

# Medicine Doctorate (MD)

---

## Courses

### MD A601 Foundations of Clinical Medicine: Immersion 2 Credits

Boot camp in the fundamental clinical skills of medicine including doctor-patient communication, medical interviewing, the content and structure of the medical database, basic physical exam, and the culture and professionalism of medicine.

**Registration Restrictions:** Admission to WWAMI MD program.

### MD A602 Foundations of Clinical Medicine: Primary Care Practicum 1-3 Credits

Introduces medical students to continuity of care by working with practicing physicians. Course demonstrates how to work with individuals to help them achieve optimal health, and includes topics in primary and preventative care, geriatrics, rehabilitation, palliative care, behavioral health, and pain management.

**Special Note:** May be taken a maximum of four times for credit.

**Registration Restrictions:** Admission to WWAMI MD program

### MD A603 Foundations of Clinical Medicine: Clinical Skills 1-3 Credits

Introduces the physician role including communication skills, interviewing techniques, physical examination, documentation and clinical reasoning. Course will include hospital-based patient encounters to develop comfort with the physician role.

**Special Note:** May be taken for a maximum of four times for credit.

**Registration Restrictions:** Admission to WWAMI MD program

### MD A604 Introduction to Medicine, Health & Society 1 Credit

Introduces core concepts needed for clinical practice in the changing healthcare environment. Explores 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.

**Special Note:** This course is taught in a 1-week intensive format.

**Registration Restrictions:** Admission to WWAMI MD program

### MD A605 Medicine, Health, and Society 3 Credits

Emphasizes core concepts needed for clinical practice in the changing healthcare environment. Explores areas related to humanism in medicine, including the themes of health systems, systems improvements, diversity, health equity, ethics, social determinants of health, and global population and public health.

**Special Note:** This course is taught in a 3-week intensive format.

**Registration Restrictions:** Admission to WWAMI MD program

**Prerequisites:** MD A604 with a minimum grade of P.

**MD A606 Ecology of Health and Medicine - Foundations 3 1 Credit**  
Emphasizes core concepts needed for clinical practice in the changing healthcare environment. Explores areas related to humanism in medicine, including the themes of diversity; health equity; ethics; professionalism; and determinants of health, such as interplay of components of Ecosocial Model, ethical case analysis, advocacy and integrity, high-functioning teams, influence of individual factors on health, health economics, patient safety, health metrics, and application of systems thinking.

**Special Note:** This course is taught in a 1-week intensive format.

**Registration Restrictions:** Admission to WWAMI MD program

**Prerequisites:** MD A604 and MD A605.

**MD A607 Ecology of Health and Medicine - Foundations 4 1 Credit**  
Emphasizes core concepts needed for clinical practice in the changing healthcare environment. Explores areas related to humanism in medicine, including the themes of diversity; health equity; ethics; professionalism; and determinants of health, such as accountability in health disparities, ethical case analysis, excellence, conflict resolution, primary care and rural medicine systems, informed medical decision making, advanced patient safety, global burden of disease, application of systems thinking.

**Special Note:** This course is taught in a 1-week intensive format.

**Registration Restrictions:** Admission to WWAMI MD program

**Prerequisites:** MD A604 and MD A605 and MD A606.

### MD A608 Clinical Epidemiology 2 Credits

Introduces methods for identifying, interpreting and applying high quality, relevant published medical research and evidence to the practice of clinical medicine for effective preventative and therapeutic interventions. Topics include research study design of randomized trials, measures of effect, interpretation of causal relationships, contexts for screening and diagnosis, interpretation of test results, application of statistical measures, systematic reviews and meta-analyses.

**Special Note:** This course is taught on a compressed schedule.

**Registration Restrictions:** Admission to WWAMI MD Program

### MD A610 Fundamentals of Medical Science & Research 9 Credits

Introduces foundational basic science and research concepts in medicine. Topics covered include molecular and cell biology; human physiology; genetics; biochemistry; community health and disease; clinical epidemiology; research study design and data analysis. Incorporates fundamental principles of anatomy, pathology, pharmacology, and medicine in society.

**Registration Restrictions:** Admission to WWAMI MD program

### MD A620 Infections & Immunity 7 Credits

Introduces the immune system, microbiology, infectious diseases, inflammation and repair. Topics discussed include the pathogenesis and immunity of infectious disease, immunodeficiencies, hypersensitivity, autoimmunity, and the basis of immunologic diagnostics. Integrates relevant principles in anatomy, pathology, pharmacology, and medicine in society.

**Registration Restrictions:** Admission to WWAMI MD program

**MD A630 Cardiovascular System 6 Credits**

Introduces cardiovascular biology and medicine. Topics covered include cardiac electrophysiology, cardiac muscle mechanics, myocardial infarction, and cardiac repair. Integrates relevant principles of thoracic anatomy, physiology, radiology, pathology, pharmacology, and surgery.

**Registration Restrictions:** Admission to WWAMI MD program

**MD A640 Cancer, Hormones and Blood 7 Credits**

Introduces fundamental principles 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.

**Registration Restrictions:** Admission to the WWAMI MD program

**MD A641 Muscles, Joints, Bones & Skin 6 Credits**

Introduces fundamental principles of the musculoskeletal system and dermatology. Topics covered include anatomical structures of limbs, spine and skin, disorders of the musculoskeletal system and skin, and the pathophysiology of trauma, aging, and relevant infection and inflammation. Integrates relevant principles of anatomy, histology, pathology, imaging and pharmacology.

**Registration Restrictions:** Admission to the WWAMI MD program

**MD A650 Head, Neck & Gut 6 Credits**

Introduces fundamental principles of head and neck anatomy and the gastrointestinal (GI) system. Topics covered include structure and function of ears, nose, throat, and gastrointestinal tract; pathophysiology of digestion and hepatic function; the principles and practice of clinical nutrition. Integrates the relevant principles of anatomy, radiology, pathology, and pharmacology.

**Registration Restrictions:** Admission to WWAMI MD program

**MD A653 Air, Fluids and Salts 7 Credits**

Introduces fundamental principles of the respiratory and renal-urinary systems in medicine. Topics covered include ventilation mechanics; obstructive, restrictive, and pulmonary-vascular diseases; renal function and common kidney diseases. Integrates relevant principles of anatomy, physiology, radiology, pathology and pharmacology.

**Registration Restrictions:** Admission to WWAMI MD program

**MD A660 Mind, Brain and Behavior 8 Credits**

Presents organization and function of the central nervous system focusing on a systematic approach to the differential diagnosis and management of major neurologic, psychiatric, and behavioral disorders. Topics covered include physiologic and pathophysiologic mechanisms, and current therapeutic approaches to disease integrating relevant principles of anatomy, physiology, radiology, pathology, and pharmacology.

**Special Note:** This course is taught on a compressed 7-week schedule.

**Registration Restrictions:** Admission to WWAMI MD program

**MD A670 Lifecycle and Reproduction 6 Credits**

Introduces normal and abnormal human development, reproductive functions including ova and sperm development, menstruation, normal pregnancy, and labor and delivery along with infertility, family planning techniques, and reproductive aging; integrates relevant fundamental principles in pelvic anatomy, pathology, histology, imaging, and pharmacology.

**Registration Restrictions:** Admission to WWAMI MD program

**MD A698A Independent Investigative Inquiry - III 4 Credits**

Engages students in research activities in either hypothesis-driven, rural/underserved experience-driven, global-health experience-driven, simulation development-driven, or systematic literature review that will foster the skills of life-long learning essential for practicing physicians in the 21st century. Each student selects and independently investigates a topic of particular interest to them within one of these frameworks following faculty approval and guidance.

**Special Note:** Research conducted during summer between terms 2 and 3 in Foundations Phase of MD program.

**Registration Restrictions:** Admission to the WWAMI School of Medical Education and graduate standing

**MD A698B Independent Investigative Inquiry - Poster 1 Credit**

Engages students in preparation and presentation of professional quality research poster covering the independent investigative inquiry project conducted in MD A698A. Students will develop skills in dissemination of scholarly work through poster design, figure development, assembly and poster presentation at regional Medical Student III Poster Session.

**Registration Restrictions:** Admission to the WWAMI School of Medical Education and graduate standing

**Prerequisites:** MD A698A with a minimum grade of P or concurrent enrollment.