

MD2 - MEDICAL SCHOOL: YEAR 2

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 2A 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 through exploration of pediatrics and general surgery. 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 and service-learning activities. Offered Yearly.

Prerequisite: MD1 5103

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

MD2 6102 Clinical Skills 2B 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 through exploration of emergency medicine, urology, and internal medicine. 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 and service-learning activities. Offered Yearly.

Prerequisite: MD2 6101

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

MD2 6103 Clinical Skills 2C 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.

Prerequisite: MD2 6102

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

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 Course 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 Course 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 Course 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 6511 Community Engagement Elective 2A Cr. 2

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 5512

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

MD2 6512 Community Engagement Elective 2B Cr. 3

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: MD2 6511

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

MD2 6521 Medical Education Research Elective 2A Cr. 2

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. The purpose of this course is to leverage the knowledge and skills that students acquired in MD1 Medical Education Research and apply them to medical education research projects and topics. Offered Yearly.

Prerequisite: MD1 5522

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

MD2 6522 Medical Education Research Elective 2B Cr. 3

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. The purpose of this course is to leverage the knowledge and skills that students acquired in the Medical Education Research electives completed so far and apply them to medical education research projects and topics. Offered Yearly.

Prerequisite: MD2 6521

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

MD2 6531 Leadership and External Affairs Development (LEAD)/Medical Political Action (MPAC) Elective 2A Cr. 2

Section 1 was focused on primary content to ensure students have a basic understanding of the health policy and political process. Section 2 of the program will focus on applying that knowledge base to a real advocacy project. Upon completion of section 2, students will have the necessary skills to advocate on health policies issues on their own or in collaboration with their colleagues. The goal of the MPAC program is to support the leadership and advocacy development of medical students to better prepare them to become physician leaders for their patients, colleagues, and community. Offered Yearly.

Prerequisite: MD2 6532

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

MD2 6532 Leadership and External Affairs Development (LEAD)/Medical Political Action (MPAC) Elective 2B Cr. 3

Section 1 was focused on primary content to ensure students have a basic understanding of the health policy and political process. Section 2 of the program will focus on applying that knowledge base to a real advocacy project. Upon completion of section 2, students will have the necessary skills to advocate on health policies issues on their own or in collaboration with their colleagues. The goal of the MPAC program is to support the leadership and advocacy development of medical students to better prepare them to become physician leaders for their patients, colleagues, and community. Offered Yearly.

Prerequisite: MD2 6531

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

MD2 6541 Research Elective 2A Cr. 2

In the preceding M1 Research Electives, students learned to select and interact with a mentor, to critically read, evaluate, and discuss scientific literature at a beginner's level, to write a scientific mini-review, and to write a research proposal. This course is designed to further develop the skills learned in the M1 electives and to enhance a student's hands-on research skills by providing opportunities to perform research under the guidance of an individual mentor. In this course, students will specifically learn to: 1) apply their knowledge of research skills to perform scientific research in a laboratory under the guidance of a mentor, 2) critically read, evaluate, and discuss scientific literature at a level appropriate for an advanced research student, 3) interact effectively and professionally with a chosen mentor, and 4) work professionally and efficiently as part of a team of peers and other researchers. Offered Yearly.

Prerequisite: MD1 5542

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

MD2 6542 Research Elective 2B Cr. 3

In the preceding M2 Research Elective A course, students further developed the research skills they had learned in the M1 electives and enhanced their hands-on research skills by performing research under the guidance of their mentor. This course is designed to enhance and sharpen the skills learned in the previous research electives. Here, students will specifically learn to: 1) apply their knowledge of research skills to perform scientific research in a laboratory under the guidance of a mentor, 2) apply their knowledge of research and presentation skills to prepare and professionally present a research presentation, 3) critically read, evaluate, and discuss scientific literature at a level appropriate for an advanced research student, 4) critically listen to and evaluate a scientific presentation, 5) interact effectively and professionally with a chosen mentor, and 6) work professionally and efficiently as part of a team of peers and other researchers. Offered Yearly.

Prerequisite: MD2 6541

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

MD2 6561 Directed Teaching in a Medical Education Environment Elective 2A Cr. 1

Directed teaching in a medical school setting for which advanced students are preparing underclass peers for success in the medical education program. Includes near-peer tutoring and/or coaching opportunities. Seminars in which professional learning opportunities centers on teaching methods, industry best practices, and discussion of educational issues in various fields are explored. Offered Yearly.

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

MD2 6562 Directed Teaching in a Medical Education Environment Elective 2B Cr. 1

Directed teaching in a medical school setting for which advanced students are preparing underclass peers for success in the medical education program. Includes near-peer tutoring and/or coaching opportunities. Seminars in which professional learning opportunities centers on teaching methods, industry best practices, and discussion of educational issues in various fields are explored. Offered Yearly.

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

MD2 6563 Directed Teaching in a Medical Education Environment Elective 2C Cr. 1

Directed teaching in a medical school setting for which advanced students are preparing underclass peers for success in the medical education program. Includes near-peer tutoring and/or coaching opportunities. Seminars in which professional learning opportunities centers on teaching methods, industry best practices, and discussion of educational issues in various fields are explored. Offered Yearly.

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

MD2 6571 Medical Quality Improvement Elective 2A Cr. 2

Quality improvement (QI) is a systematic, formal approach to the analysis of practice performance and efforts to improve performance. When organizations focus on quality improvement, they can create significant positive change. QI within medical institutions will help the organizations save patient lives along with reducing the cost of hospital and medical offices' daily operations. A focus on quality improvement in a medical setting can also better prepare a future physician to handle a large-scale emergency or medical event, as illustrated during the COVID-19 pandemic. In this course, students will gain an understanding of the origin of quality improvement methodologies and the impact it has on health care and patient safety. Offered Yearly.

MD2 6572 Medical Quality Improvement Elective 2B Cr. 3

Quality improvement (QI) is a systematic, formal approach to the analysis of practice performance and efforts to improve performance. When organizations focus on quality improvement, they can create significant positive change. QI within medical institutions will help the organizations save patient lives along with reducing the cost of hospital and medical offices' daily operations. A focus on quality improvement in a medical setting can also better prepare a future physician to handle a large-scale emergency or medical event, as illustrated during the COVID-19 pandemic. In this course, students will gain an understanding of the origin of quality improvement methodologies and the impact it has on health care and patient safety. Offered Yearly.

Prerequisite: MD1 5551 and MD1 5552 and MD2 6571

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 6601 Step 1 Preparation Course 2A Cr. 1**

All students will be provided with a structured Step 1 Prep Course to help facilitate and support their efforts during M2. Offered Yearly.

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

MD2 6602 Step 1 Preparation Course 2B Cr. 1

All students will be provided with a structured Step 1 Prep Course to help facilitate and support their efforts during M2. Offered Yearly.

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

MD2 6603 Step 1 Preparation Course 2C Cr. 1

All students will be provided with a structured Step 1 Prep Course to help facilitate and support their efforts during M2. Offered Yearly.

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

MD2 6605 Clinical Synthesis and Integration Course Cr. 3

This Clinical Synthesis and Integration (CSI) course builds on the normal and abnormal structure and function of organ systems from Human Body Foundations & Human Disease Foundation to provide students with the integrated foundational knowledge of Biomedical science, Clinical science and Health System Science. The course aims to engage second-year medical students in synthesizing & integrating the key concepts and foundational principles related to the etiology, pathogenesis, morphology, critical investigations, interpreting lab values, and clinical manifestations. Learners will also continue to develop and demonstrate 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. Students will practice advanced skills in patient interviewing and physical examination emphasizing a patient-centered, empathic, and compassionate approach. Offered Yearly.

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

MD2 6610 Step-I Enhancement Course Cr. 2

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. Offered Yearly.

MD2 6800 Preparation for Clerkships Cr. 5

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, basic cardiovascular life support (BLS), and HIPAA certification. Students will complete online curricula in advanced patient communication skills, professionalism and ethics. Effective use of the electronic health record as the platform for medical care will be a key component. Offered Yearly.

MD2 6911 Business of Medicine Elective 2A: Innovation and Entrepreneurship: Foundations Cr. 3

Students learn about the fundamentals and types of innovation and entrepreneurship in healthcare settings. Key trends shaping the pace and direction of innovation are examined as students explore the challenges and opportunities facing physician entrepreneurs attempting to design and introduce innovative solutions which are desirable, feasible and viable within the healthcare ecosystem. The upward pressure on costs associated with ongoing changes in payment models and in the operations of healthcare systems, coupled with search for improved outcomes and the abatement of health disparities underscores the importance of relevant, effective, and cost-efficient innovation efforts. The costs associated with translational and clinical research and development informed by patients, physicians and service providers engaged at the point of care promotes progress along commercialization pathways and can yield higher rates of success. In-class activities are augmented with required fieldwork. Offered Yearly.

Prerequisite: MD1 5912

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

MD2 6912 Business of Medicine Elective 2B: Innovation and Entrepreneurship: Following the Roadmap Cr. 3

Students continue to explore the challenges and opportunities facing physician entrepreneurs while taking concrete steps to design and develop an innovative solution by testing and validating the roadmap they developed in the Business of Medicine – Innovation and Entrepreneurship Foundations course. Students work in small teams with the assistance of a select multidisciplinary faculty group drawn from the WSU School of Medicine and the Mike Ilitch School of Business as well as other schools and colleges and the assistance of external coaches and mentors. In-class activities are augmented with required fieldwork. Offered Yearly.

Prerequisite: MD2 6911

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