# Course Code Prefix Guide

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Course Descriptions

ACADEMIC MEDICINE AND LEADERSHIP (AML)
SU Campus Only

AML 4001: Clinical Academic Elective (variable credits)
This course is designed to provide students with an opportunity to study healthcare and medicine in relation to academia. Prerequisite: acceptance and enrollment in the Academic Medicine and Leadership track and Clinical Education department approval required.

AML 5010: Academic Medicine and Leadership I (2 credits)
The Academic Medicine and Leadership Track is a selective enrichment course that will provide students with specialized training in various areas of academics and leadership development. With the expansion of medical schools and residency programs, there is a growing demand for well-trained academicians and faculty. Students in this specialty track will learn about various, multi-faceted topics in academics, medical education, organized medicine, health policy, and leadership development. The student will be trained in skills to be an effective public speaker, educator, and physician leader. The track will be a continuum of two consecutive semester courses starting in the spring semester of the first year and ending in the fall semester of the second year. The educational objectives and contents of this track will be in addition to the required core curriculum. Prerequisite: acceptance into the Academic Medicine and Leadership Track.

AML 5020: Academic Medicine and Leadership II (2 credits)
A continuation of AML 5010, this course will continue to build on the understanding that with the expansion of medical schools and residency programs in the United States, there is a growing demand for well-trained academicians and faculty. Students in this enrichment track will learn about the various, multi-faceted topics in academics, medical education, organized medicine, health policy, and leadership development. Skills necessary to become an effective public speaker, educator, and physician leader will be addressed. Prerequisite: AML5010.

ANATOMY (ANT)

ANT 4001: Anatomy Elective (variable credit)
Students will have the opportunity to develop and refine skills related to human anatomy. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

ANT 4901: Anatomy Fellowship (variable credit)
The Anatomy Fellowship is designed to provide a continuum of
the study of anatomy to the next level, as well as provide the student with tools which can, in the future, be utilized to either teach or conduct anatomical research appropriate to the context of their final field of endeavor. Only students accepted into the Undergraduate Anatomy Fellowship program are permitted to register for this course.

ANESTHESIOLOGY (ANE)

ANE 4001: Anesthesiology Elective (variable credit)
Anesthesiology is the practice of medicine dedicated to the relief of pain and total care of the surgical patient before, during, and after surgery. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

BIOMEDICAL SCIENCES (BMS)

BMS 5002: Biomedical Pharmacology (3 credits)
Biomedical pharmacology presents an overview of the basic concepts and principles of pharmacology complemented by selected topics in pharmacotherapeutics. Students explore mechanisms of drug action, pharmacokinetics, pharmacodynamics, pharmacogenomics, and toxicology. Additional classroom sessions highlight the basic and clinical pharmacology of agents that exert effects on a variety of physiologic systems. Students will be required to complete an innovative new drug capstone project demonstrating their ability to provide peer-feedback, work on a team, appropriately review and synthesize recent medical literature, and conduct an oral presentation. Successful completion of the course will prepare students for doctoral level study of pharmacology. Prerequisite: none.

BMS 5008: Medical Humanities (1 credit)
The Medical Humanities course is centered on the exploration of humanistic pursuits in the biomedical sciences. Topics vary by year and include human subject research history and ethics, professional identity formation, illness narratives, or other related subjects. This course is grounded in a variety of literary and textual sources and involves small and large group discussion, collaboration, written analyses, service-learning, and critical reflection. Prerequisite: none.

BMS 5010: Journal Club (2 credits)
The course aims to provide MSBS students the opportunity to evaluate and investigate evidence through critically reading, interpreting, and presenting primary literature for peers, RVU-COM students, and faculty. This course helps students stay abreast of current knowledge in the field, develop presentation skills, and create solutions to real-world issues through applying knowledge from the biomedical sciences. Topics will include advances across biomedical research, community service and leadership responsibilities, and inter-professional teamwork. Emphasis is placed on developing presentation and teaching skills and in communicating scientific studies in seminar. The format of the course includes: 1) an introduction to and guided research of issues from national health initiatives (NIH, CDC, HHS and/or HRSA); 2) critical appraisal and formal presentation of biomedical research; and 3) a culminating NIH-style grant proposal to address research questions and advocacy needs. Prerequisite: none.

BMS 5011: Evidence-Based Medicine (2 credits)
The role of Evidence-Based Medicine (EBM) is to foster students’ information literacy and develop understanding of the process of evidence-based medicine in order to leverage, create, use, and connect information to scenarios. The course is organized around the five elements of evidence-based medicine: ASK, ACQUIRE, APPRAISE, APPLY, ASSESS. Each of those components will be explored in depth to increase the awareness, understanding, and skills of the students. Students will learn to identify and understand various research methodologies, research designs, and bio-statistical concepts as elements of developing their understanding of medical and scientific information. Prerequisite: none.

BMS 5021: Molecular Basis of Medicine I (2 credits)
This course is a two-semester course that incorporates a problem-based learning (PBL) approach to investigative fundamental biomedical concepts within the context of clinical cases. The objective of the course is to promote student learning of the biochemical, molecular, and cellular mechanisms underlying normal physiology and metabolism, thus providing a foundation for understanding disease processes. The course provides a foundation in cellular and molecular biology, including cell structure, cellular macromolecules, DNA and RNA structure and function, protein synthesis, and regulation of gene expression, energetics, metabolism, regulation, organization and function of cellular organelles, flow of genetic information, and the regulation of selected cell activities. The first semester will focus primarily on human molecular genetics. The second semester will primarily focus on metabolic pathways and inborn errors of metabolism. Critical thinking skills will be developed throughout the course as students discuss clinical cases in order to link the clinical presentation with the underlying molecular mechanisms of the disease state. Prerequisite: none.
BMS 5022: Molecular Basis of Medicine II (2 credits)

A continuation of BMS 5021, Molecular Basis of Medicine II, incorporates a problem-based learning (PBL) approach to investigative fundamental biomedical concepts within the context of clinical cases. The objective of the course is to promote student learning of the biochemical, molecular, and cellular mechanisms underlying normal physiology and metabolism, thus providing a foundation for understanding disease processes. The course provides a foundation in cellular and molecular biology, including cell structure, cellular macromolecules, DNA and RNA structure and function, protein synthesis, and regulation of gene expression, energetics, metabolism, regulation, organization and function of cellular organelles, flow of genetic information, and the regulation of selected cell activities. The first semester will focus primarily on human molecular genetics. The second semester will primarily focus on metabolic pathways and inborn errors of metabolism. Critical thinking skills will be developed throughout the course as students discuss clinical cases in order to link the clinical presentation with the underlying molecular mechanisms of the disease state. Prerequisite: none.

BMS 5041: Physiology I (4 credits)

These two one-semester courses together provide a systems-based curriculum that provides the student an opportunity to build a cognitive framework and knowledge base necessary to understand and apply normal human physiology to medical physiology and pathophysiology. Systems covered in the first semester include cellular physiology, homeostatic mechanisms, basic neurophysiology, the cardiovascular system, the respiratory system, and the renal system. Systems covered in the second semester include gastrointestinal, endocrine, and reproductive; neurophysiology, introduction to biomedical ethics, and multisystem physiology and pathophysiology processes are also covered. Basic clinical skills, clinical reasoning, physical exam skills are also integrated throughout. This curriculum combines lecture with clinical correlations, case studies, independent study, projects, and simulation activities. Prerequisite: none.

BMS 5042: Physiology II (4 credits)

A continuation of BMS 5042 Physiology I, this course provides a systems-based curriculum that provides the student an opportunity to build a cognitive framework and knowledge base necessary to understand and apply normal human physiology to medical physiology and pathophysiology. Systems covered in the first semester include cellular physiology, homeostatic mechanisms, basic neurophysiology, the cardiovascular system, the respiratory system, and the renal system. Systems covered in the second semester include gastrointestinal, endocrine, and reproductive; neurophysiology, introduction to biomedical ethics, and multisystem physiology and pathophysiology processes are also covered. Basic clinical skills, clinical reasoning, physical exam skills are also integrated throughout. This curriculum combines lecture with clinical correlations, case studies, independent study, projects, and simulation activities. Prerequisite: none.

BMS 5051: Human Anatomy I (2 credits)

This is a two-semester course encompassing all aspects of human functional anatomy and clinical gross anatomy. This course will cover embryonic development and focus on the gross anatomy of all systems in the human body including musculoskeletal, neuronal, respiratory, cardiovascular, digestive, urinary, and reproductive systems. In addition, imaging techniques such as x-ray radiography, CT scans, and MRI emphasizing structural relationships will introduce students to a clinical perspective of the structure of the human body. Course objectives include the acquisition of anatomical structural knowledge, the development of oral presentation and written communication skills, as well as the development of critical assessment of biomedical literature. Students will experience hands on learning with prosected cadavers. Learning is facilitated through lecture, team problem-based learning with clinical case presentations, and reflective observation exercises. Prerequisite: none.

BMS 5052: Human Anatomy II (2 credits)

A continuation of BMS 5051 Human Anatomy I, this course encompasses all aspects of human functional anatomy and clinical gross anatomy. This course will cover embryonic development and focus on the gross anatomy of all systems in the human body including musculoskeletal, neuronal, respiratory, cardiovascular, digestive, urinary, and reproductive systems. In addition, imaging techniques such as x-ray radiography, CT scans, and MRI emphasizing structural relationships will introduce students to a clinical perspective of the structure of the human body. Course objectives include the acquisition of anatomical structural knowledge, the development of oral presentation and written communication skills, as well as the development of critical assessment of biomedical literature. Students will experience hands on learning with prosected cadavers. Learning is facilitated through lecture, team problem-based learning with clinical case presentations, and reflective observation exercises. Prerequisite: none.

BMS 5060: Microbiology and Infectious Diseases (3 credits)

This course introduces graduate students to the fundamental principles of microbiology including microbial structure and diversity, microbial metabolism and pathogenicity, and classes and actions of antimicrobial drugs. This overview includes discussions of the interplay between the microbial pathogen and
the host immune response during the infectious process and the understanding of adaptations of the microbial pathogens to overcome the immune system and cause diseases in humans. Representative microorganisms belonging to each class of pathogen (bacterial, viral, fungal, and parasitic) are discussed. Other topics within the course will include emerging diseases, public health epidemiology, vaccines, antimicrobial resistance, and eradication of disease. Prerequisite: none.

**BMS 5070: Immunology (3 credits)**

This course is designed to introduce students to the foundational knowledge necessary to understand the normal and abnormal functions of the immune system. Immunological principles involving innate and adaptive immunity, host responses to pathogens, blood groups, immunopathology, immunodeficiencies, autoimmunity, vaccines, transplantation, classes and actions of immunologically active drugs, and targeted immunotherapies will be discussed. Didactic lectures, small group discussions, clinical case studies, designated reading assignments, and application sessions will be utilized in this course. In addition, there will be an interdisciplinary component to this course as students will also write critical reflections regarding team service-learning projects. Prerequisite: none.

**CRITICAL CARE (CRT)**

**CRT 4001: Critical Care/ICU Elective (variable credit)**

Intensive care medicine or critical care medicine is a branch of medicine concerned with the diagnosis and management of life-threatening conditions that may require sophisticated organ support and invasive monitoring. Intensive care is usually only offered to those whose condition is potentially reversible and who have a good chance of surviving with intensive care support. Prerequisite: Successful completion of all pre-clinical coursework and passing score on COMLEX Level 1.

**CRT 4100: Critical Care Medicine Pediatric Elective (variable credit)**

Pediatric Critical Care focuses on children from birth through the teen years who are critically ill and require careful monitoring in a pediatric intensive care unit (PICU). Treatment is generally provided for, but not restricted to children with unstable, life-threatening conditions; children on respirators; children with severe heart and lung disease; and children with brain trauma. Prerequisite: Successful completion of all pre-clinical coursework and passing score on COMLEX Level 1.

**DERMATOLOGY (DRM)**

**DRM 4001: Dermatology Elective (variable credit)**

Dermatology is the branch of medicine dealing with the skin, nails, hair, and its diseases. It is a specialty with both medical and surgical aspects. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**DRM 4100: Dermatopathology Elective (variable credit)**

Dermatopathology is a joint subspecialty of dermatology and pathology and to a lesser extent of surgical pathology that focuses on the study of cutaneous diseases at a microscopic and molecular level. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**EMERGENCY MEDICINE (EMR)**

**EMR 4001: Emergency Medicine Elective (variable credit)**

Emergency medicine, also known as accident and emergency medicine, is the medical specialty concerned with caring for undifferentiated, unscheduled patients with illnesses or injuries requiring immediate medical attention. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**FAMILY MEDICINE (FAM)**

**FAM 3001: Family Medicine Core I (1-8 Credits)**

The Family Medicine Externship consists of two four-week externships that will provide clinical exposure to various aspects of general ambulatory medicine. Students will gain knowledge and experience in the diagnosis and management of various acute and chronic medical conditions in the outpatient clinical setting. A broad spectrum of primary care preventive and diagnostic challenges will be experienced with patients of various ages, genders, and cultures. It is critical to note that the eight-week clinical externship experience is not intended to teach the student everything on the subject of Family Medicine or provide the student with clinical experience in every aspect of the discipline. The Clerkship Director and the assigned Preceptor may provide educational, guidance but it is each student’s individual responsibility to learn the subject content. Lifelong self-learning
is the ultimate goal and is expected in this core clinical externship. (8 credits total). Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**FAM 3002: Family Medicine Core II (1-8 Credits)**

The Family Medicine Externship consists of two four-week externships that will provide clinical exposure to various aspects of general ambulatory medicine. Students will gain knowledge and experience in the diagnosis and management of various acute and chronic medical conditions in the outpatient clinical setting. A broad spectrum of primary care preventive and diagnostic challenges will be experienced with patients of various ages, genders, and cultures. It is critical to note that the eight-week clinical externship experience is not intended to teach the student everything on the subject of Family Medicine or provide the student with clinical experience in every aspect of the discipline. The Clerkship Director and the assigned Preceptor may provide educational, guidance but it is each student’s individual responsibility to learn the subject content. Lifelong self-learning is the ultimate goal and is expected in this core clinical externship. (8 credits total). Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**FAM 4001: Family Medicine Elective (variable credit)**

Family medicine is a medical specialty devoted to comprehensive healthcare for people of all ages. The aim of family medicine is to provide personal, comprehensive, and continuing care for the individual in the context of the family and the community. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**FAM 4200: Occupational Medicine (variable credit)**

Occupational medicine (formerly industrial medicine) is the branch of medicine concerned with the maintenance of health in the workplace, including prevention and treatment of diseases and injuries, with secondary objectives of maintaining and increasing productivity and social adjustment in the workplace. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**FAM 4210: Sports Medicine Elective (variable credit)**

Sports medicine, also known as sport and exercise medicine, is a branch of medicine that deals with physical fitness and the treatment and prevention of injuries related to sports and exercise. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**GLOBAL HEALTH (GLB)**

**GLB 4001: Global Health Medicine Elective (variable credit)**

Global Health Medicine provides opportunities for medical students to better understand the depth, breadth, and interdisciplinary nature of global health challenges. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**GLB 4100: Global Health Emergency Medicine Elective (variable credit)**

Internationally-focused emergency medicine clerkship focusing on the care of undifferentiated, unscheduled patients with illnesses or injuries requiring immediate medical attention. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**GLB 4110: Global Health Family Medicine Elective (variable credit)**

International clerkship focused on providing healthcare to vulnerable populations worldwide. Careful attention may be given to the use of resources, knowledge, and experience of diverse societies to address health challenges as well as combining population-based health promotion and disease prevention with individual-led care. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**GLB 4120: Global Health Internal Medicine Elective (variable credit)**

Students can supplement their domestic clerkship experiences by traveling abroad. Opportunities to strengthen diagnostic skills, shift dependency on diagnostic tests, build a further sense of global health needs, provide a service to a community in need, and address the challenges of healthcare within an ethnically and culturally diverse area may occur when focusing on global health. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**GLB 4130: Global Health OBGYN Elective (variable credit)**

Global Health OBGYN clerkship will focus on engaging healthcare providers interested in the care of women in under-served
GLB 4140: Global Health Pediatric Elective (variable credit)

International clerkship focused on healthcare for children from birth through adolescence. Students may experience how diverse socio-cultural determinants affect healthcare and diseases in children that are uncommon in resource-rich areas. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

GLB 4150: Global Health Psychiatry Elective (variable credit)

Clerkship experience aiming to increase awareness of global mental health issues and social disparities. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

GLB 4160: Global Health Surgery Elective (variable credit)

Surgery has not always been considered a global health priority, but the global health community has recently recognized that surgical conditions form a significant burden of disease and have cost-effective interventions. Students may experience/dis- cuss first-hand the global burden of surgical disease, surgery in resource-poor settings, surgical workforce and task shifting, as well as the ethics of surgical care in resource-poor settings. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

GLB 4200: Global Health OMM Elective (variable credit)

Internationally-focused clerkship involving the using of hands to diagnose, treat, and prevent illness or injury. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

GLB 5031: Global Medicine I (2 credits)

According to the American Academy of Family Practice, Global Medicine is the new Family Medicine. The American population has been and continues to be a mixture of peoples from all over the world. Whether students work here or overseas, they must have a better understanding of how their patient’s health is affected by not only where they live, but also factors such as socioeconomic status, type of government and healthcare system available to them, and culture. The major goals of this course are to provide an intensive survey, exposure, and clinical education surrounding these multiple aspects of global medicine over three semesters and 90+ hours of classroom activity. It is hoped that these students who have applied, been accepted, and succeed in this program continue to serve in this capacity. This is just one component of the Global Medicine Track, which is designed to span 3 ½ years of formal osteopathic education and will include required international medical education experiences abroad and mixed cultural/public health experiences here in the United States. Prerequisite: acceptance into the Global Medicine Enrichment Track.
GLB 5032: Global Medicine II (2 credits)
This course is a continuation of GLB 5030 and will focus on furthering students' understanding of the global burden of disease in both developing and already developed countries. Students will learn about various global diseases and what program criteria are required in the successful elimination and/or eradication of diseases, through interactive group discussions and faculty/guest presentations. Medical diseases to be covered during this course will focus on pertinent communicable and non-communicable diseases such as Malaria, TB, HIV, parasitic and helminthis and arthropod diseases common in the developing world. Prerequisite: successful completion of GLB 5031.

GLB 5033: Global Medicine III (2 credits)
The focus of this course is to further strengthen students' understanding of the global burden of disease in both developing and already developed countries through the use of a variety of didactic presentations and clinical experiences. During this course, many guests will present specific diseases and their specific clinical experience in the global arena, and areas will be covered to insure a well-rounded and comprehensive exposure of global health. Emphasis will be on those topics not already covered in the normal curriculum and all will be presented from a global health perspective. Prerequisite: successful completion of GLB 5032.

GLB 5050: Global Medical Outreach (2 credits)
This is an RVUCOM medical outreach elective opportunity open to all first and second medical students. The goal of this course is to provide medical students a cross-cultural medical education experience through study and work outside of the United States in order to understand its challenges and apply the knowledge learned to their practice of medicine.

Students will be provided the opportunity to provide diagnostic and patient care services, participate in preventive and public health events, and work in areas such as minor surgery, pharmacy, triage, and clinical laboratory settings. Prerequisite: Students must be currently in good academic standing. Course may be repeated up to 2 times (4 credits maximum).

HUMANITIES (HUM)
HUM 5001: Graphic Novels and Medicine (1 credit)
This course has been designed to target the critical topic of humanism in medicine through a literary lens. Students will read a number of texts that will be discussed as a group. An informal structure, reminiscent of modern day book clubs, has been chosen to allow each student to deeply engage with the material in a safe and supportive environment. As such, student engagement will be critical.

The course is specialized in the sense that we will be focusing specifically on graphic novels. Graphic novels are similar to comic books in that they have panel-style illustrations that accompany text. However, while comic books are often released as periodicals, graphic novels tell an entire story in one volume. Additionally, they often have more detailed plots, reaching a deeper level of character development in a shorter amount of time.

HUM 5011: History of Medicine (1 credit)
This course series looks at the role of doctors, patients, diseases, and society’s reaction to them over time and asks how medicine, disease, and health have been motors for change. The course encourages students to understand how contemporary medicine differs from, but is indelibly marked by, its past. By directed use of primary and secondary sources this course introduces participants to the methods and tools of research in the history of medicine and encourages the critical analysis of differing historical interpretations, including the participant’s own.

Prerequisite: Students must be currently in good academic standing and have completed at least one semester of courses within an RVU program. Course may be repeated up to 4 times (4 credits maximum).

INTERNAL MEDICINE (INT)
INT 3001: Internal Medicine Core I (4 Credits)
The internal medicine clerkship serves as a focal point of third-year education. It is the backbone of training in medicine, and during this externship, the student will experience the breadth and diversity of disease. Students learn both the science and the art of medicine and how the two complement each other. Students will expand history and physical diagnosis skills, develop the ability to prioritize patient problems and generate a differential diagnosis, and implement patient management strategies and observe their effects. Internal medicine involves problem-solving, finding all the pieces of the puzzle and putting them together in a way that makes a coherent picture. It is also an opportunity to view the patient as a whole, to understand how a disease impacts not only on the patient’s health, but also on his or her emotional and social well-being. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
INT 3002: Internal Medicine Core II (4 Credits)

The internal medicine clerkship serves as a focal point of third-year education. It is the backbone of training in medicine, and during this externship, the student will experience the breadth and diversity of disease. Students learn both the science and the art of medicine and how the two complement each other. Students will expand history and physical diagnosis skills, develop the ability to prioritize patient problems and generate a differential diagnosis, and implement patient management strategies and observe their effects. Internal medicine involves problem-solving, finding all the pieces of the puzzle and putting them together in a way that makes a coherent picture. It is also an opportunity to view the patient as a whole, to understand how a disease impacts not only on the patient’s health, but also on his or her emotional and social well-being. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

INT 4220: Rheumatology Elective (variable credit)

Rheumatology is a branch of medicine devoted to the diagnosis and therapy of rheumatic diseases. Rheumatologists deal mainly with immune-mediated disorders of the musculoskeletal system, soft tissues, autoimmune diseases, vasculitides, and heritable connective tissue disorders. Many of these diseases are now known to be disorders of the immune system. Rheumatology is considered to be the study and practice of medical immunology. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

INT 4230: Cardiology Elective (variable credit)

Cardiology is a branch of medicine dealing with disorders of the heart as well as parts of the circulatory system. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

INT 4240: Hematology (variable credit)

Hematology is the branch of medicine concerned with the study of the cause, prognosis, treatment, and prevention of diseases related to blood. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

INT 4250: Hematology/Oncology Elective (variable credit)

The diagnosis, treatment, and prevention of blood diseases (hematology) and cancer (oncology) and research into them. Hematology-oncology includes such diseases as iron deficiency, anemia, hemophilia, sickle cell disease, the thalassemias, leukaemias, and lymphomas, as well as cancers of other organs. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

INT 4260: Oncology Elective (variable credit)

Oncology is a branch of medicine that deals with the prevention, diagnosis, and treatment of cancer. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

INT 4270: Pulmonology Elective (variable credit)

Pulmonology is a medical specialty that deals with diseases involving the respiratory tract. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
INT 4280: Endocrinology Elective (variable credit)
Endocrinology is a branch of biology and medicine dealing with the endocrine system, its diseases, and its specific secretions known as hormones. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

INT 4290: Gastroenterology Elective (variable credit)
Gastroenterology is the branch of medicine focused on the digestive system and its disorders. Diseases affecting the gastrointestinal tract, which include the organs from mouth into anus, along the alimentary canal, are the focus of this specialty. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

INT 4300: Geriatrics Elective (variable credit)
Geriatrics, or geriatric medicine, is a specialty that focuses on healthcare of elderly people. It aims to promote health by preventing and treating diseases and disabilities in older adults. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

INT 4310: Allergy/Immunology Elective (variable credit)
Allergy and immunology involves the management of disorders related to the immune system. These conditions range from the very common to the very rare, spanning all ages and encompassing various organ systems. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

INTERPROFESSIONAL EDUCATION (IPE)

IPE 1901: Introduction to Interprofessional Education Seminar I (1 Credit)
This two-semester course introduces the fundamental principles of interprofessional education including roles and responsibilities, contributions of individual team members, communication skills that ensure smooth transition of care to other team members, and the impact of teams on population health and quality of care. As part of the course design, learners from the Doctor of Osteopathic Medicine program will interact with students from other health profession programs within RVU and in collaboration with extramural programs, as available. Prerequisite: none.

IPE 1902: Introduction to Interprofessional Education Seminar II (1 Credit)
This two-semester course introduces the fundamental principles of interprofessional education including roles and responsibilities, contributions of individual team members, communication skills that ensure smooth transition of care to other team members, and the impact of teams on population health and quality of care. As part of the course design, learners from the Doctor of Osteopathic Medicine program will interact with students from other health profession programs within RVU and in collaboration with extramural programs, as available. Prerequisite: none.

IPE 2011: Grand Rounds (1 Credit)
This course engages second-year RVUCOM students and faculty with area (and occasionally remote) healthcare professionals representing diverse healthcare professions in interprofessional discussions of case studies consistent with primary care. The IPE Grand Rounds sessions are preceded by two foundational sessions in which students are taught how to compare healthcare professions on the basis of scope of practice and professional philosophies/values and compare healthcare practices (including prevention, therapeutics, diagnostics, and practice management) on the basis of benefit, safety, economy, and evidence. The IPE Grand Rounds sessions are 90-minute, moderated panel discussions of case studies in which healthcare providers from diverse healthcare professions discuss their respective approaches to diagnosing, treating, or preventing the condition(s) contained in the case. At the conclusion of this two semester course, students will have an enhanced understanding of how diverse healthcare professionals can collaborate in the delivery of coordinated, integrated, and cost effective primary care. Guest healthcare experts serving as panelists may participate face-to-face or via Skype. Student participation in the discussions is expected. Prerequisite: successful completion of Year 1 coursework.

IPE 5030: Comparative Healthcare Professions and Practices (1 Credit)
This investigational course will engage students and faculty from multiple higher education institutions representing diverse health science professions in asynchronous, online presentations and discussions of clinical case studies. Students will learn how to compare diverse healthcare professions on the basis of practice scope and professional philosophies. Students will also learn how diverse healthcare professions prevent, treat, and diagnose common health conditions. At the conclusion of this course, students will have an enhanced understanding of how diverse healthcare professionals can collaborate in the delivery of coordinated, integrated, and cost effective primary care. Additionally, at the conclusion of this course, the participating higher education institutions will be able to anticipate the institutional
requirement for inter-institutional online learning. Participants may include osteopathic, allopathic, naturopathic, Eastern Medicine, pharmacy, physician assistant, nursing, and other healthcare professions representatives. Special permission required.

LONG TERM CARE (LTC)
Utah Campus Only

LTC 5010: Long Term Care I (2 credits)
Long Term Care I is an enrichment course that will provide students with specialized training and experience in longitudinal medical care. With the rapidly growing aging population and increasing needs for long term care resources, there is a growing demand for physicians to lead in quality management of longitudinal care services. Students in this track will learn various, multi-faceted topics in continuity of Post-Acute, Long Term, End of Life, Palliative, and Hospice Care; be assigned to a carefully selected resident in these areas; and will actively participate in the care of his or her assigned patient. Students will develop a relationship with their patient, serving as health advocates for wellness and in turn, help their patients achieve the healthiest, highest quality of life possible in their current stage of life. Ultimately, students will be familiar with and able to incorporate and demonstrate their knowledge and skills to care for the elderly through the interactions with their patient, as well as in a future Primary Care practice or other specialty involving Geriatric, Palliative, Nursing Home, or Hospice Care. Prerequisite: acceptance into the Long Term Care Track.

LTC 5020: Long Term Care II (2 credits)
A continuation of LTC5010, Long Term Care II is an enrichment course that will provide students with specialized training and experience in longitudinal medical care. With the rapidly growing aging population and increasing needs for long term care resources, there is a growing demand for physicians to lead in quality management of longitudinal care services. Students in this track will learn various, multi-faceted topics in continuity of Post-Acute, Long Term, End of Life, Palliative, and Hospice Care; be assigned to a carefully selected resident in these areas; and will actively participate in the care of his/her assigned patient. Students will develop a relationship with their patient, serving as health advocates for wellness and in turn, help their patients achieve the highest quality of life possible in their current stage of life. Ultimately, students will be familiar with and able to incorporate and demonstrate their knowledge and skills to care for the elderly through the interactions with their patient, as well as in a future Primary Care practice or other specialty involving Geriatric, Palliative, Nursing Home, or Hospice Care. Prerequisite: acceptance into the Long Term Care Track.

MEDICINE – GENERAL (MED)

MED 3001: Fundamentals of Clinical Medicine (2 credits)
This course provides information on the policies and procedures that will govern the clinical years: the rights, responsibilities and duties of the students, faculty, and teaching facilities. The course also includes an introduction to New Innovations (software that tracks third- and fourth-year externships), professionalism, the evaluation process, overview of subject exams and study skills, financial aid review, and global and rural track requirements. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework.

MED 4200: Pain Management Elective (variable credit)
Pain management can be simple or complex, depending on the cause of the pain. This elective provides an opportunity for students to learn various, multi-faceted approaches to pain management: interventional procedures, medication management, physical therapy or chiropractic therapy, psychological counseling and support, acupuncture and other alternative therapies, and referral to other medical specialists. All of these skills and services are necessary because pain can involve many aspects of a person's daily life. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4210: Disaster Medicine Elective (variable credit)
Disaster medicine is the area of medical specialization serving the dual areas of providing healthcare to disaster survivors and providing medically related disaster preparation, disaster planning, disaster response, and disaster recovery leadership throughout the disaster life cycle. Disaster medicine specialists provide insight, guidance, and expertise on the principles and practice of medicine both in the disaster impact area and healthcare evacuation receiving facilities to emergency management professionals, hospitals, healthcare facilities, communities, and governments. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4220: Nutrition Elective (variable credit)
Focus during this course will be on the development of skills in assessing, planning, implementing, and evaluating nutritional care for patients. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
MED 4230: Physical Medicine and Rehabilitation Elective *(variable credit)*

Physical medicine and rehabilitation, also known as physiatry, is a branch of medicine that aims to enhance and restore functional ability and quality of life to those with physical impairments or disabilities. Physiatrists specialize in restoring optimal function to people with injuries to the muscles, bones, ligaments, or nervous system. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4240: Sleep Study Elective *(variable credit)*

The medical term for this study is polysomnogram, which is a noninvasive, pain-free procedure that usually requires spending a night or two in a sleep facility. During a polysomnogram, a sleep technologist records multiple biological functions during sleep, such as brain wave activity, eye movement, muscle tone, heart rhythm, and breathing via electrodes and monitors placed on the head, chest, and legs. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4250: EKG Elective *(variable credit)*

Students will be given the opportunity to expand their understanding of electrocardiograms (EKG or ECG). EKG/ECG reviewing, analyzing, and reporting will be covered. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4260: Alternative Medicine Elective *(variable credit)*

Alternative medicine is a term that describes medical treatments that are used instead of traditional (mainstream) therapies. Some examples of alternative medicine include acupuncture, chiropractic medicine, energy therapies, magnetic field therapy, therapeutic touch, herbal medicine, and ayurvedic medicine. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4270: Integrative Medicine Elective *(variable credit)*

Integrative Medicine is healing-oriented medicine that takes account of the whole person, including all aspects of lifestyle. It emphasizes the therapeutic relationship between practitioner and patient, is informed by evidence, and makes use of all appropriate therapies. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4280: Hospice/Palliative Care Elective *(variable credit)*

Palliative care is specialized medical care for people with serious illness. This type of care is focused on providing relief from the symptoms and stress of a serious illness. The goal is to improve quality of life for both the patient and the family. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
MED 4290: Pharmacology Elective *(variable credit)*

Pharmacology is the branch of biology concerned with the study of drug action, where a drug can be broadly defined as any man-made, natural, or endogenous (from within body) molecule that exerts a biochemical or physiological effect on the cell, tissue, organ, or organism. More specifically, it is the study of the interactions that occur between a living organism and chemicals that affect normal or abnormal biochemical function. If substances have medicinal properties, they are considered pharmaceuticals. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4300: Podiatry Elective *(variable credit)*

Podiatry is a branch of medicine devoted to the study, diagnosis, and medical and surgical treatment of disorders of the foot, ankle, and lower extremity. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4310: Public Health Elective *(variable credit)*

Public health is the science and art of preventing disease, prolonging life, and promoting human health through organized efforts and informed choices of society, public and private organizations, communities, and individuals. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4320: Aerospace Medicine Elective *(variable credit)*

Aviation medicine, also called flight medicine or aerospace medicine, is a preventive or occupational medicine in which the patients/subjects are pilots, aircrews, or astronauts. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4500: Overview of Medicine *(variable credit)*

This course is designed to provide the student with the opportunity to prepare independently for COMLEX Level 1 and/or COMLEX Level 2 examinations. Prerequisite: Clinical Education department approval required.

MED 4510: Healthcare Quality Improvement Elective *(variable credit)*

Students have the opportunity to complete a externship focusing on healthcare quality, patient safety, and population medicine. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4520: Lifestyle Medicine Elective *(variable credit)*

Lifestyle medicine is a scientific approach to decreasing disease risk and illness burden by utilizing lifestyle interventions such as nutrition, physical activity, stress reduction, rest, smoking cessation, and avoidance of alcohol abuse. Lifestyle medicine is the recommended foundational approach to preventing and treating many chronic diseases. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4530: Medical Spanish Elective *(variable credit)*

Students will participate in Spanish language immersion programs with a specific focus on medical Spanish. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

MED 4540: Business in Medicine Elective *(variable credit)*

Students will focus on the integration of business practices within the medical community. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
MED 5013: Medical Spanish III (1 credit)
This course will introduce the practical language skills used in clinical settings to assist with the interaction of Spanish-speaking patients. Emphasis will be placed on an advanced level of common medical vocabulary that healthcare workers may encounter in the workplace. Prerequisite: successful completion of one semester in current degree program and fluency placement exam.

MILITARY (MIL)

MIL 4001: Military Training Elective (variable credit)
Students with a military affiliation that requires training during the clinical years will be provided the opportunity to participate, as needed. Prerequisite: Clinical Education department approval required.

MIL 5041: Military Medicine I (1 credit)
Military Medicine I will incorporate immersion-based reality training, surgical simulation, information sessions, and experiences related to Medical Corps Officer military obligations, leadership/discipline, harsh military environments/field exercises, disaster stabilization evacuation, and triage in combat environments on land, sea, and air. This course will also function in conjunction with COM enrichment pathway courses where synergies are evident and possible.

Students may also have the opportunity to liaison with leaders/military officers at U.S. posts, bases, medical centers, hospitals, and other sites in order to achieve the goals and objectives of the track. Expert guests, military officers, and appropriate civilian physician/teachers will be engaged and hosted both on and off campus.

MIL 5042: Military Medicine II (1 credit)
A continuation of MIL 5041 Military Medicine I. Prerequisite: Military Medicine Enrichment pathway member.

MIL 5043: Military Medicine III (1 credit)
A continuation of MIL 5042 Military Medicine II. Prerequisite: Military Medicine Enrichment pathway member.

NEUROLOGY (NEU)

NEU 4001: Neurology Elective (variable credit)
Neurology is a branch of medicine focusing on disorders of the nervous system. Neurology deals with the diagnosis and treatment of all categories of conditions and disease involving the central and peripheral nervous systems, including their coverings, blood vessels, and all effector tissue, such as muscle. Neurological practice relies heavily on the field of neuroscience, which is the scientific study of the nervous system. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

NEU 4100: Neurosurgery Elective (variable credit)
Neurosurgery, or neurological surgery is the medical specialty concerned with the prevention, diagnosis, surgical treatment, and rehabilitation of disorders that affect any portion of the nervous system including the brain, spinal cord, peripheral nerves, and cerebrovascular system. Neurosurgery is often colloquially referred to as "brain surgery" though neurosurgeons often operate on the spinal cord and peripheral nervous system as well. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

NEU 4200: Critical Care Medicine Neurology Elective (variable credit)
Neurological Intensive Care is one of the newest and fastest-growing specialties in medicine today. Neuro–ICUs uniquely bring together specially trained physicians and nurses armed with advanced technology to perform clinical and basic science research on patients in a critical care setting to gain better understanding of their critical illnesses and to develop improved and innovative treatments for these conditions. Advanced monitoring techniques used in neuro–ICUs allow the identification of critical problems before permanent neurologic injury occurs. A neuro–ICU also provides many specialized therapeutic options for patients with serious neurologic illness. Management of patients in a neuro–ICU is essential to achieve a favorable outcome. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

NEU 4210: Alzheimer’s/Dementia Elective (variable credit)
Students will evaluate patients with dementia and other geriatric neurological issues. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
OPHTHALMOLOGY (OPH)

OPH 4001: Ophthalmology Elective *(variable credit)*

Ophthalmology is the branch of medicine that deals with the anatomy, physiology, and diseases of the eyeball and orbit. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

ORTHOPEDICS (ORT)

ORT 4100: Orthopedic Surgery Elective *(variable credit)*

Orthopedic surgery or orthopedics is the branch of surgery concerned with conditions involving the musculoskeletal system. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

ORT 4110: Pediatric Orthopedic Surgery Elective *(variable credit)*

Pediatric Orthopedic surgery focuses on the diagnostic, treatment, and management of children’s musculoskeletal programs including, but not limited to, limb and spine deformities, gait abnormalities, broken bones, and bone or joint infections and tumors. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

ORT 4120: Orthopedic Trauma Surgery Elective *(variable credit)*

Orthopedic trauma is a branch of orthopedic surgery specializing in problems related to the bones, joints, and soft tissues (muscles, tendons, ligaments) of the entire body following trauma. The main goal of this specialized area in orthopedics is the healing of the fractured bones, as well as restoring the anatomic alignment of the joint surfaces to allow for recovery and return to maximum function of the injured body part. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

OSTEOPATHIC MEDICINE (OM)

OM 1003: Cardiovascular System I *(4 Credits)*

The Cardiovascular System is an intensive, multidisciplinary course structured with the goal of enabling the student to obtain the requisite knowledge necessary to understand the normal structure and function of the cardiovascular system. It is designed to provide the student with an overview of the cardiovascular system, including the biomedical science that underlies disorders of the heart and circulatory system. The structural content of this course utilizes lectures, human cadaver dissection, reading assignments, Designated Student Assignments (DSA), and Clinical Integrative Sessions (CIS). Prerequisite: none.

OM 1004: Respiratory System I *(2 Credits)*

The Respiratory System I course encompasses the macro and micro-structure of the respiratory system and the basics of respiratory function, including Perfusion and Diffusion, Ventilation, Gas Transport, Mechanics of Breathing, Acid/Base Balance, Control of Breathing, and Pulmonary Defense Mechanisms. Each topic area is examined individually then integrated into case studies to illustrate pulmonary function. By the conclusion of the course, the student will be able to relate how the lung and chest function to control oxygen delivery to organs and carbon dioxide elimination, and will be able to identify common respiratory diseases based on laboratory findings and lung function. Prerequisite: none.

OM 1006: Endocrine/Reproductive System I *(4 Credits)*

The Endocrine/Reproductive System I course is designed to teach the basic principles of hormone secretion and action related to the major endocrine structures and reproductive and systemic tissues. Students are expected to be familiar with the structure and function of the major endocrine glands and the action of the major hormones secreted. This course will focus on the anatomy, histology, and physiology of endocrine and reproductive systems as a basis for understanding the pathological conditions resulting from endocrine dysfunction. Prerequisite: none.

OM 1007: Gastrointestinal System I *(3 Credits)*

The Gastrointestinal System course is an intensive, multidisciplinary course designed to provide a basic biomedical science foundation for students. This course will provide the requisite knowledge necessary to understand the normal structure and function of the entire gastrointestinal and hepatobiliary system. The entire course will be devoted to an intensive look at basic physiological principles involved in digestion, absorption, secretion, and gastrointestinal motility, including the hepatobiliary and pancreatic systems. Emphasis will be also on the GI structure including embryology, histology, microscopic, and gross anatomy. It will provide the students with an in-depth knowledge of normal structure and function of GI tract and hepatobiliary system; regulation of mechanical and chemical digestive processes of the gastrointestinal (GI) tract and the accessory organs of digestion;
the nervous and hormonal mechanisms regulating control of secretion in the digestive organs; and absorption and elimination of food. The goal of this course is to provide the students with knowledge of how GI structure (embryology, histology, microscopic, and gross anatomy) integrates with function (physiologic mechanisms of GI motility, digestion and absorption, and liver and pancreatic function). Students will then be able to describe the mechanisms contributing to absorption of nutrients into the body and apply their basic medical science knowledge to clinical problem-solving. Prerequisite: none.

OM 1012: Molecular and Cellular Mechanisms (4 Credits)

This course is a trans-disciplinary course that incorporates the fundamental aspects of biochemistry, molecular biology, cell biology, and genetics. It is presented using lectures, clinical correlations, medical vignettes, directed assignments, and integrated learning sessions. The objective of the course is to promote student learning of the biochemical, molecular, and cellular mechanisms underlying normal physiology and metabolism, thus providing a foundation for understanding disease processes. The course provides a foundation in cellular and molecular biology, including cell structure, cellular macromolecules, DNA and RNA structure and function, protein synthesis, and regulation of gene expression, energetics, metabolism, regulation, organization and function of cellular organelles, flow of genetic information, and the regulation of selected cell activities. Prerequisite: none.

OM 1013: Musculoskeletal System I (7 Credits)

The Musculoskeletal System course is multidisciplinary in nature. It is structured to enable the student to obtain the requisite knowledge necessary to understand the normal structure and function of the musculoskeletal system, as well as the biomedical science that underlies disorders associated with skeletal muscle, bone, joints, and peripheral nerves. The course utilizes lectures, human cadaver dissection laboratories, reading assignments, Designated Student Assignments (DSA), Basic Science Correlations (BSC), and Clinical Integrative Sessions (CIS). Prerequisite: none.

OM 1014: Neuroscience System I (8 Credits)

The Neuroscience System course presents the student with an intense consideration of the Central Nervous System (Brain and Spinal Cord) and Head and Neck anatomy. The Neuroanatomy portion of this course addresses the following topics in integrated fashion: Neuroanatomy, Neurophysiology, Neurohistology, Neuroembryology, and Neuroradiology. The study of Neuroanatomy and Head and Neck anatomy are bridged by the cranial nerves which begin in the central nervous system and distribute throughout the head and neck. Concepts in this course are presented utilizing traditional/clinical lectures, human cadaver/brain dissection laboratories, and reading assignments. These concepts are reinforced by numerous clinically-based lectures and Clinical Integrative Sessions (CIS), which emphasize the importance of integrating basic neuroanatomical knowledge with the clinical symptoms presented by a neurological deficit. Prerequisite: none.

OM 1015: Osteopathic Principles and Practice I (3 credits)

This course is designed to provide the student with a fundamental understanding of the principles and philosophies of osteopathic medicine. This understanding will allow a foundation for students to build osteopathic knowledge and provide every student the chance to offer their patients an additional approach to conventional medical care. This course will also emphasize the current biomechanical, functional, and physiologic philosophies providing a foundation for continued future education and development within the art and science of osteopathy.

All seven core competencies of the Osteopathic Profession are addressed in a variety of ways in the course. In addition, medical knowledge, patient care, interpersonal communication skills, and professionalism are woven into the labs during hands on interactions with faculty members and fellow students. The course is designed to be foundational in knowledge, with clinical application emphasized when appropriate, to help the students learn not only the lexicon of OMM but also its application in medical care. The students are allowed time during and after lab to practice and master what has been taught and demonstrated. Prerequisite: successful completion of all Year 1 coursework.

OM 1016: Osteopathic Principles and Practice II (2 credits)

This course is a continuation of OM 1015 Osteopathic Principles and Practices I and is designed to provide the student with a fundamental understanding of the principles and philosophies of osteopathic medicine. This understanding will allow a foundation for students to build osteopathic knowledge and provide every student the chance to offer their patients an additional approach to conventional medical care. This course will also emphasize the current biomechanical, functional, and physiologic philosophies providing a foundation for continued future education and development within the art and science of osteopathy.

All seven core competencies of the Osteopathic Profession are addressed in a variety of ways in the course. In addition, medical knowledge, patient care, interpersonal communication skills, and professionalism are woven into the labs during hands on interactions with faculty members and fellow students. The course
is designed to be foundational in knowledge, with clinical application emphasized when appropriate, to help the students learn not only the lexicon of OMM but also its application in medical care. The students are allowed time during and after lab to practice and master what has been taught and demonstrated. Prerequisite: successful completion of all Year 1 coursework.

OM 1019: Principles of Clinical Medicine I (3 credits)

The course is the first of four PCM courses designed to provide the student with the knowledge and educational experiences that will allow the student to develop active clinical thinking skills, acquire medical and social knowledge, develop the skills needed to complete a comprehensive or focused history and physical examination, demonstrate documentation and order-writing skills, demonstrate competency and the clinical application of basic medical procedures, and develop critical clinical thinking. The course content will be divided into several areas that include history and physical exam, skills laboratories and small group discussions, basic medical procedures, doctor-patient relationship skills, ethics, community medicine, clinical thinking and problem solving, and standardized patient experiences. Prerequisite: none.

OM 1020: Principles of Clinical Medicine II (3 credits)

The course is the second of four PCM courses designed to provide the student with the knowledge and educational experiences that will allow the student to develop active clinical thinking skills, acquire medical and social knowledge, develop the skills needed to complete a comprehensive or focused history and physical examination, demonstrate documentation and order-writing skills, demonstrate competency and the clinical application of basic medical procedures, and develop critical clinical thinking. The course content will be divided into several areas that include history and physical exam, skills laboratories and small group discussions, basic medical procedures, doctor-patient relationship skills, ethics, community medicine, clinical thinking and problem solving, and standardized patient experiences. Prerequisite: none.
OM 1023: Hematology and Immunology I (3 credits)

This course is multidisciplinary, emphasizing the foundational knowledge necessary to understand the normal function of the immune system, the red cell, and coagulation. It is designed to provide the student with an overview of the human immune system, including the aberrant immunological processes that lead to immunopathogenesis. This course will utilize lectures, designated reading assignments, and clinical integrative case discussions. Prerequisite: none.

OM 1040: Medical Ethics (1 Credit)

Medical Ethics is a yearlong competency-based course that applies ethical principles to medical practice, healthcare policy, and biomedical research. Participants learn to recognize ethical issues; engage in moral reasoning; and make decisions that respect the rights of patients, fulfill the obligations of physicians, and increase the quality, safety, and availability of healthcare. The emphasis of this course centers around the philosophy and principles underlying medical ethics, medical decision making, research ethics, physician-patient relationships and end-of-life ethical issues. Graded pass/fail. Prerequisite: none.

OM 1070: Introduction to Evidence-Based Medicine (1 Credit)

Introduction to Evidence Based Medicine is a yearlong competency-based course that fosters information literacy and evidence-based practice. This course develops student doctors’ skills and abilities to determine a need for, locate, access, evaluate, and present medical information. Designated student assignments and clinical integration sessions introduce standards, resources, strategies, and technologies that are then applied by small groups in developing and presenting a clinical case in a capstone activity. Graded pass/fail. Prerequisite: none.

OM 1080: Transition to Clinical Medicine (4 Credits)

This course is a foundational introduction to mechanisms of disease (and some therapy) and will serve as a means to migrate from acquisition of basic scientific knowledge to utilization of such knowledge in understanding disease processes. During this course, there will be a transition towards clinical thinking while integrating the scientific foundation that explains the clinical manifestations of the disorders covered. The course consists variably of lectures, student designated (and scheduled) self-study (DSA), clinical contextual integrations, and case-based interactive learning sessions (CIS). Broad topic areas to be emphasized include cellular damage, inflammation, healing and tissue repair, immunopathology, pathophysiology of hemodynamic and hemostatic disorders, genetic diseases, mechanisms of neoplasia, medical microbiology and its applications in infectious disease, environmental and nutritional disorders, an overview of diseases of infancy and childhood, and introductory pharmacology of antimicrobials. Throughout the courses, the language of medicine is emphasized in conjunction with etiologic mechanisms, clinical features, differential diagnoses, and morphology. In addition, important aspects of clinical laboratory involvement and data utilization in the diagnosis of disease are discussed, as appropriate. It is expected that students in this course will function as mature adult learners and will seek all the knowledge necessary from any and all sources available. Prerequisite: none.

OM 1090: Microbes and Infectious Diseases (3 Credits)

This course is a foundational introduction to pathogens, pathogenic mechanisms, and infectious diseases (and some therapy). This course covers bacteria, viruses, fungi, parasites, and prions in their roles as infectious agents. The course requires, and builds on, previous knowledge of immunology and how it relates to the body’s reactions to pathogens. It will serve as a means to migrate from acquisition of basic scientific knowledge of pathogens to utilization of such knowledge in understanding infectious disease processes. We will start with basic concepts of infections, progress to learning the microbiology of specific pathogens, learn how to identify and test for these pathogens, and conclude with the clinical implications of the discussed pathogens. The course consists variably of live and video lectures, student designated (and scheduled) self-study (DSA), clinical contextual integrations, and case-based interactive learning sessions (CIS). Students will understand the structure, pathogenicity, laboratory findings, and clinical aspects of numerous pathogens. Throughout the course, the language of medicine is emphasized in conjunction with etiologic mechanisms, clinical features, differential diagnoses, and morphology. This course includes introductory pharmacology of antimicrobials in order to facilitate discussion of infectious disease diagnosis and treatment. In addition, important aspects of clinical laboratory involvement and data utilization in the diagnosis of disease are discussed as appropriate. It is expected that students in this course will function as mature adult learners and will seek all the knowledge necessary from any and all sources available. Prerequisite: none.

OM 2001: Musculoskeletal System II (3 Credits)

The Musculoskeletal System II course is designed to deliver pertinent topics of diseases of skin, bone, joint, soft tissue, peripheral nerve, and skeletal muscle in a multidisciplinary format. Neuromuscular physiology will be reviewed at the beginning of the course. Pathological concepts of disease presentation, pathophysiology, and outcomes will be discussed. Anti-inflammatory and neuromuscular pharmacology will be integrated into the
therapy of these disorders. There will be a clinical integration of rheumatologic disorders, gout and crystal joint disease, dermatology connective tissue disease, and vasculitides. Prerequisite: successful completion of all Year 1 coursework.

OM 2002: Neuroscience System II (5 Credits)

This course is designed to use the neuroanatomy and neurophysiology basic science information presented in Year 1 to underpin a comprehensive overview of neuropathology, including both non-neoplastic and neoplastic diseases. Neuroanatomy, neurophysiology, and clinical neurology are integrated to build the clinical framework necessary to succeed during Year 3 and Year 4 clinical externships. Relevant and necessary neurohistology, neuroembryology, and neuroradiology are discussed. Prerequisite: successful completion of all Year 1 coursework.

OM 2003: Hematologic/Lymphatic System II (3 Credits)

This course is designed to provide the student with a comprehensive overview of hematology and hematopathology. All blood cell lines will be discussed in the context of the pathophysiology and pathology of both non-neoplastic and neoplastic diseases. Specifically, the course will begin with sessions on hematopoiesis, followed by discussions of red cell disorders and the clinical work-up of anemia. Common diagnostic tests and their interpretation will be integrated into this initial content. Information regarding white cell disorders then will be presented, including non-neoplastic disorders and neoplastic disorders such as leukemias, non-Hodgkin lymphomas, and Hodgkin lymphoma. An in-depth treatment of bleeding and hypercoagulable disorders will be provided. In addition, students will be exposed to concepts related to solid organs of the hematologic/lymphatic system, the spleen and thymus, transfusion medicine, the molecular biology of red cells, and pertinent pharmacologic information related to the treatment of anemia and the use of pharmacologic agents aimed at modulating the immune system, coagulation, fibrinolysis, and neoplastic diseases. Prerequisite: successful completion of all Year 1 coursework.

OM 2005: Cardiovascular System II (5 Credits)

The Cardiovascular System II course is an intensive multidisciplinary course structured with the goal of enabling the student to obtain the requisite knowledge necessary to understand the pathophysiology, pharmacology, and clinical medicine of the cardiovascular system. After completion of the course, each student will be able to recognize the presenting signs and symptoms of various cardiovascular diseases and be able to ascertain and differentiate the various entities involved in cardiac health and disease, with an eye to treatment of various cardiovascular disorders. Various aspects of evaluating cardiac patients will be presented, with special emphasis on interpretation of EKGs. Prerequisite: successful completion of all Year 1 coursework.

OM 2006: Respiratory System II (4 Credits)

The Respiratory System II course will concentrate on the pathology, pathophysiology, diagnosis, and treatment of major disorders of the lungs, and the relationship multisystem diseases have with the pulmonary system. Student activities will concentrate on the fundamental obstructive, restrictive, and infectious diseases. Pulmonary emergencies and primary and secondary malignancies will be presented, with an emphasis on diagnostic techniques and treatment methodologies. Prerequisite: successful completion of all Year 1 coursework.

OM 2008: Endocrine System II (3 Credits)

The Endocrine System II course will review the basic principles of endocrine hormone signaling, storage, secretion, and action. Abnormalities in normal endocrine physiology will be discussed through pathophysiologic correlations and clinical discussions. The course will emphasize the hypothalamic/pituitary complex, thyroid, parathyroid, adrenal, andendocrine functions of the pancreas. Students are expected to be familiar with the hypofunctioning or hyperfunctioning of key endocrine glands, the structure, secretion, and action of endocrine hormones (peptide, steroid and thyroid hormones), and the major clinical endocrine disorders related thereto. Pharmacology as it relates to hormone secretion and action will be discussed, as will pharmacological treatment of glandular hormonal under and over production. Emphasis will be placed on understanding the pathophysiology of each endocrine gland with the intent to use the general principles of endocrine pathophysiology and pharmacology to effectively diagnose, manage, and care for patients with endocrine disorders. Prerequisite: successful completion of all Year 1 coursework.

OM 2009: Gastrointestinal System II (4 Credits)

The course covers the gastrointestinal system, including the hepatobiliary and pancreatic systems. After a brief review of normal physiologic principles and processes, the initial two weeks are devoted to a thorough study of gastrointestinal pathophysiology. Clinical-pathological correlations are emphasized. The remainder of the course is devoted to the application of the integrated pathophysiologic principles in clinical settings under the guidance of appropriate clinical faculty. Material that has been previously covered is integrated into clinical application and used to build the clinical framework needed to be a competent osteopathic physician. Emphasis is placed on understanding the pathophysiology and the ability to correlate and use basic principles in the management of gastrointestinal disorders. Clinical discussions and lectures focus on disease states the students will encounter.
OM 2013: Renal System II (5 Credits)

The first week of the Renal System II course will focus on the general principles of pharmacology (i.e. pharmacodynamics, pharmacokinetics, drug biotransformation, and clinical trials). Also included in this first week is a basic review of autonomic pharmacology and subsequent introduction to the drugs that act on the autonomic nervous system. The remainder of the Renal System II course is structured using a fundamental template common to all second-year system courses. The Renal System II course will contain a brief review of renal medical physiology, followed by presentations of pathologic entities of the renal system. Clinically-focused topics are discussed during the final week of the course. Pharmacology topics as they relate to the renal system will be presented throughout the course when appropriate. Broad topics to be emphasized include the wide spectrum of physiologic functions of the human kidney, pathologic renal entities (e.g. glomerulopathy, glomerulonephritis, tubulointerstitial disorders, infections, toxic and ischemic insults, vascular disease, and neoplasms), drugs used in the treatment of hypertension, and clinical aspects of the above-mentioned disorders. Key aspects of clinical laboratory test ordering and data utilization in the diagnosis and monitoring of kidney and urinary tract disease are discussed. Prerequisite: successful completion of all Year 1 coursework.

OM 2014: Reproductive System II (3 Credits)

This course will cover female and male health-related reproductive issues. Following a review of normal reproductive physiology, pathophysiologic perspectives of the female genital tract, breasts, and pregnancy are presented. The approach to the gynecologic patient, including examination and diagnostic procedures, are discussed. All phases of pregnancy, including antepartum, labor/delivery, and post-partum care, are reviewed in concert with complications and procedures of each phase of pregnancy. Infectious and neoplastic pathology of the male genital tract is covered. Pharmacology as it relates to both female and male reproductive systems will be integrated throughout the course. Clinical correlations will focus on the pathology that students will encounter on clinical externships and throughout their medical career. Prerequisite: successful completion of all Year 1 coursework.

OM 2016: Osteopathic Principles and Practices III (3 Credits)

This course is a continuation of OM 1016 Osteopathic Principles and Practices II and is designed to provide the student with a fundamental understanding of the principles and philosophies of osteopathic medicine. This understanding will allow a foundation for students to build osteopathic knowledge and provide every student the chance to offer their patients an additional approach to conventional medical care. This course will also emphasize the current biomechanical, functional, and physiologic philosophies providing a foundation for continued future education and development within the art and science of osteopathy.

All seven core competencies of the Osteopathic Profession are addressed in a variety of ways in the course. In addition, medical knowledge, patient care, interpersonal communication skills, and professionalism are woven into the labs during hands on interactions with faculty members and fellow students. The course is designed to be foundational in knowledge, with clinical application emphasized when appropriate, to help the students learn not only the lexicon of OMM but also its application in medical care. The students are allowed time during and after lab to practice and master what has been taught and demonstrated. Prerequisite: successful completion of all Year 1 coursework.

OM 2017: Osteopathic Principles and Practices IV (2 Credits)

This course is a continuation of OM 2016 Osteopathic Principles and Practices III and is designed to provide the student with a fundamental understanding of the principles and philosophies of osteopathic medicine. This understanding will allow a foundation for students to build osteopathic knowledge and provide every student the chance to offer their patients an additional approach to conventional medical care. This course will also emphasize the current biomechanical, functional, and physiologic philosophies providing a foundation for continued future education and development within the art and science of osteopathy.

All seven core competencies of the Osteopathic Profession are addressed in a variety of ways in the course. In addition, medical knowledge, patient care, interpersonal communication skills, and professionalism are woven into the labs during hands on interactions with faculty members and fellow students. The course is designed to be foundational in knowledge, with clinical application emphasized when appropriate, to help the students learn not only the lexicon of OMM but also its application in medical care. The students are allowed time during and after lab to practice and master what has been taught and demonstrated. Prerequisite: successful completion of all Year 1 coursework.

OM 2018: Principles of Clinical Medicine III (4 credits)

The course is the third of four PCM courses designed to provide the student with the knowledge and educational experiences that will allow the student to develop active clinical thinking skills, acquire medical and social knowledge, develop the skills needed
to complete a comprehensive or focused history and physical examination, demonstrate documentation and order-writing skills, demonstrate competency and the clinical application of basic medical procedures, and develop critical clinical thinking. The course content will be divided into several areas that include history and physical exam, skills laboratories and small group discussions, basic medical procedures, doctor-patient relationship skills, ethics, community medicine, clinical thinking and problem solving, and standardized patient experiences. Prerequisite: successful completion of all Year 1 coursework.

OM 2019: Principles of Clinical Medicine IV (3 Credits)

The course is the final PCM course in the four-course series designed to provide the student with the knowledge and educational experiences that will allow the student to develop active clinical thinking skills, acquire medical and social knowledge, develop the skills needed to complete a comprehensive or focused history and physical examination, demonstrate documentation and order-writing skills, demonstrate competency and the clinical application of basic medical procedures, and develop critical clinical thinking. The course content will be divided into several areas that include history and physical exam, skills laboratories and small group discussions, basic medical procedures, doctor-patient relationship skills, ethics, community medicine, clinical thinking and problem solving, and standardized patient experiences. Prerequisite: successful completion of all Year 1 coursework.

OM 2020: Psychiatry System (2 Credits)

Psychiatry System is structured to expose students to psychiatric and behavioral medical issues commonly seen in practice. The psychiatric component of the course will focus on mental health disorders such as depression, bipolar disorder, mania, psychosis, anxiety, and drug abuse. Symptoms of these disorders will be explored in detail with a heavy emphasis on the available pharmacologic treatments. The behavioral component will explore issues related to human development and abnormal behavior such as paraphilias and eating disorders. Prerequisite: successful completion of all Year 1 coursework.

OM 2040: Advanced Medical Ethics (1 Credit)

Advanced Medical Ethics is a year-long competency-based course that applies ethical principles to medical practice, healthcare policy, and biomedical research. Participants learn to recognize ethical issues; engage in moral reasoning; and make decisions that respect the rights of patients, fulfill the obligations of physicians, and increase the quality, safety, and availability of healthcare. This course utilizes and builds on the principles learned in the Introduction to Medical Ethics. Areas of emphasis are cross-cultural ethics, transplantation ethics, ethics in medical economics, ethical issues in the specialties of surgery, pediatrics, OB/GYN, psychiatry and genomic medicine, ethical issues in public health and healthcare information, and ethical issues that students and house staff face during their clinical externships. Graded pass/fail/honors. Prerequisite: successful completion of all Year 1 coursework.

OM 2070: Pre-Clinical Capstone (2 credits)

The Pre-Clinical Capstone course is a required, structured course that provides an opportunity for student synthesis and integration of all pre-clinical content and concepts. It is designed to facilitate student self-assessment of key concepts in biomedical disciplines and development of knowledge in areas of weakness. This is accomplished through a required full-length practice board exam at the beginning of the course that allows for student identification of knowledge gaps. Subsequently, students develop and submit a required study plan aimed at addressing content/subject deficits. After identification of areas of concentration for study, students complete required practice item banks with concentration on those areas identified for improvement and then complete a required full-length practice board exam to gauge their progress. Prerequisite: successful completion of all Year 1 and 2 coursework.

OSTEOPATHIC MANIPULATIVE MEDICINE (OMM)

OMM 4001: Osteopathic Manipulative Medicine Elective (variable credit)

Osteopathic manipulative treatment, or OMT, is hands-on care that involves using the hands to diagnose, treat, and prevent illness or injury. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

OMM 4901: Osteopathic Manipulative Medicine Fellowship (variable credit)

This fellowship emphasizes an anatomic and physiologic understanding and application of OPP clinically, as well as the academic teaching experience in osteopathic principles and procedures. Prerequisite: Students must be accepted into the OMM fellowship to register for this experience.
OSTEOPATHIC PRINCIPLES AND PRACTICE (OST)

OST 3010: OPP Clinical Integration (1 credit)

This course builds upon the foundation of the principles and philosophies of osteopathic medicine established during the Osteopathic Principles and Practices I-IV courses. The goal of this course is to expand students’ osteopathic knowledge base and apply new and previously learned techniques to the overall care of patients. The format will include online modules and associated quizzes that correspond to core externships as well as interactive OPP sessions. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

OST 4010: Advanced OPP Clinical Integration (1 credit)

This course builds upon the foundation of the principles and philosophies of osteopathic medicine established during the first three years of OPP courses. This course will teach students how to apply osteopathic techniques to treat specific patient presentations and disease processes. The format will include modules that review the integration of osteopathic principles and practices into the general practice of medicine. Each module will consist of an online PowerPoint presentation, pertinent osteopathic manipulative techniques, and a five-question quiz. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PATHOLOGY (PTH)

PTH 4001: Pathology Elective (variable credit)

Pathology is a significant field in modern medical diagnosis and medical research, concerned mainly with the causal study of disease, whether caused by pathogens or non-infectious physiological disorder. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PTH 4200: Pathology Blood Banking Elective (variable credit)

Blood banking, the process of collecting, testing, processing, and storing blood for later use, is a cornerstone of emergency and surgical medicine and is dependent on the clinical laboratory for ensuring the safe use of blood and its components. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PTH 4210: Pathology Forensic Elective (variable credit)

Forensic pathology is pathology that focuses on determining the cause of death by examining a corpse. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
PEDIATRICS (PED)

PED 3001: Pediatrics Core *(4 credits)*

Pediatrics differs from adult medicine in many respects. Treating a child is not like treating a miniature adult. The obvious body size differences are paralleled by maturational changes. The smaller body of an infant or neonate is substantially different physiologically from that of an adult. Congenital defects, genetic variance, and developmental issues are of greater concern to pediatricians than they often are to adult physicians. A major difference between pediatrics and adult medicine is that children are minors and, in most jurisdictions, cannot make decisions for themselves. The issues of guardianship, privacy, legal responsibility, and informed consent must always be considered in every pediatric procedure. In a sense, pediatricians often have to treat the parents and sometimes, the family, rather than just the child. Adolescents are in their own legal class, having rights to their own health care decisions in certain circumstances only. The pediatrics clerkship requires a total of four weeks on service. The Clerkship Director and assigned Preceptor may provide educational guidance, but it is each student’s individual responsibility to learn the subject content. Lifelong self-learning is the ultimate goal and is expected in this core clinical externship. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4001: Pediatric Elective *(variable credit)*

General clerkship focused on the branch of medicine that involves the medical care of infants, children, and adolescents. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4100: Pediatric Anesthesiology Elective *(variable credit)*

Pediatric anesthesiology focuses on the general anesthesia, sedation, and pain management needs of infants and children. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4110: Pediatric Dermatology Elective *(variable credit)*

Pediatric Dermatology focuses on care for children (newborns through adolescents) with skin disorders. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4120: Pediatric Emergency Medicine Elective *(variable credit)*

Pediatric emergency medicine is a medical subspecialty of both pediatrics and emergency medicine. It involves the care of undifferentiated, unscheduled children with acute illnesses or injuries that require immediate medical attention. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4130: Pediatric Gynecology Elective *(variable credit)*

Pediatric and Adolescent Gynecology focuses on conditions of the uterus, ovaries, vagina, and vulva. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4140: Pediatric Internal Medicine Elective *(variable credit)*

Pediatric internal medicine is a medical specialty in which doctors train to be board certified in both internal medicine and pediatrics. Med-peds physicians are given more training in order to become more proficient at treating and diagnosing more complex diseases, including more emphasis on critical care medicine. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4150: Pediatric Neurology Elective *(variable credit)*

Pediatric neurology or child neurology refers to a specialized branch of medicine that deals with the diagnosis and management of neurological conditions in neonates (newborns), infants, children, and adolescents. The discipline of child neurology encompasses diseases and disorders of the spinal cord, brain, peripheral nervous system, autonomic nervous system, muscles, and blood vessels that affect individuals in these age groups. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4160: Pediatric Pathology Elective *(variable credit)*

Pediatric pathology is a sub-specialty of surgical pathology that deals with the diagnosis and characterization of neoplastic and non-neoplastic diseases of children. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
PED 4170: Pediatric Psychiatric Elective *(variable credit)*

Pediatric psychiatry is a branch of psychiatry that focuses on the diagnosis, treatment, and prevention of mental disorders in children, adolescents, and their families. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4180: Pediatric Surgery Elective *(variable credit)*

Pediatric surgery is a subspecialty of surgery involving the surgery of fetuses, infants, children, adolescents, and young adults. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4190: Pediatric Urology Elective *(variable credit)*

Pediatric urology is a surgical subspecialty of medicine dealing with the disorders of children's genitourinary systems. Pediatric urologists provide care for both boys and girls ranging from birth to early adult age. The most common problems are those involving disorders of urination, reproductive organs, and testes. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4200: Pediatric Cardiology Elective *(variable credit)*

A pediatric cardiologist is a pediatrician who has received extensive training in diagnosing and treating children's cardiac problems. Evaluation and treatment may begin with the fetus since heart problems can now be detected before birth. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4220: Pediatric Developmental Elective *(variable credit)*

Developmental Pediatrics allows for the opportunity to become familiar with typical and abnormal development in childhood, behavior management techniques, various aspects of developmental assessment, and referral sources/patterns in the community for children with developmental disabilities. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4230: Pediatric Ear, Nose, and Throat Elective *(variable credit)*

Pediatric Otolaryngology (Ear, Nose, and Throat) focuses on the medical and surgical treatment of ear, nose, and throat diseases in children. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4240: Pediatric Endocrinology Elective *(variable credit)*

Pediatric endocrinology is a medical subspecialty dealing with disorders of the endocrine glands, such as variations of physical growth and sexual development in childhood, diabetes, and many more. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4250: Pediatric Gastroenterology Elective *(variable credit)*

Pediatric gastroenterology developed as a sub-specialty of pediatrics and gastroenterology. It is concerned with treating the gastrointestinal tract, liver, and pancreas of children from infancy until age eighteen.

PED 4260: Pediatric Hematology-Oncology Elective *(variable credit)*

Pediatric Hematology-Oncology focuses on the medical needs of a child or adolescent diagnosed with a blood disease and/or cancer. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4270: Pediatric Infectious Disease Elective *(variable credit)*

The focus during a Pediatric Infectious Disease externship is providing medical care for recurring or persistent disease caused by an infectious agent such as bacteria, a fungus, a parasite, or other rare infection in children from birth through the teen years. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4280: Pediatric Intensive Care Elective *(variable credit)*

Pediatric Intensive Care focuses on the treatment of very sick and injured infants and children with a wide range of health problems, including congenital heart defects, trauma, childhood cancer, medical emergencies, and post-operative care following complex operations (such as a kidney transplant). Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
PED 4290: Pediatric Neonatal Elective *(variable credit)*

Neonatology is a subspecialty of pediatrics that consists of the medical care of newborn infants, especially the ill or premature newborn. It is a hospital-based specialty, and is usually practiced in neonatal intensive care units (NICUs). Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4300: Pediatric Nephrology Elective *(variable credit)*

Pediatric Nephrology offers comprehensive services for the entire spectrum of kidney and urinary diseases in children. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PED 4310: Pediatric Pulmonology Elective *(variable credit)*

Pediatric pulmonology is a medical specialty that deals with diseases in children and adolescents involving the respiratory tract. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PHYSICIAN ASSISTANT (PAS)

PAS 5001: Interprofessional Education Seminar I *(1 credit)*

This two-semester course introduces the fundamental principles of interprofessional education including roles, responsibilities, and contributions of individual team members, communication skills that ensure smooth transition of care to other team members, and the impact of teams on population health and quality of care. Learners will interact with students from the physician assistant, master of science in biomedical sciences, and doctor of osteopathic medicine programs, in addition to nursing students. Prerequisite: None.

PAS 5002: Interprofessional Education Seminar II *(1 credit)*

This course is a continuation of PAS 5001. The learner must successfully complete PAS 5001 before participating in PAS 5002.

PAS 5011: Normal Human Development *(2 credits)*

This core course introduces the fundamental principles of normal physical, social, and psychological development and function across the lifespan. Self-care for the student professional will be an integral part of this course. Prerequisite: none.

PAS 5113: Molecular and Cellular Concepts I *(4 credits)*

This core course introduces the fundamental principles of biochemistry, cell biology, microbiology, genetics, physiology, and pharmacology in order to understand the pathophysiology of illness and disease and the rationale for therapeutic intervention. Prerequisite: none.

PAS 5114: Molecular and Cellular Concepts II *(5 credits)*

This course is a continuation of PAS 5113. Prerequisite: PAS 5113.

PAS 5115: Anatomy I *(4 credits)*

This core course introduces the fundamental principles of human anatomy, allowing the learner to correlate structure, function, and the clinical assessment of pathology. Prerequisite: none.

PAS 5116: Anatomy II *(4 credits)*

This course is a continuation of PAS 5115. Prerequisite: PAS 5115.

PAS 5131: Professional Seminar I *(3 credits)*

This two-semester core course introduces the learner to issues related to professional practice by exploring both micro and macro approaches to healthcare and its delivery, including the principals of public health, cultural competency, communication, social determinants of health, patient advocacy, biomedical ethics, informed consent, patient safety, the impaired provider, and healthcare financing. Central to each of these discussions will be the role of the Physician Assistant and the Physician Assistant profession. Prerequisite: none.

PAS 5132: Professional Seminar II *(3 credits)*

This course is a continuation of PAS 5131. Prerequisite: PAS 5131.

PAS 5133: Illness and Disease I *(4 credits)*

This two-semester core course introduces the learner to clinical medicine topics and includes presenting signs and symptoms, pathophysiology, appropriate diagnostic techniques, and management options, including prevention. Prerequisite: none.
PAS 5134: Illness and Disease II (6 credits)
This course is a continuation of PAS 5133. Prerequisite: PAS 5133.

PAS 5135: Evidence-Based Practice I (2 credits)
This two-semester core course introduces the learner to principles of evidence-based medicine, including reviewing and evaluating the medical literature, formulating research questions, and designing a capstone project. Prerequisite: none.

PAS 5136: Evidence-Based Practice II (2 credits)
This course is a continuation of PAS 5135. Prerequisite: PAS 5135.

PAS 5137: Clinical Medicine: Skills and Assessment I (4 credits)
This two-semester course introduces the fundamental principles of clinical practice including history-taking, performing physical examinations, ordering and interpreting diagnostic and screening tests, documentation using the SOAP format, and best practices in transitioning care. Prerequisite: none.

PAS 5138: Clinical Medicine: Skills and Assessment II (5 credits)
This course is a continuation of PAS 5137. Prerequisite: PAS 5137.

PAS 5139: Reasoning and Application I (3 credits)
This two-semester course introduces the fundamental principles of clinical reasoning and decision making through developing clinical hypothesis and differential diagnosis. Problem-based learning will provide the foundation for patient scenarios. Prerequisite: none.

PAS 5140: Reasoning and Application II (3 credits)
This course is a continuation of PAS 5139. Prerequisite: PAS 5139.

PAS 5150: Introduction to Supervised Clinical Practice Experiences (1 credit)
This core course serves as orientation to supervised clinical practice experience (SCPEs). The learner will gain an understanding of the expectations associated with participating in clinical experiences. This includes a review of the EPAs, types of clinical presentations, skills and procedures learners will likely partici-
PAS 5263: Supervised Clinical Practice III (16 credits)

The learner will participate in supervised clinical practice experiences (SCPEs) across a variety of settings including in-patient, emergency department, and operating room. The learner will be exposed to patients across the lifespan and provide preventative, emergent, acute, and chronic care to diverse populations requiring a wide range of healthcare. This course serves as a prerequisite to PAS 5264 and is the third of four supervised clinical practice experiences. The learner must successfully complete requirements of PAS 5263 before participating in PAS 5264. Prerequisite: PAS 5262

PAS 5264: Supervised Clinical Practice IV (10 credits)

The learner will participate in supervised clinical practice experiences (SCPEs) across a variety of settings including in-patient, emergency department, and operating room. The learner will be exposed to patients across the lifespan and provide preventative, emergent, acute, and chronic care to diverse populations requiring a wide range of healthcare. This course is the fourth in a series of four supervised clinical practice experiences. The learner must successfully complete requirements of PAS 5263 before participating in PAS 5264. Prerequisite: PAS 5263

PAS 5271: Research Proposal (2 credits)

This course is a four-week, self-directed period in which learners will develop the graduate research project. Upon completion of the course, the learner will have a viable research proposal, serving as the foundation for the capstone project. The proposal must receive program and Institutional Review Board (IRB) approval prior to implementation. Prerequisite: none.

PAS 5272: Capstone (8 credits)

This core course represents a culmination of learner progress through the RVU PA program. The learner will demonstrate readiness for entry to the profession through reaching competence in each of the 13 entrustable professional activities (EPAs) measured across the curriculum and illustrated in completed learner portfolios. Learners will present individual research projects in the form of an oral and poster presentation. Prerequisite: PAS 5271.

PAS 5391: Independent Study (variable 1-16 credits)

This course is reserved for those learners who may require remediation in didactic, clinical, or both types of coursework. The course must be recommended and approved by the Physician Assistant Program before a learner can be enrolled. Course goals and objectives will be designed to meet the needs of the learner. Prerequisite: Program Director approval.
PHYSICIAN SCIENCE (PHY)

PHY 5051: Physician Scientist I (1 credit)
This course provides students with exposure to the scientific method and the many aspects of conducting independent research, exploring the key components at each step in the scientific process. The types of research highlighted in this course may include basic science, clinical, translational, and medical education research. Students should have a strong desire to understand what is required to be a successful principal investigator and may pursue supervised research during class time as part of their career development. Prerequisite: acceptance into the Physician Scientist Track.

PHY 5052: Physician Scientist II (1 credit)
This course is a continuation of PHY 5051 Physician Science I. Prerequisite: acceptance into the Physician Scientist Track.

PHY 5053: Physician Scientist III (1 credit)
This course is a continuation of PHY 5052 Physician Science II. Prerequisite: acceptance into the Physician Scientist Track.

PSYCHIATRY (PSY)

BHM 3001: Behavioral Medicine Core (4 credits)
The Behavioral Medicine Externship consists of a four-week externship that will provide clinical exposure to various aspects of mental health issues. Students will gain knowledge and experience in the diagnosis and management of psychiatric patients in the clinical setting. It is critical to note that the four-week clinical externship experience is not intended to teach the student everything on the subject of behavioral medicine or provide the student with clinical experience in every aspect of the discipline. The Clerkship Director and the assigned Preceptor may provide educational, guidance but it is each student’s individual responsibility to learn the subject content. Lifelong self-learning is the ultimate goal and is expected in this core clinical externship. (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PSY 4001: Psychiatry Elective (variable credit)
Psychiatry is the medical specialty devoted to the diagnosis, prevention, study, and treatment of mental disorders. These include various maladaptations related to mood, behavior, cognition, and perceptions. See glossary of psychiatry. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PSY 4200: Psychopathology Elective (variable credit)
Psychopathology is the scientific study of mental disorders, including efforts to understand their genetic, biological, psychological, and social causes; effective classification schemes; course across all stages of development; manifestations; and treatment. The term may also refer to the manifestation of behaviors that indicate the presence of a mental disorder. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

PSY 4210: Psychopharmacology (variable credit)
Psychopharmacology is the scientific study of the effects drugs have on mood, sensation, thinking, and behavior. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

RADIOLOGY (RAD)

RAD 4001: Radiology Elective (variable credit)
Radiology is the science of dealing with X-rays and other high-energy radiation, especially the use of such radiation for the diagnosis and treatment of disease. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

RAD 4100: Neuroradiology Elective (variable credit)
Neuroradiology is a subspecialty of radiology, which focuses on the diagnosis of abnormalities of the brain, spine, and head and neck. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

RAD 4200: Radiology Diagnostic Elective (variable credit)
Diagnostic radiology is the field of medicine that uses imaging exams and procedures to diagnose a patient. In any form of medical care, diagnostic radiology plays an integral part in the diagnosis of disease or injury. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
RAD 4210  Radiology: Interventional Elective  
(variable credit)

Interventional radiology, sometimes known as vascular and interventional radiology, is a medical specialty that provides minimally invasive image-guided diagnosis and treatment of disease. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

RESEARCH (RSH)

RSH 4001: Research Elective  
(variable credit)

Opportunities to supplement the core curriculum with research are available to currently-enrolled students. For more information and to discuss options, contact the Office of Clinical Education.

RURAL AND WILDERNESS MEDICINE (RWM)

RWM 4001: Rural and Wilderness Medicine Elective  
(variable credit)

Rural and Wilderness Medicine is the branch of medicine that addresses prevention, assessment, and treatment of accidents and illness where rapid access to the national 911 systems is not an option. It has been defined as the practice of medicine with limited resources in austere environments and ranges from the initial treatment and evacuation of patients with acute injuries to the management of illnesses experienced by patients on long term expeditions. Its broad scope includes but is not limited to Trauma and Emergency Medicine, Sports Medicine, Rescue and Evacuation, Diving and Hyperbaric Medicine, Disaster Medicine, Tropical and Travel Medicine, Expedition Medicine, High-Altitude/Mountaineering Medicine, Survival Medicine, and Tactical Medicine. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

RWM 5021: Rural and Wilderness Medicine I  
(1 Credit)

This course will introduce students to rural and wilderness medicine. Introductory clinical concepts will be presented and an emphasis will be placed on procedural competencies that support a rural medical practice. Students may have the opportunity to meet with actively practicing clinicians in the community, residency directors, and other administrators associated with rural residency programs. Prerequisite: acceptance into the Rural and Wilderness Medicine Track.

RWM 5022: Rural and Wilderness Medicine II  
(1 Credit)

This course is a continuation of RWM 5021 Rural and Wilderness Medicine I. Prerequisite: acceptance into the Rural and Wilderness Medicine Track.

RWM 5023: Rural and Wilderness Medicine III  
(1 Credit)

This course is a continuation of RWM 5022 Rural and Wilderness Medicine II. Prerequisite: acceptance into the Rural and Wilderness Medicine Track.

SURGERY (SRG)

SRG 3000: Fundamentals of Surgery  
(1 Credit)

This course provides students with initial exposure to their surgery clerkship on the RVU campus at the surgical simulation center for one week. Students will be expected to take call in the evenings. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

SRG 3001: Surgery Core I  
(variable 1-7 credits)

The Surgery externship consists of a three-week and a four-week externships that will provide clinical exposure to various aspects of surgery. Students will gain knowledge and experience in the diagnosis and management of surgical patients in the inpatient and outpatient clinical settings. It is critical to note that the surgical clinical course is not intended to teach the student everything on the subject of surgery or provide the student with clinical experience in every aspect of the discipline. The Clerkship Director and the assigned Preceptor may provide educational guidance, but it is each student’s individual responsibility to learn the subject content. Lifelong self-learning is the ultimate goal and is expected in this core clinical externship. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1, and successful completion of SRG3000 Fundamentals of Surgery.

SRG 3002: Surgery Core II  
(variable 1-7 credits)

The Surgery externship consists of a three-week and a four-week externships that will provide clinical exposure to various aspects of surgery. Students will gain knowledge and experience in the diagnosis and management of surgical patients in the inpatient and outpatient clinical settings. It is critical to note that the surgi-
cal clinical course is not intended to teach the student everything on the subject of surgery or provide the student with clinical experience in every aspect of the discipline. The Clerkship Director and the assigned Preceptor may provide educational guidance, but it is each student’s individual responsibility to learn the subject content. Lifelong self-learning is the ultimate goal and is expected in this core clinical externship. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework, passing score on COMLEX Level 1, and successful completion of SRG3000 Fundamentals of Surgery.

SRG 4001: General Surgery Elective (variable credit)

General Surgery is a discipline of surgery having a central core of knowledge embracing anatomy, physiology, metabolism, immunology, nutrition, pathology, wound healing, shock and resuscitation, intensive care, and neoplasia, which are common to all surgical specialties. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

SRG 4100: Urogynecologic Surgery Elective (variable credit)

Urogynecologic surgery is a surgical specialty focusing on minimally invasive and robotic gynecologic surgical procedures. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

SRG 4200: Bariatric Surgery Elective (variable credit)

Bariatric surgery includes a variety of procedures performed on people who have obesity. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

SRG 4210: Plastic Surgery Elective (variable credit)

Plastic surgery is a surgical specialty involving the restoration, reconstruction, or alteration of the human body. It can be divided into two categories. The first is reconstructive surgery which includes craniofacial surgery, hand surgery, microsurgery, and the treatment of burns. The other is cosmetic or aesthetic surgery. While reconstructive surgery aims to reconstruct a part of the body or improve its functioning, cosmetic surgery aims at improving the appearance of it. Both of these techniques are used throughout the world. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

SRG 4220: Oral Surgery Elective (variable credit)

Oral and maxillofacial surgery specializes in treating many diseases, injuries, and defects in the head, neck, face, jaws and the hard and soft tissues of the oral (mouth) and maxillofacial (jaws and face) region. It is an internationally recognized surgical specialty. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

SRG 4230: Thoracic Surgery Elective (variable credit)

Cardiothoracic surgery (also known as thoracic surgery) is the field of medicine involved in surgical treatment of organs inside the thorax (the chest)—generally treatment of conditions of the heart (heart disease) and lungs (lung disease). In most countries, cardiac surgery (involving the heart and the great vessels) and general thoracic surgery (involving the lungs, esophagus, thymus, etc.) are separate surgical specialties; the exceptions are the United States, Australia, New Zealand, and some EU countries, such as the United Kingdom and Portugal. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

SRG 4240: Transplant Surgery Elective (variable credit)

Transplant surgery is the surgical removal of an organ(s), tissue, or blood products from a donor and surgically placing or infusing them into a recipient. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

SRG 4250: Trauma Surgery Elective (variable credit)

Trauma surgery is a surgical specialty that utilizes both operative and non-operative management to treat traumatic injuries, typically in an acute setting. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

SRG 4260: Ear, Nose, and Throat (ENT) Surgery Elective (variable credit)

Otorhinolaryngology is a surgical subspecialty within medicine that deals with conditions of the ear, nose, and throat (ENT) and related structures of the head and neck. Patients seek treatment from an otorhinolaryngologist for diseases of the ear, nose, throat, base of the skull, and for the surgical management of cancers and benign tumors of the head and neck. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) course-
work and passing score on COMLEX Level 1.

**SRG 4270: Podiatric Surgery Elective (variable credit)**

Podiatric surgery is a specialist field in the podiatry profession. Podiatric surgery is the surgical treatment of conditions affecting the foot, ankle, and related lower extremity structures by accredited and qualified specialist podiatrists. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**SRG 4280: Gastrointestinal Surgery Elective (variable credit)**

Includes both upper gastrointestinal surgery (upper GI surgery), which focuses on the upper parts of the gastrointestinal tract including Liver resection, Esophagectomy, and Pancreatoduodenectomy, and lower gastrointestinal surgery (or colorectal surgery) and surgery of the small intestine. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**SRG 4290: Perioperative Care Elective (variable credit)**

Perioperative Care focuses on patient necessities before, during, and after a surgical procedure. Key elements may include patient preparation prior to the day of surgery, a standardized approach to patient monitoring and education on the day of surgery, and careful postoperative monitoring. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**TRAUMA (TRM)**

**TRM 4200: Trauma Elective (variable credit)**

Trauma surgery is a surgical specialty that utilizes both operative and non-operative management to treat traumatic injuries, typically in an acute setting. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

**URBAN UNDERSERVED MEDICINE (URB)**

**URB 5011: Urban Underserved Medicine I (2 credits)**

Racial and ethnic disparities in healthcare and lack of qualified manpower have created a serious need for physicians in America's urban areas. Members of racial and ethnic minority groups, who make up the majority of inner-city residents, are less likely than others to receive needed services than those from wealthier communities; this includes treatment for HIV infection, mental health problems, cardiovascular disease, and cancer. This track will teach students about healthcare inequities and disparities within different populations of patients in urban areas. It will also serve to inform and educate young physicians about the suffering of asylum seekers and refugees in the United States and the disparity between international humanitarian obligations and the government's current treatment of people in these situations. At its core, the program will also give students knowledge and foresight into providing for with patients who may have a different cultural, literacy, or socio-economic backgrounds and teach them how to become effective health care providers. Prerequisite: acceptance into the Urban Underserved Track.

**URB 5012: Urban Underserved Medicine II (2 credits)**

This course is a continuation of URB 5011 Urban Underserved Medicine I. Prerequisite: acceptance into the Urban Underserved Track and successful completion of URB 5011. Prerequisite: acceptance into the Urban Underserved track.

**URGENT CARE (URG)**

**URG 4001: Urgent Care Elective (variable credit)**

Urgent care is a category of walk-in clinic focused on the delivery of ambulatory care in a dedicated medical facility outside of a traditional emergency room. Urgent care centers primarily treat injuries or illnesses requiring immediate care, but not serious enough to require an ER visit. Urgent care centers are distinguished from similar ambulatory healthcare centers such as emergency departments and convenient care clinics by their scope of conditions treated and available facilities on-site. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
UROLOGY (URO)

UTO 4001: Urology Elective (variable credit)

Urology, also known as genitourinary surgery, is the branch of medicine that focuses on surgical and medical diseases of the male and female urinary-tract system and the male reproductive organs. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

WMN WOMEN’S HEALTH

WMN 3001: Women’s Health Core (4 credits)

The Women’s Health Externship consists of a four-week externship that will provide clinical exposure to various aspects of women’s health issues. Not all students will have the opportunity to experience all of the learning objectives listed in the syllabus, but all students are still responsible for the information and self-directed learning. Learning is an active process that requires student involvement; we encourage a collaborative learning atmosphere and, whenever possible, opportunities to acquire the basic core of cognitive knowledge, clinical experience, and practical skills in women’s health should be provided. However, the extent of student participation is at the discretion of the clinical faculty and comfort level. While the faculty can stimulate and enlighten, the primary responsibility for learning rests upon the student. The Clerkship Director and the assigned Preceptor may provide educational guidance, but it is each student’s individual responsibility to learn the subject content. Lifelong self-learning is the ultimate goal and is expected in this core clinical externship. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

WMN 4001: Women’s Health Elective (variable credit)

Women's health refers to the health of women, which differs from that of men in many unique ways. Women's health is an example of population health, where health is defined by the World Health Organization as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity". Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

WMN 4100: Gynecology Elective (variable credit)

Gynecology is the medical practice dealing with the health of the female reproductive systems and the breasts. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

WMN 4110: OBGYN Elective (variable credit)

Obstetrics and gynecology is the medical specialty that deals with pregnancy, childbirth, and the postpartum period and the health of the female reproductive systems and the breasts. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.
WMN 4120: Gynecologic Oncology Elective *(variable credit)*

Gynecologic oncology is a specialized field of medicine that focuses on cancers of the female reproductive system, including ovarian cancer, uterine cancer, vaginal cancer, cervical cancer, and vulvar cancer. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

WMN 4130: Gynecological Surgery Elective *(variable credit)*

Gynecological surgery refers to surgery on the female reproductive system and is usually performed by gynecologists. It includes procedures for benign conditions, cancer, infertility, and incontinence. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

WMN 4200: Maternal/Fetal Medicine Elective *(variable credit)*

Maternal–fetal medicine is a branch of medicine that focuses on managing health concerns of the mother and fetus prior to, during, and shortly after pregnancy. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.

WOUND CARE (WND)

WND 4001: Wound Care Elective *(variable credit)*

Wound healing is an intricate process in which the skin repairs itself after injury. Wound healing is depicted in a discrete timeline of physical attributes constituting the post-trauma repairing process. Prerequisite: successful completion of all pre-clinical (Year 1 and Year 2) coursework and passing score on COMLEX Level 1.