This includes basic concepts of oncogenesis, epidemiology, biology of cancer, pathology and the role of the immune system. The course seeks to place hematological disorders and cancer into the context of continuity medicine and chronic illness and care, and uses a combination of didactic, clinical case presentations and small-group teaching methods.

Components: LEC.

Grading: GRD.

MDR 659. CMC Dermatology and Ophthalmology. 2 Credit Hours.

The course uses an interdisciplinary approach to present basic concepts of Dermatology and Ophthalmology and uses these disciplines to present the basic concepts of infectious processes and disease. The course uses a combination of didactic, clinical case presentations, and small-group teaching methods.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

MDR 660. CMC Integration of Public Health and Medicine IV. 1 Credit Hour.

The IPHM IV course is designed to allow students to apply their clinical skills (communication, history taking and physical exam skills) in continuity of care environments (community practice setting and Department of Health clinics). The IPHM IV course will meet for 4-5 hours per week and is closely coordinated and integrated with the PS3 course. Community and faculty preceptors will supervise and evaluate students longitudinally.

Components: MOD.

Grading: GRD.

MDR 661. Physicianship IV. 1 Credit Hour.

Components: MOD.

Grading: GRD.

MDR 700. Medical Curriculum 7. 18 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 701. Introduction to Radiology. 0 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 702. Interprofessional Patient Safety. 1 Credit Hour.

The Patient Safety/Transition to the Wards module is a one week module geared towards preparing students for their role in the health care field. The goals are to provide students with the requisite knowledge, skills, behaviors and attitudes to not only deliver safe patient care but also to be able to identify and solve patient safety problems. The course involves a series of interactive didactic sessions and simulated role play at the UM-JMH Center for Patient Safety.

Components: MOD.

Grading: GRD.

MDR 703. Core Family and Community Medicine. 4-5 Credit Hours.

The family medicine and geriatric medicine clerkship is a community based primary care rotation where students are exposed to patients in the outpatient setting. Students are introduced to the whole patient approach to medical care. They are expected to gain a working knowledge of the types of medical conditions that are commonly seen in the primary care setting. They will become familiar with managed care concepts of health delivery. They should gain an appreciation for how cultural and social influences affect the perception of health and management of diseases. They should acquire an understanding of the concepts of continuity and coordination of care. Students will also spend one week of intensive training experience on the acute care of elders unit at Jackson Memorial Hospital. They will become proficient in the use of assessment instruments in the evaluation of the geriatric patient. Students are evaluated on their knowledge of family medicine and geriatrics, their interpersonal skills, and their professionalism.

Components: LEC.

Grading: GRD.

MDR 705. Core Generalist Primary Care Clerkship. 4 Credit Hours.

The generalist primary care clerkship exposes students to ambulatory medicine. Students are expected to become competent in the properties of common diseases seen in an outpatient setting. They will gain skills and competence in the history taking, physical examination, diagnosis and treatment of these conditions. They will also rotate through a variety of specialty care areas and will evaluate patients with the guidance of specialty care faculty. Students are evaluated on their knowledge of ambulatory medicine, their interpersonal skills, and their professionalism.

Components: LEC.

Grading: GRD.

MDR 706. Core Internal Medicine Clerkship. 8-10 Credit Hours.

The Internal Medicine clerkship is a rotation where students are expected to further develop their skills of history taking, physical examination, and observation. They are to gain knowledge about the diagnosis and treatment of medical conditions. They will practice their skills of communication with their team, the hospital staff, and their patients. The clerkship has didactic activities in addition to the bedside teaching, student report, and patient oriented problem solving sessions. Students are evaluated on their knowledge of medicine, their interpersonal skills, and their professionalism.

Components: LEC.

Grading: GRD.

MDR 707. Neurology Clerkship. 2 Credit Hours.

The Neurology Clerkship exposes students to common and emergency neurological diseases. Students have the option of exposure to Pediatric Neurology during the clerkship. Students are expected to become competent in the neurological examination, diagnosis, evaluation by various modalities of imaging and laboratory testing, and treatment options. Students are exposed to inpatient ward, consult and stroke services. Students are evaluated on their knowledge of neurology, their interpersonal skills, and their professionalism.

Components: LEC.

Grading: GRD.

MDR 708. Core Obstetrics and Gynecology Clerkship. 5-6 Credit Hours.

The Ob/Gyn clerkship offers clinical and didactic learning opportunities in the varied settings of ob/gyn practice - the operating room, inpatient wards, the clinic, labor and delivery, and the ultrasound suite. Students are assigned to JMH, community hospital and private practice sites to varying degrees to meet learning requirements. Students learn the clinical presentations and differential diagnosis of the conditions comprising the majority women's reproductive health care - with nearly even distribution of obstetrics and gynecology topics. On site clinical learning is supplemented with case based and problem based didactic learning, both in the intermediate sized classroom and small group learning settings. Ethical reasoning, EBM, suturing and communications skills and issues are covered in the workshop format. Students will learn how women's cultural, educational and socioeconomic backgrounds affect their access to health care their values about fertility, childbearing, and contraception, the consequences of sexual behaviors and their understanding of their bodies throughout life, and their power in relationships and the role of sexuality in their lives. The evaluation system focuses on medical knowledge, communications skills and EBM skills.

Components: LEC.

Grading: GRD.

MDR 709. Core Pediatrics Clerkship. 5-6 Credit Hours.

The clerkship exposes the students to the spectrum of the pediatric population from neonates to adolescence. It is divided into experiences on the clinical ward service, ambulatory, emergency room, neonatal and comprehensive healthcare program. Students are expected to become competent in the examination of the child and in common pediatric diseases. The teaching is divided between ward based teaching rounds and didactic sessions. Students are evaluated on their knowledge of pediatrics, their interpersonal skills, and their professionalism.

Components: LEC.

Grading: GRD.

MDR 710. Core Psychiatry Clerkship. 5-6 Credit Hours.

The clerkship exposes students to psychiatric disorders and the psychiatric patient. Students are expected to become competent with obtaining a psychiatric history and performing a mental status examination. They are expected to identify and evaluate patients with neuropsychiatric and substance abuse symptoms. They are expected to recognize the spectrum of ages affected by psychiatric disorders and brain diseases. They will become acquainted with the laboratory and imaging testing relevant to the clinical manifestations of psychiatric disorders. They are expected to be knowledgeable as to the various medications used in the treatment of these diseases, including potential drug interactions. Students are evaluated on their knowledge of psychiatry, their interpersonal skills, and their professionalism.

Components: LEC.

Grading: GRD.

MDR 711. Core Surgery Clerkship. 8-10 Credit Hours.

The surgical clerkship is a rotation where students gain knowledge about diseases that have surgery as a treatment modality. Students are exposed to the operating room and assist in surgical procedures. They are expected to gain an understanding of the pathophysiology of the disease processes and have a basic knowledge of the diagnosis and treatment of them. They are expected to develop the basic surgical skills that are expected of a general physician. Students evaluated on their knowledge of surgery, their interpersonal skills, and their professionalism.

Components: LEC.

Grading: GRD.

MDR 712. Anesthesiology Clerkship. 2 Credit Hours.

The anesthesia clerkship exposes students to the various techniques used by anesthesiologists during surgical procedures and exposes them to the pre-operative evaluation of patients and post-operative care. Students will use the simulation training devices to become competent in the techniques of management of a patient and their airway. Students will become knowledgeable on the pharmacology of the various medications used in anesthesia. Students are evaluated on their knowledge of anesthesia, their interpersonal skills, and their professionalism. No interviewing during Thanksgiving block.

Components: LEC.

Grading: GRD.

MDR 713. Core Internal Medicine Clerkship. 10 Credit Hours.

The Internal Medicine clerkship is a rotation where students are expected to further develop their skills of history taking, physical examination, and observation. They are to gain knowledge about the diagnosis and treatment of medical conditions. Throughout their rotation students will experience inpatient medicine, outpatient medicine, and sub-specialty medicine. During inpatient medicine and sub-specialty they will practice their skills of communication with their team, the hospital staff, fellows, and their patients. Students will experience bedside teaching, student report, and patient oriented problem solving sessions. During their outpatient medicine and sub-specialty experience, they will practice skills of communication with the clinic staff, nurse practitioners, physician assistants, fellows, and patients. During outpatient medicine, students will have a unique experience to see patients in the office from the start of a clinical encounter by getting patients from the waiting room to the end of their encounter where they are encouraged to have an assessment and plan. They will have the opportunity to precept with their attending in the patient's exam room, giving the patient the opportunity to add any additional information the medical student may have missed. These students will also be experiencing telehealth where they will use video visits to see patients. Overall, the clerkship has various didactic activities covering various topics in inpatient, ambulatory, and sub-specialty medicine. Students are evaluated on their knowledge of medicine, their interpersonal skills, and their professionalism.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 714. Caring for Families and Communities. 8 Credit Hours.

Caring for Families and Communities (CFC) clerkship will help prepare students for the unique and evolving role of the physician in the ever changing health care system. During this 8-week clerkship, you will have many opportunities to work closely with patients, primary care physicians, and other members of the health care team in the varied clinical settings in which future physicians will encounter patients. You will be learning and practicing both the traditional and less traditional skills necessary for our future physicians. You will learn about the importance of meeting the healthcare needs of communities of patients as well as individual patients and will develop some of the knowledge and skills necessary to fulfill these fundamental physician responsibilities. No matter what career path you choose, the experiences, knowledge, and skills that you gain from this clerkship are intended to help you become the best physician you can be.

Components: LEC.

Grading: GRD.

MDR 715. Integrated Pediatrics and Obstetrics and Gynecology. 12 Credit Hours.

The Integrated Pediatrics and OBG Clerkship includes the disciplines of Pediatrics and Obstetrics and Gynecology. This clerkship includes elements of Radiology, Pathology, and Genetics. Each student will spend time in each of these disciplines and will follow patients across disciplines when possible. Didactic sessions will be provided for each of the disciplines and will include conferences that are interprofessional in nature. The University of Miami Miller School of Medicine places a priority on active, collaborative, learner-centered methodologies to prioritize the knowledge, skills and attitudes required of physicians to practice in today's health care system. The clerkship experiences will allow students to follow their patients through their care and treatment and participate in the medical, surgical, diagnostic and therapeutic aspects of the care required for management of acute and chronic illnesses. Clinical experiences are designed to emphasize interprofessional, team-based, complex disease management with a major focus on continuity care, health maintenance, and disease prevention. The clinical clerkships will strive to not only integrate the basic and clinical sciences, but also the behavioral and social sciences with continued emphasis on the Institutional Objectives of the Educational Program. The University of Miami Miller School of Medicine places a priority on active, collaborative, learner-centered methodologies to prioritize the knowledge, skills and attitudes required of physicians to practice in today's health care system. The clerkship experiences will allow students to follow their patients through their care and treatment and participate in the medical, surgical, diagnostic and therapeutic aspects of the care required for management of acute and chronic illnesses. Clinical experiences are designed to emphasize interprofessional, team-based, complex disease management with a major focus on continuity care, health maintenance, and disease prevention. The clinical clerkships will strive to not only integrate the basic and clinical sciences, but also the behavioral and social sciences with continued emphasis on the Institutional Objectives of the Educational Program.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 716. Integrated Surgery, Emergency Medicine, and Anesthesiology. 12 Credit Hours.

The NextGen integrated clerkship, From ED to OR, will give the Phase 2 medical student the opportunity to actively expand their knowledge across emergency medicine, anesthesia and surgery disciplines, develop technical, procedural and clinical skills and initiate collaborative relationships with patients, residents, faculty and staff across the interdisciplinary continuum of the adult and pediatrics emergency departments, trauma resuscitation, operating room, outpatient clinic and inpatient wards. Below are the discipline course descriptions, learning objectives, student expectations and learning outcomes. EM Discipline Description: The Emergency Department creates an unique opportunity for medical students to acquire a foundation of knowledge and skills to care for patients with emergency medical conditions. We believe that every physician should possess adequate assessment and management skills to rapidly identify life-threatening conditions, to initiate care, demonstrate procedural proficiency and to know whom and when to call for assistance, regardless of their ultimate medical specialty and training. The Emergency Department is also one of the few practice sites where students play an integral role in the initial evaluation of an undifferentiated patient – where the diagnosis is completely unknown on initial contact. The medical students are expected to be an involved, engaged and active member of the ED team, providing ED patient care and communicating with families. Anesthesia Discipline Description: The medical student rotation in the Department of Anesthesiology, Perioperative Medicine and Pain Management is designed to provide medical students with insights into the specialty of general anesthesiology, its subspecialties and the importance of the anesthesiologist in caring for patients prior to surgery, during surgery and the postoperative period. We will educate medical students on the multi-faceted role anesthesiologists play as perioperative physicians, intensivists and pain medicine specialists and how anesthesiologists apply their diagnostic skills and problem-solving abilities in these arenas will be demonstrated. At the same time, we will teach students to perform technical procedures appropriate to their level of training. Whenever feasible, we will promote participation in research so that students may explore a topic in depth as well as develop skills in critical thinking. During the Anesthesia rotation, students will become familiar with the many facets of the practice of anesthesiology including the perioperative setting, pre-anesthetic evaluation, induction and maintenance of anesthesia during surgery, patient emergence from anesthesia and post anesthesia care. It is expected that the medical student will develop an information base allowing them to identify and manage common preoperative concerns. We aim to develop recognition of the importance of patient safety; understand pharmacological dosing, complications related to various anesthetic techniques; understand basic ACLS and understand the management of regional anesthetics. The clerkship offers a unique opportunity for medical students to gain valuable experience and knowledge of the operating room setting within an academic institution. You will be exposed to the daily challenges faced by anesthesiologists. Surgery Discipline Description: The main purpose of the Surgery rotation is to provide the medical student with the resources and knowledge to recognize surgical disease. Career choices available to the medical student today in terms of medical discipline and specialty are quite varied. However, surgical disease is something that needs to be recognized and identified by all physicians. Every clinician needs to understand when patients have surgical problems and need to be referred to a surgeon. Doctors also need to understand proper screening tools available to prevent surgical problems and the appropriate times to order these studies. The purpose of the Surgery rotation is not to produce a junior surgeon. The main goal of this clinical rotation is to introduce the junior student to the world of general surgery and to show students that surgeons play an important role in the management of patients amongst all disciplines in medicine. In addition, students will see that surgery is an exciting field especially with all of the technological advances of the 21st century. The Surgery rotation will introduce students to a wide spectrum of surgical diseases. By following patients through their initial presentation to the operating room, their perioperative and post-operative care, students will be able to observe the evolution and resolution of surgical disease processes. Teaching in the operating room and at the bedside, in particular, brings students and patients together for their mutual benefit.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 717. Integrated Medicine. 12 Credit Hours.

The Practice of Medicine Clerkship includes the disciplines of internal medicine, geriatrics, palliative care/hospice medicine, and elements of radiology over the 12-week period. In a given week, each student will spend time in each of these disciplines and will follow patients across disciplines when possible. Didactic sessions will be provided for each of the disciplines and will include conferences that are interprofessional in nature. The University of Miami Miller School of Medicine places a priority on active, collaborative, learner-centered methodologies to prioritize the knowledge, skills and attitudes required of physicians to practice in today's health care system. The clerkship experiences will allow students to follow their patients through their care and treatment and participate in the medical, surgical, diagnostic and therapeutic aspects of the care required for management of acute and chronic illnesses. Clinical experiences are designed to emphasize interprofessional, team-based, complex disease management with a major focus on continuity care, health maintenance, and disease prevention. The clinical clerkships will strive to not only integrate the basic and clinical sciences, but also the behavioral and social sciences with continued emphasis on the Institutional Objectives of the Educational Program.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 718. Integrated Psychiatry, Neurology, and Family Medicine. 12 Credit Hours.

The Mind, Matter and Medicine Clerkship includes the disciplines of Neurology, Psychiatry and Family Medicine over the 12-week period. In a given week, each student will spend time in each of these disciplines and will follow patients across disciplines when possible. Didactic sessions will be provided for each of the disciplines and will include conferences that are interprofessional in nature. The University of Miami Miller School of Medicine places a priority on active, collaborative, learner-centered methodologies to prioritize the knowledge, skills and attitudes required of physicians to practice in today's health care system. The clerkship experiences will allow students to follow their patients through their care and treatment and participate in the medical, surgical, diagnostic and therapeutic aspects of the care required for management of acute and chronic illnesses. Clinical experiences are designed to emphasize interprofessional, team-based, complex disease management with a major focus on continuity care, health maintenance, and disease prevention. The clinical clerkships will strive to not only integrate the basic and clinical sciences, but also the behavioral and social sciences with continued emphasis on the Institutional Objectives of the Educational Program.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 720. Medicine as a Profession Clerkships 1. 1 Credit Hour.

Medicine as a Profession Clerkships 1 (MAP CK 1) is part of a course series which expands on the knowledge, skills, and attitudes that are essential to the practice of clinical medicine and to becoming transformative leaders in education, research, and policy/health systems. The MAP course touches on the fundamental aspects of being a physician—the knowledge, skills, and attitudes that are the basis for practicing medicine. With time, you will learn what it means to be a doctor, to live a doctor's life, to do a doctor's work. Our goal is to help you become an altruistic, dutiful, culturally humble, and ethical physician, one who is committed to compassionate, respectful patient care, and dedicated to excellence and life-long learning. MAP 2 broadens on the 7 key themes introduced during the Introduction to the Medical Profession (IMP) course (see 7 Key Themes below). The majority of your MAP education will occur in your house Learning Communities of 8-9 students that meets the same afternoon once per week with a clinical faculty member (Longitudinal Clinical Educator = LCE). On any given afternoon, you may participate in small-group discussions, work with standardized patients, attend larger group activities (50 students), or go into clinical and community settings with your LCE. Please note these Learning Community sessions will follow a flipped classroom approach and thus will require careful attention to pre-session independent work to complete individually or as part of a team each week. These assignments will be reviewed and discussed in Learning Community meetings with your peers and your LCE. MAP Themes across the 4-Year Curriculum: In MAP 2, you will continue to learn competencies needed to meet the Institutional Objectives of the Educational Program (see below). You will learn basic and clinical sciences virtually and in the classroom, and then apply this knowledge through increasing responsibility for direct patient care in hospitals and doctors' offices. This content will build on the 7 overlapping themes introduced in IMP: 7 Key Themes 1. Clinical Skills (interviewing the patient, physical examination, clinical reasoning) 2. Professionalism (ethics, legal medicine, physician behavior, policy/advocacy) 3. Communication Skills (interpersonal, interprofessional, group dynamics, learning to teach) 4. Population Health (social determinants of health, role of culture/bias/racism in health outcomes, health equity, public health, climate science) 5. Health Systems Science (business of medicine, informatics, population health management, evidence-based medicine, electronic health records, patient safety, quality improvement, artificial intelligence) 6. Nutrition and Wellness (personal wellbeing, patient health promotion and preventive medicine) 7. Personal Development (learning how to learn, career and scholarly development, becoming a transformational leader) These themes are not each specific courses; rather, these themes are woven into the entire curriculum via small groups, clinical experiences, independent learning opportunities, lectures, and seminars. Each theme represents a collaborative effort of medical educators from various disciplines.

Components: MOD.

Grading: GRD.

Typically Offered: Fall.

MDR 721. Medicine as a Profession Clerkships 2. 3 Credit Hours.

Medicine as a Profession Clerkships 2 (MAP CK 2) is part of a course series which expands on the knowledge, skills, and attitudes that are essential to the practice of clinical medicine and to becoming transformative leaders in education, research, and policy/health systems. The MAP course touches on the fundamental aspects of being a physician—the knowledge, skills, and attitudes that are the basis for practicing medicine. With time, you will learn what it means to be a doctor, to live a doctor's life, to do a doctor's work. Our goal is to help you become an altruistic, dutiful, culturally humble, and ethical physician, one who is committed to compassionate, respectful patient care, and dedicated to excellence and life-long learning. MAP 2 broadens on the 7 key themes introduced during the Introduction to the Medical Profession (IMP) course (see 7 Key Themes below). The majority of your MAP education will occur in your house Learning Communities of 8-9 students that meets the same afternoon once per week with a clinical faculty member (Longitudinal Clinical Educator = LCE). On any given afternoon, you may participate in small-group discussions, work with standardized patients, attend larger group activities (50 students), or go into clinical and community settings with your LCE. Please note these Learning Community sessions will follow a flipped classroom approach and thus will require careful attention to pre-session independent work to complete individually or as part of a team each week. These assignments will be reviewed and discussed in Learning Community meetings with your peers and your LCE. MAP Themes across the 4-Year Curriculum: In MAP 2, you will continue to learn competencies needed to meet the Institutional Objectives of the Educational Program (see below). You will learn basic and clinical sciences virtually and in the classroom, and then apply this knowledge through increasing responsibility for direct patient care in hospitals and doctors' offices. This content will build on the 7 overlapping themes introduced in IMP. 7 Key Themes 1. Clinical Skills (interviewing the patient, physical examination, clinical reasoning) 2. Professionalism (ethics, legal medicine, physician behavior, policy/advocacy) 3. Communication Skills (interpersonal, interprofessional, group dynamics, learning to teach) 4. Population Health (social determinants of health, role of culture/bias/racism in health outcomes, health equity, public health, climate science) 5. Health Systems Science (business of medicine, informatics, population health management, evidence-based medicine, electronic health records, patient safety, quality improvement, artificial intelligence) 6. Nutrition and Wellness (personal wellbeing, patient health promotion and preventive medicine) 7. Personal Development (learning how to learn, career and scholarly development, becoming a transformational leader) These themes are not each specific courses; rather, these themes are woven into the entire curriculum via small groups, clinical experiences, independent learning opportunities, lectures, and seminars. Each theme represents a collaborative effort of medical educators from various disciplines.

Components: MOD.

Grading: GRD.

Typically Offered: Spring.

MDR 722. Medicine as a Profession Clerkships 3. 2 Credit Hours.

Medicine as a Profession Clerkships 3 (MAP CK 3) is part of a course series which expands on the knowledge, skills, and attitudes that are essential to the practice of clinical medicine and to becoming transformative leaders in education, research, and policy/health systems. The MAP course touches on the fundamental aspects of being a physician—the knowledge, skills, and attitudes that are the basis for practicing medicine. With time, you will learn what it means to be a doctor, to live a doctor's life, to do a doctor's work. Our goal is to help you become an altruistic, dutiful, culturally humble, and ethical physician, one who is committed to compassionate, respectful patient care, and dedicated to excellence and life-long learning. MAP 2 broadens on the 7 key themes introduced during the Introduction to the Medical Profession (IMP) course (see 7 Key Themes below). The majority of your MAP education will occur in your house Learning Communities of 8-9 students that meets the same afternoon once per week with a clinical faculty member (Longitudinal Clinical Educator = LCE). On any given afternoon, you may participate in small-group discussions, work with standardized patients, attend larger group activities (50 students), or go into clinical and community settings with your LCE. Please note these Learning Community sessions will follow a flipped classroom approach and thus will require careful attention to pre-session independent work to complete individually or as part of a team each week. These assignments will be reviewed and discussed in Learning Community meetings with your peers and your LCE. MAP Themes across the 4-Year Curriculum: In MAP 2, you will continue to learn competencies needed to meet the Institutional Objectives of the Educational Program (see below). You will learn basic and clinical sciences virtually and in the classroom, and then apply this knowledge through increasing responsibility for direct patient care in hospitals and doctors' offices. This content will build on the 7 overlapping themes introduced in IMP. 7 Key Themes 1. Clinical Skills (interviewing the patient, physical examination, clinical reasoning) 2. Professionalism (ethics, legal medicine, physician behavior, policy/advocacy) 3. Communication Skills (interpersonal, interprofessional, group dynamics, learning to teach) 4. Population Health (social determinants of health, role of culture/bias/racism in health outcomes, health equity, public health, climate science) 5. Health Systems Science (business of medicine, informatics, population health management, evidence-based medicine, electronic health records, patient safety, quality improvement, artificial intelligence) 6. Nutrition and Wellness (personal wellbeing, patient health promotion and preventive medicine) 7. Personal Development (learning how to learn, career and scholarly development, becoming a transformational leader) These themes are not each specific courses; rather, these themes are woven into the entire curriculum via small groups, clinical experiences, independent learning opportunities, lectures, and seminars. Each theme represents a collaborative effort of medical educators from various disciplines.

Components: MOD.

Grading: GRD.

Typically Offered: Fall.

MDR 756. RMC Core Integrated Internal Medicine Clerkship. 13 Credit Hours.

The Integrated Medicine clerkship offers students parallel training in internal medicine primarily, geriatrics and palliative care. Radiology is included as it supports clinical decision making in internal medicine. Students will acquire the clinical skills, critical thinking skills, knowledge, and professional behaviors necessary to provide comprehensive medical care for adults and develop experience in the assessment, evaluation, and basic management of important, common problems encountered in inpatient internal medicine. The objectives for the clerkship are derived from the internal medicine and geriatrics clerkships on the main campus and from the Clerkship Directors in Internal Medicine guidelines. Students will spend half the rotation as part of a team with the UMMSM Internal Medicine residents based at JFK and half the rotation assigned to an internist preceptor and spend their time in both inpatient and outpatient settings. Students will also participate in a geriatrics consult service and a palliative care consult service. Academic half-days will include lecture and small-group activities in the individual disciplines along with integrated multidisciplinary activities. Assessment will be achieved by the use of the NBME Subject Exam in Medicine, clinical performance evaluation by faculty preceptor, observed clinical histories and physical exams and written case reports.

Components: LEC.

Grading: GRD.

MDR 757. JFK Neurology Clerkship. 4 Credit Hours.

The purpose of the JFK Neurology clerkship at JFK Medical Center is to provide students with an opportunity to acquire a foundation of knowledge and skills to care for patients with neurological conditions. The primary goals of the Neurology Clerkship are for you to gain competence in taking a neurologic history and performing a neurologic exam, and use them to aid in localization and diagnosis of neurologic disease. Also, it is hoped students will develop knowledge, attitudes, and skills necessary to assess, diagnose and refer patients presenting in the primary care setting with neurologic complaints. Students will have the opportunity to explore the field of neurology as a potential career path through exposure to a variety of complaints, diagnoses, patient encounters, and case-based didactics. Students are evaluated on their knowledge of neurology, their interpersonal skills, and their professionalism.

Components: LEC.

Grading: GRD.

MDR 758. RMC Core Obstetrics and Gynecology Clerkship. 5 Credit Hours.

By the end of the clerkship, students will demonstrate the ability to obtain a complete obstetric and gynecologic age-appropriate history and perform the physical examination which elicits information necessary for diagnosis and treatment. Students will complement their clinical experience in the office and on the wards with independent directed study and recognize the importance of interdisciplinary collaboration in optimizing clinical outcomes for patients, work effectively with other health professionals, and demonstrate knowledge of the role of obstetrics and gynecological care in the broader community and health care system. Academic half-days will include lecture and small-group activities. Assessment will be achieved by the use of the NBME Subject Exam in Obstetrics and Gynecology, clinical performance evaluation by faculty preceptor, observed structured clinical examination (OSCE), written case reports and journal club.

Components: LEC.

Grading: GRD.

MDR 759. RMC Core Pediatrics Clerkship. 5 Credit Hours.

By the end of this clerkship, students will demonstrate the ability to obtain a complete age-appropriate pediatric history which elicits information necessary for diagnosis and treatment and will demonstrate knowledge of appropriate health supervision, anticipatory guidance, and preventive medicine in pediatrics. Students will demonstrate interpersonal and communication skills that result in effective information exchange and collaboration with patients, their families, and other health care providers. Students will be assigned to a general pediatrician preceptor and spend their time in the clinical ward service, ambulatory, emergency room, neonatal and the hospital setting, and a comprehensive healthcare program in private practice. Academic half-days will include lecture and small-group activities. Assessment will be achieved by the use of the NBME Subject Exam in Pediatrics, clinical performance evaluation by faculty preceptor, observed clinical histories and physical exams and written case reports.

Components: LEC.

Grading: GRD.

MDR 760. RMC Core Psychiatry Clerkship. 5 Credit Hours.

By the end of this clerkship, students will demonstrate the ability to obtain a complete psychiatric history, recognize relevant physical findings and perform a complete mental status examination, and conduct a psychiatric interview which elicits information necessary for diagnosis and treatment, all of which form the basis of a therapeutic alliance with the patient. Students will demonstrate knowledge of common psychiatric emergencies and their management and demonstrate the ability to evaluate both their patient care practices and the scientific evidence, in order to improve the quality of care they deliver to patients with psychiatric illness. Academic half-days will include lecture and small-group activities. Assessment will be achieved by the use of the NBME Subject Exam in Psychiatry, clinical performance evaluation by faculty preceptor, observed clinical histories and written case reports.

Components: LEC.

Grading: GRD.

MDR 761. RMC Core Integrated Surgery Clerkship. 11 Credit Hours.

The Integrated Surgery clerkship offers students parallel training in surgery primarily, anesthesiology and radiology. Students will acquire the clinical skills, critical thinking skills, knowledge, and professional behaviors necessary to provide comprehensive pre-operative evaluation of patients and post-operative care. Students will spend half the rotation assigned to a general surgeon and the other with a vascular surgeon in order to acquire the skills and knowledge about diseases that have surgery as a treatment modality. Students will be part of the operating room teams and assist in surgical procedures. Students will be expected to assist the anesthesiology teams for pre- and post-surgical care. Radiology experiences will be provided by the JFK radiology team during discipline-specific teaching time but also as part of the care of the patient pre- and post-surgery. Academic half-days will include lecture and small-group activities in the individual disciplines along with integrated multidisciplinary activities. Assessment will be achieved by the use of the NBME Subject Exam in Surgery, clinical performance evaluation, observed clinical histories and physical exams and written case reports.

Components: LEC.

Grading: GRD.

MDR 764. RMC Core Family Medicine Clerkship. 5 Credit Hours.

The clerkship aims to train students to provide care that is compassionate, appropriate and effective for the treatment of health problems and the promotion of health. The objectives for the clerkship are derived initially from the clerkship objectives on the main campus and from the Society for the Teaching of Family Medicine guidelines. Students will be assigned to a family medicine preceptor and spend the majority of their time in the private practice. Academic half-days will include lecture and small-group activities. Assessment will be achieved by the use of the NBME Subject Exam in Family Medicine, clinical performance evaluation by faculty preceptor, observed clinical histories and physical exams and written case reports.

Components: LEC.

Grading: GRD.

MDR 765. RMC Community Public Health Practicum. 2 Credit Hours.

This course will build upon the experiences in the first two years during Community & Public Health Practicum 1. All students will spend one afternoon per week during the core clinical clerkships during this practicum course. Students will rotate through a repeating sequence of four experiences each week: an afternoon in their public health continuity clinic, an immersion experience with Department of Health sites, work on their public health capstone project, and a monthly seminar series. Seminars in contemporary Public Health Issues. In their continuity primary care clinics they will be assigned to a public health FQHC clinic in an underserved community in Palm Beach County. They will work with general internist physicians in this clinic. The course is Pass/Fall and contingent upon attendance, enthusiasm, and professionalism.

Components: PRA.

Grading: GRD.

MDR 766. RMC Physicianship Skills IV. 0 Credit Hours.

The PS4: Transitions to Residency course continues the themes addressed in PS1-2-3 related to the competencies that physicians must master to provide high quality and effective care in today's health care system. The course expands upon the themes of communication skills, medical ethics, medical humanities, wellness, time-management strategies, patient safety, systems-based care, inter-professional team care, and preparing for life as a medical resident within the applied setting of the year 3 clerkships. The PS4 course will meet for eight sessions for two-hours each during the academic year. Each session is delivered in the form of learning communities, with faculty and student continuity throughout the year. This allows for small group discussion, communication skill role plays, team-based learning, and the forging of mentoring relationships. A passing grade will be contingent on attendance at the eight sessions, completion of journal activities, and satisfactory participation.

Components: MOD.

Grading: GRD.

MDR 800. Ultrasound in Gynecology and Obstetrics. 2-4 Credit Hours.

This rotation is an intensive experience with the faculty of the Division of Ultrasound in the Department of Obstetrics and Gynecology. It is geared for students interested in the fields of Obstetrics and Gynecology, Radiology and/ or General Surgery. The emphasis of the rotation is on the use of ultrasound as a diagnostic and therapeutic tool in women's health. The student will observe and participate in diagnostic ultrasound for gynecologic problems, routine and complicated obstetrics, and ultrasound guided procedures for gynecologic and obstetrical indications. This will be complemented by time in the operating room for general gynecologic surgery and on labor and delivery. Students are expected to display a high level of intellectual curiosity and perform as a self motivated learner. For students with an interest in Obstetrics and Gynecology or Radiology there may be opportunities to become involved with research with the attending physicians.

Components: MOD.

Grading: GRD.

MDR 801. University of Miami Hospital Gynecology. 4 Credit Hours.

This rotation is intended for students with an interest in the fields of Obstetrics and Gynecology, Urology, General Surgery and Family Medicine. Students will become an integral part of the gynecology service at the University of Miami Hospital. Experience will include participation in private practice clinics, office surgery, inpatient consults, surgery in the operating room and post operative care. Surgeries will include minor procedures, operative laparoscopy, robotics and open gynecologic surgery. Students are expected to display a high level of intellectual curiosity and perform at the level of an in Obstetrics and Gynecology.

Components: MOD.

Grading: GRD.

MDR 802. Ophthalmology @ BPEI Naples FL. 2 Credit Hours.

The two week clinical elective in ophthalmology is geared toward fourth year medical students with an interest in obtaining a basic understanding of fundamental ophthalmology for students NOT pursuing a career in ophthalmology. Aspects of ophthalmology that are pertinent to the practice of internal medicine, neurology, pediatrics, family practice and other primary care specialties will also be taught. Students will rotate through the emergency room, operating room, and various subspecialty clinics at the Bascom Palmer Eye Institute where they will shadow attendings and housestaff. Students will be required to keep a patient log and will be expected to complete an online course. A case presentation session based on the patient pathology seen throughout the course will take place at the end of the rotation. Students are also welcome to attend weekly grand rounds and fluorescein conferences as well as daily resident lectures during the rotation.

Components: MOD.

Grading: GRD.

MDR 803. Mechanisms of Disease I. 1-9 Credit Hours.

Components: MOD.

Grading: PNP.

MDR 804. Mechanisms of Disease II. 1-9 Credit Hours.

Components: MOD.

Grading: PNP.

MDR 805. Geriatrics: Morse Center Palm Beach. 2 Credit Hours.

The medical student will spend two weeks at the Morse Geriatric Center and assume responsibility for the care of older patients under the supervision of a board-certified geriatrician, geriatric medicine fellows, and members of the interdisciplinary care team. Our mission is to teach, model and assess the knowledge, skills, and attitudes needed by medical students to complete a comprehensive geriatrics assessment. Clinical activities will take place in multiple chronic care venues including the Morse Geriatric Center, a long term care facility; the Levine Rehabilitation Center, a subacute rehabilitation center; the Traditions of the Palm Beaches, an assisted living center; and the Geriatric Clinic.

Components: MOD.

Grading: GRD.

MDR 806. Wound Healing. 2-4 Credit Hours.

The student will be exposed to a multitude of difficult-to-heal wounds in the lower extremity (i.e. diabetic foot ulcers, venous ulcers), trunk (pressure sores), upper extremities (traumatic, infected), and head and neck (cancers, etc.) Students will interview patients with chronic and acute wounds and identify critical pathways that will lead to the diagnosis, etiology, pathophysiology and treatment of these difficult-to-heal wounds. Students will learn to care for these wounds and make clinical interventions and recommendations to their healing.

Components: MOD.

Grading: GRD.

MDR 807. Advanced Gross Anatomy. 2-4 Credit Hours.

Intended primarily for students applying for surgical or orthopedic residency programs, this elective provides the ability to study advanced regional anatomy with opportunities for students to develop teaching and presentation skills.

Components: MOD.

Grading: GRD.

MDR 808. Third Year Anesthesiology. 2 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 809. Advanced Anesthesiology. 4 Credit Hours.

The Senior Elective rotation program is consistent with the guidelines of the American Society of Anesthesiology. However, few additions and modifications are included in order to make this rotation a more meaningful one for a student who has been exposed to anesthesiology during his junior year. By the end of the rotation, the student is expected to be proficient in airway management, pharmacology of general and local anesthetics, drug interactions, and the medical evaluation of surgical patients as it pertains to anesthesia.

Components: MOD.

Grading: GRD.

MDR 810. Cell Biology Research. 2 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 811. Dermatology. 2-4 Credit Hours.

The student will attend 7 clinics per week, weekly management conferences and grand rounds, the Miami Dermatology Society meetings (which are held 6 times a year), journal club, and slide conferences. The student will participate in outpatient dermatologic care, under supervision of the Chief Resident and a member of the faculty, at Jackson Memorial Hospital and the University of Miami Hospital. Development of history taking, diagnostic skills, and ambulatory management of dermatological diseases will be emphasized in this elective program. Basic diagnostic procedures, including punch and shave biopsies, Tzanck, scabies, and potassium hydroxide preparations will be taught. There will also be opportunities to observe surgical therapy and the Dermatology inpatient service. All students will be required to participate in slide reading session with Dr. Elgart and there will be a quiz at the end of the rotation.

Components: MOD.

Grading: GRD.

MDR 812. Emergency Medicine Clerkship. 4 Credit Hours.

The Emergency Medicine four-week rotation will provide both classroom teaching, simulation, and hands-on clinical experience in emergency care of patients of all ages with a wide spectrum of illnesses and injuries. Students are expected to evaluate and manage assigned patients under the direct supervision of an EM attending physician. Students will also gain additional experience at physical diagnosis and procedural skills by working with patients being evaluated by other housestaff, as appropriate for teaching. Emphasis is placed upon initial assessment, recognition, prioritization, and stabilization of acute emergency conditions. Procedural skills are an important emphasized component, including wound repair, intravenous techniques, airway management, ACLS care, fracture and soft tissue injury management, incision and drainage procedures, etc. This rotation also includes a variety of generalist skills in handling minor acute conditions that will be encountered frequently in primary care practice. The student will participate in the provision of pre-hospital emergency care with a Fire Rescue EMS crew.

Components: LEC.

Grading: GRD.

MDR 813. Dermatology Virtual Elective. 4 Credit Hours.

In this 4-week virtual elective, the student will be exposed to various areas of dermatology and taught both through video and live sessions. Students will be provided a rigorous education in dermatology that will prepare them for their future training and will learn about our dermatology program at the University of Miami Miller School of Medicine.

Components: MOD.

Grading: GRD.

MDR 815. Externship not at University of Miami. 2-8 Credit Hours.

A maximum of 12 weeks may be spent in elective time away from UMMSM. Externship time in excess of the allowable 12 weeks will be counted for credit but will not count towards fulfillment of the required 14 weeks of Electives, unless a student obtains prior written approval from the Senior Associate Dean for Undergraduate Medical Education. In other words, at least two weeks of Electives must be taken at your home school. Externship experiences must be described in the course catalog of the host institution. No externships with physicians in private practice will be approved.

Components: MOD.

Grading: GRD.

MDR 816. Family Medicine in the Florida Keys. 2-4 Credit Hours.

Since late 1992, third year medical students have been given the opportunity to complete their Family Medicine rotation in the private office of physicians practicing in the Florida Keys. The popular rotation has prompted many students to request similar experience during the senior year.

Components: MOD.

Grading: GRD.

MDR 817. Family Medicine Preceptorship. 2 Credit Hours.

Students taking the Family Medicine Preceptorship will have the opportunity to experience the true essence and diversity of Family Practice in an ambulatory setting and develop knowledge of the specialty. *Students are expected to participate with their family physician preceptor in all health care related activities. These may include but are not limited to: management of hospitalized patients, nursing home visits, home visits and volunteer activities.

Components: MOD.

Grading: GRD.

MDR 818. Family Medicine Practice Based Research. 4 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 819. Family Medicine Sub-I. 4 Credit Hours.

The overall goal for the students taking Inpatient Family Medicine (Ward Family Medicine) is to afford them the opportunity to experience Family Medicine in an inpatient setting, and to develop some knowledge of the specialty.

Components: MOD.

Grading: GRD.

MDR 820. Ambulatory Internal Medicine. 2-4 Credit Hours.

The ambulatory block rotation serves to enhance the medical student's knowledge and skills in caring for the ambulatory medical patient. Students will primarily be seeing patients which are new to the outpatient clinic, addressing preventive screening as well as care of chronic conditions such as diabetes, hypertension, cardiomyopathy, and chronic obstructive pulmonary disease. In addition, they will be exposed to patients with the following characteristics: - Ambulatory patients with acute complaints - Gender-specific medical care - Patients recently discharged from the inpatient setting or from the emergency room - Patients being evaluated for surgery - Patients presenting for routine GYN care.

Components: MOD.

Grading: GRD.

MDR 821. Arthritis. 2-4 Credit Hours.

This elective will teach the student an approach to the diagnosis, management and therapy of common rheumatic disease including rheumatoid arthritis, gout and osteoarthritis. In addition, unusual diseases such as systemic sclerosis, polymyositis, and vasculitis are seen. Students will become proficient in the examination of joints and interpretation of joint fluid findings.

Components: MOD.

Grading: GRD.

MDR 822. UMH Cardiovascular Intensive Care Unit. 4 Credit Hours.

This elective is intended to provide the senior medical student with a variety of cardiac critical care experiences, including acute myocardial infarction, heart failure, valvular heart disease, and arrhythmias. The student will also be exposed to clinical research ranging from valvular heart disease to stem cell transplantation. Three-to-four cardiology conferences will be offered each week, supplementing the daily teaching rounds, which include didactic presentations. An opportunity for procedures experience, including central line placement, will also be available.

Components: MOD.

Grading: GRD.

MDR 823. Cardiology Teaching Lab - Harvey (4 wks). 4 Credit Hours.

This rotation consists of a comprehensive review of cardiology for the clinician. A clinician must be able to evaluate and treat cardiology patients, as they represent the largest subset of patients they see with significant disease. Each student is trained to develop the knowledge and skills needed to conduct a complete cardiovascular history and bedside examination. The rotation includes the integration of the Bedside Evaluation with the current indications for non-invasive and invasive diagnostic testing. The diagnosis and management of valvular heart disease, coronary heart disease, hypertensive heart disease, congestive failure, and congenital lesions are covered by didactic lectures, patient presentations (certain rotations), review of highly selected material during Self-Learning time, and by group and individual sessions with Harvey, the Cardiopulmonary Patient Simulator. The UMedic multimedia computer curriculum is incorporated into the elective to further interactive self-learning. Didactic ECG and Arrhythmia lectures are given daily. Each student will also read, interpret and review electrocardiograms and arrhythmias with clinical faculty. Students will use web-based programs, Essential ECG and Essential Arrhythmia, to facilitate their learning.

Components: MOD.

Grading: GRD.

MDR 824. JMH Cardiology Consult. 2-4 Credit Hours.

This rotation includes consultative diagnosis, electrocardiography, and intensive medical and surgical cardiac care at JMH. Students work up patients and discuss the history and physical findings with the cardiology fellows, participate in daily consultation rounds with the attending cardiologists, and are in the supervision of fellows and faculty. Students attend and participate in the cardiology conference; and for those interested, a period of observation in the Cardiac Catheterization Laboratory may be arranged.

Components: MOD.

Grading: GRD.

MDR 825. Clinical Cardiology at Mount Sinai Medical Center. 4 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 826. Endocrinology, Diabetes and Metabolism. 4 Credit Hours.

This is a 4-week elective intended to expose the senior medical student to a spectrum of experiences in Endocrinology and Diabetes. The student will spend time at Jackson Memorial Hospital (JMH) and University of Miami Hospital (UMH) on the inpatient Diabetes and Endocrinology consult services, seeing patients in consultation and follow-up and discussing them with the fellows and attending on rounds. The student will attend the JMH and VA diabetes and endocrinology outpatient clinics. All students will meet with the clerkship director and are expected to attend all conferences.

Components: MOD.

Grading: GRD.

MDR 827. Advanced Geriatrics. 2-4 Credit Hours.

This senior level elective in geriatric medicine allows students to gain additional experience evaluating older patients in a variety of care settings under the supervision of attendings physicians and fellows in geriatric medicine. It can also be designed to give students a clinical or research experience in a specialized area of geriatrics tailored to their interests. Students will be assigned to a primary clinical venue and will have opportunities to rotate through other care settings (inpatient consultation, outpatient, home-based and/or long term care).

Components: MOD.

Grading: GRD.

MDR 829. JMH Coronary Care Unit. 2-4 Credit Hours.

This elective presents students with the opportunity to follow patients with life endangering cardiac problems from the moment of admission to the hospital to discharge from the Unit. Particular emphasis is placed on clinical aspects of diagnosis and management of these patients. Participation in the insertion of Swann-Ganz and pacemaker catheters shall be allowed for students who show exceptional interest. The rotation will, in addition, provide experience in computerized monitoring of arrhythmias, EKG and echocardiographic interpretations, and experience in interpreting cardiac catheterization data.

Components: MOD.

Grading: GRD.

MDR 830. Gastroenterology. 2-4 Credit Hours.

This is a 4-week elective intended to expose the senior medical student to a wide spectrum of experiences in gastroenterology. Each week or two (depending on the length of the elective), the student will rotate through a different hospital/clinic setting and see patients/procedures based on the emphasis at that location. The student will spend time at Jackson Memorial Hospital on the consult service, seeing patients in consultation and follow-up and discussing them with the fellows and attending on rounds. The student will also watch endoscopy and learn its indications and findings. At the University of Miami Hospital, students will be exposed to a more tertiary care setting, also rounding with the fellow and attending and watching procedures, some of which are more advanced and not done at Jackson. At the University of Miami Hospital and Clinics, the student will be given an outpatient experience, including subspecialty clinics in Inflammatory Bowel Disease and Motility while also watching advanced endoscopic procedures. The student will have the opportunity to go to clinic and watch procedures at the VA as well. The rotation director will try to meet with the students during the rotation, and they are expected to attend fellow conferences and the VA and JMH fellows' clinics.

Components: MOD.

Grading: GRD.

MDR 831. General Ambulatory Internal Medicine at Veteran's Adm. 2-4 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 832. Advanced Geriatrics @ Miami Jewish Home. 2 Credit Hours.

The medical student will spend two weeks at the Miami Jewish Health Systems and assume responsibility for the care of older patients under the supervision of a faculty member and members of the interdisciplinary care team. The goal is to teach, model and assess the knowledge, skills, and attitudes needed by medical students to complete a comprehensive geriatrics assessment. Clinical activities will take place in multiple chronic care venues available at the Miami Jewish Health Systems, which include a nursing home, an assisted living facility, outpatient clinics, and an inpatient hospital.

Components: MOD.

Grading: GRD.

MDR 833. Hematology. 2-4 Credit Hours.

The objective of this clinical hematology program is to allow students to obtain experience in the diagnosis and management of hematological disease, in the performance of marrow aspiration and in the study of morphology of peripheral blood cells and bone marrow. Students are expected to participate in the workup of hematology consults, hematology conferences, rounds, and seminars. Direct contact during teaching rounds between the students and faculty provides ongoing evaluation of the progress and comprehension

Components: MOD.

Grading: GRD.

MDR 834. Hepatology. 2-4 Credit Hours.

The student will be exposed to a wide spectrum of liver and biliary disease. The pathogenesis and development of a practical clinical approach to the recognition and differential diagnosis of these disorders will be emphasized. The student may opt for a predominantly outpatient or inpatient exposure or a combination of both. In the outpatient rotation the student will be assigned to the clinic fellow and will attend daily outpatient clinic at UMHC with different faculty members. In the inpatient rotation the student will round with the inpatient fellow and attending on the patients admitted to the Hepatology service at UMHC and inpatient Hepatology consults. In a 4-week rotation the student may opt to spend 2 weeks in the outpatient and 2 weeks in the inpatient setting or all 4 weeks in one of them. There are daily morning conferences at 8:00 a.m., weekly liver biopsy / tumor conferences and literature review sessions.

Components: MOD.

Grading: GRD.

MDR 835. Mt. Sinai Infectious Diseases. 4 Credit Hours.

The goal of the elective is to provide the opportunity to increase understanding of the broad range of Infectious Disease through the experience of serving as a consultant. Students work closely with the fellow and Attending in Infectious Disease at Mt. Sinai Medical Center. The student is expected to see patients as a consultant. Cases are presented to Attending physician and discussed in detail. There are special microbiology laboratory conferences and a weekly Infectious Disease clinical conference.

Components: MOD.

Grading: GRD.

MDR 836. Infectious Diseases. 2-4 Credit Hours.

This elective provides a learning experience in the clinical discipline of Infectious Diseases, a discipline that stresses accurate definition of disease and establishment of an etiologic diagnosis through clinical assessment and microbiologic testing. Treatment can be rationally selected when the etiologic diagnosis is correctly identified. Appropriate initiation and discontinuation of antimicrobials are key activities on the ID service. Performing these steps under guidance of a physician with ID specialty training provides the essence of this clinical experience. This elective provides a unique opportunity to see a broad range of infectious diseases.

Components: MOD.

Grading: GRD.

MDR 837. Hospital, Health Care Services, and Access: An Interdisciplinary Inquiry. 2 Credit Hours.

Hospitals are settings in which great numbers of people converge and interact in surprisingly many ways. This interdisciplinary course will offer graduate students across the University the opportunity to appreciate and examine closely the complexity of the hospital form and the necessarily multiple perspectives within which we view, think, and work in hospitals.

Components: MOD.

Grading: GRD.

MDR 838. Latin American Externship. 4 Credit Hours.

Electives in various Latin American countries can be arranged on an individual basis. Areas of special interest will vary but most deal with tropical hygiene and medicine in underdeveloped areas. This program is a reciprocal part of our Latin American Training Program and as such entails certain stipulations. • All students will be screened by the Office of Student Affairs and recommended in writing. • Students must speak Portuguese if they are planning to travel to Brazil. All other countries in Latin America require conversational Spanish skills. • Students will be responsible for their travel, room and board, and any other incidental expense. • A maximum of 10 students will be allowed to travel to Latin America. • Length of externship is 4-6 weeks. Students will receive credit for four weeks only.

Components: MOD.

Grading: GRD.

MDR 839. JMH Medical Intensive Care Unit. 2-4 Credit Hours.

The Medical Intensive Care Unit is an eighteen bed unit that provides care for critically ill medical patients. Students will gain an understanding of caring for patients with acute and chronic respiratory failure, various types of shock, cardiogenic pulmonary edema, the acute respiratory distress syndrome, malignant hypertension, acute myocardial infarction and various complications of multi-organ system failure. Emphasis will be placed on the indications for admission to and discharge from the MICU, invasive hemodynamic monitoring and mechanical ventilatory support. Education is provided during morning work rounds with the attending, core lectures on MICU related topics, biweekly critical care journal club and informal student and housestaff case presentations.

Components: MOD.

Grading: GRD.

MDR 840. MIA VAMC Medical Intensive Care Unit. 2-4 Credit Hours.

By spending time on Attending rounds in the morning and check-out rounds in the afternoon with the housestaff, students will increase their appreciation of the problems of providing care for patients with acute and chronic respiratory failure, the various types of shock, cardiogenic pulmonary edema, the adult respiratory distress syndrome, malignant hypertension, acute myocardial infarction and various complications of multi-organ system failure.

Components: MOD.

Grading: GRD.

MDR 842. Nephrology. 4 Credit Hours.

The clinical and teaching activities focus on the provision of consultative and direct medical care for patients with renal disease, hypertension, disorders of water, electrolyte and acid-base balance, and related metabolic and immunologic disease. Contemporary technologies used in diagnosis and treatment include renal biopsy, acute and chronic hemo- and peritoneal-dialysis, renal transplantation, plasmapheresis, evaluation of nuclear flow studies, and interventional nephrology.

Components: MOD.

Grading: GRD.

MDR 843. Pulmonary. 4 Credit Hours.

This 4-week elective is intended to expose the senior medical student to a spectrum of experiences in pulmonary disease. The student will be assigned to the pulmonary consultation services at either Jackson Memorial Hospital or University of Miami Hospital.

Components: MOD.

Grading: GRD.

MDR 844. Teaching Elective 4th Year. 4 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 845. HIV Primary Care Clinic. 2-4 Credit Hours.

Students, under the supervision of an HIV / Infectious Disease Attending, will act as Internist developing their skills of diagnosis and management of patients with human immunodeficiency virus (HIV) infection at the dedicated outpatient ambulatory facility. The spectrum of patients includes those with predominantly advanced HIV disease and complications to evaluation and screening of patients with mildly symptomatic or asymptomatic HIV disease. Special emphasis is placed on Infectious Disease, Primary Care, and General Internal Medicine. In addition, particular needs in the areas of psychiatry, Dermatology and Ophthalmology related to the general internist will be covered.

Components: MOD.

Grading: GRD.

MDR 846. Student Health Clinic. 2 Credit Hours.

The Student Health Service provides primary care services to UM undergraduate and graduate students. Students are seen for acute illnesses and injuries, and are followed for chronic medical problems. Specialty care services include orthopaedics, women's health, and allergy clinics. Routine lab tests and X-rays are performed on site.

Components: MOD.

Grading: GRD.

MDR 847. JMH Medicine Sub-I. 4 Credit Hours.

Two senior students will be paired, and together, will carry out all the duties and responsibilities of an intern, commensurate with their capabilities. The pair will function as an "acting intern" and will have an increased level of responsibility for direct patient care. There will be an opportunity to improve clinical and didactic skills in the diagnosis and treatment of a wide spectrum of medical disorders. They will be directly supervised by their second or third year medical resident and Attending Physician. Students will be assigned to Jackson Memorial Hospital (JMH) medical teams – General Medicine, Special Immunology/Infectious Diseases, Cardiology, Hematology/Oncology, or Transplant Nephrology. Every effort will be made to pair students with their requested fellow student as well as with residents and attendings who have demonstrated excellence in student teaching and a high level of interest in education. Assignment will be made by the Chief Medical Residents with input from the clerkship director. While students may indicate a preference, the final decision will be up to the course director.

Components: MOD.

Grading: GRD.

MDR 848. Brain Injury Neurorehab. 2-4 Credit Hours.

During the elective, the medical student will spend time on the Ryder Trauma 4th floor Neurorehab service, shadowing the Rehab attending on daily rounds. There is an opportunity to get involved in clinical research activities that are ongoing in the division. Students will also have the opportunity to become familiar with Botulinum toxin injections and Baclofen pumps.

Components: MOD.

Grading: GRD.

MDR 849. Neurology Consultation. 2-4 Credit Hours.

On this service, students who have completed the neurology clerkship are provided the opportunity to evaluate off-service neurology problems with the neurology consulting resident and attending assigned to that service.

Components: MOD.

Grading: GRD.

MDR 850. Advanced Neurology. 2-4 Credit Hours.

Third- or fourth-year students who have completed the clinical clerkship in neurology may perform an elective on the General Neurology service at Jackson Memorial Hospital or the Veterans Administration Medical Center with an array of university-run or private physician clinic choices to complement this experience. Clinic choices include Epilepsy, Veterans Administration Neurology, Neuro-ophthalmology, Neuromuscular, Stroke, Pediatric Neurology, Multiple Sclerosis, Movement Disorders, Neuro-Oncology, Sleep and Headache. Experience in EMG and Neuropathology can be arranged based on director approval and availability.

Components: MOD.

Grading: GRD.

MDR 851. Stroke Neurology. 2-4 Credit Hours.

Third- or fourth-year medical students who have completed the clinical clerkship in Neurology may perform a 2- or 4-week rotation on the stroke neurology service at Jackson Memorial Hospital under the supervision of a stroke neurology attending.

Components: MOD.

Grading: GRD.

MDR 852. Neurosurgery Sub-I. 4 Credit Hours.

The neurosurgery service covers virtually the entire gamut of modern neurosurgical practice. The clinical service is divided into teams that focus primarily on specific subspecialty areas. The spine team cares for patients with tumors, trauma, degenerative disease, and other disorders. The general cranial team deals with cerebrovascular disease, tumors, epilepsy, movement disorders, and other pathology. A separate team cares for patients with head injuries. The pediatric division cares for patients at both Jackson Memorial Hospital and Miami Children's Hospital. A separate team cares for a busy neurosurgical service at University of Miami Hospital that includes both cranial and spinal patients. The JMH Neuroscience Intensive Care Unit is one of the largest such facilities in the world and is an important center of the department's clinical activities.

Components: MOD.

Grading: GRD.

MDR 853. UMH Cardiac Catheterization. 2 Credit Hours.

This is a 2-week elective intended to expose the senior medical student to the vast array of procedures performed in interventional cardiology. During the rotation, the student will have the opportunity to interact with multiple specialists who have expertise in various areas of interventional cardiology and attend cardiology conferences. The student will spend time at the Catheterization Laboratory of University of Miami Hospital (UMH), and be actively involved in the care of patients undergoing procedures. The student will discuss all cases with cardiology fellows and attending physicians and scrub in 3 or more diagnostic and interventional catheterization procedures daily. The student will attend cardiology conferences and a weekly half-day clinic where he/she will either see patients referred for catheterization procedures or follow up patients who had recently undergone a procedure. Learning during the rotation will be case-based. The student will meet at least once weekly with the clerkship director, or a designated faculty member. During these meetings, the student will present the case log and discuss one of the two required case work-ups as detailed below.

Components: MOD.

Grading: GRD.

MDR 854. MIA VAMC Military Related Mental Health and General Psychiatry. 2-4 Credit Hours.

The medical student will be involved in the care of patients with a wide spectrum of psychiatric conditions but specific emphasis will be placed on those disorders that are related to military life and exposure to combat. The student will rotate through different clinics at the Miami VA. This rotation will give the medical student the opportunity to work with patients in different settings, such as Outpatient psychiatry, Consultation Liaison Psychiatry, and Primary Care

Components: MOD.

Grading: GRD.

MDR 855. Gynecologic Oncology. 4 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 856. Gynecologic Oncology Sub-I. 4 Credit Hours.

The objective is for the student to gain experience in the diagnostic and therapeutic approaches for various gynecologic cancers through participating in direct patient care and Resident/Fellow didactic activities. Students will enhance interpersonal skills and professional conduct in the female patient encounter setting. After completing the rotation, students should feel comfortable with both pre and postoperative management of women having common gynecologic procedures, and have an understanding of the management of women with gynecologic malignancies.

Components: MOD.

Grading: GRD.

MDR 857. Maternal Fetal Medicine Sub-I. 4 Credit Hours.

The objective is for the student to gain experience in the diagnostic and therapeutic approaches for various obstetrical scenarios through participating in direct patient care. Students will enhance interpersonal skills and professional conduct in the female pregnant patient encounter setting. After completing the rotation, students should feel comfortable with the management of an uncomplicated vaginal delivery and also gain insight into the management of the complicated obstetrical patient.

Components: MOD.

Grading: GRD.

MDR 858. Reproductive Health. 2-4 Credit Hours.

The objectives are for the student to improve knowledge and skills in managing contraceptive cases that are routine and also highly complex and to learn about pregnancy options including surgical and medical abortion techniques. The student should become proficient in recognizing and managing the complications arising from contraception and abortion. Participation in the 4 week course will allow the introduction of other material including sexual assault, addiction and other issues of reproductive health.

Components: MOD.

Grading: GRD.

MDR 859. Oncology. 4 Credit Hours.

The Division of Hematology/Oncology is responsible for the diagnosis and treatment of benign hematology and neoplastic diseases at the three teaching hospitals: Jackson Memorial (JMH), University of Miami Hospitals and Clinics (UMHC), and University of Miami (UMH). The Department provides consultative services at the UMH, inpatient services and outpatient clinics at UMHC and both consultative and inpatient ward services at JMH. Only private outpatients are seen at UMHC.

Components: MOD.

Grading: GRD.

MDR 860. Ophthalmology. 2-4 Credit Hours.

The two week clinical elective in ophthalmology is geared toward medical students with an interest in obtaining a basic understanding of fundamental ophthalmology. Aspects of ophthalmology that are pertinent to the practice of internal medicine, neurology, pediatrics, family practice and other primary care specialties will also be taught. Students will rotate through the emergency room, operating room, and various subspecialty clinics at the Bascom Palmer Eye Institute where they will shadow attendings and housestaff. A comprehensive didactic course will be conducted concurrently during this two week block which includes interactive case based presentations. A final examination will be administered at the conclusion of the course. Students are also welcome to attend weekly grand rounds and fluorescein conferences as well as daily resident lectures during the rotation. An additional two weeks is offered for students considering ophthalmology as a career. All students wishing to be part of the four week course must have approval of the course coordinator. These additional two weeks may be arranged independently with a faculty ophthalmologist.

Components: MOD.

Grading: GRD.

MDR 861. MIA VAMC Ophthalmology. 2-4 Credit Hours.

To provide medical students the opportunity to shadow residents and attendings in the clinic and emergency room setting, and thereby become familiar with instrumentation utilized in standard eye examinations. To provide medical students the opportunity to watch ophthalmic surgery (cataract surgery, glaucoma surgery, retinal surgery) to provide initial exposure to microsurgical techniques.

Components: MOD.

Grading: GRD.

MDR 862. Orthopedic Trauma Elective. 2 Credit Hours.

The student will participate in the management of traumatic injuries of the musculoskeletal system, excluding hand, and spine. The participation will be directed to acquiring an adequate history and physical examination and management of trauma through conservative and surgical approaches. The student will be asked to assist in the operating room to learn surgical skills, how to set up traction and to do closed reductions with cast applications.

Components: MOD.

Grading: GRD.

MDR 863. Orthopedic Trauma Sub-I. 4 Credit Hours.

The student will participate in the management of traumatic injuries of the musculoskeletal system, excluding hand, and spine. The participation will be directed to acquiring an adequate history and physical examination and management of trauma through conservative and surgical approaches. The student will be asked to assist in the operating room to learn surgical skills, how to set up traction and to do closed reductions with cast applications.

Components: MOD.

Grading: GRD.

MDR 864. WPB VAMC Orthopedic Hip & Knee Surgery. 4 Credit Hours.

This is a 4-week elective to provide a broad based exposure to general orthopedic surgery with special emphasis in lower limb joint reconstruction surgery. During the rotation, the student will spend approximately 50% of the time in an office clinical setting evaluating patients with hip and knee disorders and 50% of the time in the operating room gaining surgical experience and insight. This may vary based on the student's desire to spend more operative time with other surgeons in the department. The surgical experience will be 80% hip and knee surgery and 20% general orthopedic surgery. The elective will be under the direction of one surgeon. For those students that are interested, there will be the possibility to work on a quality improvement project and the opportunity to work with other orthopedic specialists within the group to expand the horizon of exposure to different surgical procedures. We have five orthopedic surgeons in the department covering the breadth and depth of orthopedic surgery, except for pediatric and spine surgery.

Components: MOD.

Grading: GRD.

MDR 865. Adult Reconstruction & Joint Replacement. 2-4 Credit Hours.

This is a four-week elective rotation intended to expose the senior medical student to spectrum of experiences in Joint Replacement and Orthopaedic surgery. Each week or two, the student will rotate through a different hospital/clinic setting and see patients/procedures based on the emphasis at that location.

Components: MOD.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 866. Hand Surgery. 2 Credit Hours.

The student will be provided with the opportunity to become familiar with acute injuries, chronic conditions and congenital deformities of the hand. They will learn to take a history and do a physical examination of the hand, as well as assist in the conservative and surgical management of hand problems. The student will be expected to attend rounds, clinics, surgery and conferences, both hand and general orthopedic conferences. All Students will be required to take Ortho E.R. call with the PGY2 on the hand service.

Components: MOD.

Grading: GRD.

MDR 867. Musculoskeletal Oncology. 2 Credit Hours.

Students on the orthopedic oncology service are expected to become familiar with the principles of staging and diagnosing tumors of bone and soft tissue. The student will evaluate patients in the outpatient and inpatient setting and be responsible for the management of these patients pre- and post-operatively with close resident and attending supervision. The student will develop history and physical examination skills, as they pertain to oncologic patients, as well as actively participate in their non-operative and operative management. The student will participate in the regular educational conferences including a bi-weekly didactic orthopaedic oncology case-based conference, a weekly multidisciplinary oncology conference, and a weekly pre-operative planning conference. There are a number of potential research projects, both clinical and laboratory, that are available to interested investigators. Dr. Conway is the Program Director and member of the Orthopedic Residency Selection Committee.

Components: MOD.

Grading: GRD.

MDR 868. Multidisciplinary Hematology and Oncology at Deerfield Beach. 4 Credit Hours.

This elective will focus on a multidisciplinary approach to the diagnosis and treatment of solid and blood cancers, as well as benign hematologic diseases. It will take place in the outpatient hematology oncology clinic at the Sylvester Cancer Center at Deerfield Beach.

Components: MOD.

Grading: GRD.

MDR 870. Orthopedic Spine. 2 Credit Hours.

This rotation provides exposure to traumatic and degenerative affections of the spine. Students will participate in all rounds, clinics, and conferences. Students will be exposed to and participate in the care of patients with traumatic and degenerative disorders of the spine.

Components: MOD.

Grading: GRD.

MDR 871. Otolaryngology. 2-4 Credit Hours.

Otolaryngology is the surgical sub-specialty of hearing, balance, skull base and cochlear implant surgery, and facial nerve dysfunction. During this rotation, the senior clerk will have the opportunity to participate in the clinical evaluation, auditory and vestibular testing, medical and surgical treatment of disorders of the ear and facial nerve. The rotation will be split into three portions: clinic, operating room, and didactic sessions. Hands on anatomical dissection of the temporal bone and preparation of a clinical Grand Rounds presentation are included.

Components: MOD.

Grading: GRD.

MDR 872. Inpatient and Outpatient Otolaryngology. 2 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 873. Otolaryngology Elective. 2 Credit Hours.

This rotation gives an overview of the scope of activities covered by Otolaryngology. Students are expected to get exposed to both clinical and surgical aspects of Otolaryngology and explore the variety of different subspecialties within this field. Students are encouraged to start if possible with this course before taking MDR875.

Components: MOD.

Grading: GRD.

MDR 874. Outpatient Clinical Otolaryngology. 2-4 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 875. Otolaryngology Sub-I. 4 Credit Hours.

This rotation is a clinical and surgical Otolaryngology clerkship. Students are expected to get involved in both clinical and surgical aspects of Otolaryngology. Students are encouraged to start if possible with MDR873 before taking this course.

Components: MOD.

Grading: GRD.

MDR 876. Subinternship in Otolaryngology. 4 Credit Hours.

This rotation is a clinical and surgical Otolaryngology clerkship. Students are expected to get involved in both clinical and surgical aspects of Otolaryngology. Students are encouraged to start if possible with MDR873 before taking this course.

Components: MOD.

Grading: GRD.

MDR 877. Forensic Pathology. 2-4 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 878. Mt. Sinai Pathology. 2-4 Credit Hours.

The Department of Pathology at Mount Sinai Medical Center offers an elective in either clinical or anatomic pathology. The program will be tailored to the particular interest and level of training of the individual. The student will be supervised by staff pathologists working with the resident staff and participate in inter- and intradepartmental conferences.

Components: MOD.

Grading: GRD.

MDR 879. Pathology. 2-4 Credit Hours.

This elective is geared towards students who wish to explore Pathology as a career option or who seek to better understand and utilize clinical and anatomic pathology services in their clinical practice. Students select week long rotations from a list and attend all Pathology Teaching Conferences and Grand Rounds. Anatomic Pathology rotations are at JMH or UMH and Clinical Pathology rotations are at JMH. This elective may be taken as a two or four week rotation

Components: MOD.

Grading: GRD.

MDR 880. Adolescent Medicine. 2-4 Credit Hours.

The goals of this elective clinical rotation are to broaden the student's general knowledge of Adolescent Medicine, with emphasis on learning diagnosis and treatment of the unique physical, developmental, and psychosocial problems of patients ages 10 – 25 years. The student will participate in the multidisciplinary team approach to adolescent health care; gain experience in communicating and interacting with a wide variety of inpatient and outpatient adolescents, and attend all aspects of the Adolescent Medicine teaching program.

Components: MOD.

Grading: GRD.

MDR 881. Child Protection Team. 2-4 Credit Hours.

The Child Protection Team elective is designed to familiarize the students to all aspects of child abuse. The students will learn to assess and document physical abuse and neglect, attend court hearings and participate in case staffing. This elective is geared to meet the needs of all medical students (independent of their career goals) and introduce them to the community resources available for children and their families.

Components: MOD.

Grading: GRD.

MDR 882. Fetal Cardiology. 2 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 883. Neonatology. 2-4 Credit Hours.

This rotation in Neonatology can be taken as a 2 or 4 week elective. The student will be part of the team headed by an attending, and will follow and manage one or two patients together with one of the residents on the team. Teaching rounds will be conducted 5 times a week, work rounds 7 days a week. During the first 2 weeks of the rotation the student will refresh and refine his/her physical examination skills. He/she will become familiar with the nutritional needs of neonates and infants and with how these needs can be met by feedings and parental alimentation. How to prevent and correct imbalances in body water and electrolytes will be stressed. Problems with anemia, hyperbilirubinemia, infection (congenital or acquired after birth), hypoglycemia and hypocalcemia and their management will be explained. During the second two weeks of the rotation the focus of training will change to infants with respiratory and cardiovascular failure. The student will become familiar with the different causes of respiratory failure, how to judge the severity of respiratory failure by interpreting arterial blood gases and acid base status, and how to support the infants with supplement O₂ or mechanical ventilation. Furthermore, the students will be exposed to signs and symptoms of cardiovascular failure, impaired regulation of breathing, and the consequences of hypoxic ischemic brain injury.

Components: MOD.

Grading: GRD.

MDR 885. Pediatric Cardiology. 2 Credit Hours.

The student is exposed to the physiology, clinical and laboratory diagnosis, and management of the infant and child with congenital and acquired heart disease. Fundamentals of electrophysiology and pulmonary physiology, as it relates to heart disease, will be discussed in scheduled tutored sessions. Physical diagnosis is emphasized during participation in the out-patient clinics at the University of Miami and Jackson Memorial Hospital. Cardiology ward rounds are conducted daily providing the opportunity to follow hospitalized patients from clinical diagnosis to cardiac catheterization to cardiac surgery. Interpretation of pediatric electrocardiograms and cardiac echocardiograms are included the individual patient's evaluation.

Components: MOD.

Grading: GRD.

MDR 886. Pediatric Dermatology. 2-4 Credit Hours.

The understanding of mechanisms of pathophysiology and effective therapy in pediatric dermatological diseases is stressed in this elective. The students will participate in management of in-patient and out-patient dermatological and connective tissue problems. Diagnostic techniques by light microscopy and immunologic techniques and standard dermatologic laboratory techniques will be emphasized.

Components: MOD.

Grading: GRD.

MDR 887. Pediatric Emergency Medicine. 2-4 Credit Hours.

The student will be the primary physician for pediatric patients presenting with acute problems in the emergency facility of Jackson Memorial Hospital. The student will evaluate and treat patients with an extensive variety of acute illnesses under supervision of pediatric faculty and house staff.

Components: MOD.

Grading: GRD.

MDR 888. Pediatric Endocrinology. 4 Credit Hours.

The student will be the primary physician for pediatric patients presenting with acute problems in the emergency facility of Jackson Memorial Hospital. The student will evaluate and treat patients with an extensive variety of acute illnesses under supervision of pediatric faculty and house staff.

Components: MOD.

Grading: GRD.

MDR 889. Pediatric Gastroenterology, Hepatology, and Nutrition. 2-4 Credit Hours.

The student will be able to participate in the care for inpatients and outpatients; to participate in daily rounds on inpatients as well as consults with the attending physician, fellow and pediatric resident team. Opportunities to conduct patient interviews and examinations as well as to observe/participate in GI procedures will be an integral part of the elective. The student will review indications/risks for particular procedures and surgeries as they relate to pediatric gastroenterology. Students will also participate in weekly outpatient clinics. Students will also learn care of gastrostomy tubes. The 4 week rotation will consist of 2 weeks inpatient and 2 weeks outpatient. For the 2 week rotation, the student will choose either the inpatient or outpatient component of the rotation.

Components: MOD.

Grading: GRD.

MDR 890. Genetics and Metabolic Diseases. 2-4 Credit Hours.

This elective exposes students to diagnosis and management of a variety of genetic syndromes, inheritable metabolic diseases, hereditary cancer syndromes, and other heritable disorders. During this elective, patients with genetic syndromes, chromosomal disorders, metabolic disease, and other Mendelian disorders are seen in the Mailman Center Metabolic and Genetics clinic, the Jackson Pediatric Genetics clinic, Specialty Genetics Clinics at UM, and the Jackson Memorial Hospital wards. The specialty clinics include Neurogenetics clinic, Cleft lip and palate clinic, Cancer Genetics clinic, Muscular Dystrophy clinic, Fragile X clinic, Hearing loss clinic, and Prenatal Genetics clinic.

Components: MOD.

Grading: GRD.

MDR 891. Pediatric Infectious Diseases and Immunology. 4 Credit Hours.

The 4-week rotation in Pediatric Immunology and Infectious Disease is designed to give the student a broad experience in the immunological and infectious disease problems of children. The student will participate in both the inpatient and outpatient care of children with such problems by rounding daily with the attending fellow and the clinical pediatric infectious disease faculty. The student will also have the opportunity to assist in the care of children with HIV-1 infection as well as other immunodeficiency diseases.

Components: MOD.

Grading: GRD.

MDR 892. Pediatric Intensive Care Unit Sub-I. 4 Credit Hours.

The primary objective of this rotation is to promote the development and mastery of clinical critical care pediatric competencies. The environment of the PICU affords the student a broad exposure to clinically relevant physiological and pathophysiological principles and multisystem disease (Competencies: Patient Care, Medical Knowledge). The practice of evidence based medicine is promoted by encouraging students to conduct literature search for current guide lines (Practice-based Learning and improvement), with an emphasis on the basic principles of recognition and management of respiratory failure and shock in the pediatric population (infance to 21 years).

Components: MOD.

Grading: GRD.

MDR 893. Pediatric Mobile Clinic. 4 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 894. Pediatric Nephrology. 4 Credit Hours.

This elective consists of exposure to in-patient and outpatient pediatric renal problems, participation in clinical and experimental discussion with House staff and Fellows, and observation of renal physiology experiments. Students will be able to describe diagnostic approaches to pediatric renal problems by radiological, histological, electromicroscopic, and immunological techniques. Current clinical studies include: immunological, metabolic, and physiologic changes in nephrotic syndrome poorly controlled or uncontrolled with steroids; recurrent hematuria; renal function of newborn and infant; calcium, phosphorus, vitamin D, and PTH metabolism in uremia. Chronic Renal Failure; growth; lipids; HIV nephropathy; effect of maternal cocaine on the fetal kidney, low birth weight Nephropathy, dialysis cardiomyopathy; and drug use in hypertension.

Components: MOD.

Grading: GRD.

MDR 895. Pediatric Pulmonary. 2-4 Credit Hours.

The objective of this rotation is to provide the students with the clinical exposure to acute and chronic, acquired and congenital, respiratory diseases from infancy to adolescence in both in-patient and out-patient venues. These conditions include but are not limited to asthma, chronic cough, chronic lung disease of infancy, cystic fibrosis, congenital lung abnormalities, recurrent and complicated pneumonia. The student will participate in the in-patient rounds or activities, ambulatory clinics and didactic conferences.

Components: MOD.

Grading: GRD.

MDR 896. Poison Center Toxicology. 2-4 Credit Hours.

The senior student will be given the opportunity to assist the Poison Information Specialists and Toxicologists at the Florida Poison Information Center with the diagnosis, triage, treatment and follow-up of patients exposed to toxins. The high volume of cases (over 170 patients per day) will allow the student to learn about a wide variety of toxins in both pediatric and adult patients. The clinical experience at the Poison Center will be supplemented with didactic lectures and bedside consultations for both adult and pediatric patients hospitalized at Jackson Memorial Hospital.

Components: MOD.

Grading: GRD.

MDR 897. Pediatrics Sub-I. 4 Credit Hours.

The large pediatric inpatient service offers a unique opportunity to the student to improve the clinical and didactic skills in the diagnosis and management of all the common and most of the uncommon disorders in children. The senior student will be placed in the regular first year resident rotation functioning as part of the ward team under direct supervision of pediatric residents and the attending physicians. There might be two (2) attendings on the team, one full time faculty member in general pediatrics and the other a pediatric specialist or a practicing community pediatrician.

Components: MOD.

Grading: GRD.

MDR 898. Ophthalmology @ Palm Beach Gardens. 2-4 Credit Hours.

The primary goal of this elective is to familiarize the student with general concepts of Ophthalmology, and how to conduct a basic eye examination. Aspects of Ophthalmology that are pertinent to the practice of Internal Medicine, Neurology, Family Practice, and other primary care specialties will also be taught. Emphasis is placed on the ocular exam and findings related to common eye pathology such as cataracts, glaucoma, macular degeneration, diabetic retinopathy, and conjunctivitis. Some exposure to more unusual cases to ophthalmology as a subspecialty will be obtained in clinics. Didactic sessions with attending faculty, patient care with fellows in the clinics and coordinated self teaching make up the majority of the elective. Students will also have the ability to go to the OR to observe ophthalmic surgery. Opportunity to assist faculty in write-up of case reports will also be available for the students considering ophthalmology as a career goal.

Components: MOD.

Grading: GRD.

MDR 899. Pharmacology Research Opportunities. 2-4 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 900. Physical Medicine and Rehabilitation. 2-4 Credit Hours.

This elective is intended for medical students who have completed the neurology core clerkship rotation. During the elective, the medical student will spend time on the Ryder Trauma 4th floor Neurorehab service, shadowing the Rehab attending on daily rounds. Students will also have the opportunity to become familiar with Botulinum toxin injections and participate of Brain Injury Medicine Clinic on the 2nd and 4th Thursday of the month. There is an opportunity to get involved in clinical research activities that are ongoing in the division.

Components: MOD.

Grading: GRD.

MDR 901. Child and Adolescent Psychiatry. 2-4 Credit Hours.

Various clinical services are utilized for undergraduate and post-graduate training in Child & Adolescent Psychiatry: the Children's Inpatient Unit and the Child and Adolescent Outpatient Clinic. Students may be assigned to one or a combination of these services where they will have a supervised experience.

Components: MOD.

Grading: GRD.

MDR 902. Consultation-Liaison Psychiatry. 2-4 Credit Hours.

This service is responsible for consultations to non-psychiatric inpatients and for various liaison activities with other services and units of the general hospital. Students under supervision will respond to consultation requests in evaluating the patient and making recommendations to the referring physician. They will join faculty members in their liaison work and attend regularly scheduled seminars and consultation reviews.

Components: MOD.

Grading: GRD.

MDR 903. Geriatric Psychiatry. 2-4 Credit Hours.

The Department of Psychiatry offers an elective in Geriatric Psychiatry. The elective can be tailored to the student's special needs. Clinical experiences focus on diseases that are more prevalent in the geriatric population such as delirium and dementia.

Components: MOD.

Grading: GRD.

MDR 904. JMH Inpatient Psychiatry. 2-4 Credit Hours.

This elective allows students to diagnose and manage a variety of psychiatric disorders. This includes patients with mood disorders, psychotic disorders and other conditions that require psychiatric hospitalization. Under the supervision of attending physicians students will manage patients with a variety of therapeutic techniques available for their treatment. We have several units available for this elective: 2 Inpatient units for acutely ill adult psychiatric patients - JMH, 1 dual diagnosis unit (treatment of acute substance abuse, detox and psychiatric disorders) – JMH, 1 inpatient unit for Mood Disorders - UMH.

Components: MOD.

Grading: GRD.

MDR 905. Psychiatry Emergency Service. 2 Credit Hours.

This course provides students with the opportunity to be involved in the diagnosis and therapy of selected patients presenting to the Psychiatric Emergency Room. The student will be assigned to the Psychiatric Emergency Room. The student will then be able to observe a wide range of acute psychiatric emergencies and learn to handle these in an appropriate manner. The student will begin to develop concepts of psychiatric diagnosis, nomenclature and treatment applicable to the acute situation. Also, under supervision, the student will see acute psychiatric consultations as requested. Students should consider this elective interested in a career in Emergency Room Medicine or Family Medicine besides those students interested in Psychiatry.

Components: MOD.

Grading: GRD.

MDR 906. Ambulatory Psychiatry. 2 Credit Hours.

This course provides students with the opportunity to be involved in the diagnosis and therapy of selected patients presenting to the outpatient clinics at the Mental Health Center. Individual supervision will be aimed at exposing the student to the range of psychiatric disorders that can be managed in an outpatient basis such as anxiety disorders, depression, etc. The students will be exposed to different therapeutic modalities used to treat these problems including psychopharmacologic treatments, cognitive behavioral therapy, and group therapy.

Components: MOD.

Grading: GRD.

MDR 907. Research Experience. 0 Credit Hours.

Components: MOD.

Grading: NON.

MDR 908. Mt. Sinai Diagnostic Radiology. 2-4 Credit Hours.

The courses consist of daily required didactic conferences and practical film interpretation sessions covering all areas of Radiology. The student will participate in divisional activities including diagnostic and therapeutic nuclear medicine and non-invasive cardiovascular laboratory, under the direct Preceptorship of attending physicians.

Components: MOD.

Grading: GRD.

MDR 909. Radiology Clerkship. 2 Credit Hours.

Radiology is a required 2 week clerkship available to third and fourth year medical students, and must be successfully completed prior to graduation. The course is offered once a month 12 times a year. It is a structured two week course mainly at Jackson Memorial Medical Center. The aim of the course is to teach the student what every physician should know about diagnostic imaging and how to effectively use our varied radiographic techniques and imaging modalities to diagnose disease, regardless of their field of interest. An Advanced Radiology elective is offered in 2-week blocks (B blocks only) to those students wanting to gain more in depth knowledge or who are interested in the field as a career choice. Multiple blocks may be taken. Please refer to Course MDR 910 for description. The course consists of daily required morning image interpretation sessions rotating through the subspecialties of Radiology as well as afternoon small group interactive sessions for case solving, based on the assigned on-line video tutorials. There will be an assigned instructor which will be an attending, fellow, or senior resident. Attendance is mandatory and will be recorded. The students will be assessed for performance during these sessions. The students are also invited to attend other departmental and sectional conferences. A final exam will be given on the last day of the course.

Components: LEC.

Grading: GRD.

MDR 910. Advanced Radiology. 2 Credit Hours.

Radiology II at Jackson Memorial Medical Center consists of a more extensive exposure to one or two subspecialty areas in clinical Diagnostic Radiology. The student may select to spend one or two weeks in any subspecialty area to gain more in-depth knowledge of that subspecialty. The experience will vary somewhat depending on the area of Diagnostic Radiology which the student selects. They are welcome, but not required, to attend scheduled student lectures. They are encouraged to attend the daily 12:30 p.m. Departmental conference. They are required to attend all subspecialty conferences of the sections they are rotating through.

Components: MOD.

Grading: GRD.

MDR 911. Nuclear Medicine. 2 Credit Hours.

The Nuclear Medicine elective allows the student to interact with the clinical and research activities of Nuclear Medicine as it relates to diagnostic imaging and therapy with this modality. Students are trained under the direct supervision of our faculty members with guidance from our residents. Learning Techniques include: daily work, teaching file and conference attendance. Reading sessions start at 8 a.m. daily. While patients are injected for studies during the morning, the students observe the technical aspect of this procedure prior to interpreting the studies with residents and attendings. An example of such studies is the myocardial perfusion studies - patients are injected early in the morning, residents and students monitor the stress and rest imaging acquisitions. They also interpret the EKGs prior to evaluating the processed images in the reading room. Students will also observe many other nuclear medicine procedures, such as cisternograms, renal scintigraphy, thyroid scintigraphy and PET scans.

Components: MOD.

Grading: GRD.

MDR 913. HCH Cardiology. 2-4 Credit Hours.

This rotation includes consultative diagnosis, electrocardiography, and intensive medical and surgical cardiac care at Holy Cross Hospital and Clinics. Under the direct supervision of the attending cardiologist, students will have the opportunity to evaluate patients presenting with a full spectrum of cardiac complaints. The student will participate in consultation rounds with the attending cardiologists, in both the inpatient and outpatient settings, participate in the evaluation of noninvasive testing, and observe cardiac catheterization and cardiac surgery of their patients.

Components: MOD.

Grading: GRD.

MDR 914. Physical Medicine & Rehabilitation Virtual Rotation. 2 Credit Hours.

This elective provides a variety of settings to experience and learn about the field of physical medicine and rehabilitation through a virtual set up.

Components: MOD.

Grading: GRD.

MDR 915. Radiation Oncology. 4 Credit Hours.

The objective of the elective on Radiation Oncology is to familiarize the student with the treatment of neoplastic disease in general, and specifically with the role of ionizing radiation in treating cancer and related disorders. The course is tailored to the needs of individual students, with an emphasis on providing a general introduction to Radiation Oncology for students either interested in other medical fields, other oncologic specialties, or considering Radiation Oncology as a field specialization.

Components: MOD.

Grading: GRD.

MDR 916. Research. 0-8 Credit Hours.

Guidelines for obtaining academic credit for research are found on the subsequent pages. This information is also available on the MedEd website under Important Documents for students. MDR 916 "Research" – Used to designate credits student has been awarded. Seniors are required to always have on their scheduled an appropriate number of credits required for graduation. Since Research Credits are frequently granted late in the Senior year, students must schedule Electives late in the year that they may drop if and when Research credit is granted.

Components: MOD.

Grading: GRD.

MDR 917. Burn Unit Sub-I. 4 Credit Hours.

The Burn Service admits over 150 major injuries and 300 total patients per year. Concentration is on acute care but reconstruction is also done. Principles of critical care, infection control, nutritional support, wound care and rehabilitation are stressed. Opportunities for clinical research exist.

Components: MOD.

Grading: GRD.

MDR 918. Burn Unit Elective. 2 Credit Hours.

Components: LEC.

Grading: GRD.

MDR 919. Cardiothoracic Surgery Sub-I. 4 Credit Hours.

This rotation will give the 4th year student a unique opportunity to see complex surgical procedures while learning how to care for critically ill patients. The attending and resident staff will supervise the care of patients undergoing operations for coronary artery disease, congenital and acquired valvular heart disease, complex congenital heart defects, a variety of lung and esophageal diseases, trauma to the chest, and heart and lung transplants. Patients will range from premature infants to elderly adults at JM and VA Hospitals.

Components: MOD.

Grading: GRD.

MDR 920. General Surgery EI Sub-I. 4 Credit Hours.

This 4-week rotation will expose the 4th year student to a wide array of cancer problems and teach an integrated interdisciplinary approach to their management. Esophageal, hepatic, breast, and gastric carcinomas will be seen and treated in addition to melanomas and soft tissue sarcomas.

Components: MOD.

Grading: GRD.

MDR 921. General Surgery EII Sub-I. 4 Credit Hours.

This elective surgery service predominantly sees hepatobiliary, pancreatic problems, surgical endocrine and adrenal disease. It deals with patients with portal hypertension and biliary tract disease, and both benign and malignant conditions will be seen and treated. In addition, endocrine surgery patients will be seen, and the full spectrum of thyroid and parathyroid disease will be learned. Advanced laparoscopic skills can also be seen treating a whole spectrum of surgical problems. Students have the opportunity to join evening rounds, present patients, discuss current problems and generate treatment options. Students will present didactic discussion of patient subjects to staff and colleagues weekly.

Components: MOD.

Grading: GRD.

MDR 922. General Surgery EIII Sub-I. 4 Credit Hours.

This elective service deals primarily with diseases of the colon, rectum, and anus. Benign disease, such as hemorrhoids, anal fistulae, anal fissures, and inflammatory bowel disease will be seen and thoroughly discussed and learned. In addition, the entire spectrum of colon and rectal cancer will be seen and treated.

Components: MOD.

Grading: GRD.

MDR 923. Neurology Virtual Elective. 2-4 Credit Hours.

This two to four-week elective course explores the key aspects in the care of patients with neurological diseases and intends to expose medical student to variety of neurological conditions. Each student will be paired with one resident and one attending for their virtual daily inpatient rounds and discussions. The student will be exposed to neurological emergencies and common neurological disorders.

Components: MOD.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 924. Introduction to Neurosurgery. 2 Credit Hours.

This 2 week elective is intended to give the third year medical student an initial acquaintance to neurosurgery including the pathophysiology, evaluation, and management of the spectrum of disorders that confront the modern neurosurgeon. The UM neurosurgery service covers virtually the entire gamut of neurosurgical practice. The clinical service is divided into teams that focus primarily on specific subspecialty areas. The spine team cares for patients with tumors, trauma, degenerative disease, and other disorders. The general cranial team deals with cerebrovascular disease, tumors, epilepsy, movement disorders, and other pathology. A separate team cares for patients with head injuries. The pediatric division cares for patients at both Jackson Memorial Hospital and Miami Children's Hospital. A separate team cares for a busy neurosurgical service at University of Miami Hospital that includes both cranial and spinal patients.

Components: MOD.

Grading: GRD.

MDR 925. Surgery Boot Camp - Transition to Residency. 2 Credit Hours.

The purpose of this course is to allow all MS4 students who match in surgical residencies or surgery preliminary internship to enter their intern year with a solid knowledge base and set of procedural skills related to preoperative, intraoperative, and postoperative care of the surgical patient. Participation in the two-week course will allow students to practice procedural and basic surgical skills, enhance their surgical knowledge, and review practices to enhance their abilities to perform confidently and competently as a new intern. This course is intended to consolidate and expand upon skills learned on the core clerkship and surgical M4 electives. This two-week elective is designed to combine didactic, case-based, multidisciplinary simulations, procedural, and team-based education experiences. Real time self-assessment using feedback from instructors as well as final course evaluations will provide students with an understanding of their preparedness for internship. Novel multidisciplinary pager exercises will improve communication skills, triaging of patient management, and experience with common clinical scenarios.

Components: MOD.

Grading: GRD.

MDR 926. Oral and Maxillofacial Surgery. 2-4 Credit Hours.

The Department of Surgery's Division of Oral and Maxillofacial Surgery offers the student an intense experience in Head and Neck Reconstructive Surgery, Oral and Maxillofacial Pathology, Facial Trauma and Head and Neck Anatomy. The attending and resident staff is committed to providing the student with a valuable educational experience. This is the only exposure the medical student receives regarding the problems related to the oral cavity and to oral and maxillofacial surgery, which may confront him/her at a later date in his/her career. This is an advantageous rotation for those interested in ENT, Plastic Surgery, and Ophthalmology.

Components: MOD.

Grading: GRD.

MDR 927. Pediatric Surgery Sub-I. 4 Credit Hours.

This very busy surgical service will allow the 4th year student the opportunity to care for common and uncommon, yet very interesting, surgical problems in the pediatric population. The experience includes abdominal surgery, hernia surgery, and thoracic procedures. There is close supervision by the pediatric surgery attendings with daily rounds and a chance to follow patients closely. Outpatient clinics also provide for close patient follow up.

Components: MOD.

Grading: GRD.

MDR 928. Plastic Surgery. 2 Credit Hours.

This rotation provides comprehensive exposure to all facets of aesthetic plastic and reconstructive surgery at UM affiliated clinical institutions and educational venues. Students participate in the pre-operative planning, operative management, and post-operative care of plastic and reconstructive surgery patients, on the wards and in the clinics; learn plastic techniques in the operating and emergency rooms; and also participate in the on-call schedule with the residents. Students are also welcome to actively participate in all of educational programs of the division including Grand Rounds, Journal Clubs & Didactic Sessions. Medical students will be encouraged to participate in any ongoing research projects.

Components: MOD.

Grading: GRD.

MDR 929. Surgical Intensive Care Unit. 2-4 Credit Hours.

This rotation is offered to give 4th year students an introduction to the environment of the ICU and the unique subject matter that pertains to it. It also gives you the opportunity to see what happens after surgical emergencies, surgical complications, and transplants. Education is provided by morning rounds, student and housestaff presentations, reading, and by paying attention and asking questions!

Components: MOD.

Grading: GRD.

MDR 930. Transplant Surgery. 4 Credit Hours.

The student will have responsibilities similar to a junior house officer, under strict supervision of the Transplant Team because of the critical care of these patients. The student will be present at the operation for vascular access surgery, general surgery on transplantation patients and chronic renal failure patients, which would include bilateral native nephrectomies (usually for difficult to control hypertension), kidney, liver, pancreas, and pancreatic islet transplants, and related surgery. In addition, issues related to native organ disease – kidney, pancreas, liver, leading to need for transplantation – will be covered. There will be weekly conferences and seminars in research and clinical problems in kidney, liver, and pancreas transplantation and participation in weekly immunobiology transplant conferences.

Components: MOD.

Grading: GRD.

MDR 931. Trauma Surgery. 4 Credit Hours.

The trauma teams treat all patients requiring surgery who are admitted through the emergency room. In addition, the trauma teams are responsible for management of all major trauma victims brought to the Ryder Trauma Center, a Level-I Center. This rotation will allow the student to care for major trauma victims and patients with non-trauma surgical emergencies.

Components: MOD.

Grading: GRD.

MDR 932. Trauma Intensive Care Unit. 2-4 Credit Hours.

The students will gain an initial understanding of critical care and complex postoperative care of the critically ill trauma and surgical patient. Education is provided by morning rounds, student and housestaff presentations, reading, and by paying attention and asking questions!

Components: MOD.

Grading: GRD.

MDR 933. HCH General Surgery. 2-4 Credit Hours.

This elective in General Surgery will focus on Open and Laparoscopic General Surgery, Surgical Oncology, Colorectal Surgery and Vascular Surgery. The cases include cholecystectomies, colon resections, hepatobiliary and pancreatic surgery, complex hernia repairs, distal bypasses, aortic aneurysms and vascular stenting. In addition, appendectomies, hernias, hemorrhoid operations, as well as other outpatient procedures will be part of the surgery experience.

Components: MOD.

Grading: GRD.

MDR 934. Female Pelvic Medicine and Surgery. 2-4 Credit Hours.

Female Pelvic Medicine and Reconstructive Surgery is a surgical subspecialty within Urology and Gynecology dealing with problems of the anatomy and/or function of the pelvic floor in women. These issues may effect urination, defecation, pain sensation, and sexual function. During this elective, the senior clerk will have the opportunity to participate in the evaluation and the medical and surgical treatment of females in this patient population.

Components: MOD.

Grading: GRD.

MDR 935. Out-Patient Urology. 2-4 Credit Hours.

This elective is offered to those students who are particularly interested in Urology as a career choice. It is designed so that the student will participate as a team member on each service he/she rotates on and will accept responsibilities and perform duties commensurate with his/her ability.

Components: MOD.

Grading: GRD.

MDR 936. Reproductive Urology. 2-4 Credit Hours.

The Reproductive Urology elective rotation focuses on the care and treatment of urologic patients, specifically related to andrology and male fertility. The student will work with the urology residents and attending faculty in the operating rooms, wards, and clinics. The student will attend weekly urology didactic conferences on Thursday and Friday mornings.

Components: MOD.

Grading: GRD.

MDR 937. Urology Sub-I. 4 Credit Hours.

This elective is offered to those students who are particularly interested in Urology as a career choice. It is designed so that the student will participate as a team member on each service he/she rotates on and will accept responsibilities and perform duties commensurate with his/her ability.

Components: MOD.

Grading: GRD.

MDR 938. Urology Elective. 2-4 Credit Hours.

As much as 30% of all visits of elderly men to the primary care physician can relate to symptoms and disorder of the genitourinary tract. Physician should at least be conversant on these common ailments (i.e., BPH, Prostate cancer, Incontinence, Impotence, Stones or Hematuria).

Components: MOD.

Grading: GRD.

MDR 939. Professional Development for Medical Student Leaders. 2 Credit Hours.

1. Students must hold a leadership position within the Academic Societies (as a society director, assistant director, a member of the society executive staff, or training director), DOCS, or Executive Student Government staff. 2. The course will span the senior year, from July through March. 3. During the month of July, assigned readings, didactic sessions, and group exercises will be offered during evenings and weekends; students will need to be available to attend ALL of these sessions in July in order to receive the 2 weeks of academic credit. 4. These activities are designed to teach the fundamental aspects of teamwork, leadership, teaching and learning, and mentoring. 5. Throughout the year, students will be responsible for fulfilling the obligations of their specific position within the student organization. 6. Students in Academic Society positions will attend their society training and student report sessions to apply the information learned in the didactic sessions and will complete exercises to evaluate and improve their skills in these areas. Student Evaluation and Grading: By completing a combination of assigned exercises, attending all scheduled seminar sessions, and fulfilling student leadership responsibilities, each student will receive 2 weeks of elective credit. **For credit, attendance is REQUIRED for ALL summer sessions in JULY.

Components: MOD.

Grading: GRD.

MDR 940. Public Health Elective. 2-4 Credit Hours.

The Public Health elective will be offered to senior MD/MPH medical students if approved by the course director for time spent on a 2- or 4-week public health externship. MD students who have completed public health coursework will also be considered. The consideration of elective credit includes the content and quality of the program/ project. In addition, the dates of the program must mesh with the schedule of the medical school curriculum and academic calendar. Each application will be considered on an individual basis with consideration of the student's overall performance and standing at UMMSM.

Components: MOD.

Grading: GRD.

MDR 941. HCH Cardiothoracic Surgery Sub-I. 4 Credit Hours.

Overview: This unique surgery sub-internship will allow the student to learn in a preceptor-based model about the surgical management of cardiovascular and thoracic diseases. The students will be exposed to a wide variety of surgical experiences, including open and minimally-invasive surgical approaches. The student will also engage in preoperative and postoperative assessment and treatment of patients. The students will have primary responsibility for the care and management of their patients.

Components: MOD.

Grading: GRD.

MDR 942. Orthopedic Surgery (RMC/St. Mary's). 2 Credit Hours.

The elective is intended to offer a truly unique opportunity to observe specialized advanced and complex orthopaedic problem management. The pathologies treated by Dr. Quinnan include high energy orthopaedic trauma, adult deformity correction and post-traumatic extremity as well as pelvic reconstruction, limb lengthening, and amputee reconstruction including osseointegration. In addition, there are opportunities to observe cutting edge and pioneering techniques in pediatric orthopaedic surgery including management of many complex congenital and developmental syndromes in addition to spinal deformity correction with other partners at the Paley Institute. The Paley Orthopaedic & Spine Institute currently has 11 orthopaedic surgeons including Drs Quinnan, Paley, Feldman, Dobbs, Minas, Shufflebarger, Asghar, Robbins, Shannon, Huser, and Cantor, many of whom are highly published and world renown leaders in surgical innovation.

Components: MOD.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 943. General Surgery E IV Sub-I. 4 Credit Hours.

This 4-week rotation will expose the 4th year student to several unique, yet related, surgical disciplines: laparoscopic surgery, surgical endoscopy, and the surgical management of morbid obesity.

Components: MOD.

Grading: GRD.

MDR 944. MIA VAMC General Surgery Sub-I. 4 Credit Hours.

The surgical program at the VA Medical Center is a truly General Surgical Service which focuses on Open and Laparoscopic General Surgery, Surgical Oncology, Colorectal Surgery and Vascular surgery. The cases include cholecystectomies, colon resections, hepatobiliary and pancreatic surgery, complex hernia repairs, distal bypasses, aortic aneurysms and vascular stenting. In addition, appendectomies, hernias, hemorrhoid operations and an increasing number of outpatient surgeries compose our experience.

Components: MOD.

Grading: GRD.

MDR 945. Taylor Breast Health Center. 2-4 Credit Hours.

This elective will consist of a 2 week or a 4 week block at the Taylor Breast Health Center. During this time, the student will have the opportunity to participate in the diagnosis and follow-up of patients with the full spectrum of breast diseases, most importantly breast cancer.

Components: MOD.

Grading: GRD.

MDR 947. Research Review by Research Committee. 0-8 Credit Hours.

Components: MOD.

Grading: GRD.

MDR 948. JFK Surgery Sub-I. 4 Credit Hours.

This surgery sub-internship will allow the student to learn in a team model about the surgical management of common gastrointestinal and endocrine disorders. The student will be exposed to both open and laparoscopic operations, treating a broad spectrum of surgical entities. The student will also engage in preoperative and postoperative assessment and treatment of patients, with an emphasis on continuity of care.

Components: MOD.

Grading: GRD.

MDR 949. Caring for the Community: Free Clinics Elective. 2 Credit Hours.

Provides students with an opportunity of clinical care at student-run free clinics while advancing their knowledge of the social determinants of health and the barriers that uninsured patients encounter in obtaining primary medical care and specialty care when needed. The student-run free clinic elective will provide medical students with an engaging clinical experience that will prepare them to more effectively advocate and care for uninsured patients. This elective provides an opportunity for third and fourth year medical students to provide clinical care at student-run free clinics while advancing their knowledge of the social determinants of health and the barriers that uninsured patients encounter in obtaining primary medical care and specialty care when needed. The student-run free clinic elective will provide medical students with an engaging clinical experience that will prepare them to more effectively advocate and care for uninsured patients. In addition to their clinical roles, students will be actively involved as both teachers and learners. Working under the direct supervision of faculty physicians, students will participate in training and educating volunteer underclass students by leading clinical care teams and conducting wrap-up sessions at the end of each clinic session. To prepare them for their educator roles, students will receive didactic training outside of clinic on various topics pertaining to teaching skills and the social determinants of health. This longitudinal experience provides students the opportunity to receive two weeks of elective credit by completing the required didactic sessions and at least 18 clinical experiences that may be scheduled over the course of 21 months during years 3 and 4. The Free Clinic elective is available to all students; however it will be required of all third and fourth year students in the social medicine pathway.

Components: PRA.

Grading: GRD.

MDR 950. COVID-19 Virtual Elective. 2 Credit Hours.

During the COVID-19 pandemic, frontline healthcare providers have been forced to learn new skills and assume new roles to fight this unprecedented disaster. The purpose of this elective is to educate medical students on COVID-19 management techniques, public health principles, pandemic preparedness and relevant issues that will be essential in future crises.

Components: MOD.

Grading: GRD.

MDR 951. Cardiology Teaching Lab - Harvey (2 wks). 2 Credit Hours.

This rotation consists of a focused review of cardiology for the clinician. A clinician must be able to evaluate and treat cardiology patients, as they represent the largest subset of patients they see with significant disease. Each student is trained to develop the knowledge and skills needed to conduct a complete cardiovascular history and bedside examination, and interpret ECG's and arrhythmias. The rotation includes the integration of the bedside evaluation with the current indications for non-invasive and invasive diagnostic testing. The diagnosis and management of valvular disease, coronary disease, hypertensive heart disease, heart failure and congenital lesions are covered by group and individual sessions with Harvey, the Cardiopulmonary Patient Simulator. The UMedic multimedia computer curriculum is incorporated into the elective to further interactive self-learning. Didactic ECG and Arrhythmia lectures are given daily. Each student will also read, interpret and review electrocardiograms and arrhythmias with clinical faculty. Students will use our web-based programs, Essential ECG and Essential Arrhythmia, to facilitate their learning.

Components: MOD.

Grading: GRD.

MDR 952. Reproductive Endocrinology and Infertility. 2 Credit Hours.

This rotation will provide you with the unique opportunity to learn about the subspecialty of reproductive endocrinology and infertility. During this rotation student will learn the basics of menstrual cycle, hormonal regulation and different causes of infertility. Students will be exposed to a wide variety of endocrinological disorders such as amenorrhea, polycystic ovarian syndromes, thyroid dysfunction, and hyperprolactinemia. Opportunity will be given to attend and observe the different techniques of advanced reproductive technology, including in vitro fertilization, intracytoplasmic sperm injection, intrauterine insemination. You will also be able to scrub-in and observe a wide variety of endoscopic surgeries.

Components: MOD.

Grading: GRD.

MDR 953. Cardiac Anesthesiology. 4 Credit Hours.

During this rotation, the student will be exposed to the principles and the practice of cardiothoracic anesthesia, applied cardiovascular physiology and pharmacology. The course will provide the student exposure to and experience performing the preoperative assessment and intraoperative management of cardiothoracic surgical patients from the perspective of the cardiac anesthesiologist. The student will work with faculty, fellows, and residents delivering anesthetic care to adult patients undergoing cardiothoracic and vascular procedures.

Components: MOD.

Grading: GRD.

MDR 954. Pediatric Anesthesiology. 2 Credit Hours.

This elective will introduce the subspecialty of Pediatric Anesthesiology to medical students interested in careers in Anesthesiology, Pediatrics and related specialties. The rotation will consist of a 2-week consecutive period that will expose the medical student to the basic knowledge and skills inherent to the practice of pediatric anesthesia. Techniques of basic procedural skills will be reviewed along with discussions on topics integral to pediatric peri-operative care. The course will provide the student exposure to and experience performing the preoperative assessment, intra- and post-operative management of pediatric surgical patients from the perspective of the pediatric anesthesiologist.

Components: MOD.

Grading: GRD.

MDR 955. UroGynecology Sub-I. 4 Credit Hours.

The objective of this sub-internship is to improve the students' knowledge and skills in evaluating and managing women with pelvic organ prolapse (POP) and urinary incontinence. The student will develop an understanding of pelvic anatomy, become familiar with surgical principles and develop proficiency in evaluating and recognizing the various types of POP, urinary incontinence and voiding disorders. Student participating in the sub-internship will also become familiar with the surgical management of POP and urinary incontinence and have greater exposure to other common types of pelvic floor dysfunction such as; fecal incontinence, constipation, urinary tract infections, bladder and pelvic pain, urethral diverticulum, and sexual dysfunction.

Components: MOD.

Grading: GRD.

MDR 956. Procedure Team Medical Student Elective. 2-4 Credit Hours.

The performance of an invasive bedside procedure carries with it inherent risks and potential complications. Incorrect accomplishment of such may adversely affect patient safety, increase hospital length of stay, necessitate the use of additional resources, and propagate incorrect procedural methods for the next generation of physicians. To this end a formal course in procedural instruction serves as model for the other institutions and as a standard within our own. The days of "see one, do one, teach one" are extinct. Students will undergo formal procedural instruction using task trainers/ models. They will become familiar with relevant anatomy, and perfect the technical skills needed to successfully perform invasive bedside procedures, from pre-procedural assessment to post-procedure documentation and follow-up

Components: MOD.

Grading: GRD.

MDR 957. Geriatrics and Palliative Medicine Clerkship. 2 Credit Hours.

The medical student will spend four weeks at the VA Medical Center and assume responsibility for the care of older patients under the supervision of board-certified geriatricians and palliative medicine physicians, geriatric and palliative medicine fellows, and members of the interdisciplinary care team. Our mission is to teach, model and assess the knowledge, skills, and attitudes needed by medical students to complete comprehensive geriatric and palliative care assessments. Clinical activities will mainly take place in multiple chronic care venues at the VA including the Intermediate Care Unit, the Hospice Unit, the Community Living Center, and the Geriatric Primary Care Clinic. Students may have an opportunity to rotate at the Miami Jewish Health System or participate in clinical services at the University of Miami Hospital and the Cancer Center.

Components: LEC.

Grading: GRD.

MDR 958. UMH Medicine Sub-I. 4 Credit Hours.

The primary objective of this rotation is to emphasize mastery of clinical core internal medicine competencies, to develop skills in inpatient management of common medical illnesses, and to prepare fourth year medical students for internship. This rotation will promote the expansion of the clinical knowledge base and emphasize the practice of evidence based internal medicine.

Components: MOD.

Grading: GRD.

MDR 959. JFK Medicine Sub-I. 4 Credit Hours.

The objective of this rotation is to provide students with hands on clinical experiences that are specifically designed to mirror their upcoming roles as interns in postgraduate training. The medical Sub-intern will master specific core competencies and basic principles of inpatient medical care. The sub-intern will be a member of a medical ward team that consists of an attending, one resident, two interns and two third year clerks. The sub-intern will work specifically with one resident on the team who will directly oversee the sub-intern and the care of his/her patients. They will focus on delivery of inpatient care to general medical patients as well as collaborate with medical and surgical subspecialties. They will attend daily morning report and attending rounds as well as participate in daily sign out/hand off rounds. Sub-Interns will attend daily noon conferences, weekly grand rounds, and twice weekly sessions with sub-internship coordinators to review key inpatient topics.

Components: MOD.

Grading: GRD.

MDR 960. Vascular Surgery. 4 Credit Hours.

This rotation is a busy service treating the complete spectrum of vascular diseases including aneurysms of the aorta, cerebrovascular disease, mesenteric vascular disease, renovascular disease and peripheral vascular disease. In addition, endovascular procedures will be observed. This rotation will allow the student to care for patients both pre-operatively and post-operatively. There will also be some experience interpreting non-invasive diagnostic tests to tailor the operation for specific vascular problems. Conferences with the attendings are held on a weekly basis. Students will learn how to recognize, diagnose and treat the most common vascular diseases. All students will be evaluated by the attending in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration. Students are required to stay until 10 PM when on night call.

Components: MOD.

Grading: GRD.

MDR 961. MIA VAMC Medicine Sub-I. 4 Credit Hours.

The objective of this rotation is to provide students with hands on clinical experiences that are specifically designed to mirror their upcoming roles as interns in postgraduate training. The medical Sub-intern will master specific core competencies and basic principles of inpatient medical care. With the guidance and oversight of the supervising attending and resident, the sub-I will be seen as the primary care giver by the patient and the hospital staff,

Components: MOD.

Grading: GRD.

MDR 962. Internal Medicine SUB-I. 4 Credit Hours.

The primary objective of this rotation is to emphasize mastery of clinical core internal medicine competencies, to develop skills in inpatient management of common medical illnesses, and to prepare fourth year medical students for internship. This rotation will promote the expansion of the clinical knowledge base and emphasize the practice of evidence based internal medicine.

Components: MOD.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 963. Ambulatory Obstetrics and Gynecology. 4 Credit Hours.

The objective is for the student to gain experience in the diagnostic and therapeutic approaches for general obstetric and gynecologic conditions by participating in direct patient care and resident didactic activities. Students will enhance interpersonal skills and professional conduct in the female patient encounter setting. Students will learn the basic ambulatory management of medium and high risk obstetrical patients, the management of ambulatory gynecologic conditions, and prevention and screening in women's reproductive health. This rotation is ideal for the student considering a career in obstetrics and gynecology as he or she will be exposed to multiple aspects of the field. The rotation will also provide a strong foundation in outpatient women's reproductive health for those going into internal medicine, family medicine, pediatrics and psychiatry.

Components: MOD.

Grading: GRD.

MDR 965. Addiction Psychiatry @ Wellington Retreat. 4 Credit Hours.

Medical students get hands on experience regarding the evaluation and treatment of addiction and other psychiatric illnesses. From day one, they are taught to recognize symptoms and gain interview techniques. They perform initial evaluations directly supervised by Dr. Moran who is triple board certified in general psychiatry, addiction psychiatry, and addiction medicine. Students attend community meetings every week day as well as adolescent community meetings and several groups (which usually takes all morning 8:30-12:00). They are shown the proper way to write notes on patients with psychiatric diseases and all notes are written by the students and reviewed by the doctor. Students are assigned a caseload of patients. The students are expected to assess them daily to witness and understand the gradual changes in the psychopathology. Every day, everyone involved in the care of patients (Doctors, Therapists, Clinical Director, Coordinators Director, Residents P.A. students and the medical students) meet during lunch (12:30-13:30) to discuss the individual treatment of each patient; students are encouraged to participate since their contact with the patients provides helpful additional observations. Our treatment is based on cutting edge research and the students will learn about psychopharmacology as well as evidence-based psychosocial interventions.

Components: MOD.

Grading: GRD.

MDR 966. Health Law Course. 2-4 Credit Hours.

Health Law course presents issues of health in the broader social context of people's lives, providing knowledge and skills from both disciplines to the advancement of health through joint medical-legal advocacy and interdisciplinary solutions to complex problems. During the course, students from medicine will have the opportunity to work in unique clinical experiences which focus not only on medical care of actual patients but also on broader policy issues that affect public health. They will have an opportunity to work with the Child protection Team, Justice Outreach with the Veterans courts, Human Trafficking and Asylum clinics and the State Attorney's office Human trafficking unit and the judges and Domestic Violence courts. They will also participate in seminars with other medical students as medical faculty to discuss topics pertinent to the interface of medicine and law. At the end of this course they will have a preliminary understanding of the social determinants that adversely affect patient health such as income and employment, housing, education, legal status, and personal safety. They will have an introduction to how health care providers and lawyers can work together to invoke more effective and preventive remedies for patients and clients.

Components: MOD.

Grading: GRD.

MDR 967. JFK Cardiology Consult. 2-4 Credit Hours.

This is an inpatient consult rotation is at JFK Medical Center, a tertiary care center in Palm Beach County. It is a very active cardiac center with invasive cardiology services, cardiac surgery, and electrophysiology services. Patients encountered reflect the rich, diverse nature of pathology present in the area with equal exposure to men and women of multiple ethnicities and socioeconomic backgrounds.

Components: MOD.

Grading: GRD.

MDR 968. Psychiatry @ South County Mental Health. 2-4 Credit Hours.

This elective provides students with the opportunity to build upon their Psychiatry Core Clerkship experience by assuming increased responsibility for the diagnosis, treatment and management of psychiatric inpatients. Under the supervision of attending physicians, students will gain experience in the diagnosis and treatment of patients presenting with a wide range of psychopathology, including Mood Disorders, Psychotic Disorders and Substance Use Disorders. Students will gain experience in performing psychiatric evaluations, psychopharmacology and psychosocial interventions.

Components: MOD.

Grading: GRD.

MDR 969. Interventional Radiology. 4 Credit Hours.

The course is an introduction to Vascular/Interventional Radiology and consists of intensive exposure to Vascular and Interventional Radiology procedures under the direct supervision of interventional radiologists. Students will learn and participate in (a) the use of radiological imaging to guide procedures in different organ systems, (b) the evaluation and management of patients requiring interventional radiology procedures, and (c) performance of interventional procedures, including arterial and venous angiography, angioplasty, stenting, embolization of tumors and vascular malformations, and other vascular and interventional procedures. They will also be instructed in the placement of different venous access devices. Students will also be exposed to non-vascular procedures such as percutaneous biliary drainage and tumor ablation.

Components: MOD.

Grading: GRD.

MDR 970. Ophthalmology for the Non-Ophthalmologist. 2 Credit Hours.

The two week clinical elective in ophthalmology is geared toward medical students with a particular interest in obtaining an in depth understanding of fundamental ophthalmology (geared for every student regardless of specialty interest). Aspects of ophthalmology that are pertinent to the practice of internal medicine, neurology, pediatrics, family practice and other primary care specialties will also be taught. Students will rotate through the emergency room, operating room, and various subspecialty clinics at the Bascom Palmer Eye Institute where they will shadow attendings and housestaff. A comprehensive didactic course will be conducted concurrently during this two week block which includes interactive case based presentations. A final examination will be administered at the conclusion of the course. Students are also welcome to attend weekly grand rounds and fluorescein conferences as well as daily resident lectures during the rotation. An additional two weeks is offered for students considering ophthalmology as a career. All students wishing to be part of the four week course must have approval of the course coordinator. These additional two weeks are set up as a preceptorship and may be arranged independently with a faculty ophthalmologist.

Components: MOD.

Grading: GRD.

MDR 971. Ophthalmic Pathology. 4 Credit Hours.

The two week clinical elective in ophthalmology is geared toward medical students with a particular interest in obtaining an in depth understanding of fundamental ophthalmology (geared for every student regardless of specialty interest). Aspects of ophthalmology that are pertinent to the practice of internal medicine, neurology, pediatrics, family practice and other primary care specialties will also be taught. Students will rotate through the emergency room, operating room, and various subspecialty clinics at the Bascom Palmer Eye Institute where they will shadow attendings and housestaff. A comprehensive didactic course will be conducted concurrently during this two week block which includes interactive case based presentations. A final examination will be administered at the conclusion of the course. Students are also welcome to attend weekly grand rounds and fluorescein conferences as well as daily resident lectures during the rotation. An additional two weeks is offered for students considering ophthalmology as a career. All students wishing to be part of the four week course must have approval of the course coordinator. These additional two weeks are set up as a preceptorship and may be arranged independently with a faculty ophthalmologist.

Components: MOD.

Grading: GRD.

MDR 972. Emergency Medicine consortium agreement. 4 Credit Hours.**Components:** MOD.**Grading:** GRD.**MDR 973. Pediatric Allergy and Immunology. 2-4 Credit Hours.**

The pediatric allergy and immunology elective is designed to give senior medical students exposure to the spectrum of diseases seen in the field of Allergy and Immunology. The student will predominantly rotate through the outpatient clinic and inpatient consults, and see patients and procedures based on the emphasis of that location.

Components: MOD.**Grading:** GRD.**MDR 975. LABOR AND DELIVERY NIGHT ROTATION. 2 Credit Hours.**

This is a 2-week elective intended to expose the MS4 to a spectrum of experiences in Obstetrics. Each week, the student will rotate through Labor and Delivery and gain experience in the care of pregnant patients, including vaginal delivery, cesarean delivery, triaging gravid patients, and obstetrical emergencies.

Components: MOD.**Grading:** GRD.**MDR 977. Virtual Ophthalmology. 2 Credit Hours.**

This is an intensive 2-week virtual elective, which will teach the senior medical student ophthalmology knowledge and concepts through flipped classroom work, shadowing in telemedicine visits and operating rooms, specialty conferences, lectures/grand rounds, and morning lectures. The small group discussions include clinical cases covering the spectrum of ophthalmic subspecialties, including diagnosis and management. This elective is opened only to 4th year visiting students applying to ophthalmology. Students of varied ophthalmic knowledge backgrounds are welcome! Applications will be processed through the University of Miami Miller School of Medicine's VSAS/VSLO portal. This elective is meant to stimulate the intellectual curiosity and students' continued learning in ophthalmology, through close virtual contact with Bascom Palmer residency leadership and core educator faculty. The small group discussions include clinical cases covering the spectrum of ophthalmic subspecialties, including diagnosis and management. This elective is opened only to 4th year visiting students applying to ophthalmology. Students of varied ophthalmic knowledge backgrounds are welcome! Applications will be processed through the University of Miami Miller School of Medicine's VSAS/VSLO portal. This elective is meant to stimulate the intellectual curiosity and students' continued learning in ophthalmology, through close virtual contact with Bascom Palmer residency leadership and core educator faculty.

Components: MOD.**Grading:** GRD.**Typically Offered:** Fall & Spring.**MDR 978. Trauma-Informed Care for Survivors of Sexual Violence. 2-4 Credit Hours.**

Sexual violence is a public health crisis with almost 18% of people who identify as women reporting rape or attempted rape in their lifetime.³ Millions of people are victims of human trafficking and forced sexual exploitation every year.² The Roxcy Bolton Rape Treatment Center (RTC) and the THRIVE (Trafficking Healthcare Resources and Interdisciplinary Victim Services and Education) Clinic on the University of Miami/Jackson Healthcare campus are designed to provide trauma-informed care to survivors of sexual violence. Medical students should have opportunities to administer trauma-informed care. The purpose of this elective rotation is to expose medical students to clinical scenarios in which patient trauma is addressed and prioritized, prepare students to advocate for vulnerable patients and practice holistic and humanistic medicine for survivors throughout their careers.

Components: MOD.**Grading:** GRD.**Typically Offered:** Fall & Spring.**MDR 979. Radiology Consortium Agreement. 4 Credit Hours.****Components:** MOD.**Grading:** GRD.**MDR 980. Geriatrics Consortium Agreement. 4 Credit Hours.****Components:** LEC.**Grading:** GRD.**MDR 986. Geriatrics Consortium Agreement. 4 Credit Hours.****Components:** MOD.**Grading:** GRD.**MDR 988. Required Management of the Acutely Ill Patient Course. 4 Credit Hours.**

Students will be exposed to the management of acutely ill patients through simulated online modules to develop and reinforce critical patient care skills in preparation for residency.

Components: MOD.**Grading:** GRD.**Typically Offered:** Spring.

MDR 989. Emergency Medicine Elective. 2 Credit Hours.

The goal of this elective is to provide students in the Class of 2022 who are pursuing careers other than emergency medicine an opportunity to experience the care of patients in the emergency room setting. The elective is a 2-week rotation composed of 6 shifts in the UHealth Tower emergency room. Students would have hands-on clinical experience in emergency care of patients of all ages with a wide spectrum of illnesses and injuries. Students are expected to evaluate and manage assigned patients under the direct supervision of an EM attending physician. Students will play an integral role in the initial evaluation of an undifferentiated patient – where the diagnosis is completely unknown on initial contact and the clinician must start from scratch to formulate a differential diagnosis, plan of evaluation and plan of management. Emphasis is placed upon initial assessment, recognition, prioritization, and stabilization of acute emergency conditions. The rotation also includes a variety of generalist skills in handling minor acute conditions that will be encountered frequently in primary care practice.

Components: MOD.

Grading: GRD.

Typically Offered: Fall.

MDR 990. HCH Emergency Medicine Clerkship. 4 Credit Hours.

The purpose of the RMC Emergency Medicine clerkship at Holy Cross is to provide students with an opportunity to acquire a foundation of knowledge and skills to care for patients with emergency medical conditions. Every physician should possess adequate assessment and management skills to rapidly identify life-threatening conditions, to initiate care, and to know whom and when to call for assistance. The Emergency Department is also one of the few practice sites where students play an integral role in the initial evaluation of an “undifferentiated” patient – where the diagnosis is completely unknown on initial contact, and the clinician must “start from scratch” to formulate a differential diagnosis, plan of evaluation, and plan of management. Experience in a wide range of procedural skills are also readily available including airway management, suturing, and central venous line placement. Students will participate in an EMS ride along, simulation cases, and didactic sessions. Students are evaluated through clinical evaluations and a written examination.

Components: LEC.

Grading: GRD.

MDR 991. Fixing Levels. 0 Credit Hours.

Fixing Levels

Components: MOD.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 992. RMC Radiation Oncology. 2-4 Credit Hours.

This is a 2 or 4-week elective intended to expose the senior medical student to spectrum of experiences in radiation-oncology. It's anticipated that the student will rotate through 2-3 outpatient clinic settings and be exposed to various radiation-oncology treatment modalities/technologies.

Components: MOD.

Grading: GRD.

MDR 993. Virtual Externships not at UM. 2-8 Credit Hours.

Virtual externships offered through LCME/ACGME accredited institutions may be utilized towards elective requirements. Externships may be available through the VSLO system and follow our typical externship policy through the Office of Student Affairs. Externships not offered through VSLO will need to be approved by the Associate Dean for Clinical Curriculum. Students should send a detailed schedule/estimated weekly hours for the non-VSLO virtual externship to the Associate Dean for Clinical Curriculum. Once approved, the externship will be sent to the Student Affairs Office for approval.

Components: MOD.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 994. Dean's Research Excellence Award in Medicine Program. 0 Credit Hours.

The DREAM research scholarship program is designed for medical students who are interested in pursuing a physician-scientist career in academic medicine. The DREAM program integrates Miller School of Medicine's outstanding preclinical and clinical training, rigorous research training, and professional development elements specifically designed to enhance the physician-scientist training experience. Program Overview Through engaged mentoring, this research scholarship provides medical students a valuable education and training opportunity in basic and translational science. Students will join a research lab at the Miller School of Medicine, carry out independent research projects, and acquire the essential research skills (study design, experimental execution, project management, and report preparation) designed to accelerate a career path in academic medicine. The one-year DREAM research program will start after the end of year 3 (June of MS3) for students in legacy curriculum, and after the Phase 2 (January of MS3) for students in NextGen MD curriculum.

Components: MOD.

Grading: NON.

MDR 995. WPB VAMC Physical Medicine and Rehabilitation. 2-4 Credit Hours.

The purpose of this rotation is to provide the medical student with an introduction to the field of PM&R with emphasis on basic assessment and management options for common musculoskeletal disorders and neurological conditions affecting physical function. The rotation takes place mostly in the outpatient clinic setting with opportunities to also learn in other settings such as a nursing home or acute general hospital. There is also exposure to electrodiagnostic medicine and pain management.

Components: MOD.

Grading: GRD.

MDR 996. International Study Abroad. 0-8 Credit Hours.

All students going abroad on international programs (ie, medical mission trips and others), regardless if UM or non-UM sponsored/related, must obtain proper approval from the Office of Student Affairs. Required forms can be found on the MedEd website under Important Documents for Students – “Administrative Requirements for International Study”. MDR 996 “International Study Abroad” – Senior medical students may obtain academic credit for selected international clinical experiences. Only senior students are allowed to receive credit for such experiences. Credit is counted towards their Elective requirements. The above mentioned forms must be filled out. Additional information is also required, including written goals/objectives for the rotation, expectations, student responsibilities, location/institution for the clinical experience, how the student will be evaluated, and the name/contact of physician who will complete the evaluation form. This information needs to be presented in advance to the Senior Associate Dean for Undergraduate Medical Education for approval prior to the trip, preferably far in advance.

Components: MOD.

Grading: GRD.

MDR 997. Research Md/Phd Program. 0-8 Credit Hours.

Students must have defended their thesis for Graduate School and also finished their 3rd year MD clerkships student will be granted 8 credits.

Components: MOD.

Grading: GRD.

MDR 998. John T. and Winifred Hayward Foundation Genomic Medicine Fellowship Research Course. 0 Credit Hours.

The John T. and Winifred Hayward Foundation Genomic Medicine Fellowship is awarded to one student per year to support work on a mentored research project in genomics and genomic medicine. The fellowship provides a stipend (awarded through the Medical Education Financial Aid Office) and support for research supplies and travel to a scientific meeting to present results. The research proposal submitted in the fellowship application outlines the activities to be completed in the fellowship year, under the guidance of a UM faculty mentor. Specific learning objectives and milestones are outlined below.

Components: MOD.

Grading: NON.

Typically Offered: Fall & Spring.

MDR 999. Fixing Unit Levels. 0 Credit Hours.

Fixing Unit Levels

Components: MOD.

Grading: GRD.

Typically Offered: Fall & Spring.

MDR 000. Elective. 1-30 Credit Hours.

Components: LEC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.