

MEDICINE (M.D. PROGRAM)

Office of Enrollment Management Services

Office of Admissions
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Admission to M.D. Program

The School of Medicine accepts 290 students for its entering class. The students are selected from a large number of applicants who apply through the American Medical College Application Service (AMCAS).

Academic Requirements for Admission

Wayne State University School of Medicine requires applicants for admission to have earned a bachelor's degree.

Required subjects for baccalaureate preparation are:

- general physics;
- inorganic and organic chemistry;
- general biology;
- college writing or composition

It is recommended that students complete lab work in the above science courses. and take a course in statistics, ethics, and biochemistry. The student is urged to select additional subjects which will contribute substantially to a broad cultural background.

It is to be noted that when students are accepted before completion of their premedical requirements, they must maintain a satisfactory scholastic average in their continued premedical work to warrant enrollment in the School of Medicine.

The *Medical College Admission Test* is required of all applicants for admission into the first year class. Students seeking admission should take this test no later than September of the year prior to matriculation. After a preliminary review of application credentials, interviews are held with those applicants who warrant further consideration.

Admission to the First-Year Class

The School of Medicine adheres to the acceptance procedures of the Association of American Medical Colleges, including the 'Early Decision Plan.' Admission procedures of the School are:

1. No place in the first-year class shall be offered to an applicant more than one year before the actual start of instruction for that class.
2. Following the receipt of an offer of a place in the first-year class, a student shall be allowed three weeks in which to make a decision.
3. No student who has at any time been requested to withdraw for any reason from a medical school in which he/she has been registered will be accepted by the WSU School of Medicine. Students who have been dropped for poor scholarship by the School of Medicine should not expect favorable consideration for readmission.
4. Any applicant accepted by the School of Medicine who does not complete enrollment must apply for readmission and meet all requirements in force at the time of the new application.

Selection Factors

The Committee on Admissions will select applicants who, in its judgment, will make the best students and physicians. Consideration is given to the entire record, including grade point average, Medical College Admission Test scores, recommendations and interview results (one-on-one interview and multiple mini-interviews), as these reflect an applicant's personality, maturity, character and suitability for medicine. Additionally, the committee regards as desirable certain health care experiences, such as volunteering or working in hospitals, hospices, nursing homes or doctor's offices. The committee also values experience in biomedical laboratory research. Following an initial screening process, students with competitive applications are selected to complete a secondary application. Special encouragement is given to candidates from medically underserved areas in Michigan.

As a state-supported school, the institution must give preference to Michigan residents; however, out-of-state applicants are encouraged to apply. An applicant's residency is determined by university regulations. Applicants must be a U.S. or Canadian citizen or U.S. permanent resident to be eligible for admission. Students whose educational backgrounds include work outside the United States must have completed two years of course work, including the prerequisite courses at a U.S. or Canadian college or university. Canadian citizens are considered non-resident for both admission and tuition purposes. Interviews are required but are scheduled only with those applicants who are given serious consideration. Students are urged to apply by November 1.

Application and Acceptance Policies

The School of Medicine adheres to the acceptance procedures of the Association of American Medical Colleges, including the 'Early Decision Plan.' Admission procedures of this School are:

1. An American Medical College Application Services application must be filed between June 1 and December 31 of the year preceding anticipated matriculation.
2. Applicants must respond to acceptance offer within three weeks of the offer.

Diversity and Integrated Student Services

This unit supports the medical school to maintain its representation of diversity across economic, personal and social dimensions. This is accomplished through pipeline outreach programs and special projects that present a combination of academic and extracurricular activities designed to inform high school, undergraduate and post-baccalaureate students about career opportunities in medicine and other health professions, and prepare them to gain admission.

A special program feature of the unit is the Post Baccalaureate Program. This medical school preparatory program offers an opportunity to a small number of applicants who are Michigan residents, and whose undergraduate academic achievement has been compromised by certain disadvantaging factors to gain admission into medical school. Successful completion of this special one year program facilitates entry into medical school for those selected applicants from disadvantaged backgrounds.

Registration Requirements Physical Examination

Each student must present proof of a physical examination at or before registration for the first year. Students are also required to be annually tested for TB (skin test or chest x-ray). Additional vaccines and titers may be required.

Health Insurance

Health insurance is mandatory and students must demonstrate proof of insurance at registration. Students have the option of purchasing the group plan offered by the Medical School, which can be purchased at registration.

Disability Insurance is mandatory and can be purchased at registration.

Criminal Background Check: All accepted applicants to the medical school will be required to complete a criminal background check through AMCAS and Certiphi, the selected vendor for criminal background checks.

Transcripts

Transcripts of all university-level work must be on file in the Registrar's Office for each medical student, including the degree statement from the university from which the student obtained his/her degree.

Academic Program

The Office of Undergraduate Medical Education is responsible for the overall management, administration, and supervision of the undergraduate medical curriculum. The undergraduate program in medicine is structured in phases that divide the four years on a time, and more importantly, conceptual level.

- The initial segment (18 months) establishes a framework of skills, scientific, clinical and societal – a chassis on which to build the practice of medicine.
- The next segment (12 months) involves an intense clinical experience in all aspects of medicine.
- The final segment (14 months) sees students advance toward their career goals while being prepared for residency.

Phase 1 of the curriculum is aimed at 'coaching up' our students, training them earlier, and providing context as to how/why to apply classroom learning within clinics and in the community. To give students an even greater start, we align the basic science curriculum to best take advantage of cadaver dissection opportunities for additional hands-on experience.

Phase 1, Segment 1

The Segment 1 curriculum will be eight months in length and taught on a systems-based model. Each system is taught via lecture; small-group problem-based and case-based learning; and laboratory experiences. Of particular note, this segment is centered upon anatomic cadaver dissection. This is unusual in medical schools in 2018, but we consider it to be essential.

Systems curriculum present the anatomy, physiology, biochemistry, histology and genetics of each organ system, correlated with anatomic dissection.

Importantly, clinical education is also correlated with each system, as the physical exam and history exercised and instruction in the clinical skills course will mirror the system taught in the basic science portion.

Phase 1, Segment 2

The second segment is concentrated on the abnormal – the diseased states of the human. This, again, is taught by organ system. Minor revisions are ongoing in this curriculum, which will build upon the existing systems approach.

Clinical instruction is centered upon the continuity clerkship in which each student is paired with a preceptor in community practice for a half day of clinic every other week. This real-patient experience is integrated

with further instruction in clinical skills and regional/focused physical exam in the skills center.

Students must pass Step 1 of the USMLE (United States Medical Licensing Examination) in order to be promoted from Year II to Year III. Students must also pass Step 2 (both clinical knowledge and clinical skills) examinations in order to graduate.

NEED INFORMATION ON PHASES 2 and 3

Matriculation and Promotion

Primary evaluation of students is the responsibility of the faculty of the appropriate departments or courses for Year I-III students, and the Elective Course Coordinators for Year IV students.

Students are evaluated promptly by the primary evaluators, who make recommendations to the Promotions Committee which may include: promotion, re-examination, repetition of all or part of the year, interruption or suspension or probation of a student's program, or dismissal. Questions of suitability for the study and practice of medicine on other than academic grounds are handled according to the University's 'Guidelines for Assisting Persons with Behavioral Problems.'

The Promotions Committee is chaired by the Vice Dean for Medical Education or his/her designee and consists of twelve members: four nominated from the faculty by the President of the Faculty Senate, with the advice and consent of the Executive Committee; four nominated from the Council of Departmental Chairpersons; and four selected by and from the student body. Faculty members serve three-year terms. Student members serve for one year and have full discussion privileges. Their votes are advisory to the Committee.

At appropriate intervals, the Promotions Committee meets to make promotional decisions based upon the student's academic performance. The Committee has the obligation to assure that the rules of the School and the rights of the individuals involved have been fairly met. Decisions are transmitted for the Committee by the Associate Dean for Academic and Student Programs. Students have the right to appeal such decisions by direct petition to the Promotions Committee. In the event of such an appeal, the Committee may gather evidence and hear witnesses. The student involved has the right to be heard by the Committee and may call a reasonable number of witnesses to testify in his/her behalf. The Promotions Committee is the final decision-making body with regard to the promotion process. The student has the right to request the Office of the Provost to review any determinations made by the Promotions Committee of the School of Medicine relative to academic performance on his/her part.

Leaves of Absence may be granted to students with documented health problems (medical leave of absence), or to those with appropriate educational opportunities outside the School (educational leave of absence), for personal reasons (personal leave of absence); or the medical school can put students on an administrative leave of absence.

Any students whose enrollment is continued by the Promotions Committee, or, in the case of Leaves of Absence, by the Vice Dean for Medical Education or his/her designee, is considered to be making academic progress toward the M.D. degree.

Grading

The grading system throughout all years of the School's curriculum is:

- 'H' (Honors)
- 'S' (Satisfactory)

- 'U' (Unsatisfactory)
- 'I' (Incomplete)

The exception to this rule is Year 3 where an S+ (Satisfactory with commendations) can be achieved in all clerkships. The minimum passing grade is 'S'. In order to be promoted from year to year, students must obtain 'S' on all course work and complete all requirements established by course directors.

Graduation Requirements

Students regularly registered in the School of Medicine may receive the degree Doctor of Medicine upon the fulfillment of the following requirements:

1. They must be at least 21 years of age, must exhibit good moral character, and must be suitable for the practice of medicine.
2. They must have satisfactorily completed all the academic requirements established by the School.
3. They must have paid all fees in full, and have all holds released.
4. They must pass Step 1 and pass Step 2 (clinical knowledge) and Step 2 (clinical skills) of National Board examinations.

M.D. Curriculum

Segment 1 - Phase 1, Part 1 - Pre-Clerkship

Code	Title	Credits
Courses include:		
MD1 5050	Advanced Learning Strategies for Physicians in Training	2
MD1 5051	Foundations of Normal Structure and Function	4
MD1 5053	Block 3 Lab	2
MD1 5054	Normal Structure and Function of the Gastrointestinal, Renal, and Urinary Systems	3
MD1 5055	Block 4 Lab	1
MD1 5056	Normal Structure and Function of the Reproductive, Endocrine, Blood, and Lymphatic Systems	3
MD1 5057	Block 5 Lab	1
MD1 5058	Normal Structure and Function of the Central Nervous System	3
MD1 5059	Block 6 Lab	2
MD1 5060	Clinical Skills Course I	5
MD1 5061	Clinical Skills Course II	3
MD1 5062	Population, Patient, Physician and Professionalism (P4) Part I	9
MD1 5063	Normal Structure and Function of the Musculoskeletal, Skin and Peripheral Nervous Systems	2
MD1 5065	Normal Structure and Function of the Cardiopulmonary Systems	3
MD1 5066	Block 3.5 Lab	3
Students can choose an optional elective for 5 credits		
MD1 5150	Community Engagement Part I (optional elective)	
MD1 5151	Leadership and External Affairs Development (LEAD) / Medical Political Action (MPAC) (optional elective)	
MD1 5153	Medical Research Elective (optional elective)	
MD1 5154	Medical Education Research (optional elective)	
Total Credits		46

Segment 2 Phase 1, Part 2 - Pre-Clerkship

Code	Title	Credits
Courses include:		
MD1 6698	Foundations Course: Fundamentals of Human Disease	8
MD1 6699	Populations, Patients, Physician, Professionalism and Clinical Skills Part I	1
MD2 6701	Population, Patient, Physician and Professionalism (P4) Part II	5
MD2 6702	Musculoskeletal, Skin and Peripheral Nervous Systems: Fundamentals of Human Disease	3
MD2 6703	Cardiopulmonary Systems: Fundamentals of Human Disease	5
MD2 6704	Gastrointestinal Systems: Fundamentals of Human Disease	3
MD2 6705	Renal and Urinary Systems: Fundamentals of Human Disease	2
MD2 6706	Endocrine and Reproductive Systems: Fundamentals of Human Disease	3
MD2 6707	Hematopoietic and Lymphoid Systems: Fundamentals of Human Disease	2
MD2 6708	Central Nervous System: Fundamentals of Human Disease	3
MD2 6709	Clinical Skills Course III	3
MD2 6710	Clinical Experiential Clerkship	4
MD2 6610	Step 1 Preparation Course	1
Students can choose an optional elective for 5 credits		
MD2 6711	Medical Political Action and Public Health Leadership (MPAC) Part II (optional elective)	
MD2 6712	Community Engagement Part II (optional elective)	
MD2 6713	Medical Research Elective Part II (optional elective)	
Total Credits		43

Segment 3 - Phase 2 - Clerkship

Code	Title	Credits
MD3 7100	Family Medicine Clerkship	4
MD3 7200	Internal Medicine Clerkship	12
MD3 7300	Pediatrics Clerkship	6
MD3 7400	Surgery Clerkship	12
MD3 7500	Psychiatry Clerkship	4
MD3 7600	Obstetrics and Gynecology Clerkship	6
MD3 7700	Neurology Clerkship	4
MD3 7950	Clinical Reasoning, Integration, Skills and Practice Class is offered for 1 credit per 12 week block	4
Total Credits		52

Segment 4 - Phase 3 - Post-Clerkship

Code	Title	Credits
Required Course:		
MD4 8160	Emergency Medicine Core Clerkship	7
Required Sub-internship (choose 1 of 5 sub-internships below to fulfill the requirement):		
MD4 8210	Family Medicine Subinternship	
MD4 8470	Internal Medicine Subinternship	
MD4 8770	Obstetrics/Gynecology Subinternship	
MD4 9210	Pediatric Subinternship	

MD4 9490	Surgery Subinternship	
MD4 9545	Step 2 Preparation	1
Choose One Capstone Course		6
MD4 9392	Advanced Surgical Skills	
MD4 9600	Residency Preparation	
Required MD4 Electives: seven courses to be chosen from MD4 courses not taken to satisfy any of the above requirements. ^{Eight} courses (48 credits) are required starting for the Class of 2022.		42
Total Credits		63

Cooperative Electives Exchange Program

The Deans of the four Michigan medical schools, acting as the Michigan Medical Schools Liaison Committee, have signed cooperative agreements allowing students full credit for courses taken as electives at any one of the participating medical schools:

- Wayne State University
- University of Michigan
- Michigan State University
- Michigan State University College of Osteopathic Medicine.

The Deans intend the program 'to make the best use of one another's resources to the greater advantage of the student and the Michigan community. By allowing medical students full academic credit for elective courses taken at any one of our respective medical schools, our students will be able to share productively in the learning and training opportunities of the entire State.'

Under the course exchange program, election of an 'away course' at one of the cooperating schools requires approval of both the parent and host institutions. Enrollment, matriculation and fee payments continue without alteration at the parent institution; however, students are responsible for all travel and living expenses incurred during the 'away' elective. Additional information can be obtained from Records and Registration, School of Medicine. Under the course exchange program, election of an 'away course' at one of the cooperating schools requires approval of both the parent and host institutions. Enrollment, matriculation and fee payments continue without alteration at the parent institution; however, students are responsible for all travel and living expenses incurred during the 'away' elective. Additional information can be obtained from Records and Registration in the School of Medicine.

Medical Doctor Courses - First Year (MD1)

MD1 5001 Human Body Foundations I Cr. 10

Human Body Foundations I is the first of a 3-part course series in the basic sciences that engages medical students with knowledge of the normal structure and function of the human body, prepares them for the study of human disease, sets the stage for success on the USMLE Step I exam, and provides the scaffolding on which the clerkship curriculum is built. Part I emphasizes fundamental principles in biochemistry, cell biology, embryology, histology, genetics, physiology, and pharmacology, and introduces students to the anatomical investigation of tissues and organs through full-body cadaver dissection beginning with the Musculoskeletal System. Offered Yearly.

MD1 5002 Human Body Foundations II Cr. 10

Human Body Foundations II is the second of a 3-part course series in the basic sciences that engages medical students with knowledge of the normal structure and function of the human body, prepares them for the study of human disease, sets the stage for success on the USMLE Step I exam, and provides the scaffolding on which the clerkship curriculum is built. Part II focuses on three organ systems of the body: Cardiovascular/Respiratory, Renal/Urinary, and Gastrointestinal, emphasizing fundamental principles of physiology, histology, biochemistry, pharmacology, genetics, and embryology, as well as anatomical study through full-body cadaver dissection of the visceral systems. Offered Yearly.

MD1 5003 Human Body Foundations III Cr. 10

Human Body Foundations III is the last of a 3-part course series in the basic sciences that engages medical students with knowledge of the normal structure and function of the human body, prepares them for the study of human disease, sets the stage for success on the USMLE Step I exam, and provides the scaffolding on which the clerkship curriculum is built. Part III focuses on the Reproductive & Endocrine Systems and the Central Nervous System and emphasizes fundamental principles of neuroscience, physiology, histology, embryology, genetics, biochemistry, and pharmacology. The sequence of full-body cadaver dissection is brought to a close with the anatomical investigation of pelvic and head & neck regions. Offered Yearly.

MD1 5050 Advanced Learning Strategies for Physicians in Training Cr. 2

Designed to provide students with knowledge, skills, and behaviors consistent with optimizing academic performance in the medical education learning environment. These include: using evidence-based programming designed to foster clinical/critical thinking skills, developing metacognitive awareness through exposure to and practice with highly effective learning techniques required for success in medical school, and assessing and providing feedback on information age competencies. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5051 Foundations of Normal Structure and Function Cr. 4

Introduces students to the study of medicine beginning with the exploration of life at the molecular and cellular levels. The course content is delivered by faculty whose expertise encompasses the disciplines of Biochemistry, Cell Biology & Histology, Human Genetics, Pharmacology, and Physiology. Themes will include: biological membranes; protein function; fundamentals of inter- and intracellular signal transduction, cellular energetics; introduction to the biochemical and physiological effects of pharmaceutical drugs (pharmacodynamics) and to how the human body processes drugs (pharmacokinetics); the flow of genetic information at the molecular level and on the basic principles of human genetics; and advanced topics in human genetics and pharmacology, and with the examination of human fetal development from fertilization through the first eight weeks of life. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5053 Block 3 Lab Cr. 2

The first portion of the course will cover the structure and function of the normal musculoskeletal, skin, peripheral nervous system. The second portion of the course will cover the structure and function of normal cardiopulmonary system. By the end of the course, students will be able to describe the gross anatomical structure, microanatomy, and normal development of these systems. They will also apply basic scientific principles from biochemistry, physiology, and pharmacology to describe the normal function. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5054 Normal Structure and Function of the Gastrointestinal, Renal, and Urinary Systems Cr. 3

Students will learn the structure and function of the normal gastrointestinal and urinary systems. By the end of the course, students will be able to describe the gross anatomical structure, microanatomy, and normal development of these systems. They will also apply basic scientific principles from biochemistry, physiology, and pharmacology to describe the normal function. The first portion of the course will cover the structure and function of the normal gastrointestinal system, including the oral cavity, the pharynx and esophagus, the stomach, the intestines, the anal canal, and the liver and associated digestive organs. The second portion of the course will cover the structure and function of the urinary system, including the renal system (kidneys) and the urinary tract. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5055 Block 4 Lab Cr. 1

Students will learn the structure and function of the normal gastrointestinal and urinary systems. By the end of the course, students will be able to describe the gross anatomical structure, microanatomy, and normal development of these systems. They will also apply basic scientific principles from biochemistry, physiology, and pharmacology to describe the normal function. The first portion of the course will cover the structure and function of the normal gastrointestinal system, including the oral cavity, the pharynx and esophagus, the stomach, the intestines, the anal canal, and the liver and associated digestive organs. The second portion of the course will cover the structure and function of the urinary system, including the renal system (kidneys) and the urinary tract. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5056 Normal Structure and Function of the Reproductive, Endocrine, Blood, and Lymphatic Systems Cr. 3

Students will learn the structure and function of the normal endocrine and reproductive systems, as well as the structure and function of the components of blood and the normal lymphatic system. By the end of the course, students will be able to describe the gross anatomical structure, microanatomy, and normal development of these systems. They will also apply basic scientific principles from biochemistry, physiology, and pharmacology to describe the normal function. The first portion of the course will cover the structure and function of the normal reproductive and endocrine systems. The second portion of the course will cover the structure and function of normal blood and the lymphatic system, including an introduction to basic immunology. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5057 Block 5 Lab Cr. 1

Students will learn the structure and function of the normal endocrine and reproductive systems, as well as the structure and function of the components of blood and the normal lymphatic system. By the end of the course, students will be able to describe the gross anatomical structure, microanatomy, and normal development of these systems. They will also apply basic scientific principles from biochemistry, physiology, and pharmacology to describe the normal function. The first portion of the course will cover the structure and function of the normal reproductive and endocrine systems. The second portion of the course will cover the structure and function of normal blood and the lymphatic system, including an introduction to basic immunology. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5058 Normal Structure and Function of the Central Nervous System Cr. 3

Students will learn the structure and function of the central nervous system (CNS). By the end of the course, students will be able to describe the major pathways and centers in the brain and spinal cord and their normal function including the special senses. This will include the disciplines of Gross Anatomy, Microanatomy, Biochemistry, Cell Biology, Pharmacology, Physiology, and Development (both anatomical and behavioral). Students will be able to demonstrate application of the principles of normal structure and function to a clinical scenario involving damage to the central nervous system by predicting the outcome. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5059 Block 6 Lab Cr. 2

Students will learn the structure and function of the central nervous system (CNS). By the end of the course, students will be able to describe the major pathways and centers in the brain and spinal cord and their normal function including the special senses. This will include the disciplines of Gross Anatomy, Microanatomy, Biochemistry, Cell Biology, Pharmacology, Physiology, and Development (both anatomical and behavioral). Students will be able to demonstrate application of the principles of normal structure and function to a clinical scenario involving damage to the central nervous system by predicting the outcome. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5060 Clinical Skills Course I Cr. 5

Designed to develop and demonstrate foundational knowledge and basic clinical skills in history-taking, patient examination, oral case presentation, clinical reasoning and performance of procedures required to participate in clinical service learning activities. Students who are competent in these foundational skills will then proceed to develop advanced skills in patient interviewing and physical examination emphasizing a patient-centered empathic and compassionate approach incorporating the patient's perspective, socioeconomic background and cultural intelligence, and protection of patient privacy required to participate in early clinical experiences. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5061 Clinical Skills Course II Cr. 3

Designed to develop and demonstrate foundational knowledge and basic clinical skills in history-taking, patient examination, oral case presentation, clinical reasoning and performance of procedures required to participate in clinical service learning activities. Students who are competent in these foundational skills will then proceed to develop advanced skills in patient interviewing and physical examination emphasizing a patient-centered empathic and compassionate approach incorporating the patient's perspective, socioeconomic background and cultural intelligence, and protection of patient privacy required to participate in early clinical experiences. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5062 Population, Patient, Physician and Professionalism (P4) Part I Cr. 9

Provides students the opportunity to learn, practice, and apply knowledge and skills as a physician-in-training in diverse urban clinical and community outreach settings. Through large group sessions, small group sessions, online modules, self-directed reflective assignments, and clinical and community engagement, students will actively participate in activities demonstrating the interconnectedness of the population, patient and physician. The course also emphasizes the need for students to quickly develop their professional identity as a physician-in-training by behaving professionally and demonstrating respect to their colleagues, faculty, patients and families. By engaging early with patients and potential patients, students' attitudes, as well as knowledge and skills, will be developed with a concentrated focus on understanding the patient's perspective, leading to true patient-centered care. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5063 Normal Structure and Function of the Musculoskeletal, Skin and Peripheral Nervous Systems Cr. 2

The overall goal will be to engage students in the key concepts related to the pathogenesis, pathology, pathophysiology, basic principles of diagnosis and treatment of disease processes effecting the musculoskeletal organ system, skin and peripheral nervous system. Content areas include: review of the anatomy of the extremities and spine; upper and lower extremity fractures/injuries; development, normal structure/function and aging of bones and joints; metabolic and non-metabolic bone disease; scoliosis; disorders of the extracellular matrix and soft tissue; synovial fluid analysis; osteoarthritis; rheumatoid arthritis; septic arthritis; gout; CPPD deposition disease and pseudogout; ankylosing spondylitis; reactive arthritis; psoriatic arthritis; systemic lupus erythematosus; systemic sclerosis; skin tumors, rashes and infections; manifestations of neuromuscular diseases; and pharmacologic interventions for the treatment of musculoskeletal, peripheral nervous system and skin disorders. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5065 Normal Structure and Function of the Cardiopulmonary Systems Cr. 3

The cardiovascular system component includes: review of the normal anatomy, embryology and physiology of the cardiovascular system; systemic hypertension; atherosclerosis and ischemic heart disease; basic electrophysiological principles; ECG interpretation; valvular heart disease; examination of the cardiovascular system; diseases of the pericardium; tumors of the cardiovascular system; non-atherosclerotic vascular disease; primary myocardial disease; cardiovascular disease in the elderly; congenital heart disease; congestive heart failure; nutritional management of patients with cardiovascular disease will be discussed.

The pulmonary system component includes: review of anatomy, histology and physiology of the respiratory system; arterial blood gases; numerous diseases associated with the pulmonary system; aging and the respiratory system; respiratory failure; introduction to sleep and sleep medicine; and relevant pharmacologic management of cardiovascular and pulmonary diseases. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5066 Block 3.5 Lab Cr. 3

Normal structure and function of cardiopulmonary systems lab. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5101 Clinical Skills 1-A Cr. 1

Learners will develop and demonstrate foundational knowledge and basic clinical skills in history-taking, patient examination, note writing, oral case presentation and performance of procedures required to participate in clinical service-learning activities. They will be introduced to advanced skills in patient interviewing and physical examination emphasizing a patient-centered, empathic, and compassionate approach, incorporating the patient's perspective and socioeconomic background, and protection of patient privacy required to participate in early clinical experiences. They will also be introduced to basic clinical reasoning concepts. Offered Yearly.

MD1 5102 Clinical Skills 1-B Cr. 1

Learners will continue to develop and demonstrate foundational knowledge and basic clinical skills in history-taking, patient examination, note writing, oral case presentation, clinical reasoning and performance of procedures required to participate in clinical service-learning activities. They will practice advanced skills in patient interviewing and physical examination emphasizing a patient-centered, empathic and compassionate approach, incorporating the patient's perspective and socioeconomic background, and protection of patient privacy required to participate in early clinical experiences. They will also practice basic clinical reasoning skills. Offered Yearly.

MD1 5103 Clinical Skills 1-C Cr. 1

Learners will demonstrate mastery of foundational knowledge and basic clinical skills in history-taking, patient examination, note writing, oral case presentation, clinical reasoning and performance of procedures required to participate in clinical service-learning activities. They will continue to develop advanced skills in patient interviewing and physical examination emphasizing a patient-centered, empathic and compassionate approach, incorporating the patient's perspective and socioeconomic background, and protection of patient privacy required to participate in early clinical experiences. They will refine basic clinical reasoning skills. Offered Yearly.

MD1 5150 Community Engagement Part I Cr. 5

Provides students with an opportunity to explore the experience of underserved patients as they navigate for health and community services in Southeast Michigan. Meeting with agency leaders and staff, students will learn about program design, administration and operation. Students will interact with program participants to understand their circumstances and challenges patients with limited resources face. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5151 Leadership and External Affairs Development (LEAD) / Medical Political Action (MPAC) Cr. 5

Provides students with an opportunity to learn, practice and apply knowledge and skills as physician healthcare leaders and advocates. Students will engage in healthcare advocacy to improve healthcare for patients and communities and to improve the health systems that deliver care. Working with organized medicine, students will author resolutions and meet with governmental leaders to present and advocate for reforms to decrease health disparities. Students will learn about use of media as a tool for advocacy and learn about philanthropy as it relates to healthcare. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5153 Medical Research Elective Cr. 5

This research program is designed to prepare physicians who are committed to excellence by cultivating habits of research and inquiry. By participating in an investigative experience, it will also significantly impact and sharpen critical reasoning skills. Students who are educated in a research environment are stimulated to seek a deeper understanding of health and disease and develop their ability to analyze scientific literature, making them valued members of any medical field, whether it be academic medicine, community-based practice, health care policy, or emerging technologies. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5154 Medical Education Research Cr. 5

Society places a large emphasis on education, yet understanding the basic science of teaching and learning is neglected. That is, research exploring the effectiveness of curriculum, teaching, and learning strategies on student outcomes, has not been a priority in medical education. To train students and residents for the practice of medicine in the 21st century, we must continue to be innovative in our curriculum and teaching, stay current with new technology and be able to demonstrate the effectiveness of our programs through the practice of medical education research. To address this issue the Wayne State University School of Medicine has developed a medical education research course. The purpose of this course is to introduce undergraduate medical students to the field of medical education research and to have them participate in medical education research activities. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year.

MD1 5155 Business of Medicine Cr. 5

This course guides students through the economic, social, political, and technological trends shaping the business of healthcare. Healthcare expenditures flow across intersections of business and medicine affecting access, cost, and quality of care. The quest for improved patient outcomes fuels rapid changes in delivery systems due to technological advances. Technological advances also alter operational systems, insurance, patient engagement, etc. The purpose of this course is to explore of the business of medicine, and for future physicians to develop a deeper understanding and gain insights into how they can affect the future of healthcare. Students will develop a multidisciplinary lens by learning from representatives of healthcare systems, policy makers, regulators, and individual stakeholders who influence both the rate and flow of healthcare expenditures. This exploration will traverse along a range of topics, with illustrative examples drawn from a variety of healthcare setting. Offered Yearly.

MD1 5201 Population, Patient, Physician and Professionalism (P4) 1-A Cr. 1

Provides students the opportunity to learn, practice, and apply knowledge and skills as a physician-in-training in diverse urban clinical and community outreach settings. Through large group sessions, small group sessions, online modules, self-directed reflective assignments, and clinical and community engagement, students will actively participate in activities demonstrating the interconnectedness of the population, patient and physician. The course also emphasizes the need for students to quickly develop their professional identity as a physician-in-training by behaving professionally and demonstrating respect to their colleagues, faculty, patients and their families. By engaging early with patients and potential patients, students' attitudes, as well as knowledge and skills, will be developed with a concentrated focus on understanding the patient's perspective, leading to true patient-centered care. Offered Yearly.

MD1 5202 Population, Patient, Physician and Professionalism (P4) 1-B Cr. 1

Provides students the opportunity to learn, practice, and apply knowledge and skills as a physician-in-training in diverse urban clinical and community outreach settings. Through large group sessions, small group sessions, online modules, self-directed reflective assignments, and clinical and community engagement, students will actively participate in activities demonstrating the interconnectedness of the population, patient and physician. The course also emphasizes the need for students to quickly develop their professional identity as a physician-in-training by behaving professionally and demonstrating respect to their colleagues, faculty, patients and their families. By engaging early with patients and potential patients, students' attitudes, as well as knowledge and skills, will be developed with a concentrated focus on understanding the patient's perspective, leading to true patient-centered care. Offered Yearly.

MD1 5203 Population, Patient, Physician and Professionalism (P4) 1-C Cr. 1

Provides students the opportunity to learn, practice, and apply knowledge and skills as a physician-in-training in diverse urban clinical and community outreach settings. Through large group sessions, small group sessions, online modules, self-directed reflective assignments, and clinical and community engagement, students will actively participate in activities demonstrating the interconnectedness of the population, patient and physician. The course also emphasizes the need for students to quickly develop their professional identity as a physician-in-training by behaving professionally and demonstrating respect to their colleagues, faculty, patients and their families. By engaging early with patients and potential patients, students' attitudes, as well as knowledge and skills, will be developed with a concentrated focus on understanding the patient's perspective, leading to true patient-centered care. Offered Yearly.

MD1 5301 Service Learning 1-A Cr. 0

Provides students the opportunity to learn, practice, and apply knowledge and skills as a physician-in-training in diverse urban clinical and community outreach settings. Through large group sessions, small group sessions, online modules, self-directed reflective assignments, and clinical and community engagement, students will actively participate in activities demonstrating the interconnectedness of the population, patient, and physician. The course also emphasizes the need for students to quickly develop their professional identity as a physician-in-training by behaving professionally and demonstrating respect to their colleagues, faculty, patients and their families. By engaging early with patients and potential patients, students' attitudes, as well as knowledge and skills, will be developed with a concentrated focus on understanding the patient's perspective, leading to true patient-centered care. Offered Yearly.

MD1 5302 Service Learning 1-B Cr. 0

Provides students the opportunity to learn, practice, and apply knowledge and skills as a physician-in-training in diverse urban clinical and community outreach settings. Through large group sessions, small group sessions, online modules, self-directed reflective assignments, and clinical and community engagement, students will actively participate in activities demonstrating the interconnectedness of the population, patient, and physician. The course also emphasizes the need for students to quickly develop their professional identity as a physician-in-training by behaving professionally and demonstrating respect to their colleagues, faculty, patients and their families. By engaging early with patients and potential patients, students' attitudes, as well as knowledge and skills, will be developed with a concentrated focus on understanding the patient's perspective, leading to true patient-centered care. Offered Yearly.

MD1 5303 Service Learning 1-C Cr. 0

Provides students the opportunity to learn, practice, and apply knowledge and skills as a physician-in-training in diverse urban clinical and community outreach settings. Through large group sessions, small group sessions, online modules, self-directed reflective assignments, and clinical and community engagement, students will actively participate in activities demonstrating the interconnectedness of the population, patient, and physician. The course also emphasizes the need for students to quickly develop their professional identity as a physician-in-training by behaving professionally and demonstrating respect to their colleagues, faculty, patients and their families. By engaging early with patients and potential patients, students' attitudes, as well as knowledge and skills, will be developed with a concentrated focus on understanding the patient's perspective, leading to true patient-centered care. Offered Yearly.

MD1 5800 Directed Study Cr. 1-12

Individualized curriculum designed to enhance knowledge and skills in preparation for the next phase of medical school. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year or Med Second Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD1 6698 Foundations Course: Fundamentals of Human Disease Cr. 8

The overall goal will be to engage medical students in learning the key concepts related to the mechanisms and consequences of human disease. Using examples from multiple body sites, this course will provide an in-depth study of basic pathologic processes. The major categories of disease to be covered will include: cellular adaptation and injury; inflammation and repair; circulatory disturbances; atherosclerosis; forensic pathology; immunopathology; neoplasia; genetic and pediatric diseases; environmental and nutritional disorders; infectious disease; and therapeutics. Within each of these categories, two concepts will be particularly emphasized: pathogenesis and altered morphology. Pathogenesis (mechanism of disease development) is reviewed primarily at the molecular and cellular level. It is at this step that the course will interface with biochemistry, pharmacology, cell biology, genetics, immunology, microbiology, and physiology. Offered Yearly.

MD1 6699 Populations, Patients, Physician, Professionalism and Clinical Skills Part I Cr. 1

The overall goals of the Populations, Patients and Professionalism Bridge course will be to engage first year medical students in learning about a special topic that occurs throughout a population residing within the city of Detroit as well as to understand basic principles about how to engage urban populations to achieve shared healthcare outcomes. Offered Yearly.

Medical Doctor Courses - Second Year (MD2)

MD2 6001 Human Disease Foundations I Cr. 10

Human Disease Foundations I launches the MD2 pre-clerkship segment of the MD degree program. This is the first of a 3-part series. This course builds on the normal structure and function of organ systems from Segment 1 to provide students with foundational knowledge of disease processes. The overall goal of the Human Disease Foundations series is to engage second-year medical students in learning the key concepts and foundational principles related to the etiology, pathogenesis, pathology, pathophysiology, clinical manifestations, basic principles of diagnosis, and treatment of disease processes. These courses emphasize foundational knowledge in pathophysiology, microbiology, immunology, genetics, and pharmacology. In Human Disease Foundations-I, we will cover the foundational aspects of the pathological and pathophysiological mechanisms of disease, clinical genetics, immunology, microbiology/infectious disease, and the musculoskeletal, peripheral nervous and integumentary systems. Offered Yearly.

MD2 6002 Human Disease Foundations II Cr. 10

Human Disease Foundations II continues the MD2 pre-clerkship segment of the MD degree program. This is the second course of a 3-part series. This course builds on the normal structure and function of these organ systems from Segment 1 to provide students with foundational knowledge of disease processes. The overall goal of the Human Disease Foundations series is to engage second-year medical students in learning the key concepts and foundational principles related to the etiology, pathogenesis, pathology, pathophysiology, clinical manifestations, basic principles of diagnosis, and treatment of disease processes. These courses emphasize foundational knowledge in pathophysiology, microbiology, immunology, genetics, and pharmacology. In Human Disease Foundations-II, we will cover the most important aspects of the pathology and pathophysiology mechanisms of diseases affecting the cardiopulmonary, gastrointestinal, and urinary systems. Offered Yearly.

MD2 6003 Human Disease Foundations III Cr. 10

Human Disease Foundations III concludes the MD2 pre-clerkship segment of the 4-year program leading to the MD degree. This is the last course of a 3-part series that provides medical students with foundational knowledge of disease processes, building on organ-based normal structure and function from Segment 1. The goal of Human Disease Foundations-III is to engage students in learning the key concepts and foundational principles related to etiology, pathology, pathophysiology, recognition of clinical presentations, basic principles of diagnosis, and treatment of disease processes which affect the hematologic/lymphatic, endocrine, reproductive and central nervous systems. This course emphasizes foundational knowledge in pathophysiology, microbiology, immunology, genetics, pharmacology, neurology and psychiatry. The knowledge gained will build a strong foundation for future clinical training on the internal medicine, obstetrics and gynecology, neurology, and psychiatry clerkships. Offered Yearly.

MD2 6101 Clinical Skills 2-A Cr. 1

Designed to develop and demonstrate foundational knowledge and basic clinical skills in history-taking, patient examination, oral case presentation, clinical reasoning and performance of procedures required to participate in clinical service-learning activities. Students who are competent in these foundational skills will then proceed to develop advanced skills in patient interviewing and physical examination emphasizing a patient-centered empathic and compassionate approach incorporating the patient's perspective, socioeconomic background and cultural intelligence, and protection of patient privacy required to participate in early clinical experiences. Offered Yearly.

MD2 6102 Clinical Skills 2-B Cr. 1

Designed to develop and demonstrate foundational knowledge and basic clinical skills in history-taking, patient examination, oral case presentation, clinical reasoning and performance of procedures required to participate in clinical service-learning activities. Students who are competent in these foundational skills will then proceed to develop advanced skills in patient interviewing and physical examination emphasizing a patient-centered empathic and compassionate approach incorporating the patient's perspective, socioeconomic background and cultural intelligence, and protection of patient privacy required to participate in early clinical experiences. Offered Yearly.

MD2 6103 Clinical Skills 2-C Cr. 2

Designed to develop and demonstrate foundational knowledge and basic clinical skills in history-taking, patient examination, oral case presentation, clinical reasoning and performance of procedures required to participate in clinical service-learning activities. Students who are competent in these foundational skills will then proceed to develop advanced skills in patient interviewing and physical examination emphasizing a patient-centered empathic and compassionate approach incorporating the patient's perspective, socioeconomic background and cultural intelligence, and protection of patient privacy required to participate in early clinical experiences. Offered Yearly.

MD2 6201 Population, Patient, Physician and Professionalism (P4) 2-A Cr. 1

P4 Segment 2 is a second year medical student course designed to guide students to: provide patient-centered and culturally responsive care, to become effective team members, to learn evidence based theories that reduce healthcare disparities, to recognize their own professional development, and to foster self-directed learning through use of flipped classroom models, case studies, and real world interactions in community projects that utilize an inter-professional approach to caring for specialized populations. Offered Yearly.

MD2 6202 Population, Patient, Physician and Professionalism (P4) 2-B Cr. 1

P4 Segment 2 is a second year medical student course designed to guide students to: provide patient-centered and culturally responsive care, to become effective team members, to learn evidence based theories that reduce healthcare disparities, to recognize their own professional identity formation, and to foster self-directed learning through use of flipped classroom models, case studies, and real world interactions in community projects that utilize an inter-professional approach to caring for specialized populations. Offered Yearly.

MD2 6203 Population, Patient, Physician and Professionalism (P4) 2-C Cr. 1

P4 Segment 2 is a second year medical student course designed to guide students to: provide patient-centered and culturally responsive care, to become effective team members, to learn evidence based theories that reduce healthcare disparities, to recognize their own professional development, and to foster self-directed learning through use of flipped classroom models, case studies, and real world interactions in community projects that utilize an inter-professional approach to caring for specialized populations. Offered Yearly.

MD2 6301 Service Learning 2-A Cr. 0

Segment 2 Service Learning is a second year medical school course designed to guide students to: provide patient-centered and culturally responsive care, to become effective team members, to learn evidence based theories that reduce healthcare disparities, to recognize their own professional identity formation, and to foster self-directed learning through use of flipped classroom models, case studies, and real world interactions in community projects that utilize an inter-professional approach to caring for specialized populations. Offered Yearly.

MD2 6302 Service Learning 2-B Cr. 0

Builds on concepts learned in the first segment with additional emphasis on equipping trainees to provide patient-centered and culturally responsive care to distinct patient populations living in Detroit. Topics of discussion include nutrition-related chronic disease, veteran health, sexual health, homeless health, school-based health, and healthcare provided to those with disabilities. Through large group sessions, small group sessions, online modules, and service-learning activities, trainees will become effective inter-professional team members, learn how to reduce health care disparities, improve professional development, and foster self-directed learning skills. Offered Yearly.

MD2 6303 Service Learning 2-C Cr. 0

Builds on concepts learned in the first segment with additional emphasis on equipping trainees to provide patient-centered and culturally responsive care to distinct patient populations living in Detroit. Topics of discussion include nutrition-related chronic disease, veteran health, sexual health, homeless health, school-based health, and healthcare provided to those with disabilities. Through large group sessions, small group sessions, online modules, and service-learning activities, trainees will become effective inter-professional team members, learn how to reduce health care disparities, improve professional development, and foster self-directed learning skills. Offered Yearly.

MD2 6401 Clinical Experiential Clerkship 2-A Cr. 1

The course is focused on ambulatory clinical exposure with the overall objective of developing students as medical professionals, patient advocates, and skilled clinicians. Offered Yearly.

MD2 6402 Clinical Experiential Clerkship 2-B Cr. 1

The course is focused on ambulatory clinical exposure with the overall objective of developing students as medical professionals, patient advocates, and skilled clinicians. Offered Yearly.

MD2 6403 Clinical Experiential Clerkship 2-C Cr. 1

The course is focused on ambulatory clinical exposure with the overall objective of developing students as medical professionals, patient advocates, and skilled clinicians. Offered Yearly.

MD2 6510 Clinical Medicine II: Physical Diagnosis Cr. 0

Advanced physician-patient communication skills; additional competencies in physical examination and diagnosis. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year; enrollment is limited to students with a major in Medicine; enrollment limited to students in the Medical Doctor program; enrollment is limited to Medical level students; enrollment limited to students in a Doctor of Medicine degree; enrollment limited to students in the School of Medicine.

MD2 6600 Directed Study Cr. 1-12

Students participate in an individualized curriculum designed to enhance their knowledge and skills in preparation for the next phase of medical school. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med First Year or Med Second Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

Repeatable for 12 Credits

MD2 6610 Step 1 Preparation Course Cr. 1

As the first of what will be a lifetime of licensure exams, preparing for the USMLE Step 1 often creates a great deal of stress. While some amount of stress is a natural part of test preparation, it does not have to be debilitating. The Wayne State School of Medicine serves to mitigate some stress by providing students with resources and skills to help them optimize their performance on Step 1. This course provides students with a structured Step 1 Prep Course program to facilitate and support their efforts during the dedicated study period. Central to students' success on Step 1 is a clear understanding of student's strengths and deficiencies, which serve to inform the development of a study plan. Individualized guidance is provided to optimize results on both the National Board of Medical Examiners Comprehensive Basic Science Exam (CBSE) and the Comprehensive Basic Science Self-Assessment (CBSSA) are Step 1 practice exams, which are highly valued predictors of Step 1 performance. Offered Yearly.

MD2 6650 Step 1 Summer Preparation Cr. 2-8

Students will be provided the opportunity to enhance their Step 1 examination readiness through formal classroom and independent learning. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students.

Repeatable for 8 Credits

MD2 6701 Population, Patient, Physician and Professionalism (P4) Part II Cr. 5

Builds on concepts learned in the first course with additional emphasis on equipping trainees to provide patient-centered and culturally responsive care to distinct patient populations living in Detroit. Topics of discussion include nutrition-related chronic disease, veteran health, sexual health, homeless health, school-based health and healthcare provided to those with disabilities. Through large group sessions, small group sessions, online modules, and service-learning activities, trainees will become effective inter-professional team members, learn how to reduce health care disparities, improve professional development and foster self-directed learning skills. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6702 Musculoskeletal, Skin and Peripheral Nervous Systems: Fundamentals of Human Disease Cr. 3

Engages medical students in learning the key concepts related to the pathogenesis, pathology, pathophysiology, basic principles of diagnosis, and treatment of disease processes effecting the musculoskeletal organ system, skin, and peripheral nervous system. Content includes: review of the anatomy of the extremities/spine; upper/lower extremity fractures/injuries; development, normal structure/function, and aging of bones and joints; metabolic and non-metabolic bone disease; scoliosis; disorders of the extracellular matrix and soft tissue; synovial fluid analysis; osteoarthritis; rheumatoid arthritis; septic arthritis; gout; CPPD deposition disease and pseudogout; ankylosing spondylitis; reactive arthritis; psoriatic arthritis; systemic lupus erythematosus; systemic sclerosis; skin tumors and rashes; skin and soft tissue infections; manifestations of neuromuscular diseases; and pharmacologic interventions for the treatment of MSK, PNS, and skin disorders. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6703 Cardiopulmonary Systems: Fundamentals of Human Disease Cr. 5

Covers the key concepts related to the pathology, pathophysiology, diagnosis and treatment of cardiovascular and pulmonary disease. The cardiovascular component includes: normal anatomy, embryology, and physiology; systemic hypertension; atherosclerosis and ischemic heart disease; basic electrophysiological principles; ECG interpretation; valvular heart disease; diseases of the pericardium; tumors; non-atherosclerotic vascular disease; primary myocardial disease; cardiovascular disease in the elderly; congenital heart disease; and congestive heart failure. The pulmonary component includes: normal anatomy, histology, and physiology; arterial blood gases; various diseases affecting the pulmonary system; lung cancer and smoking cessation; aging and the respiratory system; respiratory failure; and introduction to sleep and sleep medicine. Relevant pharmacologic management of cardiovascular and pulmonary diseases will also be discussed. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6704 Gastrointestinal Systems: Fundamentals of Human Disease Cr. 3

Engages medical students in learning the key concepts related to the etiology, pathogenesis, pathology, and pathophysiology of non-infectious and infectious disease processes affecting the gastrointestinal organs, as well as basic principles of their diagnosis and treatment. The following content areas will be covered: liver disorders; diseases affecting the gallbladder, extrahepatic biliary tract and pancreas; diseases of the salivary glands, esophagus, stomach, small intestine, and colon; genetic predisposition to cancers of the gastrointestinal tract; and the effects of various systemic disorders on the GI tract. Nutritional and pharmacologic management of gastrointestinal diseases will also be included. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6705 Renal and Urinary Systems: Fundamentals of Human Disease Cr. 2

Provides medical students with an understanding of the pathogenesis, pathology and pathophysiology of disease processes affecting the kidney and urinary tract. Students will develop the skills of diagnosis and learn treatment options. The following content areas are covered: normal renal physiology; various disorders of body fluid, electrolyte and acid#based regulation; the principles underlying appropriate therapeutic strategies; acute and chronic renal failure; uremia; end stage renal disease; major glomerular, tubulointerstitial and systemic diseases with renal involvement; major benign and malignant tumors of the kidney and bladder; infections of the urinary tract; the principles for appropriate supportive and therapeutic measures including nutritional management of patients with renal disease; and an understanding of the physiologic basis for the pharmacologic actions of drugs on the kidney. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6706 Endocrine and Reproductive Systems: Fundamentals of Human Disease Cr. 3

Engages medical students in learning the key concepts related to the pathogenesis, pathology, and pathophysiology of the more common disease processes affecting the endocrine and reproductive organ systems, as well as basic principles of their diagnosis and treatment. The following content areas will be covered: fundamental concepts regarding endocrine hormones; the hypothalamic/pituitary axis and related disorders; reproductive endocrinology and corresponding abnormalities; disorders of the male and female genital tracts; abnormalities of the placenta and selected complications of pregnancy; breast disease; diabetes mellitus; lipid disorders; diseases of the thyroid, parathyroid, and adrenal glands; calcium homeostasis and disorders of calcium; endocrine hypertension; obesity; and genetic factors that play a role in endocrine disorders. Nutritional management of diabetic and obese patients will be covered. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6707 Hematopoietic and Lymphoid Systems: Fundamentals of Human Disease Cr. 2

The overall goal will be to provide the foundations, background facts and expected competencies, to foster understanding common benign and malignant hematological disorders. At the end of this course, students should have the skills and the ability to integrate the acquired knowledge into clinical settings. The following content areas will be covered: a review of normal blood coagulation, hemostasis and platelet function; hemolytic anemia including diagnostic tests; hemoglobinopathies including how hemoglobin alterations produce disease, diagnosis and management; platelet disorders including the symptoms associated with inherited and acquired coagulation and vascular disorders; an introduction to stem cell transplantation; transfusion medicine; diagnostic criteria, pathophysiology, and therapeutic options for the treatment of anemia, myelodysplastic syndromes, acute leukemias, myeloproliferative disorders, and lymphomas, among other topics. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6708 Central Nervous System: Fundamentals of Human Disease Cr. 3

Covers key concepts related to disease processes affecting the central nervous system, and provides the basis for understanding the unique features that disease processes in the brain. Enables students to integrate neuroanatomy, neuropathology, and introductory clinical neurology in preparation for the clinical rotation in neurology. The following content areas will be covered: basic neuropathology and mass lesions; brain tumors and infectious processes; neurodegenerative diseases; cognitive dysfunction and dementia; the application of neuroradiology to diagnosis; pathology of cerebrovascular disorders and stroke; nervous system trauma; autoimmune and demyelinating diseases; epilepsy; and the pharmacotherapy of headache. Normal development and the recognition and treatment of psychiatric disorders seen in adults and children will also be covered. This portion will prepare students for their clinical rotation in psychiatry and provide a background in psychiatry. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6709 Clinical Skills Course III Cr. 3

A self-directed, competency-based course designed to develop and demonstrate knowledge and skills in history-taking, patient examination, oral case presentation, clinical reasoning and procedural skills. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6710 Clinical Experiential Clerkship Cr. 1-3

The course is focused on ambulatory clinical immersion with the overall objective of developing students as medical professionals, patient advocates, and skilled clinicians. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

Repeatable for 4 Credits

MD2 6711 Medical Political Action and Public Health Leadership (MPAC) Part II Cr. 5

Provides students with an opportunity to learn, practice and apply knowledge and skills as physician healthcare leaders and advocates. Students will engage in healthcare advocacy to improve healthcare for patients and communities and to improve the health systems that deliver care. Working with organized medicine, students will author resolutions and meet with governmental leaders to present and advocate for reforms to decrease health disparities. Students will learn about use of media as a tool for advocacy and learn about philanthropy as it relates to healthcare. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6712 Community Engagement Part II Cr. 5

Provides students with an opportunity to explore and understand the experience of under-served patients as they navigate community health services in Southeast Michigan. Medical students interact with patients or participants and staff to learn the circumstances and challenges faced with limited resources, to foster empathy, compassion, respect and humanistic care. Meeting with agency leaders and staff students learn about program design, administration and operation through outreach and mentoring volunteering. Offered Yearly.

Prerequisite: MD1 5151

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6713 Medical Research Elective Part II Cr. 5

This research program is designed to “prepare physicians who are committed to excellence by cultivating habits of research and inquiry.” By participating in an investigative experience, it will also significantly impact and sharpen critical reasoning skills. Students who are educated in a research environment are stimulated to seek a deeper understanding of health and disease and develop their ability to analyze scientific literature, making them valued members of any medical field, whether it be academic medicine, community-based practice, health care policy, or emerging technologies. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6714 Medical Political Action & Public Health Leadership (MPAC) Part III Cr. 1

The MPAC program elective provides students with an opportunity to learn, practice and apply knowledge and skills as physician healthcare leaders and advocates. Students will engage in healthcare advocacy to improve healthcare for patients and communities and to improve the health systems that deliver care. Working with organized medicine, students will author resolutions and meet with governmental leaders to present and advocate for reforms to decrease health disparities. Students will learn about use of media as a tool for advocacy and learn about philanthropy as it relates to healthcare. Offered Yearly.

Prerequisite: MD2 6711

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6715 Community Engagement Part III Cr. 1

The Community Engagement elective provides students with an opportunity to explore and understand the experience of underserved patients as they navigate community health services in Southeast Michigan. Medical students interact with patients or participants and staff to learn the circumstances and challenges faced with limited resources, to foster empathy, compassion, respect and humanistic care. Meeting with agency leaders and staff students learn about program design, administration and operation through outreach and mentoring volunteering. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6716 Medical Research Elective Part III Cr. 1

This research program is designed to “prepare physicians who are committed to excellence by cultivating habits of research and inquiry.” By participating in an investigative experience, it will also significantly impact and sharpen critical reasoning skills. Students who are educated in a research environment are stimulated to seek a deeper understanding of health and disease and develop their ability to analyze scientific literature, making them valued members of any medical field, whether it be academic medicine, community-based practice, health care policy, or emerging technologies. Offered Yearly.

Prerequisite: MD2 6713

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6717 Medical Education Research Part II Cr. 5

Society places a large emphasis on education, yet understanding the basic science of teaching and learning is neglected. That is, research exploring the effectiveness of curriculum, teaching, and learning strategies on student outcomes, has not been a priority in medical education. To train students and residents for the practice of medicine in the 21st century, we must continue to be innovative in our curriculum and teaching, stay current with new technology and be able to demonstrate the effectiveness of our programs through the practice of medical education research. Offered Yearly.

Prerequisite: MD1 5154

Restriction(s): Enrollment limited to students with a class of Med Second Year.

MD2 6800 Preparation for Clerkships Cr. 7

This course is required for all students who plan to begin clerkships in April of each year. It is designed to prepare students for the transition from the pre-clerkship classroom to the clerkship experience. Through lectures, small group sessions, and skills-building workshops, students will learn about their expected roles and responsibilities as members of the health care team, particularly an inpatient clinical team, and practice skills such as preparing oral and written presentations for inpatient rounds and performing basic procedures. During this course, students will also complete their mandatory training in electronic health records (EHR), infection control, advanced cardiovascular life support (ACLS), and HIPAA certification. Offered Yearly.

Medical Doctor Courses - Third Year (MD3)

MD3 7000 Continuity Clinical Clerkship Cr. 3

A continuity experience in which the basic skills, knowledge and attitudes necessary to manage the care of patients in an out-patient primary care setting are learned. Offered Every Term.

Prerequisite: MD3 7300 (may be taken concurrently) and MD3 7100 (may be taken concurrently) and MD3 7200 (may be taken concurrently)

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD3 7100 Family Medicine Clerkship Cr. 3-4

Practice of family medicine learned in a community-based primary care setting; experiencing care and treatment of children, adolescents, and adults with acute and chronic disease. Offered Every Term.

Prerequisite: MD3 7000 (may be taken concurrently) and MD3 7300 (may be taken concurrently) and MD3 7200 (may be taken concurrently)

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

Repeatable for 4 Credits

MD3 7200 Internal Medicine Clerkship Cr. 1-12

Practical experience in recognition, evaluation, diagnosis, and management of hospitalized adult patients with acute non-surgical illnesses. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

Repeatable for 12 Credits

MD3 7300 Pediatrics Clerkship Cr. 1-8

Practical experience in recognition, evaluation, diagnosis, and management of pediatric patients in in-patient and ambulatory care settings. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

Repeatable for 8 Credits

MD3 7400 Surgery Clerkship Cr. 1-12

Practical experience in recognition, evaluation, diagnosis, and management of patients in general surgery or surgical sub-specialties. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

Repeatable for 12 Credits

MD3 7500 Psychiatry Clerkship Cr. 3-4

Practical experience in recognition, evaluation, diagnosis, and management of patients with behavioral and emotional brain disorders. Offered Every Term.

Prerequisite: MD3 7400 (may be taken concurrently) and MD3 7600 (may be taken concurrently) and MD3 7700 (may be taken concurrently)

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD3 7600 Obstetrics and Gynecology Clerkship Cr. 1-8

Practical experience in recognizing, evaluating, diagnosing, and managing the health care of women in a variety of inpatient and outpatient settings.

Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

Repeatable for 8 Credits

MD3 7700 Neurology Clerkship Cr. 3-4

Practical experience in recognition, evaluation, diagnosis, and management of patients with disorders of the nervous system. Offered Every Term.

Prerequisite: MD3 7400 (may be taken concurrently) and MD3 7500 (may be taken concurrently) and MD3 7600 (may be taken concurrently)

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD3 7800 Directed Study Cr. 1-12

Individualized curriculum designed to enhance knowledge and skills in preparation for the next phase of medical school. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD3 7950 Clinical Reasoning, Integration, Skills and Practice Cr. 1

CRISP will allow students to acquire skills important to clinical practice of medicine, that are common to all clerkships. It will build clinical practice and reasoning skills important and common to all clerkships during the clerkship phase of medical school, and provide continuation of a continuous clinical skill curriculum that is built in all 4 years of the School of Medicine curriculum. Offered Every Term.

Repeatable for 4 Credits

Medical Doctor Courses - Fourth Year (MD4)

MD4 8010 Humanities in Medicine Cr. 6

Work with vulnerable populations and stigmatized patients including the elderly, homeless, addicted, handicapped, pregnant teens and others. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8020 Medical Education Cr. 6

Processes involved in evaluation of courses; coordination of the assessment of Year 1-2 courses. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8025 Curriculum Development Cr. 6

Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8030 Medicine and Political Action Cr. 6

Observation and participation in medical areas that are politically in the forefront of medicine today. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8035 Students Teaching and Educating Peers Cr. 6

Students will learn and apply techniques to prepare medical students for the Step 1 examination, as well as lead Step 1 preparation sessions. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major, minor, or concentration in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8036 Independent Service Learning Cr. 3,6

Students will participate in a Service Learning Program within a community organization providing direct service to the organizations specific clientele. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major, minor, or concentration in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8040 Special Topics in Anatomy and Cell Biology Cr. 3,6

Review of research training in gross anatomy, cell biology, histology, embryology, or neuroscience. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8041 Gross Anatomy Teaching Lab Cr. 6

Students taking this elective will gain teaching and mentorship experience in preparation for a career in academic medicine by teaching freshman medical students dissection skills in the anatomy labs. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8045 Medical Ethics Cr. 6

Medical ethics issues and concerns in the ICU, PICU, NICU, as well as those associated with a medical ethics committee. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8046 Street Medicine: Detroit Cr. 3,6

Knowledge and skills necessary to promote health, prevent illness, and manage the common chronic, and minor acute primary care needs of adults who are experiencing homelessness in Detroit. Clinical Experience (CLN): students will complete 120 hours of clinical education experience during their one-month rotation Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students.

MD4 8050 General Anesthesiology Cr. 3,6

Practice of anesthesia including preoperative assessment, delivery of general and regional anesthesia, equipment use, and monitoring techniques. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8060 Pain Management Cr. 6

Diagnosis, treatment and management of acute and chronic pain syndromes related to malignant and nonmalignant diseases. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8070 Pediatric Anesthesiology Cr. 6

Preoperative assessment, delivery of general and regional anesthesia, equipment use, and monitoring techniques in pediatric patients. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8090 Military Officer Training Cr. 6

The course will develop critical thinking in decision making processes that incorporate medical decisions within both a battlefield scenario as well as in a hospital setting. This course will emphasize how an officer fits within the TEAMSTEP concept of medical management which enforces medical excellence, team building within a hospital. This course is only available to students in the HPSP program. Offered Yearly.

MD4 8100 Law and Medicine Cr. 3,6

Legal issues associated with practicing clinical medicine. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8110 Healthcare: Systems, Quality, Safety and Social Determinants Cr. 6

The goal of every health care provider and organization is to provide safe, timely, equitable, effective, efficient, and patient-centered care. In order to do this, students need foundational knowledge and skills related to safety, quality, leadership and the business of medicine and Students electing this course will join the WSUSOM chapter of the Institute of Healthcare Improvement. Students will also complete a learning game and seven online learning modules to better understand how to provide care to underserved and disadvantaged patients. Offered Every Term.

MD4 8115 Special Topics: Interprofessional Education Cr. 2

This interprofessional course is for health professional student learners in the areas of advanced practice. The course allows health professional students to learn about, from and with each other, how each discipline contributes to the healthcare team, the importance of effective communication, the role of team collaboration and preparing health care professionals for collaborative practice with a focus on clinical decision making in interdisciplinary teams. Offered Intermittently.

Restriction(s): Enrollment is limited to Graduate, Medical or Professional level students.

Equivalent: NUR 7115, PAS 7115, PPR 7115, SW 7115

MD4 8120 General Dermatology Cr. 3,6

Fundamentals of diagnosing, treating and managing patients with common dermatologic disorders. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8130 Dermatology Research Cr. 3,6

Knowledge and experience in dermatology research. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8140 General Emergency Medicine Cr. 3,6

Initial evaluation, stabilization, and management of patients in the emergency department. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8145 ER Ultrasound Cr. 6

Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students.

MD4 8150 Emergency Medicine Research Cr. 3,6

Process and participation in emergency medicine research. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8160 Emergency Medicine Core Clerkship Cr. 7

Evaluation, stabilization, and treatment of a variety of patients presenting to the ER with urgent and emergent illness and trauma. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year.

MD4 8165 Advanced Emergency Medicine Cr. 6

Being the primary provider for patients while in the ER, from initial evaluation to completion of disposition. Offered Every Term.

Prerequisite: MD4 8160 with a minimum grade of S

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in a Doctor of Medicine degree; enrollment limited to students in the School of Medicine.

MD4 8170 General Family Medicine Cr. 3,6

Enhancement of knowledge and skills in conducting a history/physical, diagnosing/managing patients, and participation in common office procedures in the outpatient setting. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8171 Rural Family Medicine Cr. 3-6

Students will gain a better understanding of the unique needs, challenges and rewards of practicing medicine in a medically underserved, rural or small-town community. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8172 Family Medicine Student Run Free Clinic Cr. 6

Students are involved in supervision of day-to-day operations of Student Run Free Clinic. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8173 Patient Centered Medical Home and Quality Curriculum Cr. 6

The Patient Centered Medical Home and Quality rotation exposes students to the concepts of the patient centered medical home and quality metrics as they pertain to current practices in family medicine. Offered Every Term.

MD4 8175 MPH Master's Project Cr. 6

Students apply the knowledge and skills gained from classroom and field experiences to a scholarly project of their own design and execution. The final products are a written paper and an oral presentation. Offered Intermittently.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year.

MD4 8176 Public Health and Clinical Medicine Cr. 6

Students will complete a set of activities that introduce students to various aspects of public health and its role in clinical patient care. Offered Intermittently.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year.

MD4 8210 Family Medicine Subinternship Cr. 7

Students expand on Year 3 family medicine clerkship experience with more intensive involvement in select patient populations. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8220 Hospice/Palliative Medicine Cr. 3,6

Care of terminally ill patients; basic communication and interactive skills associated with these patients and their families. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8230 Maternal and Child Health Cr. 6

Gaining experience in an aggressive family medicine OB service. Offered Yearly.

Prerequisite: MD3 7600 with a minimum grade of S

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in a Doctor of Medicine degree; enrollment limited to students in the School of Medicine.

MD4 8250 Sports Medicine Cr. 6

Knowledge and skills to assess the fitness and health risks of athletes. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8255 International Elective Cr. 6

Offered Intermittently.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8258 International Away Cr. 6

Offered Intermittently.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major, minor, or concentration in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8260 Allergy and Clinical Immunology Cr. 3,6

Conducting an allergic H & P; understanding basic mechanisms, pathophysiology and testing of allergic and immunologic disorders. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8261 Advanced Physical Diagnosis Cr. 6

Students will refine their basic physical examination, as well as advance their skills in evaluating hypertension, thyroid disease, cardiac murmurs, breast abnormalities, and geriatric assessment. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8262 Ambulatory Subspecialty in Internal Medicine Cr. 6

Students will learn the practice of ambulatory internal medicine, with an emphasis placed upon bedside teaching, physical diagnosis and in-depth discussion of the clinical, diagnostic and therapeutic aspects of each case. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8264 Independent Study in Medical Education Cr. 3,6

Students will improve their skills as learners and critical thinkers, and gain an appreciation of the importance of lifelong learning. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8265 Urban Medicine for Visiting Students Cr. 6

Students will learn academic internal medicine in an urban setting with an emphasis on recognizing, studying, treating, and preventing disparities in healthcare. Offered Every Term.

Restriction(s): Enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8270 Ambulatory Med Cr. 6

Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8280 Cardiology Cr. 3,6

Basic history/physical, diagnostic, treatment and management skills associated with common inpatient cardiac problems. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8281 Interventional Cardiology Cr. 6

Exposure to an interventional lab. Gaining familiarity with the clinical utility of routine cardiovascular interventions and hemodynamic measurements. Offered Yearly.

Prerequisite: MD4 8280 with a minimum grade of S

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in a Doctor of Medicine degree; enrollment limited to students in the School of Medicine.

MD4 8290 Cardiology Consultation Cr. 3,6

Skills needed to consult with medical and surgical patients with cardiac problems. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8310 Coronary Care Unit Cr. 6

Diagnosis and treatment of common cardiac problems; care for critically ill patients admitted to cardiac care unit. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to Medical level students.

MD4 8320 Critical Care Medicine Cr. 3,6

Management of critically ill patients to improve diagnostic, problem solving, assessment, and treatment skills. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8340 Endocrine/Bone and Mineral Metabolism Cr. 3,6

Diagnosing, treating, and managing patients with metabolic bone diseases. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8350 Endocrinology Research Cr. 6

The research process; participation in research associated with medical endocrinology. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8360 Endocrine/Metabolism Cr. 3,6

Techniques of conducting a history and physical; diagnostic, therapeutic, and laboratory approaches to endocrine disorders. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8365 Scholarly Writing for Critical Appraisal of Clinical Research Cr. 6

Peer review for clinical research practice. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year.

MD4 8366 Scholarly Editing for Critical Appraisal of Clinical Research Cr. 6

Scholarship is defined as creating new knowledge. Scholarship in an academic environment requires peer review. Editors work with their assigned peer reviewers; both have shared responsibilities: ensure scientific validity and suggest ways to improve the manuscript. Offered Yearly.

MD4 8370 Gastroenterology Cr. 3,6

Conducting a history and physical exam, and diagnosing, treating, and managing patients with common gastrointestinal diseases. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8380 Gastroenterology Research Cr. 6

The research process; participation in specific gastroenterology research. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8390 General Internal Medicine Inpatient Cr. 3,6

Common problems encountered in an internal medicine inpatient clinical setting. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8391 Internal Medicine: Miscellaneous Cr. 3,6

Students learn various topics and issues in general internal medicine. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8392 Metabolic Nutrition and Weight Management Cr. 3,6

Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8393 Medical Education: Clinical Skills Instruction Cr. 6

Students will receive instruction on the fundamentals of adult learning theory, skills training, feedback and evaluation through a mini Stanford Faculty Development program. Offered Every Term.

MD4 8395 Clinical Pharmacology Cr. 6

Four-week on-line elective where students use case-based scenarios to apply pharmacology principles in a clinical setting. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8400 Clinical Genetics Cr. 3,6

Interviewing, conducting a physical examination, and other patient interactions in patients with suspected or known genetic diseases. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8420 Geriatric Medicine Cr. 6

Conduct of a comprehensive assessment and treatment of a geriatric patient; factors affecting the health of the elderly. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8430 Hematology Cr. 3,6

Familiarization with a variety of hematologic and oncologic disorders; how to diagnose, treat, and manage patients with these disorders. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8440 HIV/AIDS Cr. 6

Basic knowledge and skills associated with care of HIV-infected persons in outpatient and inpatient settings. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8450 Infectious Disease Cr. 3,6

Evaluating, diagnosing and treating patients with acute and chronic infectious diseases. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8460 Infectious Disease Research Cr. 6

The research process; participation in specific infectious disease research. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8470 Internal Medicine Subinternship Cr. 7

Expanding on Year 3 internal medicine clerkship experience; more intensive involvement in select patient populations. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8480 Medicine/Pediatrics Cr. 3,6

Aspects of the day-to-day practice of a physician specializing in an internal medicine/pediatric practice. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8490 Nephrology Cr. 3,6

Experience in diagnosing and managing patients with acute and chronic nephrologic problems. Offered Every Term.

Prerequisite: MD3 7200 with a minimum grade of S

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8510 Oncology: Medical Cr. 3,6

Evaluation, diagnosis, treatment and management of patients with oncologic conditions. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8520 Oncology: Outpatient Cr. 3,6

Cancer patients in the outpatient setting: initial evaluations, types of malignant diseases, role of staging, conducting a focused follow-up of cancer patients. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to Medical level students.

MD4 8530 Oncology Research Cr. 6

The research process; participation in research involving patients with cancer. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8540 Otolaryngology Cr. 3,6

History and basic head and neck examination on patients with otolaryngologic disease. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8550 Otolaryngology Medical and Surgical: Head and Neck Cr. 3,6

Additional training in otolaryngology head and neck surgery. Offered Every Term.

Prerequisite: MD3 7200 with a minimum grade of S and MD3 7400 with a minimum grade of S

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8560 Otolaryngology Research Cr. 6

The research process; participation in otolaryngology research. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8570 Palliative Medicine Cr. 3,6

Understanding of and skills in palliative medicine: communication, cultural issues, psycho-emotional and spiritual aspects of end of life care and death and dying. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8575 Complementary Medicine Cr. 6

The world of complementary medicine: what it is, how it is different from conventional medicine, how it is practiced, and what its benefits are. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in a Doctor of Medicine degree; enrollment limited to students in the School of Medicine.

MD4 8580 Primary Care Medicine Cr. 6

Common problems encountered in internal medicine outpatient clinical setting. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8590 Pulmonary Medicine Cr. 3,6

Diagnosis and management of a variety of pulmonary disorders; diagnosis of acute and chronic respiratory failure; interpretation of pulmonary tests. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8600 Pulmonary and Sleep Research Cr. 6

The research process; participation in pulmonary and sleep research. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8610 Pulmonary Consultation Cr. 6

Diagnosis and management of a variety of pulmonary disorders; diagnosis of acute and chronic respiratory failure; interpretation of pulmonary tests. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8620 Rheumatology Cr. 3,6

Diagnosis and management of common rheumatologic problems; understanding ancillary procedures and lab tests. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8630 Sleep Disorders Cr. 6

Interviewing, physical examination, diagnosis, and therapy of patients with sleep disorders. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8640 Molecular Medicine Cr. 3,6

State-of-the-art molecular biological research and methods, relating to basic and applied research of human disease. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8650 General Neurology Cr. 3,6

Evaluation, diagnosis, treatment and management of patients with an array of general neurologic conditions. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8660 Neurology Consult Cr. 6

Pathogenesis, genetics, neurochemistry, imaging, diagnostic testing, presentation and treatment of Alzheimer's and other forms of dementia. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8690 Movement Disorders Cr. 6

Evaluation, diagnosis, treatment and management of patients with neurologic movement disorders. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8700 Neurology - Oncology Cr. 6

Diagnosis, treatment and management of patients with malignancies of the neurologic system. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8710 Neurologic Sleep Disorders Cr. 6

Operations of a sleep lab and evaluation of patients with sleep disorders. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8730 Neurology Pediatrics Cr. 3,6

Diagnosis, treatment, and management of a variety of neurologic disorders of infancy and childhood. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8750 General Neurosurgery Cr. 3,6

Preoperative, intraoperative, and post-operative care of neurologic patients. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8760 Neurosurgery Research Cr. 3,6

Basic research principles as they apply to clinical questions in neurosurgery. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8770 Obstetrics/Gynecology Subinternship Cr. 7

Senior students expand upon their Year 3 Obstetrics/Gynecology clerkship experience with more intensive involvement in select patient populations. Offered Every Term.

MD4 8780 General Gynecology Cr. 3,6

Signs, symptoms, and management of both surgical and nonsurgical gynecologic disease. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8781 Family Planning and Abortion Cr. 3-6

Students will learn the principles and counseling techniques for contraceptive management and abortion. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8790 Gynecologic Oncology Cr. 3,6

Evaluation and treatment of patients presenting with a range of gynecologic malignancies. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8800 Obstetrics Cr. 3,6

Signs, symptoms and management of normal/abnormal labor, and experience patients with intrapartum high risk conditions and intrapartum/postpartum complications. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8810 Obstetrics/Gynecology Cr. 3,6

Care of inpatient and outpatient obstetric and gynecologic patients, and participation in obstetric and gynecological procedures. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8820 Obstetrical Ultrasound Cr. 6

Basic knowledge and skills in obstetrical ultrasound. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8830 Maternal Fetal Medicine Cr. 3,6

Experience patients with common medical and obstetrical complications; development of skills in fetal assessment and evaluation of high risk pregnancies. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8850 Nurse Midwifery Cr. 3,6

Ambulatory women's health care delivery as performed by a certified nurse midwife, including management of labor and delivery. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8860 Reproductive Endocrine and Infertility Cr. 3,6

Diagnosis and treatment of couples with infertility and reproductive endocrine disorders. Offered Every Term.

Prerequisite: MD3 7600 with a minimum grade of S

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8870 Reproductive Genetics Cr. 3,6

Diagnostic, therapeutic and counseling procedures associated with reproductive genetics, fetal diagnosis, and fetal therapy. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8890 Ophthalmology Cr. 3,6

Conducting basic eye examinations; evaluation methods, management and treatment of eye diseases. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8900 Ophthalmic Research Cr. 3,6

The research process; participation in ophthalmic research. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8910 General Orthopedic Surgery Cr. 3,6

Conduct of an H & P, diagnosis and treatment of patients with orthopedic problems; participation in preoperative, operative, and post-operative care. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8911 Orthopedic Surgery Sports Medicine Cr. 3,6

Through the clinic and operating room settings, students will learn the assessment of the athlete, emergent care of injuries on the field, as well as common sport injuries. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8912 Orthopedic Hand Surgery Cr. 3,6

Students will learn about the care of patients with upper extremity disorders, including carpal tunnel, tendon injuries, hand fractures, arthritis of the hand and common congenital deformities. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8913 Orthopedic Foot/Ankle Surgery Cr. 3,6

Through the clinic and operating room, students will learn how to perform a history and physical exam, diagnose and treat patients that have foot or ankle complaints. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8914 Orthopaedic Surgery Research Cr. 3,6

Students participate in current orthopaedic surgery and biomechanics research. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8930 Orthopedic Traumatology Cr. 3,6

Basic surgical principles and pathophysiology, diagnosis, and management of a variety of traumatic orthopedic conditions. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8940 General Pathology Cr. 3,6

Functions of a clinical laboratory, including interpretation of surgical pathology. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8950 Anatomic Pathology Cr. 3,6

Basic pathologic processes; how gross, microscopic and other techniques are applied to the diagnosis and treatment of disease. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8970 Forensic Pathology Cr. 3,6

Basic mechanisms of injury; characteristic features of injury patterns; relationship between medicine and law. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8980 Tumor Genetics Cr. 6

Role of cytogenetics and molecular cytogenetics in diagnosis, management and prognosis of a patient's disease. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8990 General Pediatrics Cr. 3,6

Evaluating and managing children with common pediatric problems; aspects of normal growth and development. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8991 Child Abuse Identification and Treatment Cr. 6

Students will learn the techniques to identify and report suspected child abuse and neglect, as well as methods of treatment and prevention.

Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 8992 Pediatric Pulmonary Cr. 6

Students will learn the evaluation and treatment of pediatric patients with acute and chronic respiratory diseases. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9000 Adolescent Pediatrics Cr. 6

Interviewing and physical examination on adolescent patients; normal physical, cognitive and psychosocial development of adolescent patients. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9010 Allergy, Immunology, and Rheumatology Cr. 3,6

Day-to-day care of pediatric patients with common allergic, immunologic and rheumatologic disease. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9050 Pediatric Genetics Cr. 3,6

Abnormal morphology of children; diagnostic skills in various inborn errors. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9060 Medical Toxicology and Poison Control Cr. 6

Assessment and management of pediatric patients with suspected or known poisoning or toxic exposure. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9070 Neonatology Cr. 3,6

Evaluation of healthy newborns; common newborn conditions; care of high risk infants and their mothers. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9080 Pediatric Cardiology Cr. 3,6

Skills in taking and performing a cardiac exam; normal hemodynamics; natural history of children with congenital and acquired heart disease. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9090 Pediatric Ear, Nose and Throat Cr. 3,6

Entire scope of pediatric otolaryngology. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9100 Pediatric Emergency Medicine Cr. 3,6

Observation and participation in care of children presenting with a wide range of conditions in pediatric emergency medicine. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9110 Pediatric Endocrinology and Diabetes Cr. 3,6

Evaluation of normal physical growth and development; recognition of common pediatric endocrine problems. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9120 Pediatric Gastroenterology, Hepatology, and Nutrition Cr. 3,6

Performance of a history and physical exam, development of a diagnosis, and caring for patients with disorders of the gastrointestinal tract. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9130 Pediatric Hematology/Oncology Cr. 3,6

Basic skills to conduct an H & P and diagnose and treat children with hematologic and oncologic problems. Offered Every Term.

Prerequisite: MD3 7300 with a minimum grade of S

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9140 Pediatric Infectious Disease Cr. 6

Evaluation, diagnosis, treatment, and management of common pediatric infections. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9150 Pediatric Intensive Care Cr. 3,6

Basic diagnostic and therapeutic approach to care of critically ill children. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9160 Pediatric Nephrology Cr. 3,6

Basic skills to examine, diagnose and treat patients with common renal diseases. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9180 Pediatric Pathology: Autopsy and Surgical Cr. 3,6

Correlation of clinical, anatomical and laboratory findings in diagnosing pediatric disease. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9190 Pediatric Plastic Surgery/Craniofacial Cr. 3,6

Recognition and development of a treatment plan for congenital craniofacial anomalies and vascular lesions. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9200 Pediatric PMR Cr. 3,6

Childhood functional impairments including head injury, spinal cord injury, cerebral palsy, neuromuscular diseases, sports medicine, and electromyography. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9210 Pediatric Subinternship Cr. 7

Senior students expand upon Year 3 pediatric clerkship experience with more intensive involvement in select patient populations. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9230 Physical Medicine and Rehabilitation Cr. 3,6

Performance of an H & P; development of greater understanding of diagnosis, management and treatment of patients with neuromuscular and musculoskeletal problems.] Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9240 Spinal Cord Injury Rehabilitation Cr. 3,6

Management of patients with spinal cord injuries; role of rehabilitation team approach to spinal cord injuries. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9261 Emergent and Consult Liaison Psychiatry Cr. 3,6

Students will learn to assess psychiatric patients, manage acute intoxication and withdrawal syndromes, manage psychiatric patients with medical comorbidities and learn basic managed care principals. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9262 Emergency Psychiatry Cr. 3-6

Students will learn to evaluate, diagnose, and treat psychiatric patients in an emergency setting. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9263 Clinical Electro-Physiology Research Cr. 3-6

Students will participate in the academic research process, as well as learn the strengths and weakness of the different electrophysiological testing modalities. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9264 Psychiatry Research Cr. 3,6

Students will participate in research projects and learn the clinical components associated with neuropsychiatric research. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9265 Outpatient Psychiatry Cr. 3-6

The student will observe routine outpatient practice and have an opportunity to evaluate new outpatients under the supervision of residents/staff. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9270 Child and Adolescent Psychiatry Cr. 3,6

Experience of a variety of children and adolescents with psychiatric disorders; evaluation of patients and provision of care. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9290 Psychiatric Consultation Cr. 3,6

Knowledge and skills associated with the psychiatric interview; mental status examination; development of knowledge base in behavioral medicine and treatment of psychiatric illness. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9300 Psychiatry: Geriatrics Cr. 3,6

Knowledge and skills associated with the psychiatric interview; mental status examination; interpretation of data, diagnosis, psychopharmacology and psychotherapy in geriatric patients. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9320 Research and Practice in Addiction Psychiatry Cr. 3,6

Diagnosis and management of individuals with addictive disorders; psychotherapeutic and pharmacotherapeutic interventions for problems with psychotropic substances. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9340 Substance Abuse Cr. 3,6

Inpatient and outpatient treatment of substance use disorders. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9345 Psychiatric Care of Veterans Cr. 6

Clinical Experience; Students will complete 160 hours of clinical education experience during their one-month rotation. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students.

MD4 9350 General Diagnostic Radiology Cr. 3,6

Basic techniques of imaging; skills to diagnose and interpret radiographic studies. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9360 Intervention Radiology Cr. 3,6

Role of interventional radiologic techniques in diagnosis and management of disease. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9370 Nuclear Medicine Cr. 3,6

Performing and interpreting clinical nuclear medicine procedures; role of nuclear medicine in clinical practice. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9380 Radiation Oncology Cr. 3,6

Role of radiation therapy in variety of adult and pediatric malignancies. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9390 General Surgery Cr. 3,6

Experience in a variety of elective and acute surgical cases; diagnostic skills; basic surgical techniques and procedures. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9392 Advanced Surgical Skills Cr. 6

Students will learn advanced surgical skills in preparation for their surgery residency program. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9393 Breast Surgery Cr. 6

Students will gain exposure to the diagnosis and treatment of breast diseases at the Walt Comprehensive Breast Center. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9400 Acute Burn Care Cr. 6

Physiologic principles and clinical management of burn victims. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9410 Cardiovascular Surgery Cr. 3,6

Diagnosis and treatment of cardiologic diseases using invasive surgical approaches. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9440 Pediatric Surgery Cr. 3,6

Diagnosis and care of surgical disorders in children. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9470 Plastic and Reconstructive Surgery Cr. 3,6

Evaluation, formulation of treatment plan, management of postoperative care, and participation in surgical procedures for patients requiring plastic surgery. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9480 Surgical Intensive Care Unit Cr. 3,6

Care of critically ill surgical patients; common surgical intensive care unit procedures. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9490 Surgery Subinternship Cr. 7

Senior students expand upon their Year 3 surgery clerkship experience with more intensive involvement in select patient populations. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9495 Advanced Maxillofacial Surgery Cr. 7

Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9500 Transplant Surgery Cr. 3,6

Basic surgical principles and pathophysiology, diagnosis and management of a variety of transplant surgical conditions. Offered Every Term.

Prerequisite: MD3 7200 with a minimum grade of S and MD3 7400 with a minimum grade of S

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9510 Acute Care Surgery Cr. 3,6

Evaluation, diagnosis, treatment, and management of critically ill patients; basic procedures in the care of this population. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9520 Vascular Surgery Cr. 3,6

Pathophysiology, evaluation, diagnosis, and management of patients needing vascular surgery; participation of procedures for this population. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9528 Maxillofacial Surgery Cr. 6

In-depth exposure to the field of maxillofacial surgery and its subspecialties of trauma, oncology, and micro-vascular reconstruction. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9530 General Urology Cr. 3,6

Pathophysiology, evaluation, diagnosis and management of patients with urologic disease; participation in urologic surgery. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Third Year or Med Fourth Year; enrollment is limited to students with a major in Medicine; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9540 Male Reproductive Medicine Cr. 3,6

Understanding of the basic physiology of sperm production and photophysiology that lead to infertility and sexual dysfunction. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to students with a major in Medicine.

MD4 9545 Step 2 Preparation Cr. 1

Students will be introduced to methods for successfully passing the mandatory Step 2 CK United States Licensing Examination (USMLE). Offered Intermittently.

Restriction(s): Enrollment limited to students with a class of Med Fourth Year; enrollment is limited to Medical level students; enrollment limited to students in the School of Medicine.

MD4 9600 Residency Preparation Cr. 6

This one month elective course will prepare Senior Medical Students to enter residency training with a superior degree of skill. The sessions will be organized into 2 phases—those topics applicable to all specialties and those specific to specialties. Lecture, online exercises, small group discussions and simulation will be used as instructional modalities. Offered Every Term.