

MD4 - MEDICAL SCHOOL: YEAR 4

MD4 8015 Senior Clinical Reasoning, Integration, Skills and Practice (CRISP) Cr. 1

This is a year-long longitudinal course that gives the WSU senior student advanced skills in areas common to all specialties and completes the 4-year clinical excellence program as part of the Highways to Excellence® curriculum. It will encompass a number of areas that are best taught to the experienced student. There is a mixture of online courses and assignments, in person workshops and asynchronous content. Offered Every Term.

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

Repeatable for 4 Credits

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 Fourth Year.

MD4 8025 Curriculum Development Cr. 6

This is a directed student course in which students engage in individualized projects that are designed to reflect their self-directed learning skills that they have developed while at Wayne State University School of Medicine. Offered Every Term.

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

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.

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 Fourth Year.

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.

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.

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.

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 Fourth Year.

MD4 8050 Anesthesiology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8060 Pain Management Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

MD4 8070 Pediatric Anesthesiology Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

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.

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

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 Fourth Year.

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.

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

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 Dermatology Sub-Internship 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.

Repeatable for 18 Credits

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.

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.

MD4 8145 ER Ultrasound Sub-Internship Cr. 3,6

Introduce students to point-of-care ultrasound (POCUS) examinations as well as more advanced skills and applications, with a focus on indications for scanning, image acquisition and image interpretation. Offered Every Term.

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

Repeatable for 18 Credits

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 Fourth Year.

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.

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

MD4 8166 Student Run Free Clinic - Underserved Populations Cr. 6

Students are involved in supervision of day-to-day operations of Student Run Free Clinic. This includes research, mentorship, patient support and advocacy, and non-clinic based learning. Offered Every Term.

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

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 Fourth Year.

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 Fourth Year.

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 Fourth Year.

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.

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

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 Fourth Year.

MD4 8210 Acting Internship: Family Medicine 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.

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 Fourth Year.

MD4 8230 Maternal and Child Health Sub-Internship Cr. 3,6

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

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

Repeatable for 18 Credits

MD4 8250 Sports Medicine Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

MD4 8255 International Elective Cr. 6

Offered Intermittently.

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

MD4 8258 International Away Cr. 6

Offered Intermittently.

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

MD4 8260 Allergy and Clinical Immunology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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.

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.

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.

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 limited to students with a class of Med Fourth Year.

MD4 8270 Ambulatory Med Cr. 3,6

There is an increased role of ambulatory medicine in all specialties. By selecting this course, the student will gain valuable experience at an advanced level in an ambulatory setting based on the specialty of their choosing. This course will expose the student to the patient's needs as they differ in the outpatient environment, giving the student a more complete picture of longitudinal patient care outside hospitalization. Students who take this course will gain an appreciation and thorough expert understanding of how medical care is delivered in the clinic, while simultaneously exposing themselves to their planned specialty in the setting in which they will most likely be responsible for patient care after graduation. Students will select their top three sites/specialties in which to further develop their skills and be assigned a spot at a Michigan Healthcare Professionals (MHP) location based upon those selections. Offered Every Term.

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

MD4 8280 Cardiology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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.

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

MD4 8290 Cardiology Consultation Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8310 Coronary Care Unit Sub-Internship Cr. 3,6

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 Fourth Year.

Repeatable for 18 Credits

MD4 8320 Critical Care Medicine Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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 Fourth Year.

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.

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 Fourth Year.

Repeatable for 18 Credits

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.

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

MD4 8370 Gastroenterology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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.

MD4 8390 Internal Medicine Inpatient Sub-Internship 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.

Repeatable for 18 Credits

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 Fourth Year.

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.

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.

MD4 8420 Geriatric Medicine Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

MD4 8430 Hematology Sub-Internship 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.

Repeatable for 18 Credits

MD4 8440 HIV/AIDS Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

MD4 8450 Infectious Disease Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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.

MD4 8470 Acting Internship: Internal Medicine 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.

MD4 8480 Medicine/Pediatrics Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8490 Nephrology Sub-Internship Cr. 3,6

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

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

Repeatable for 18 Credits

MD4 8510 Oncology: Medical Sub-Internship 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.

Repeatable for 18 Credits

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 Fourth Year.

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.

MD4 8540 Otolaryngology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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

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

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

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.

MD4 8570 Palliative Medicine Sub-Internship 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.

Repeatable for 18 Credits

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.

MD4 8590 Pulmonary Medicine Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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.

MD4 8610 Pulmonary Consultation Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8620 Rheumatology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8630 Sleep Disorders Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

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 Fourth Year.

MD4 8650 Neurology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8660 Neurology Consult Sub-Internship Cr. 3,6

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 Fourth Year.

Repeatable for 18 Credits

MD4 8690 Movement Disorders Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

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.

MD4 8710 Neurologic Sleep Disorders Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

MD4 8730 Neurology Pediatrics Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8750 Neurosurgery Sub-Internship 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.

Repeatable for 18 Credits

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 Fourth Year.

MD4 8780 Gynecology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8781 Family Planning and Abortion Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8790 Gynecologic Oncology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8800 Obstetrics Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8810 Obstetrics/Gynecology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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.

MD4 8830 Maternal Fetal Medicine Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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 Fourth Year.

MD4 8860 Reproductive Endocrine and Infertility Sub-Internship Cr. 3,6

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

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

Repeatable for 18 Credits

MD4 8890 Ophthalmology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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 Fourth Year.

MD4 8910 Orthopedic Surgery Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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 Fourth Year.

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.

MD4 8940 Pathology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 8950 Anatomic Pathology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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 Fourth Year.

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.

MD4 8990 Pediatrics Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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.

MD4 8992 Pediatric Pulmonary Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

MD4 9000 Adolescent Pediatrics Sub-Internship Cr. 3,6

Interviewing and physical examination of 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.

Repeatable for 18 Credits

MD4 9010 Allergy, Immunology, and Rheumatology Sub-Internship Cr. 3,6

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

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

Repeatable for 18 Credits

MD4 9045 Pediatric Community Partnership Cr. 6

Students will explore the intricate dynamics of social justice and systemic racism in relation to food insecurity. Students will delve into the intersectionality of food insecurity and early childhood development and education, while also critically assessing the effects of current interventions and engaging with local communities to craft innovative solutions that address these pressing issues. Offered Every Term.

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

MD4 9050 Pediatric Genetics Sub-Internship 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.

Repeatable for 18 Credits

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.

MD4 9070 Neonatology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9080 Pediatric Cardiology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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

Entire scope of pediatric otolaryngology. Offered Every Term.

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

Repeatable for 18 Credits

MD4 9100 Pediatric Emergency Medicine Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9110 Pediatric Endocrinology and Diabetes Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9120 Pediatric Gastroenterology, Hepatology, and Nutrition Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9130 Pediatric Hematology/Oncology Sub-Internship Cr. 3,6

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

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

Repeatable for 18 Credits

MD4 9140 Pediatric Infectious Disease Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

MD4 9150 Pediatric Intensive Care Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9160 Pediatric Nephrology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9180 Pediatric Pathology: Autopsy and Surgical Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9190 Pediatric Plastic Surgery/Craniofacial Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9200 Pediatric PMR Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9210 Acting Internship: Pediatric 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.

MD4 9230 Physical Medicine and Rehabilitation Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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 Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9262 Emergency Psychiatry Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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 Fourth Year.

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.

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 Fourth Year.

MD4 9267 Brain Imaging 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.

MD4 9270 Child and Adolescent Psychiatry Sub-Internship 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.

Repeatable for 18 Credits

MD4 9290 Psychiatric Consultation Sub-Internship 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.

Repeatable for 18 Credits

MD4 9300 Psychiatry: Geriatrics Sub-Internship 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.

Repeatable for 18 Credits

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.

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.

MD4 9345 Psychiatric Care of Veterans Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

MD4 9350 General Diagnostic Radiology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9360 Intervention Radiology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9380 Radiation Oncology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9390 Surgery Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9392 Residency Preparation - Surgical 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.

MD4 9393 Breast Surgery Sub-Internship Cr. 3,6

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.

Repeatable for 18 Credits

MD4 9400 Acute Burn Care Sub-Internship Cr. 3,6

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

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

Repeatable for 18 Credits

MD4 9410 Cardiovascular Surgery Sub-Internship Cr. 3,6

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

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

Repeatable for 18 Credits

MD4 9440 Pediatric Surgery Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9470 Plastic and Reconstructive Surgery Sub-Internship 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.

Repeatable for 18 Credits

MD4 9480 Surgical Intensive Care Unit Sub-Internship 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.

Repeatable for 18 Credits

MD4 9500 Transplant Surgery Sub-Internship Cr. 3,6

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

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

Repeatable for 18 Credits

MD4 9510 Acute Care Surgery Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

MD4 9520 Vascular Surgery Sub-Internship 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.

Repeatable for 18 Credits

MD4 9525 Colorectal Surgery Cr. 3,6

Students will learn about common colon and rectal ailments and surgical procedures in both inpatient and outpatient settings. Offered Every Term.

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

MD4 9528 Maxillofacial Surgery Sub-Internship Cr. 3,6

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 Fourth Year.

Repeatable for 18 Credits

MD4 9530 Urology Sub-Internship 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 Fourth Year.

Repeatable for 18 Credits

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.

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.

MD4 9600 Residency Preparation - Nonsurgical 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.

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

MD4 9610 Teaching and Learning in Medical Education (TLMed) Cr. 2

Educational skills are increasingly recognized as essential components of the education of future physicians, particularly in residency training when learners take on new teaching responsibilities for their teams. MD4 8393 provides students with the skills, strategies, and techniques to instruct medical students in classroom and clinical contexts. This course integrates a full range of educational experiences, including teaching placements, live virtual workshops, self-paced online learning modules, instructional design projects, and a final capstone project to develop M4 students into skillful teachers. Offered Every Term.

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

Repeatable for 8 Credits

MD4 9620 Clinical Reasoning Using Integrated Skills in Education (CRUISE) Cr. 2

CRUISE is a year-long longitudinal course completes the four-year Highways to Excellence curriculum. WSU senior students will advance skills in areas common to all specialties while applying clinical reasoning to online assignments, in-person workshops, and asynchronous content. Offered Every Term.

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

Repeatable for 8 Credits