MEDICAL SCIENCE (MEDS)

**MEDS 400 (s) Seminar**  
Credit arranged

**MEDS 404 (s) Special Topics**  
Credit arranged

**MEDS 499 (s) Directed Study**  
Credit arranged

**MEDS 501 (s) Seminar**  
Credit arranged

**MEDS 502 (s) Directed Study**  
Credit arranged

Areas normally offered are directed dissection of the extremities, trunk, head, neck, abdomen, and pelvis; endocrinology, physiology, and other medically related studies. (Spring only)

**MEDS 504 (s) Special Topics**  
Credit arranged

**MEDS 506 Introduction to Primary & Continuity Care Clerkship**  
4 credits  
Introduces medical students 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 and the development of the physician role. Topics covered in primary and preventative care, geriatrics, rehabilitation, palliative care, behavioral health, and pain management. Graded P/F. (Fall only)

**Prereq:** Admission to the University of Washington School of Medicine WWAMI program

**MEDS 507 Introduction to Primary & Continuity Care Clerkship**  
4 credits  
Introduces medical students 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 and the development of the physician role. Topics covered include primary and preventative care, geriatrics, rehabilitation, palliative care, behavioral health, and pain management. Graded P/F. (Fall only)

**Prereq:** Admission to the University of Washington School of Medicine WWAMI program

**MEDS 508 Introduction to Primary & Continuity Care Clerkship**  
4 credits  
Introduces medical students 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 and the development of the physician role. Topics covered in primary and preventative care, geriatrics, rehabilitation, palliative care, behavioral health, and pain management. Graded P/F. (Spring only)

**Prereq:** Admission to the University of Washington School of Medicine WWAMI program

**MEDS 509 Introduction to Primary & Continuity Care Clerkship**  
4 credits  
Introduces medical students 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 and the development of the physician role. Topics covered in primary and preventative care, geriatrics, rehabilitation, palliative care, behavioral health, and pain management. Graded P/F. (Fall only)

**Prereq:** Admission to the University of Washington School of Medicine WWAMI program

**MEDS 510 Molecular and Cellular Basis of Disease**  
11 credits  
Introduces cell physiology and cell biology, function, genetics, and genetic diseases, genes. Topics include membrane physiology, sensory receptors; muscle energetics and contractility, autonomic nervous system; tissue response to disease; pharmacodynamics and pharmacokinetics; genetic disorders; pharmacogenetics. Incorporates relevant fundamental principles in anatomy, pathology and pharmacology. Graded P/F. (Fall only)

**Prereq:** Admission to the University of Washington School of Medicine WWAMI program

**MEDS 515 Ecology of Health & Medicine-Foundations 1**  
1 credit  
This course integrates School of Medicine thematic content with an emphasis on core concepts needed for clinical practice in the changing healthcare environment. Students will explore areas related to humanism in medicine including the themes of diversity, health equity, ethics, professionalism, and determinants of health. Graded P/F.

**Prereq:** Admission to the University of Washington School of Medicine WWAMI program

**MEDS 517 Research Methods**  
1 credit  
Community health and disease, including assessment of disease risk and mechanisms of epidemic detection, spread, and control; interpretation of research design, data analysis, bias source; and clinical epidemiology, including evaluation and application of diagnostic tests, natural history of disease, and quantitative aids for clinical decision making.

**Prereq:** Admission to the University of Washington School of Medicine WWAMI program

**MEDS 519 Invaders and Defenders**  
10 credits  
This course covers the immune system, microbial biology, infectious diseases, inflammation and repair, and skin and connective tissue. Topics discussed include the pathogenesis and immunity of infectious disease, immunedeficiencies, hypersensitivity, autoimmunity, the basis of immunologic diagnosis. Additionally, this course will include relevant fundamental scientific principles in anatomy, pathology, and pharmacology. Graded P/F. (Fall only)

**Prereq:** Admission to the University of Washington School of Medicine WWAMI program
MEDS 525 Ecology of Health & Medicine-Foundations 3
1 credit
This course integrates School of Medicine thematic content with an emphasis on core concepts needed for clinical practice in the changing healthcare environment. Students will explore areas related to humanism in medicine including the themes of diversity, health equity, ethics, professionalism, and determinants of health. Graded P/F.
Prereq: Admission to the University of Washington School of Medicine WWAMI program

MEDS 527 Investigative Inquiry
6 credits
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 investigates the subject independently, following the advice of a faculty advisor and other resources in the WWAMI community.
Prereq: Admission to the University of Washington School of Medicine WWAMI program

MEDS 528 Investigative Inquiry Project
1 credit
Students will engage in a project with an in-depth focus on a health-related issue, 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.
Prereq: MEDS 527

MEDS 529 Circulatory System
16 credits
This course provides an interdisciplinary approach to cardiovascular, respiratory, and renal-urinary medicine, including anatomy, physiology, pathology, medicine and surgery. Topics include cardiac electrophysiology and cardiac muscle mechanics, myocardial infarction and cardiac repair, thoracic and pulmonary anatomy, ventilator mechanics, gas exchange, obstructive, restrictive, and pulmonary-vascular diseases, renal function, and common kidney diseases. Graded P/F. (Spring only)
Prereq: Admission to the University of Washington School of Medicine WWAMI program

MEDS 536 Ecology of Health & Medicine-Foundations 3
1 credit
This course integrates School of Medicine thematic content with an emphasis on core concepts needed for clinical practice in the changing healthcare environment. Students will explore areas related to humanism in medicine including the themes of diversity, health equity, ethics, professionalism, and determinants of health. Graded P/F.
Prereq: Admission to the University of Washington School of Medicine WWAMI program

MEDS 540 Blood, Cancer & Musculoskeletal
8 credits
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. The musculoskeletal content will focus on clinical manifestations in the musculoskeletal system and pathophysiology of trauma, aging, infection, and inflammation. Graded P/F. (Spring only)
Prereq: Admission to the University of Washington School of Medicine WWAMI program

MEDS 545 Ecology of Health & Medicine-Foundations 4
1 credit
This course integrates School of Medicine thematic content with an emphasis on core concepts needed for clinical practice in the changing healthcare environment. Students will explore areas related to humanism in medicine including the themes of diversity, health equity, ethics, professionalism, and determinants of health. Graded P/F.
Prereq: Admission to the University of Washington School of Medicine WWAMI program

MEDS 550 Energetics and Homeostasis
10 credits
This course covers metabolism, nutrition, obesity, diabetes, gastrointestinal/liver physiology, and endocrinology. Topics include physiology and pathology of digestion and hepatic function, principles and practice of clinical nutrition, the endocrine integration of metabolism, and clinically important endocrine pathophysiology. Additionally, this course introduces anatomy, pathology, and pharmacology of the endocrine and GI Systems. Graded P/F. (Spring only)
Prereq: Admission to the University of Washington School of Medicine WWAMI program

MEDS 555 Mind, Brain and Behavior
14 credits
In this course, the foundational principles of the organization and function of the head, neck and central nervous system are explained with a focus on clinical application of this knowledge to systematically approach the differential diagnosis and management of major neurologic, psychiatric and behavioral disorders. Current therapeutic approaches to disease are explained including pharmacological, behavioral, surgical and other therapies. Graded P/F. (Fall only)
Prereq: Admission to the University of Washington School of Medicine WWAMI program

MEDS 560 Life Cycle and Reproduction
8 credits
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. Provides information concerning infertility, family planning techniques, urinary disorders, reproductive aging and demography of human population. Additionally, this course includes fundamental scientific principles in pelvic anatomy, apthology, histology, imaging and pharmacology. Graded P/F. (Fall only)
Prereq: Admission to the University of Washington School of Medicine WWAMI program

MEDS 570 Consolidation and Transition
12 credits
Reinforces content in the UWSOM foundations phase. Learning experiences will address key content areas which need further review identified throughout terms 1 and 2, with specific sessions developed as indicated; faculty/staff and peer educators will provide sessions for this basic science review as well as preparation for clerkships. Graded P/F. (Spring Only)
Prereq: Admission to the University of Washington School of Medicine WWAMI program

MEDS 597 Graduate Practicum
1-3 credits, max 3
Prereq: Admission to the University of Washington School of Medicine WWAMI program