

MEDS - Medical Science

MEDS 501 Independent Investigative Inquiry (III): 4 Credits (4 Other)

PREREQUISITES: WWAMI medical students

The purpose of the Independent Investigative Inquiry—the III—portion of the curriculum is to engage students in activities that will foster the skills of life-long learning essential for practicing physicians in the 21st century. Each student selects a topic of particular interest to her or him, and to investigate the subject independently, following the advice of a faculty advisor and other resources in the WWAMI community.

MEDS 503 Foundations of Clinical Medicine: 4 Credits (2 Lec, 1 Lab, 1 Other)

Introduction to continuity of care by working with practicing physicians and coinciding with instruction in communication skills, interviewing techniques, physical examinations, documentation, and clinical reasoning. Includes hospital-based patient encounters with an introduction to the development of the physician role. Pass/Fail only. WWAMI Medical Students only.

Repeatable up to 12 credits.

MEDS 504 Independent Investigative Inquiry Final Project: 1 Credits (1 Other)

PREREQUISITE: WWAMI Medical Student

Students will engage in a project with an in-depth focus on a health-related, thereby giving additional context to their training and career as a physician. In the process they will develop the skills to acquire and critically evaluate new information under the guidance of faculty mentorship. This will culminate in dissemination of their scholarly work through a poster presentation or a final paper depending on the type of scholarship chosen.

MEDS 505 Rural Health Care Delivery: 1 Credits (1 Lec)

PREREQUISITE: WWAMI medical student. Provide historical and current information about the health care industry, health care delivery systems and economics of health care and health care policy; with emphasis on rural health care. The purpose is to encourage WWAMI students to consider practicing in rural communities and/or providing health care to underserved populations. The infrastructure of the Montana health Care Delivery system will be presented in detail. Prior to Fall 2014, "Rural Health Care Delivery" was offered as MEDS 560

Repeatable up to 14 credits.

MEDS 507 The Healer's Art: 1 Credits (1 Lec)

PREREQUISITE: WWAMI Medical Student. Encourages cultivation of human dimensions in practice of medicine while strengthening personal commitment to medicine as a life's work. Facilitates student recognition of commonality of personal concerns among peers and student response to the dimension of mystery in the experience of illness as well as development of the capacity for awe. WWAMI

MEDS 508 Medical History Conference: 1 Credits (1 Other)

PREREQUISITE: WWAMI medical student. Guest lecturers discuss a variety of topics WWAMI Medical Program

Repeatable up to 4 credits.

MEDS 510 Fundamentals of Medical Science & Research: 9 Credits (3 Lec, 2 Lab, 4 Other)

Comprehensive introduction to foundational basic science and research concepts in medicine. Topics covered include molecular and cell biology; human physiology, genetics and biochemistry; community health and disease; clinical epidemiology, research study design and data analysis. Incorporates fundamental principles of anatomy, pathology, and pharmacology, and medicine in society. Pass/Fail only. WWAMI students only.

Repeatable up to 9 credits.

MEDS 515 Cancer, Hormones, & Blood: 7 Credits (2 Lec, 1 Lab, 4 Other)

Comprehensive introduction to the fundamentals of endocrinology, hematology, and oncology. Topics covered include endocrine regulation of metabolism; normal physiology and pathophysiologic mechanisms responsible for clinically important endocrine disorders; disturbances in red cell, white cell, and platelet production; abnormalities of hemostasis; and malignant neoplasia. Integrates relevant principles of anatomy, pathology and pharmacology, and medicine in society. Pass/Fail only. WWAMI Medical Students only.

Repeatable up to 7 credits.

MEDS 520 Infections & Immunity: 7 Credits (3 Lec, 1 Lab, 3 Other)

Comprehensive introduction to the fundamentals of the immune system; microbiology; infectious diseases; inflammation and repair. Topics covered include the pathogenesis and immunity of infectious disease, immunodeficiencies, hypersensitivity, autoimmunity, and the basis of immunologic diagnostics. Integrates relevant principles of anatomy, pathology, and pharmacology and medicine in society. Pass/Fail only. WWAMI Medical Students only.

Repeatable up to 7 credits.

MEDS 525 Medicine, Health, and Society I: 1 Credits (1 Lec)

Integrates School of Medicine thematic content with an emphasis on core concepts for clinical practice in the changing healthcare environment. Students explore areas related to humanism in medicine including the themes of ethics, health systems, systems improvements, health equity, diversity, social determinants of health, and global population and public health. Pass/Fail only. WWAMI Medical Students only.

Repeatable up to 1 credits.

MEDS 530 Muscles, Joints, Bones, & Skin: 6 Credits (2 Lec, 1 Lab, 3 Other)

Comprehensive introduction to the fundamentals of the musculoskeletal system and dermatology. Topics covered include clinical manifestations in the skin, muscles, bones, and joints and the pathophysiology of trauma, aging, infection, and inflammation. Integrates relevant principles of anatomy, pathology, and pharmacology. Pass/Fail only. WWAMI Medical Students only.

Repeatable up to 6 credits.

MEDS 535 Medicine, Health, and Society II: 2 Credits (1 Lec, 1 Other)

Integrates School of Medicine thematic content with an emphasis on core concepts for clinical practice in the changing healthcare environment. Students explore areas related to humanism in medicine including the themes of ethics, health systems, systems improvements, health equity, diversity, social determinants of health, and global population and public health. Pass/Fail only. WWAMI Medical Students only.

Repeatable up to 2 credits.

MEDS 540 Cardiovascular System: 6 Credits (2 Lec, 1 Lab, 3 Other)

Comprehensive interdisciplinary introduction to cardiovascular biology and medicine, including thoracic anatomy, physiology, radiology, pathology, pharmacology, and surgery. Topics covered include cardiac electrophysiology, cardiac muscle mechanics, myocardial infarction, and cardiac repair. Pass/Fail only. WWAMI Medical Students only.

Repeatable up to 6 credits.

MEDS 542 Respiration & Regulation: 7 Credits (3 Lec, 1 Lab, 3 Other)

Comprehensive interdisciplinary introduction to the respiratory and renal-urinary systems and medicine, including pulmonary and renal anatomy, physiology, radiology, pathology, and pharmacology. Topics covered include ventilation mechanics; obstructive, restrictive, and pulmonary-vascular diseases; renal function; and common kidney diseases. Pass/Fail only. WWAMI Medical Students only.

Repeatable up to 7 credits.

MEDS 550 Head, Neck, & Gut: 6 Credits (2 Lec, 1 Lab, 3 Other)

Comprehensive introduction to head and neck anatomy and the gastrointestinal system. Topics covered include gastrointestinal and liver physiology; pathophysiology of digestion and hepatic function; the principles and practice of clinical nutrition. Integrates the relevant anatomy, pathology, and pharmacology of the GI system. Pass/Fail only. WWAMI Medical Students only.

Repeatable up to 6 credits.

MEDS 560 Mind, Brain, and Behavior: 8 Credits (3 Lec, 1 Lab, 4 Other)

Comprehensive introduction to the organization and function of the central nervous system with a focus on clinical application of this knowledge to systematically approach the differential diagnosis and management of major neurologic, psychiatric, and behavioral disorders. Topics covered include normal physiological, pathophysiologic mechanisms, and current therapeutic approaches to disease including pharmacological, behavioral, surgical, and others. Integrates relevant principles of anatomy, pathology and pharmacology. Pass/Fail only. WWAMI Medical Students only.

Repeatable up to 8 credits.

MEDS 570 Reproduction & Development: 8 Credits (4 Lec, 2 Lab, 2 Other)

PREREQUISITE: WWAMI Medical Student. (F) Covers normal and abnormal human development reproductive functions including formation and maturation of ova and sperm, menstruation, normal pregnancy, and labor and delivery. Provides information concerning infertility, family planning techniques, urinary disorders, and reproductive aging and demography of human population. Includes relevant fundamental scientific principles in pelvic anatomy, pathology, histology, imaging, and pharmacology

Repeatable up to 8 credits.

MEDS 581 Farm to Clinician: A Culinary Medicine Approach to Healthcare: 1 Credits (1 Lec)

PREREQUISITES: WWAMI medical student or consent of instructor.

This interprofessional course will introduce the concept of food as medicine with a focus on nutrition, farm to table and sustainable food systems; give an overview of the biochemical interactions and benefits of particular foods; discuss application in the clinical setting with a focus on rural healthcare; and provide hands-on, experiential cooking lessons focused on the Mediterranean style of eating and other emerging topic related to nutrition

Repeatable up to 2 credits.

MEDS 592 Independent Study: 1 Credits (1 Other)

Designed for medical students required to complete additional study related to a required block offered during the pre-clinical foundation phase of the School of Medicine curriculum. Intended for students in remediation or extended programs to master identified areas of weakness in fundamental medical knowledge. Pass/Fail only. WWAMI Medical Students only.

Repeatable up to 2 credits.

MEDS 624 Health Equity and Community Organizing: 1 Credits ()

PREREQUISITE: Enrollment in a graduate or upper division undergraduate health professions program and consent of instructor. This interprofessional course equips students with tools to organize themselves and others to address social and structural injustices that perpetuate health disparities. Didactic coursework will be complemented with opportunities to apply skills and gain confidence through hands-on collaboration with local leaders and engagement in community-driven listening and advocacy campaigns