**MEDS - Medical Science**

**MEDS 140. Intro Medicine Health. 1 Credit. (1 Lec) S**
This course will assist students in exploring various departments at MSU and choosing a major that best fits their passions, career goals, and educational interests. This course will also provide an opportunity to explore the breadth of health care professions.

**MEDS 160. EMT Basic. 6 Credits. (4 Lec, 2 Lab) F**
The EMT course focuses on the core responsibilities which are to provide medical care to victims of emergencies, stabilize their condition and to transport them safely. After completion students are eligible to take the National Registry’s certification.

**MEDS 240. UG Clinical Observation. 1 Credit. (1 Lab) F**
PREREQUISITE: GPA greater than 3.0, consent of instructor. This course will provide fundamentals in health care professionalism through discussions of professionalism, HIPAA, medical ethics, and case studies. Following successful completion of the didactic component of the course, students will participate in a series of clinical observation rotations.

**MEDS 291. Special Topics. 1-4 Credits. (1-4 Lec; 12 cr max) On Demand**
Max 12 cr. PREREQUISITE: None required but some may be determined necessary by each offering department. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

**MEDS 340. Introduction to Dentistry. 1 Credit. (1 Lec) S**
PREREQUISITE: CHMY 141 and CHMY 143; BIOB 256 and BIOB 260; at least junior standing, GPA >3.0 and consent of instructor. This course is ideal for students who want to confirm an interest in a career in dentistry. An overview of tooth anatomy, development and vocabulary will position students to better understand the various specialties presented at the clinics of community dentists.

**MEDS 440. Clinical Observation. 2 Credits. (2 Lab) F,S,Su**
F,S
PREREQUISITE: CHMY 141 and CHMY 143; BIOB 256 and BIOB 260; at least junior standing, GPA >3.0 and consent of instructor. This shadowing experience will provide students with the opportunity to observe providers in a clinical setting and position them to meet, in part, the requirements for application to health professional school.

**MEDS 491. Special Topics 1-4 Credits. (1-4 Lec; 12 cr max) On Demand**
Max 12 cr. PREREQUISITE: None required but some may be determined necessary by each offering department. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

**MEDS 500. Seminar. 1 Credit. (1 Sem; 4 cr max) On Demand**
Max 4 cr. PREREQUISITE: WWAMI medical student or consent of the WWAMI Medical Program and Dean of The Graduate School. Yearly conference dealing with topics related to Montana’s colorful medical history.

**MEDS 502. Introductory Primary & Continuity Care. 3 Credits. (1 Lec, 2 Rec) F,S,Su**
PREREQUISITE: WWAMI Medical Student. This course introduces medical students to continuity of care by working with practicing physicians. This course is new as of Fall 2015 and is not equivalent to MEDS 502, Spanish for Health Professionals, offered prior to Fall 2015.

**MEDS 503. Clinical Reasoning. 3 Credits. (1 Lec, 2 Lab) F,S,Su**
PREREQUISITE: WWAMI Medical Student. This course will involve instruction and communication skills, interview techniques, physical examination skills and clinical reasoning. This course is new as of Fall 2015 and is not equivalent to MEDS 503, Poetics of Healing, offered prior to Fall 2015. WWAMI.

**MEDS 505. Rural Health Care Delivery. 1 Credit. (1 Lec) F**
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.

**MEDS 506. Spanish for Health Professionals. 1 Credit. (1 Lec) S**
PREREQUISITE: WWAMI medical student. A mixed-level course for beginning to advanced learners of the Spanish language with a focus to communicate in a medical setting. Objectives include learning the essential skills to converse with Spanish-speaking patients, understand important cultural considerations, conduct patient interviews in Spanish focusing on different medical problems, and set a foundation for further learning of Spanish in the healthcare context. This course was previously offered, up to Spring 2015, as MEDS 502, Spanish Health Professionals. This course is not equivalent to MEDS 502, Intro Primary & Continuity Care, beginning Fall 2015. WWAMI.

**MEDS 507. The Healer’s Art. 1 Credit. (1 Lec) S**
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 Credit. (1 Sem; 4 cr max) On Demand**
PREREQUISITE: WWAMI medical student. Guest lecturers discuss a variety of topics WWAMI Medical Program.

**MEDS 510. Molecular & Cellular Basis of Disease. 9 Credits. (4 Lec, 1 Lab, 4 Rec) F**
PREREQUISITE: WWAMI Medical Student. This course teaches the principles of cell and molecular biology, physiology, biochemistry, and genetics. Aspects include the organization of the genome and units of heredity, properties of macromolecules, and cytosarchitecture. Students will gain an understanding of intracellular communication, cell-cell interactions, properties of differentiated cells and the diversity of cell physiological properties and functions. Introduction to anatomy, histology, and pharmacology content will be incorporated into the course. This course is not equivalent to MEDS 510 Micro Anatomy (Histology), last offered Fall 2014. WWAMI.

**MEDS 520. Invaders & Defenders. 8 Credits. (4 Lec, 1 Lab, 3 Rec) F**
PREREQUISITE: WWAMI Medical Student. This course will involve integrated content in immune system, microbial biology, infectious diseases, inflammation and repair, and skin and connective tissue. Introduction to anatomy, histology, and pharmacology content will be incorporated into the course. Prior to Fall 2015, MEDS 520 was “Molecular & Cellular Basis of Disease”; this course is not equivalent to earlier MEDS 520 courses. WWAMI.

**MEDS 530. Circulatory System. 13 Credits. (5 Lec, 2 Lab, 6 Rec) S**
PREREQUISITES: WWAMI Medical Student. Circulatory systems will present students with an integrated approach to the key supply chain and waste management systems of the body. Students will follow the movement of oxygen from the environment to the tissues, and movement of waste products of metabolism along the opposite path, examining the coordinated roles of the lungs, heart and kidney in the control and regulation of these processes. Introduction to anatomy, histology and pharmacology content will be incorporated into the course. WWAMI Medical Education Program.

**MEDS 540. Blood & Cancer. 4 Credits. (1 Lec, 1 Lab, 2 Rec) S**
PREREQUISITE: WWAMI Medical Student. This course familiarizes students with the basic pathophysiologic mechanisms leading to disturbances of red cell, white cell, and platelet production, as well as abnormalities of hemostasis presenting clinical problems, with an emphasis on pathophysiology. Additionally, this course will include relevant fundamental scientific principles in anatomy, pathology, and pharmacology. Prior to Fall 2015, MEDS 540 was “Clinical Practicum.” Beginning Summer 2015, Clinical Practicum is MEDS 541, WWAMI.

**MEDS 541. Clinical Practicum. 1 Credit. (1 Lab) F,S,Su**
PREREQUISITE: Graduate level standing and acceptance into Post-Bacc Pre-Med or M.S. Health Sciences program. A practical course for students going into the medical field to observe and learn about the services provided by different health care professionals at various stages of patient care. Prior to Summer 2015, MEDS 541 was MEDS 540.

**MEDS 550. Energetics & Homeostasis. 8 Credits. (4 Lec, 1 Lab, 3 Rec) Su**
PREREQUISITE: WWAMI Medical Student. This course will involve integrated content in metabolism, nutrition, obesity, diabetes, gastrointestinal/liver physiology and endocrinology. Additionally, this course includes relevant fundamental scientific principles in anatomy, pathology, and pharmacology. WWAMI Medical Education Program.

**MEDS 560. Mind, Brain, and Behavior. 13 Credits. (5 Lec, 2 Lab, 6 Rec) F**
PREREQUISITE: WWAMI Medical Student. In this course, students will learn the fundamental scientific principles of the structure and function of the normal human nervous system in situ, define major neurologic, psychiatric, and behavior disorders, and develop a systematic approach to their differential diagnosis and management. WWAMI Medical Education Program.
MEDS 565. The Healer’s Art. 1 Credit.

MEDS 570. Lifecycles & Reproduction. 8 Credits. (4 Lec, 1 Lab, 3 Rct.) F
PREREQUISITE: WWAMI Medical Student. This course will cover normal and
abnormal human development, reproductive functions including formation and
maturation of ova and sperm, menstruation, normal pregnancy, and labor and
delivery. Additionally, this course includes relevant fundamental scientific principles in
pelvic anatomy, pathology, and pharmacology. WWAMI Medical Program.

MEDS 575. Professional Paper and Project. 1-4 Credits. (1-4 Ind; 6 cr max) On
Demand
Max 6 cr. PREREQUISITE: Graduate standing. Mechanism for M.S. students to
complete scholarly project.

MEDS 580. Special Topics. 1-4 Credits. (1 Lec; 12 cr max) On Demand
Max 12 cr. PREREQUISITE: Upper division courses and others as determined for
each offering. Courses not required in any curriculum for which there is a particular
one time need, or given on a trial basis to determine acceptability and demand before
requesting a regular course number.

MEDS 592. Independent Study. 1-3 Credits. (1-3 Ind; 6 cr max)
PREREQUISITE: Graduate standing, consent of instructor and approval of the
Director of the WWAMI Medical Program. Directed research and study on an
individual basis.

MEDS 594. Seminar. 1 Credit. (1 Sem; 4 cr max) On Demand
PREREQUISITE: WWAMI medical student. Topics offered at the graduate level
which are not covered in regular courses.