M1-M3 COURSES

Phase 1

M-ID 501 FUNDAMENTALS 5 Credit Hours
This 5-week Block presents an integrated, comprehensive course that covers introductory information needed by all subsequent Blocks within Phase 1 of the curriculum. Material included in the Fundamentals Block includes content in biochemistry and cell biology, medical genetics, embryology, basic histology, general pathology, and basic pharmacologic principles. In addition, students are exposed to foundations of population health, clinical skills, and health systems quality. The block will utilize a combination of lectures, laboratories, team-based learning, case-based small groups, standardized patient encounters, patient-oriented problem-solving sessions, and flipped classroom activities as instructional methods.
Typically Offered: FALL/SPR

M-ID 513 BLOOD, DEFENSES & INVADERS 6 Credit Hours
Blood, Defenses and Invaders takes an integrative approach to cover the immune system and pathogens that invade the cellular and humeral defenses. Topics include hematopoiesis, cellular interactions, antibody formation, antigen-antibody reactions, cell-mediated immunity, and the biological effects of immunological reactions. In addition, a comprehensive approach evaluating the pathogenesis, epidemiology, physical diagnosis and treatment of bacterial, viral, fungal and parasite-mediated infectious diseases is covered throughout this 6-week course. Finally, the course elaborates on the synthesis and function of hemoglobin, red blood cell structural components, blood types including Rh types, the pathogenesis of anemia, leukemia, and a basic understanding of blood banking and transfusion medicine. Students also investigate various components of the normal coagulation process including vasculature, platelets, pro-coagulants, and natural anticoagulation.
Typically Offered: FALL

M-ID 504 MUSCULOSKELETAL AND INTEGUMENT 6 Credit Hours
This block focuses on the normal structure and function of the integumentary and musculoskeletal systems, and recognition of the etiology and manifestations of pathologic conditions of these two systems. Students actively apply basic knowledge about the human body through dissection, virtual histology, small group interactions, and dynamic lectures. This course is designed to prepare the student for real-life patient encounters, including enhancement of physical examination skills through mastery of surface anatomy.
Typically Offered: FALL/SPR

M-ID 505 CIRCULATORY 5 Credit Hours
The 5-week circulatory block is focused on the fundamental knowledge of cardiac and vascular histology, embryology, anatomy, and physiology, and applies that knowledge toward building a more comprehensive understanding of various cardiovascular diseases such as hypertension, dyslipidemia, atherosclerosis, ischemic heart disease, vasculitis, cardiomyopathies, heart failure, congenital cardiac disorders, valvular heart disease, pericardial diseases, cardiac dysrhythmias, arterial and venous vascular disorders, traumatic and mechanical disorders of the cardiovascular system, and heart disease caused by infectious agents.
Typically Offered: FALL/SPR

M-ID 506 RESPIRATORY 4 Credit Hours
The Respiratory block emphasizes the anatomy, physiology, biochemistry, pharmacology, genetics, histopathology, and imaging of the respiratory system. This block examines the normal state and the variety of diseases that afflict the respiratory system. Students obtain knowledge of the structure and function of the entire respiratory system with comparative analysis of respiratory mechanics, gas exchange, and oxygen, as well as carbon dioxide homeostasis under normal and diseased conditions. The differentiation of important diseases is studied, including those affecting the lung parenchyma, airways, blood vessels, pleura and chest wall, including the impact of sleep-disordered breathing, and select appropriate therapy options for these diseases. Students identify changes in the nose, throat and respiratory system in gross anatomy, imaging, and histology, in addition to taking a comprehensive history and physical examination, including consideration of social and environmental factors.
Typically Offered: FALL/SPR

M-ID 507 RENAL 3 Credit Hours
The Renal block provides a strong foundation in the basic sciences relating to the kidney as well in clinical nephrology. The initial phase of the 3-week block focuses on providing fundamental knowledge of renal anatomy, histology, physiology, and pharmacology. The remainder of the block emphasizes clinical nephrology emphasizing the following areas: electrolyte disorders, acid-base disorders, introduction to clinical nephrology, acute renal failure, chronic kidney disease, glomerular diseases, and hypertension.
Typically Offered: FALL/SPR

M-ID 508 NEUROSCIENCES 8 Credit Hours
The Neurosciences block covers the basic science core concepts of neuroanatomy and neurophysiology that are necessary for a medical practitioner to clinically evaluate a patient with neurological and psychiatric diseases. Building upon this foundation, the pathophysiology of diseases affecting the brain and special senses and the clinical presentation of these diseases are covered. Treatment of these diseases, including pharmacological, is integrated with the clinical focus. The students learn how to use the physical examination to assess the patient with diseases affecting the nervous system and special senses.
Typically Offered: FALL/SPR

M-ID 510 GASTROINTESTINAL 6 Credit Hours
This 6-week block provides a strong foundation in the structure and function of gastrointestinal organs, and preclinical concepts in structure, function, and disease. The gastrointestinal system includes the esophagus, stomach, small and large intestine, liver, and pancreas. The development, anatomy, histology, and physiology of each of these major organs is addressed in detail. Additionally, the structure and function of the mouth and salivary glands is included, as well as the anterior abdominal wall. Nutrition and digestion are also covered. Disease processes of these organs and body regions are presented with a focus on the molecular and physiological mechanisms of disease, and basic approaches to medical and surgical treatment. Students are introduced to history taking and physical exam skills relevant to the organ systems and body regions of the gastrointestinal tract.
Typically Offered: FALL/SPR
M-ID 511 ENDOCRINE 3 Credit Hours
The goal of the Endocrine block is to apply knowledge of endocrine physiology to understand the pathophysiology of the endocrine system, and relate this information to the diagnosis and treatment of endocrine diseases. Topics covered include endocrine cells, tissues, structure, function, as well as hormone synthesis, secretion, action, and metabolism. Included in the discussions are the hypothalamus, pituitary, thyroid, adrenal, parathyroid, metabolic bone disease, the endocrine pancreas, glucose homeostasis, diabetes, and obesity. Typically Offered: FALL/SPR

M-ID 512 GU/REPRODUCTIVE/DEVELOPMENTAL 6 Credit Hours
In this block, students apply basic science knowledge to explain the normal and pathological states of the female and male genitourinary and reproductive systems, and to relate that knowledge to the diagnosis, treatment, and prevention of disease. This block has as its foundation the anatomy of the pelvic and perineal regions, and other structures associated with reproduction, as well as the biology and endocrine regulation of reproductive processes such as gametogenesis, fertility, pregnancy, and menopause. These principles are be applied to clinical understanding of pathologies of the genitourinary and reproductive systems. This block also includes capstone coverage of embryology to review processes of human development, both normal and abnormal. Typically Offered: FALL/SPR

M-ID 532 ACUTE CARE & CLINICAL TRANSITIONS 4 Credit Hours
This course is a pre-cursor to the clinical clerkships and is designed to facilitate the transition to clinic practice. The design of the course is similar to Phase 1 as the majority of experiences are classroom based and divided into two sections. Clinical Transitions focuses on refreshing core clinical skills and introducing information necessary for the care and advocacy of patients. Topics include but are not limited to the following: geriatrics, pediatrics, New American, LGBTQIA+, addiction, intimate partner violence, rural medicine, structural racism, trauma informed care. It will also provide training for use of key communication strategies in the clinical environment such as utilizing interpreters, telemedicine and strategies for negotiating challenging situations. Student will complete a review of the comprehensive physical exam and perform multiple simulated patient encounters to practice history taking, physical exam, note writing, clinical reasoning and verbal presentation skills. Acute Care focuses on differential diagnosis and initial work up for common chief complaints with emphasis on life threatening or time sensitive diagnoses as well as the roles and responsibilities of medical students in the clinical environment. Students will learn to integrate basic science knowledge in the context of clinical presentation through interactive lectures, case based small groups and simulation. Challenges of the clinic environment such as personal wellness, professionalism, asking for feedback and tips and tricks for clerkship success will be discussed. Common clinical procedures will be introduced in skills labs and simulations. BLS certification, EPIC EMR training, infectious disease training, a mistreatment training module, and Comprehensive Clinical Skills OSCE Part 1 are required prior to beginning the clinical clerkships. Instructor: Amy Cutright, MD Lisa Meinke, MD Typically Offered: SPRING Capacity: 135

Phase 2 (Class of 2021)

PEDS 703 BASIC REQ CLERKSHIP 6-8 Credit Hours
The Pediatrics clerkship provides an immersive exposure to the care of patients from infancy through adolescence. The clerkship is divided into two tracks; with a portion of students assigned to community preceptors outside of Omaha for their ambulatory pediatric experience, and the remainder completing their entire clerkship in Omaha. All students complete two weeks of inpatient pediatrics at either The Nebraska Medical Center (Nebraska Medicine) or Children's Hospital and Medical Center. Students also participate in selective experiences in ambulatory general pediatrics and various pediatric sub-specialties, as well as a structured didactic curriculum available on site or remotely. Prerequisite: Junior Status Typically Offered: FALL/SPR

FMED 705 COMMUNITY PRECEPTOR 6-8 Credit Hours
This clerkship which provides students with the opportunity to learn through an "immersion" experience in Family Medicine in a rural Nebraska community. The students participate in the care of the preceptor's patients under the direct supervision of the preceptor. Students care for patients in the office, hospital, and extended care facilities. A written report about a community health project is required. A portion of the core clerkship content is delivered on-site via the Internet. Prerequisite: Junior Status Typically Offered: FALL/SPR

IMED 705 BASIC REQ CLERKSHIP 9-12 Credit Hours
Students spend one half of the 12-week clerkship as an integral member of a health care team responsible for the care of inpatients on the internal medicine service at either the Omaha Veterans Administration Hospital or The Nebraska Medical Center (main Nebraska Medicine inpatient facility). During the other half of the clerkship, students may elect a variety of medicine subspecialties and outpatient clinical experiences at Nebraska Medicine, the Omaha Veteran's Administration Hospital and private practice internists. Throughout the clerkship, students assume responsibility for initial patient assessment and daily care, commensurate with their level of training, supervised by internal medicine residents and attending faculty. Skills in patient interaction, decision making, and the fundamentals of internal medicine are reviewed in formal sessions and daily attending rounds which are available to all students either on site or remotely. Prerequisite: Junior Status Typically Offered: FALL/SPR

OBGY 705 BASIC REQ CLERKSHIP 4.5-6 Credit Hours
Students are assigned to The Nebraska Medical Center or Methodist/Methodist Women's Hospitals for inpatient experience, and to the Nebraska Medicine clinics for outpatient obstetric and gynecologic clinics. They follow the progress of patients in labor, assist at operative procedures, and maintain a complete record until the patient is discharged from the hospital. Outpatient experiences include participation in the following clinics: normal and complicated obstetrics, gynecology, and family planning. Seminars, conferences, and ward rounds are scheduled regularly, available on site or remotely. Prerequisite: Junior Status Typically Offered: FALL/SPR
PSYC 705 BASIC REQUIRED CLERKSHIP 4.5-6 Credit Hours
The clinical structure of the rotation is two, 3-week rotations at two different sites. Sites include the Nebraska Medicine consult and liaison service, Nebraska Medicine Adult Crisis Unit inpatient service, VA Medical Center inpatient psychiatric unit, Lasting Hope Recovery Center psychiatric inpatient hospital, Community Alliance outpatient clinic, Nebraska Medicine addictions consult and liaison service, and Douglas County inpatient psychiatric services. Students experience outpatient psychiatric care by participating in the COPE clinic (Clinic for Outpatient Psychiatric Education) at Nebraska Medicine. Other electives and mentorship groups are available to enhance the psychiatry clerkship experience. Didactics are scheduled regularly for all clerkship students and take place on the UNMC main campus and available to off-site students remotely.
Prerequisite: Junior Status
Typically Offered: FALL/SPR

SURG 708 BASIC REQ CLERKSHIP 6-8 Credit Hours
The surgical clerkship is divided between a structured educational curriculum (didactic lectures, computer-aided learning, and skills workshops), a five-week clinical rotation on general surgery and three-week rotation on surgical subspecialty. The general surgical portion of the clerkship places students at the Nebraska Medicine system, VA Medical Center, or Nebraska Methodist Hospital. Students are involved as an integral part of the ward team and participate in morning and afternoon rounds, as well as caring for patients in ambulatory surgery clinics.
Prerequisite: Junior Status
Typically Offered: FALL/SPR