MEDICAL SCIENCE (MEDS)

MEDS 400 (s) Seminar (1-16 credits)
Credit arranged

MEDS 404 (s) Special Topics (1-16 credits)
Credit arranged

MEDS 499 (s) Directed Study (1-16 credits)
Credit arranged

MEDS 501 (s) Seminar (1-16 credits)
Credit arranged

MEDS 502 (s) Directed Study (1-16 credits)
Credit arranged

MEDS 504 (s) Special Topics (1-16 credits)
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)
Prereqs: Admission to the University of Washington School of Medicine WWAMI program

MEDS 507 Foundations of Clinical Medicine (2 credits)
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 and the development of the physician role. Graded Pass/Fail. Typically Offered: Summer.
Prereqs: 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)
Prereqs: Admission to the University of Washington School of Medicine WWAMI program

MEDS 510 Fundamentals of Medical Science & Research (13 credits)
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. Graded P/F. Typically Offered: Summer.
Prereqs: 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.
Prereqs: 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.
Prereqs: Admission to the University of Washington School of Medicine WWAMI program

MEDS 518 Air, Fluids and Salts (10 credits)
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. Graded Pass/Fail. Typically Offered: Spring Semester.
Prereqs: Admission to the University of Washington School of Medicine WWAMI program

MEDS 519 Infections and Immunity (10 credits)
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.

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.
Prereqs: 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 them and investigates the subject independently, following the advice of a faculty advisor and other resources in the WWAMI community.
Prereqs: 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.
Prereqs: 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 533 Cardiovascular System (8 credits)
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. Graded Pass/Fail. Typically Offered: Spring.
Prereq: Admissions 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 537 Cancer, Hormones and Blood (10 credits)
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. Graded Pass/Fail. Typically Offered: Fall.
Prereq: Admission to University of Washington School of Medicine WWAMI program

MEDS 538 Muscles, Joints, Bones and Skin (8 credits)
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. Graded Pass/Fail. Typically Offered: Spring.
Prereq: Admission to University of Washington School of Medicine WWAMI program

MEDS 539 Advanced Gross Anatomy I for Teachers (9 credits)
This is the first of two graduate courses that will cover the gross anatomy of the human body in depth, using human cadavers. Its goal is to prepare the students to become professional Anatomy instructors who can teach this material in Gross Anatomy courses in Medical, Dental, or Physical Therapy Schools. Additionally, they will be able to teach Anatomy or Anatomy and Physiology courses for undergraduate students in Health programs such as nursing, pre-med, pre-dent, pre-physical therapy, exercise science, and pharmacy programs. Typically Offered: Summer.
Prereq: Instructor Permission

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 541 Advanced Gross Anatomy II, for Teachers (9 credits)
This is the second of two graduate courses that will cover the gross anatomy of the human body in depth, using human cadavers. It will directly follow Advanced Anatomy I in each summer session. The goal of these courses is to prepare the students to become professional Anatomy instructors who can teach this material in Gross Anatomy courses in Medical, Dental, or Physical Therapy Schools. Additionally, they will be able to teach Anatomy or Anatomy and Physiology courses for undergraduate students in Health programs such as nursing, pre-med, pre-dent, pre-physical therapy, exercise science, and pharmacy programs. Typically Offered: Summer.
Prereq: Instructor Permission

MEDS 542 Histology for Anatomy Teachers (4 credits)
This is an online class that will cover the microscopic anatomy (histology) of the mammalian and human body. Histology covers the body's cells and subcellular structures, its tissues, and the microscopic structure of its organs. The goal of this course is to prepare Anatomy teachers to present this material in Histology courses in Medical Schools, or in Anatomy or Physiology courses for undergraduate students in Health Programs such as nursing, pre-physical therapy and pre-pharmacy Typically Offered: Fall.
Prereq: Instructor Permission

MEDS 544 Medical Pathophysiology (4 credits)
This course is a comprehensive study of underlying concepts common to the major pathophysiologic processes of the body. The course is designed for those interested in teaching pathology or pathophysiology or related disciplines or for health and pre-health students. The course adopts a system based approach to pathology and integrates material across systems using diseases such as cancer. Typically Offered: Spring.
Prereq: Instructor Permission

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 546 Medical Neuroanatomy for Anatomy Teachers (4 credits)
This is an online course that will cover topics in neuroanatomy. Topics include functional organization of the human nervous system, neurophysiology, supporting structures, and clinical relevance of these topics for health care practitioners. Typically Offered: Fall.
Prereq: Instructor Approval
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)
Prereqs: Admission to the University of Washington School of Medicine WWAMI program

MEDS 560 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)
Prereqs: Admission to the University of Washington School of Medicine WWAMI program

MEDS 570 Lifecycle 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)
Prereqs: Admission to the University of Washington School of Medicine WWAMI program

MEDS 580 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)
Prereqs: Admission to the University of Washington School of Medicine WWAMI program

MEDS 597 Graduate Practicum (1-3 credits, max 3)