



SCHOOL OF MEDICINE BULLETIN
SUMMER 2023– SPRING 2024



UNIVERSITY OF
LOUISVILLE®

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School of Medicine Bulletin

About the Bulletin

The 2024-25 Medical Bulletin is applicable to students who enroll at the University beginning Summer 2024 through Spring 2025.

The Medical Bulletin is the official listing of the policies governing medical (MD) education at the University of Louisville. While every effort has been made to make the bulletin accurate as of the date of publication, the University of Louisville reserves the right to change programs of study, academic policies, academic requirements, fees, course information, procedures for the confirmation of degrees, or the announced academic calendar and related deadlines without prior notice.

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The provisions of this publication do not constitute an express or implied contract between the University of Louisville and any member of the student body, faculty, or general public.

The University of Louisville is committed to and will provide equality of educational and employment opportunity for all persons regardless of race, sex, age, color, national origin, ethnicity, creed, religion, disability, genetic information, sexual orientation, gender, gender identity and expression, marital status, pregnancy, or veteran status – except where sex or national origin represent bona fide educational or employment qualifications. For more information concerning complaint resolutions procedures, contact the Dean of Students' Office at (502) 852-5787 or the Office of Human Resources at (502) 852-6258. For more information concerning ways in which our multicultural learning community may be nurtured and protected, contact the Office of Institutional Equity at (502) 852-7159.

The Redbook is the official statement of the organizational structure, the rules of governance and procedures, and university-wide policies of the University of Louisville. If there is any conflict between the policies, procedures or other statements contained within this catalog, *The Redbook* shall govern.

A copy of *The Redbook* is available electronically.

About the School of Medicine

The University of Louisville School of Medicine is a vibrant institution with a proud heritage as one of the most comprehensive medical facilities in the southeastern United States. The school traces its beginnings to 1833, when the Louisville Common Council set up a committee to investigate the possibility of establishing a medical college in the city.

Today, the University of Louisville School of Medicine, under the leadership of Interim Dean Jeffrey M. Bumpous, MD, FACS, continues to educate some of the nation's finest medical practitioners. In fact, it has graduated more doctors than any other institution in the Commonwealth.

With its excellent teaching and research facilities, newly endowed chairs and strong leadership, the University of Louisville School of Medicine holds a future filled with promise, built on a past distinguished by excellence.

School of Medicine Mission Statement

Mission

University Mission Statement

The University of Louisville pursues excellence and inclusiveness in its work to educate and serve its community through:

- teaching diverse undergraduate, graduate, and professional students in order to develop engaged citizens, leaders, and scholars;
- practicing and applying research, scholarship and creative activity; and
- providing engaged service and outreach that improve the quality of life for local and global communities.

The University is committed to achieving preeminence as a nationally recognized metropolitan research university.

School of Medicine Mission Statement

Improve the health and vitality of our community, our commonwealth, and our world by educating the next generation of physicians and scientists, providing high-quality compassionate care, pursuing transformative research, forging strategic partnerships, and striving for inclusive excellence.

School of Medicine Vision Statement

Demonstrate and be recognized for excellence and leadership in education, research, clinical care, innovative partnerships, and diversity, equity & inclusion.

School of Medicine Program Objectives

Competency 1: Patient Care - Provide patient-centered care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Graduates will use these skills to:

- 1.1 Perform a skilled physical examination and other procedures of a physician
- 1.2 Take an effective history using patient/family interview and their medical records
- 1.3 Correctly interpret the results of common screening and diagnostic tests, procedures, and examinations for each core specialty area of training
- 1.4 Use evidence in a patient's case to create a differential diagnosis, seeking out additional information and revising as the situation changes
- 1.5 Create and manage an effective health promotion or treatment plan
- 1.6 Use informed consent and shared decision-making with patients and families to ensure that prescribed care is based on a realistic appraisal of their condition, their goals and available resources
- 1.7 Effectively assess patients or populations for relevant medical or social determinants of disease

Competency 2: Knowledge for Practice - Develop and apply a working personal knowledge base of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences to patient care. Graduates will use this knowledge to:

- 2.1 Relate understanding of normal structure and function and risk factors for disease to patient health counseling
- 2.2 Explain the scientific basis for laboratory, imaging, and procedural diagnostic tests used in patient care and their clinical significance
- 2.3 Apply fundamental science concepts to an understanding of disease and health
- 2.4 Recommend the optimal treatment or prevention for each patient based on the scientific and clinical basis for their use
- 2.5 Evaluate patient and population-level healthcare problems using the principles of evidence-based practice and high-value healthcare, including an applied understanding of research methods and the results of relevant research studies

Competency 3: Practice-Based Learning and Improvement - Demonstrate the ability to investigate and evaluate one's care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning Graduates will use these skills to:

- 3.1 Reflect on colleague and/or patient encounters and their impact on future practice in order to improve as physicians
- 3.2 Develop and adjust as necessary a personal strategy for maintaining a current knowledge base as medicine evolves.

Competency 4: Interpersonal and Communication Skills - Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Graduates will use these skills to:

- 4.1. Effectively explain core aspects of medical care to patients and families using language they can understand, checking to ensure you are understood
- 4.2. Communicate effectively and accurately as a professional when writing and speaking, including in written communication in the medical record, and when communicating with other clinical care providers, patients, payors, and healthcare systems
- 4.3. Adjust style of communication with individual patients or other healthcare providers for maximum effectiveness, based on sensitivity to each individual's language, abilities, culture, preferences and needs
- 4.4 Apply and modify specific and/or specialized communication strategies and techniques effectively as indicated with patients, families, and colleagues in the healthcare field

Competency 5: Professionalism - Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Graduates will use these attitudes to:

- 5.1 Exhibit behaviors of professionalism required for working in a stressful and team-oriented environment, including self-regulation and awareness of own limitations

5.2. Formation of a healthy professional identity that adheres to the standards of the medical profession, including respect for all persons, compassion and empathy, trustworthiness, and high emotional intelligence

5.3 Display personal integrity and adheres to the ethics of the profession

5.4 Establish effective work habits, including timely and organized completion of required duties and assignments, prompt communication, follow-up of ongoing tasks, and effectively adjusting the approach to learning as training evolves

Competency 6: Systems -Based Practice - Demonstrate an awareness of, and responsiveness to, the larger context and system of health care as well as the ability to call effectively on other resources in the system to provide optimal health care. Graduates will use these skills and attitudes to:

- 6.1 Assist and advocate for individual patients and populations experiencing healthcare disparities or other vulnerabilities
- 6.2 Identify and remediate problems with safety and medical errors
- 6.3 Understand the financial aspects of the medical system and effectively address them in the hospital and outpatient setting
- 6.4 Provide care that takes into consideration costs to the patient and the health care system
- 6.5 Provide care that is coordinated across teams, providers, and sites
- 6.6. Provide care and keep medical records in a way that actively protects against concerns about fraud, negligence, or lack of compliance with professional standards

Competency 7: Interprofessional Collaboration - Demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient- and population-centered care. Graduates will use these skills to:

- 7.1 Work as a team member with other health professionals to establish and maintain a climate of safety, mutual respect, dignity, trust, inclusion and ethical integrity
- 7.2. Use the knowledge of one's own role and the roles of other health professionals to appropriately assess and generate support for the additional health care needs of patients and populations

Competency 8: Personal and Professional Development - Demonstrate the qualities required to sustain lifelong personal and professional growth. Graduates will use these skills to:

- 8.1. Set and revise effective personal and professional development goals based on participation in formal self-assessment, advising, career exploration, and periodic reflection activities.
- 8.2. Develop and revise a formal strategy for wellness and self-care, implement it, and periodically review its effectiveness to improve your practice.

History of the School of Medicine

It was a boom time for Louisville, which by the early 1830s had become a burgeoning center of inland transportation. With improved river travel

made possible by the steamboat, Louisville grew to be one of the largest cities in the South and sought to develop its own cultural institutions.

With the urging of community-minded citizens like town trustee James Guthrie, the city government appropriated funds for a new medical school at Eighth and Chestnut streets. The Louisville Medical Institute began classes in temporary quarters in the fall of 1837. A few weeks later, the 80 students and seven faculty members moved into a splendid Greek Revival structure designed by Kentucky architect Gideon Shryock. The school instituted clinical teaching in the wards of the public hospital, then known as the Louisville City Hospital, as an integral part of the medical curriculum. Founding faculty included several of the most distinguished professors from Lexington's Transylvania University.

By the early 1840s, the institute was flourishing. Students traveled from all over the southern and western United States to attend its lectures and clinics. Despite initial municipal funding, the school operated on a proprietary basis, enjoying considerable autonomy. The school's library was one of the finest in the country, including numerous volumes purchased in Europe. Gas lamps provided brilliant night-time lighting for specially equipped rooms. In 1846, the Louisville Medical Institute became the Medical Department of the newly formed University of Louisville. In the ensuing years of the 19th century, Louisville boasted six more medical colleges, most of which would eventually be absorbed by the University Medical Department.

Some of the best medical minds of their day taught medicine at Eighth and Chestnut and in the wards of City Hospital. Doctors such as Daniel Drake, J. Lawrence Smith, Benjamin Silliman, Charles Wilkins Short and David Wendell Yandell forged a national reputation for the school.

An adjunct to clinical teaching was the school's institution of outpatient dispensary care for indigents during the 1850-51 session. Other improvements in medical education were instituted even earlier. In 1841, Samuel D. Gross, a professor of surgery, set up one of the country's first surgical laboratories, which was used for the study of wounds in dog intestines. The school's medical practitioners then applied information gleaned from such research to the care of patients.

On Dec. 31, 1856, the institute's Greek Revival structure was destroyed by fire. Thankfully, the library and its prized contents were saved. A new building was constructed almost immediately and was ready for occupancy in 1857. The history of the structure known now as the "Old Medical School" began in April 1891 when a tract of land on the corner of First and Chestnut streets was deeded to rival Louisville Medical College. The University of Louisville acquired the building when it absorbed Louisville Medical College in 1908.

Reforms in medical education already were in progress under Dean James M. Bodine when Abraham Flexner, a Louisvillian whose brother Simon was a medical school alumnus and director of Rockefeller Institute for Medical Research, released a report on U.S. medical education that would shape the school's course for many years. Local government finally saw the need for additional resources in Louisville and began to make an annual contribution to its medical school. Increased support came with the opening of a much-expanded City Hospital in 1914. The close association between the medical school and the hospital offered students an unusual breadth of practical experience.

About this time the hospital began "accident service" when, in 1911, the facility launched the nation's first trauma care center. Dr. R. Arnold Griswold refined this innovation in the 1930s and '40s with a network

that served as the forerunner of Louisville's modern Emergency Medical Service and the U of L Trauma Center.

While the 1930s brought hard times to the country, the university was able to continue its expansion, and in March 1937 the medical school began laying the groundwork for a centennial celebration. Plans came to a halt, however, when the Ohio River overflowed its banks, causing the dismissal of downtown classes. Before leaving on Jan. 22, medical students moved the bulk of the library from the basement to the school's first floor. That foresight salvaged the valuable volumes. The medical school building was not structurally damaged, but classes didn't convene for two weeks. After classes resumed, it was another two weeks before utilities were fully restored.

During World War II the school negotiated a contract with the Federal government to educate students for the armed forces' medical corps. Throughout much of the 1940s, the school year consisted of two 16-week semesters, with a new class entering every nine months. New courses of instruction were introduced for orientation to military medicine, and the institution's facilities and energies were severely stretched.

These chapters in the school's history also were marked by great productivity as the school continued to extend its emphasis on hands-on clinical instruction and a growing list of specialty training programs. Then, as in every era, memorable men and women were part of the school's history. Among them were John Walker Moore, dean from 1929 to 1949; Sidney I. Kornhauser, chair of the anatomy department from 1922 to 1958; and neurosurgeon R. Glen Spurling.

By 1960, the school desperately needed more space. Officials began planning to construct a modern center that would house all the university's health-related programs. The first step in that plan was the opening of the 120,000 square foot Medical-Dental Research Building in 1963 under the administration of Dean Donn Smith. Smith also coordinated the construction of new buildings to house the medical and dental schools, an adjacent library, and laboratory buildings, all of which opened in 1970 and are known collectively as the Health Sciences Center. On July 1, 1970, U of L was accepted into the Commonwealth's system of state-supported universities, and Deans Douglas M. Haynes and Arthur H. Keeney spent the rest of the decade ushering in a new era of growth.

Meanwhile, at the request of Harold Boyer, Vice President for Health Affairs, the state appropriated funds for a new teaching hospital and ambulatory care center. The hospital, operated by the non-profit University Medical Center Inc., continues to serve as the medical school's primary teaching facility, providing a full range of diagnostic, emergency, therapeutic and surgical services. The school also has strong teaching relationships with Jewish Hospital, Nortons Children's Hospital, Norton Hospital, the Veterans Administration Medical Center and the James Graham Brown Cancer Center as well as numerous other facilities in the community.

The 1980s and '90s saw unprecedented growth on U of L's Health Sciences Center with the establishment of partnerships that provided unprecedented learning opportunities. Among these partnerships is Louisville Medical Center, a unique organization dedicated to leading-edge research, diagnosis and treatment. Composed of the University of Louisville Health Sciences Center, University of Louisville Hospital, Jewish Hospital, Norton Hospital, Norton's Children's Hospital, the James Graham Brown Cancer and nearly 200 other partners, LMC serves more than 500,000 patients a year.

Its accomplishments are lengthy, but highlights include the nation's first successful hand transplant surgery and groundbreaking work in artificial

heart transplants. Such advanced activities require equally advanced research facilities, and the university launched an ambitious plan to make U of L's Health Sciences Center one of the country's leading institutions for medical discovery. In 1999 the university dedicated the state-of-the-art Donald E. Baxter, M.D., Biomedical Research Building, and a companion facility, the Delia B. Baxter Biomedical Research Building was dedicated in 2003.

Thanks to an infusion of money from the Kentucky General Assembly and Kentucky's Research Challenge Trust Fund, world-class researchers began relocating to LMC and U of L's Health Sciences Center. Between 1999 and 2006, the School of Medicine experienced the fastest growth in National Institutes of Health Research funding of any medical school in the nation and continues to grow.

Construction on campus continued, with an additional 200,000 square feet of research space under construction on the east side of the Health Sciences campus, which houses laboratories associated with the Brown Cancer Center. Construction completed in fall of 2009 on the Clinical and Translational Research Building. State of the art clinical space includes the Health Care Outpatient Center (est. 2008) and the Novak Center for Children's Health (est. 2018). Educational facilities, including the Instructional Building and the Kornhauser Library underwent significant renovations in 2014.

Under the leadership of Interim Dean Jeffrey M. Bumpous, MD, FACS, the University of Louisville School of Medicine, continues to educate some of the nation's finest medical practitioners. In fact, it has graduated more doctors than any other institution in the Commonwealth.

With its excellent teaching and research facilities, newly endowed chairs and strong leadership, the University of Louisville School of Medicine holds a future filled with promise, built on a past distinguished by excellence.

Institutional and Professional Accreditation

The University of Louisville is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award associate, bachelor, master, specialist, doctoral, and first-professional degrees (D.M.D., J.D., M.D.). The University of Louisville also may offer credentials such as certificates and diplomas at approved degree levels.

Questions about the accreditation of the University of Louisville may be directed in writing to the **Southern Association of Colleges and Schools Commission on Colleges** at 1866 Southern Lane, Decatur, Georgia 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (sacscoc.org (<http://sacscoc.org/>)).

In 2021, The University of Louisville School of Medicine received full accreditation by the **Liaison on Medical Education (LCME)**. The next survey date will be in the 2028-2029 Academic year. This achievement is a testament to our commitment to excellence and continuous quality improvement.

Verify our accreditation <https://lcme.org/directory/accredited-u-s-programs/>

What is the LCME?

The **Liaison Committee on Medical Education (LCME)** is the accrediting body for medical education programs leading to the MD degree.

The LCME is jointly sponsored by the Association of American Medical Colleges (AAMC (<https://www.aamc.org/>)) and the American Medical Association (AMA (<https://www.ama-assn.org/>)) and consists of Secretariat staff who maintain offices in Washington, D.C. and Chicago, IL and 21 voting members; 17 professional members who are medical educators and or practicing physicians and are knowledgeable about U.S. medical education programs, two public members, and two medical students.

LCME accreditation is a voluntary, peer-reviewed process of quality assurance that determines whether the medical education program meets established standards while also fostering institutional and programmatic improvement. To achieve and maintain accreditation, a program must meet the LCME accreditation standards (See Functions and Structure of a Medical School (<https://lcme.org/publications/#Standards>)).

Programs are required to demonstrate graduates exhibit general professional competencies that are appropriate for entry to the next stage of training and serve as the foundation for lifelong learning and proficient medical care.

Accreditation by the LCME establishes eligibility for selected federal grants and programs, including Title VII funding administered by the U.S. Public Health Service, and eligibility to take the United States Medical Licensing Examination (USMLE (<http://www.usmle.org/>)). Most state boards of licensure require that programs be LCME-accredited as a condition for licensure of their graduates. Graduates of LCME-accredited schools are eligible for residency programs accredited by the Accreditation Council for Graduate Medical Education (ACGME (<http://www.acgme.org/>)).

For more LCME Information:

<https://lcme.org/>

<https://lcme.org/contact/>

Facilities Medical Facilities

The School of Medicine is part of the University of Louisville Health Sciences Center (HSC), located in the heart of the Louisville Medical Center. Immediately east of the School is the University of Louisville Hospital, the principal teaching hospital of the University, and within two blocks are most of the affiliated hospitals. The center of activity for preclinical students is the Instructional Building, a three-story structure, located across from the Health Sciences Center Library Commons Building. The Instructional building has three auditoriums, two lecture halls, 20 small group teaching rooms, seven lounges, group study rooms and two kitchenettes. The lecture halls are collaborative learning spaces that incorporate the latest teaching concepts. The first floor room provides digital displays at the table top, allowing students to work in groups and share their product with the entire class. The gross anatomy labs, standardized patient clinic and simulation center are also located in this facility. The building is outfitted with wireless communication to provide students with easy access to the internet and various information technology systems.

Connected to the Instructional Building are the School of Dentistry and a fourteen-floor research tower housing various Basic and Clinical Science Departments and the Office of Medical Student Affairs. The tower is also

connected to the Library Commons Building that houses the Kornhauser HSC Library, the HSC Auditorium seating 440, and a food service facility.

The Alumni Center for Medical Education

The Alumni Center for Medical Education, located on the third floor of the Instructional Building, houses two state-of-the-art clinical education sites, the John M. and Dorothy S. Paris Patient Simulation Center and the Standardized Patient Clinic. Students have opportunities to develop and hone their clinical skills in both of these facilities.

The John M. and Dorothy S. Paris Simulation Center houses five computer-driven human patient simulators (four adult and one pediatric). The Simulation Center also has three portable human patient simulators, one obstetrical delivery simulator, and numerous other part task trainers. The simulators can mimic the physiology and pathophysiology of a person of any age; students can palpate for physical structures for important anatomical landmarks; they can provide ventilation to support or protect the patient's airway and they can administer drugs for the patient's care and observe the body's reaction in a safe environment that is conducive to learning. Since the basic factors of physiology can be controlled, the simulators can also be used to demonstrate disease states that re-create realistic abnormal physiology. Audio and video management systems allow for digital capture and storage of training for future review and assessment purposes.

The Standardized Patient Clinic contains twelve fully equipped and digitized examination rooms suitable for high-stakes testing. Student performance can be observed live through a streaming server or digitally recorded for later review with a faculty member or standardized patient. Standardized patients are trained to present with particular symptoms and provide students with feedback about their history taking, examination, and communication skills. They provide students with realistic, low-risk opportunities to interact with patients during their pre-clinical years. During the clinical years, standardized patient encounters are incorporated into the curriculum as assessment and board preparation. Students work with standardized patients beginning in their first year of medical school.

The Kornhauser Health Sciences (HSC) Center Library

Kornhauser HSC Library is a comprehensive health sciences information resource center. It provides on and off-campus access to extensive research and clinical tools including Acland's Video Atlas of Human Anatomy, e-textbooks, evidence-based practice and clinical decision-making tools, USMLE prep tools and over 2300 health sciences journals and 50 medical-related databases. Individual study desks, comfortable seating areas, and group student space is provided, as well as a small vending area.

Students are among the library's priority clientele. Services for students include: laptop checkout, quiet student space, group student rooms, professional literature searching, 24 hour library access, and vending. The library has an open food and drink policy, with free snacks provided during final exams. Since 1837, the library has helped students achieve academic success and continues to offer students the best service possible.

The Kentucky Lions Eye Center

This 64,000 square foot complex includes the Department of Ophthalmology and Visual Sciences, the Kentucky Lions Eye Research Institute, the Rounsavall Eye Clinic, the Kentucky Lions Eye Bank and the offices of the Kentucky Lions Eye Foundation. Approximately two-thirds of the center is dedicated to laboratory research in visual sciences. The

center provides the highest standard of patient care in all specialty areas of Ophthalmology. A broad range of basic and clinical research activities are supported by federal and private funding agencies. Educational activities include a residency training program.

The Medical-Dental Research Building

This seven-story 120,000 square foot structure is dedicated to scientific investigation. Departments of the School of Medicine currently using the building for research include Anatomical Sciences and Neurobiology, Medicine, Pathology and Laboratory Medicine, Psychiatry, Surgery, Neurology and Neurosurgery.

The James Graham Brown Cancer Center

The James Graham Brown Cancer Center is a key component of the Health Sciences Center. The Center encourages collaboration between oncology physicians and cancer researchers and emphasizes bringing the latest research from the lab to the bedside of its patients. This emphasis reflects treatment plans for patients fueled by a commitment to translational research. Patients benefit from a team approach to patient care, where multidisciplinary teams of specialized physicians, nurses and other care providers work together to treat each patient according to a unique, customized plan.

The Center provides both treatment space and the Department offices for Radiation Oncology and the Division offices for Medical Oncology, Surgical Oncology, Dental Oncology/Maxillofacial Surgery, and Gynecologic Oncology. Clinical trials are also conducted in this facility. The Center also serves as a training site for medical students and residents in oncology related fields.

The Novak Center for Children's Health

This center is located at 411 East Chestnut Street and provides comprehensive health care for infants and children. It is a major outpatient facility for the Department of Pediatrics.

The Kosair Charities Pediatric Center

The Kosair Charities Pediatric Center houses the Department of Pediatrics' academic and administrative offices on the top two floors and the Weisskopf Center for the Evaluation of Children (WCEC) on the bottom two floors. The WCEC was established to help children who have special needs realize their full potential. Children and adults with developmental, learning and behavioral disorders receive appropriate diagnostic and intervention services. Genetic evaluation and genetic counseling are provided to children and adults who have or who are at risk of having a birth defect or genetic disorder. The professional staff is composed of pediatric developmental specialists, child psychologists, education specialists, speech-language pathologists, occupational therapists, physical therapists, social workers, geneticists, genetic associates, and nurses.

The WCEC is also committed to training professionals and community advocacy. Throughout the year, professionals from many different areas rotate through the Center, providing direct opportunity to work with this population. The Center also collaborates with professionals in the local community to better serve children with special needs and their families. The Center will move to the PMOB in the summer of 2018.

The Kidney Disease Center

The Kidney Disease Center houses the Division of Nephrology of the Department of Medicine. The Nephrology clinics and a dialysis unit

provide treatment for patients with renal disease and hypertension, for kidney transplant recipients, and for patients on chronic dialysis.

The Donald E. Baxter, MD, Biomedical Research Building and the Della B. Baxter Biomedical Research Building

The Donald E. Baxter Research Building (opened in 1999) and the Della B. Baxter Research Building (opened in 2003) provide more than 260,000 square feet of state-of-the-art research space. The lower level, connecting the two buildings, includes a 100-seat research seminar room, a large conference room and research support facilities. The other four levels in each of the buildings consists of two "pods" or wings joined by shared conference and break rooms. Each pod houses six laboratories and six offices.

Research programs located in this facility include the Institute for Cellular Therapeutics, Pediatrics (Kosair Children's Hospital Research Institute), the Center for Genetics and Molecular Medicine, Nephrology/Proteomics, Pulmonary, the Institute for Molecular Cardiology, and the Gheens Center on Aging.

The Cardiovascular Innovation Institute

Since opening its doors in 2007, the Cardiovascular Innovation Institute, a joint initiative between the University of Louisville and Jewish Hospital & St. Mary's HealthCare has focused on the discovery, development and implementation of innovative treatments for cardiovascular disease.

A primary goal of the institute is to foster a highly collaborative, integrated, multi-disciplinary world-class enterprise encompassing basic, translational, and clinical & population research in cardiovascular disease affecting individuals from pre-natal life to death.

The 80,000 square foot facility provides state-of-the-art laboratories devoted to cardiovascular research. In December 2009, the Institute completed construction of a "first of its kind" translational research cleanroom. The cleanroom suite is maintained under the current Good Manufacturing Practice (GMP) regulations of the FDA and provides researchers and clinicians with a facility to produce regulated products for clinical use. The cleanroom suite affords the opportunity to translate both cell and biohybrid therapies from the research being conducted in the facility into clinical practices.

The Kosair Charities Clinical and Translational Research Building

The Clinical and Translational Research (CTR) building, opened in 2009, has 290,000 square feet of bio-medical research laboratory space designed for research clinical and translational applications including cancer research. The CTR building provides flexible and adaptable state-of-the-art biomedical research facilities, designed to promote interdisciplinary collaboration between scientists working in the building. It has five floors of "open lab" neighborhoods, lab support facilities, faculty offices, core research facilities, and a series of seminar/conference rooms on the first floor. Primary occupants are Cancer Center, Departments of Medicine (Pulmonary and GI divisions), Microbiology and Immunology, Pharmacology, and the Center for Predictive Medicine.

Affiliated Facilities

Facilities Affiliated with the School of Medicine

Baptist Health Deaconess, Madisonville

The Baptist Health Deaconess (formerly known as the Trover) Campus is an off-campus teaching center of the University of Louisville. The facility, which includes a 401-bed hospital and 120 physicians, is playing a focal role in the School's generalist physician efforts. An increasing number of students are receiving training at the campus and its related satellites. In addition to the excellent patient volume and medical staff, this location provides a different orientation to the delivery of medical care and demonstrates to the students and residents the excellent quality of care that can be rendered in a small to medium size community. Graduates of UofL's Baptist Health Deaconess Campus programs are overwhelmingly choosing to locate their post-graduate practice in rural and/or underserved communities.

Norton Children's Hospital

Kosair Crippled Children Hospital and Norton-Children's Hospitals Inc. consolidated in May 1981 to form Kosair Children's Hospital. Kosair Children's Hospital opened the doors of its new, innovative hospital less than one block from the medical school in December 1986. In 2016, the hospital was named Norton Children's Hospital and today serves as the major pediatric referral, diagnostic, and treatment center for Kentucky and Southern Indiana and is the only full-service freestanding children's hospital in the state of Kentucky. With its bed capacity of 253, Norton Children's serves as the major medical, surgical, and inpatient psychiatric pediatric facility for the University of Louisville and its Department of Pediatrics with a full complement of students and residents. The hospital includes a state-of-the-art neonatal intensive care unit with ECMO (artificial lung) capabilities and pediatric cardiac, bone marrow and kidney transplant programs.

Norton Hospital

Norton Hospital is an innovative teaching and patient care facility with 384 medical, surgical, and obstetrical beds plus the Norton Psychiatric Clinic (a 36-bed inpatient unit with significant outpatient activity operated with a closed staff of University faculty). The Norton Healthcare Louisville Medical Center campus, which is about 1 1/2 blocks from the Medical School, provides opportunity for educating students and residents in a private patient setting. Active education programs in anesthesiology, medicine, obstetrics and gynecology, pathology, psychiatry, radiology, and surgery are directed mainly by full-time faculty members of the University of Louisville.

Norton Audubon Hospital

Norton Audubon Hospital is a 432-bed acute care hospital specializing in cardiac, cancer, surgical, pulmonary, neurology, orthopedic, vascular, emergency and diagnostic care. Norton Audubon is home to one of the largest and most comprehensive heart care programs in the Louisville region, having performed the world's second artificial heart transplant in 1984 and, since that time, been recognized by the American College of Cardiology as a national leader in advances in chest pain and heart attack treatment. It also holds the region's highest accreditation as a Chest Pain Center. Norton Audubon provides full inpatient and outpatient medical and surgical services and special programs focused on joint care, critical care, geriatric services, sleep disorders, pain management, wound healing, vascular access and music therapy. In 2016, Norton Audubon Hospital began a two-year construction and renovation project. When

completed, the hospital will have 74 additional patient rooms. The project, with a total investment of more than \$107 million, is expected to wrap up in 2018. More information is available at NortonAudobonHospital.com.

Norton Brownsboro Hospital

Norton Brownsboro Hospital is a full-service, 127-bed community hospital serving patients in northeastern Jefferson, Oldham, Shelby, Carroll, Henry, Spencer, Trimble and surrounding counties. Using a patient- and family-centered model of care, Norton Brownsboro offers a wide range of inpatient, outpatient, diagnostic, orthopedic, cardiovascular, neurological and neurosurgical, cancer care and intensive care services. The hospital's 24/7 emergency department has 22 private treatment rooms, a heliport for critical care transport and is a regional referral center for advanced neurosurgical conditions, specifically stroke care. Norton Brownsboro is certified as a Comprehensive Stroke Center by The Joint Commission. The hospital features 6/21/2017 an open, airy design with large, private patient rooms and enhanced environmental principles that earned it Leadership in Energy and Environmental Design (LEED) certification from the U.S. Green Building Council. More information is available at NortonBrownsboroHospital.com.

Norton's Children Medical Center

Norton Children's Medical Center in northeastern Jefferson County features 365-day-a-year pediatric emergency services; a full complement of pediatric diagnostic imaging services, including MRI, CT, X-ray, fluoroscopy and ultrasound; a full-service laboratory; and a wide range of pediatric outpatient surgery services, including ear, nose and throat; orthopedics; eye; urinary; dental; and general surgeries. The medical center's layout, processes and amenities were designed to ease children's and families' anxiety about medical experiences and to make the facility a friendly and inviting place for children, teens, young adults and their families. More information is available at NortonChildrens.com.

Norton Women's & Children's Hospital

Norton Women's & Children's Hospital is a full-service, 373-bed community hospital offering inpatient and outpatient medical/surgical care, full diagnostic services and 24-hour emergency care for men, women and children. The hospital specializes in comprehensive cancer prevention, detection and treatment; orthopedics and bone health; pelvic health services; migraine treatment; breast health diagnostics; and surgical weight loss services. For children, the hospital offers pediatric surgery, inpatient care including a 44-bed Level III neonatal intensive care unit, a sleep center, a rehabilitation center and pediatric emergency services, plus specialized care for pediatric urology and gynecology patients.

Norton Women's & Children's Hospital holds The Joint Commission's Gold Seal of Approval as a certified advanced Primary Stroke Center offering comprehensive stroke intervention. Through Norton Women's Care, the hospital offers general and high-risk obstetric and gynecologic care, as well as a surgical unit with private rooms and specialized nursing care just for women. Norton Women's & Children's Hospital is a designated AAGL Center of Excellence in Minimally Invasive Gynecology™ as well as an American College of Radiology Breast Imaging Center of Excellence. The hospital has been a primary provider of obstetrical services in Kentucky for a number of years, delivering more than 5,000 babies annually since 2003.

Baptist Health Deaconess, Madisonville

The Baptist Health Deaconess (formerly known as the Trover) Campus is an off-campus teaching center of the University of Louisville. The facility, which includes a 401-bed hospital and 120 physicians, is playing

a focal role in the School's generalist physician efforts. An increasing number of students are receiving training at the campus and its related satellites. In addition to the excellent patient volume and medical staff, this location provides a different orientation to the delivery of medical care and demonstrates to the students and residents the excellent quality of care that can be rendered in a small to medium size community. Graduates of UofL's Baptist Health Deaconess Campus programs are overwhelmingly choosing to locate their post-graduate practice in rural and/or underserved communities.

UofL Health Frazier Rehabilitation Institute

In conjunction with the University of Louisville School of Medicine, Frazier Rehab Institute conducts a residency program in physical medicine and rehabilitation. Frazier Rehab Institute, a 135-bed, acute rehab hospital, is housed in the new, 15-story, state-of-the-art Frazier Rehab and Neuroscience Center located at 220 Abraham Flexner Way in the Jewish Hospital Medical Campus in downtown Louisville. Along with medical care and rehab nursing, this rehab hospital offers physical, occupational and speech therapies, therapeutic recreation, psychology and neuropsychological testing services to each patient in the acute care, inpatient and outpatient rehab settings at this location. Additionally, Frazier Rehab Institute has a large network of 21 community-based, outpatient rehab sites in Kentucky and southern Indiana.

UofL Health Jewish Hospital

This not-for-profit, 442-bed, medical-surgical specialty hospital is located in the Louisville Medical Center one block from the Medical School, and was the site of the world's first and second AbioCor Totally Implantable Replacement Heart procedures and the world's first successful hand transplant. The hospital is a regional referral center recognized for quality, highly specialized medical and nursing care, and is the flagship of a health network consisting of more than 71 facilities throughout Kentucky and southern Indiana.

Jewish Hospital's mission is to provide health care services of world-class quality to all people, emphasizing research, education, and technology. Consistent with this mission, Jewish Hospital has a formal relationship with the University of Louisville School of Medicine involving training and research projects. Together we have pioneered medical firsts that have made lifesaving differences to the people of this region and beyond. In addition to the AbioCor and hand transplant projects, the hospital's many milestones include the world's first successful double-limb replantation, first minimally invasive saphenous vein harvest and first successful heart transplant following the use of a Thoratec ventricular assist device.

Students, interns, and residents work with clinical faculty who are in private practice in internal medicine and surgery. A full-time faculty member based at the hospital supervises each program. Jewish Hospital is, also, the home of the University Hand Surgery Team, which trains residents and fellows in this specialty; one of the training sites for residents in surgery; and the facility at which kidney, heart, lung, liver, and pancreas transplants are performed by the school's faculty. The Thomas Cardiovascular Laboratory, located in Jewish Hospital, is utilized as a teaching site for cardiac catheterization.

UofL Health Mary and Elizabeth Hospital

Mary & Elizabeth Hospital, part of UofL Health, is a 298-bed, full-service hospital. The hospital offers a full range of vascular, orthopedic, cardiac, neurological, surgical, rehabilitative and 24/7 emergency services. Mary & Elizabeth Hospital is also home to Bariatric Care, the region only weight-loss management program utilizing the Lap-Band system. In addition, the

hospital provides the Orbera Gastric Balloon procedure. The hospital has been recognized as one of the first health care facilities in the nation to receive a Blue Distinction enter for Bariatric Surgery. The hospital also includes a Healthy Lifestyle Center. The hospital was initially founded by the Sisters of Charity of Nazareth in 1874

UofL Health Medical Centers East

UofL Health – Medical Center East opened in 2003 and for nearly 20 years has provided patients an outpatient care experience defined by patient comfort/privacy, personal service and leading-edge technology. Home of the Center for Excellence in Women's Care, the facility has earned distinction as being the first in Louisville to receive accreditation from the American College of Radiology (ACR) for breast MRI, as well as Breast Imaging Center of Excellence (BICOE) designation. The medical center offers a full range of services, including 24/7 emergency care, chest pain observation services, breast MRI, 3D digital mammography, laser eye surgery, diagnostic and medical imaging, outpatient surgery, orthopedic care, gastroenterology care, urology care, primary and specialty care, rehab services, laboratory and infusion services.

UofL Health Medical Center Northeast

UofL Health – Medical Center Northeast is a four-story, 120,000 square-foot outpatient care facility conveniently located at 2401 Terra Crossing Boulevard off Old Henry Road near I-265/Gene Snyder Freeway. Residents in the Middletown, Jeffersontown, Anchorage and Eastwood areas of Jefferson County now have closer access to the expertise provided by UofL Physicians academic and community-based primary care and specialty physicians, as well as a full complement of health care services. Many of our physicians are also professors and researchers at the University of Louisville School of Medicine teaching tomorrow's physicians, leading research in new innovative medical advancements, and bringing progressive, innovative, state-of-the-art health care to every patient.

UofL Health Medical Center South

Located on a 19-acre campus, UofL Health – South Hospital provides outpatient services and 24/7 emergency care to residents in fast-growing Bullitt County and the surrounding service area including Southern Jefferson County, Spencer, Nelson, Meade and Hardin counties. The facility includes a 48,000 square-foot medical center and a 25,000 square-foot medical office building. The hospital offers a full range of services, including 24/7 emergency care, chest pain observation services, outpatient surgery, 3D mammography and diagnostics/medical imaging. The medical office building houses both primary care and specialty physician offices, a Frazier Rehab Institute outpatient rehab facility and the Larry Belcher Community Room which can be scheduled for use by local community groups on a complimentary basis.

UofL Health Medical Center Southwest

UofL Health – Medical Center Southwest opened in 2007 to provide outpatient and emergency care services to the medically underserved area of southwest Jefferson County. The medical center offers patients in the Valley Station, Prairie Village and Waverly Hills communities an array of critical health services including 24/7 emergency care, diagnostic and medical imaging, laboratory services and Frazier Rehab Institute outpatient rehab services.

UofL Health University of Louisville Hospital

The University of Louisville Hospital serves as the major teaching hospital for University of Louisville students and house officers. The new hospital opened in 1983 and is part of a medical complex which includes

both in-patient hospital services and out-patient services located in the Ambulatory Care Building. Clinical faculty offices are incorporated within the complex. Academic responsibility for the hospital is vested in the Executive Vice President for Health Affairs. University of Louisville Hospital is a modern 404-bed acute and trauma care hospital. The hospital provides a full range of diagnostic, therapeutic, emergency and surgical services. It houses Kentucky's first Level One Trauma Center and has a 24-hour helicopter emergency medical service.

Veteran Affairs Medical Center

This facility is located about three miles east of the downtown Medical School campus. It has a capacity of 369-beds with an average daily census of 300 patients and provides over 80,000 ambulatory care visits per year. Members of the professional staff have full faculty appointments in the School of Medicine. The VA Medical Center furnishes a large and varied flow of inpatients and outpatients for study and is approved for over 80 residency positions in medicine, surgery, psychiatry, and most of the specialties and sub-specialties dealing with adult patients. The addition of this Medical Center to the educational facilities of the School has not only increased the clinical opportunities available to students and for graduates to train for their specialty boards, but also has brought an increased number of highly trained physicians to our faculty. The VA Medical Center provides opportunities and support for major research activities for faculty. The close affiliation between the VA Medical Center and the School of Medicine is fostered by monthly meetings of the Dean's Committee, made up of those representatives from both institutions responsible for patient care, education and research activities at the VA Medical Center.

Admission to the School of Medicine Admission

Applicants to the first year class of the University of Louisville School of Medicine are considered individually and are selected based on merit without consideration of race, sexual orientation, religion, gender, age or national origin.

Overview

The Admissions Committee evaluates an applicant's acceptability based on the entire academic record (undergraduate and graduate), Medical College Admissions Test (MCAT) scores, and premedical advisory committee recommendations. The applicant's communication skills, personality, and motivation are evaluated by interviews with committee members. Extracurricular activities and medical exposure are also important elements of the applicant evaluation. Complete undergraduate preparation is strongly encouraged. The minimum prerequisites are listed under the Pre-Med Requirements. Your best resource for determining the appropriate prerequisite courses is the pre-med advisor at your undergraduate institution.

Interviews are arranged by the Admissions Office for each applicant whose credentials appear to warrant further exploration. The interview day schedule allows the applicant to talk with medical students and learn more about the School of Medicine.

Inquiries concerning admission should be addressed to:

**University of Louisville School of Medicine
Office of Admissions**
Health Instructional Building, 1st Floor
500 South Preston Street
Louisville, KY 40202-3866

(502) 852-5193 or (800) 334-8635 ext. 5193

louisville.edu/medicine/admissions (<https://louisville.edu/medicine/admissions/>)
Email: medadm@louisville.edu

Residency Status

Out-of-State Residents: Consistent with the mission of the University of Louisville as a state university, residents of Kentucky are given preference for admission. Applications from nonresidents are accepted; those with significant academic, personal, or family ties to Kentucky are given preference. Residency must be established one year before submitting your application.

International Applicants

Applications from international students, including those with "Deferred Action for Childhood Arrivals" status (DACA), are accepted. Consistent with the mission of the University of Louisville as a state university, those with significant academic, personal, or family ties to Kentucky are given preference. International applicants are considered under the following circumstances:

- The applicant has a pending application for permanent residency status in the United States **and** A) is either married to a U.S. citizen who has an established residence in Kentucky and intends to remain in Kentucky or B) has numerous members of his or her immediate family who have established residence in Kentucky indefinitely; or
- The applicant is married to the beneficiary of an approved I-140 Petition for Immigrant Worker ("I-140 spouse") and the applicant and the applicant's I-140 spouse are eligible for permanent residency except for delays stemming from backlogs in visa priority dates, and the applicant and the applicant's spouse are presently in an immigration status that is renewable until they obtain permanent residency **and** A) the applicant's I-140 spouse has an established residence in Kentucky and intends to remain in Kentucky, or B) the applicant has numerous members of his or her immediate family who have established residence in Kentucky indefinitely; or
- The applicant has been granted DACA status **and** A) is either married to a U.S. citizen who has an established residence in Kentucky and intends to remain in Kentucky or B) has numerous members of his or her immediate family who have established residence in Kentucky indefinitely.

The Admissions Dean or the Dean's designee will make all decisions as to whether consideration circumstances exist in a particular application for admission.

International students, including those with a pending permanent residency application or DACA status, are not eligible for most federal benefits, including federally guaranteed student loans. Such loans usually comprise an important part of a medical student's financial aid package. Therefore, if these international students are offered admission, they must submit documentation of sufficient funds to cover the cost of completing a medical degree (cost estimates (<http://louisville.edu/medicine/financialaid/cost-of-attendance/>)). Admission offers to international students who cannot submit adequate documentation of sufficient funds will be withdrawn. The Dean or the Dean's designee shall make all decisions as to whether the documentation of sufficient funds is adequate for a particular international student offered admission.

Early Decision

The Early Decision Program (EDP) provides the well-qualified applicant an opportunity to secure acceptance by October 1.

Candidates accepted through the EDP must attend the accepting institution. By applying as an EDP candidate, the individual agrees not to apply to any other U.S. medical school until any of the following occurs:

- a. Denial of an EDP commitment,
- b. Release from the EDP commitment, or
- c. October 1 notification deadline expiration.

The limited number of early decision seats are awarded based on exceptional academic standing and MCAT scores. The Early Decision Program application deadline is August 1.

Application Requirements

The University of Louisville School of Medicine participates in the American Medical College Application Service (AMCAS). Applications can be found at www.aamc.org/students/applying/amcas/ (<https://www.aamc.org/students/applying/amcas/>) beginning mid-May of each year. Applications are screened once they have been verified by AMCAS, regardless of residency status. Allow 4-6 weeks for AMCAS to verify applications. The ULSOM's AMCAS application deadline is November 1st.

Selected applicants are notified by email to complete the secondary application. There is a non-refundable application fee unless you received a fee waiver through the AMCAS fee assistance program. Candidates should log in to the secondary application site within two weeks of notification; however, the deadline to complete and submit the secondary application online is December 1st. Most competitive candidates should submit the secondary application as soon as possible.

Admission Test (MCAT)

All applicants must take the Medical College Admission Test (MCAT). The MCAT should preferably be taken during the second semester of the applicant's junior year, or the summer term immediately thereafter. In no case should it be postponed later than the fall of the year prior to the one in which the applicant intends to enter medical school. The MCAT should not be attempted before the major basic science requirements are completed.

MCAT information may be obtained from the applicant's pre-medical advisory personnel or by going online at the following web address: <https://students-residents.aamc.org/prepare-mcat-exam/> (<https://students-residents.aamc.org/prepare-mcat-exam/prepare-mcat-exam/>).

The ULSOM accepts the most recent score, and will not accept any MCAT scores older than two years old.

Letters of Recommendation

Each applicant is required to submit a pre-med advisory committee report. If your college/university does not have a pre-med committee, we require three (3) academic letters of recommendation. These letters must be on college letterhead and should include at least one professor of a pre-requisite or higher-level science course. The remaining academic letters may include a professor from a course in your academic major,

a research supervisor or science independent study professor in which credit was awarded, or a course from a non-science area of study.

Candidates may submit two additional letters, ideally, from sources that speak to the candidate's suitability for medicine.

Non-traditional applicants or those that have been out of school for 2 or more years may substitute no more than 2 academic letters with employer letters from a direct supervisor, a letter from a research PI/supervisor, or letters from a substantive volunteer environment.

All letters of recommendation for the University of Louisville School of Medicine must be submitted via the AMCAS letter service (<https://students-residents.aamc.org/applying-medical-school/article/amcas-letter-service-advisors-and-other-letter-aut/>). This service enables medical schools to receive all letters electronically via AMCAS. It enables authors to send all letters to be considered by schools participating in this service to AMCAS rather than each school.

Criminal Background Check

A Criminal Background Check (CBC) will be administered through AAMC on all applicants at the time of acceptance, and on alternate applicants at the request of the Admissions Office. Applicants must consent, submit to, and satisfactorily complete a criminal background check investigation as a condition of matriculation into ULSOM.

More information on the CBC policy (<http://louisville.edu/medicine/admissions/policies/criminal-background-check-policy/>) can be found on the ULSOM website.

Personal Interview

The Office of Admissions arranges appointments for interviews with all applicants whose qualifications indicate that further consideration is appropriate. If an applicant is eligible for an interview, the applicant will be notified via email.

Technical Standards

Technical Standards for Admission, Continuation and Graduation

Delineation of technical standards is required for accreditation of U.S. medical school by the Liaison Committee on Medical Education. The School of Medicine is committed to compliance with Section 504 of the Rehabilitation Act of 1973 and with the Americans with Disabilities Act of 1990, and does not discriminate against otherwise qualified applicants for admission or matriculated students who have disabilities. The School of Medicine recognizes that the contract between the school and the public includes the expectation that the school will do everything reasonable to ensure that its graduates can become fully competent physicians. Patient safety must never be compromised. Acquisition of competence is a lengthy and complex process, which would be subverted by significant limitations, with or without reasonable accommodation, on the students' ability to participate fully in the spectrum of experiences constituting the medical school curriculum. All candidates for admission, retention, promotion and graduation should be aware that the academic and clinical responsibilities of medical students may, at times, require their presence during day, evening and night hours, seven days a week.

Technical standards provide criteria against which candidates for admission, retention, promotion and graduation from the School of Medicine can be assessed as the faculty operating through its

committees exercises its judgment in selecting, retaining, promoting and graduating students. The curriculum of the School of Medicine has been designed to provide a generic professional education leading to the M.D. degree and to prepare students to pursue any pathway of graduate medical education and enter the independent practice of medicine. Therefore, an avowed intention on the part of a candidate to ultimately practice in only a narrow portion of the spectrum of medicine does not obviate the requirement for the candidate's full participation in the entire educational and training continuum. In evaluating candidates for admission, retention, promotion and graduation, it is essential that the integrity of the curriculum be maintained, that those elements deemed necessary for the education of a physician be preserved, and that the health and safety of patients be maintained.

All candidates for admission must fulfill the minimum requirements for admission and all candidates for the MD degree must complete all required courses and clerkships as listed in the School of Medicine Bulletin.

Observation

Candidates must be able, in classroom, clinical and laboratory environments, to acquire information from demonstrations and participate in experiments of science, including but not limited to such things as dissection of cadavers; examination of specimens in anatomy, pathology, and neuroanatomy laboratories; and microscopic study of microorganisms and tissues in normal and pathologic states. Candidates must be able to obtain a medical history and perform a complete physical examination, integrate findings based on this information and develop an appropriate diagnostic and treatment plan. Candidates must be able to recognize non-impaired versus impaired patient function or conditions. These skills require the use of vision, hearing, smell and touch, or the functional equivalent.

Communication

Candidates must be able to communicate effectively, efficiently, empathetically, and sensitively with patients, their families, health care personnel, colleagues, faculty, staff, and all other individuals with whom they come in contact. Candidates must be able to obtain a medical history in a timely fashion, interpret non-verbal aspects of communication, and establish therapeutic relationships with patients. Candidates must be able to perceive and react appropriately to changes in mood, activity, posture and behavior; and perceive nonverbal communication. Candidates must be able to gather, transmit and record information accurately and clearly; and communicate effectively and efficiently in English with other health care professionals in a variety of patient settings, using both written and oral form.

Motor Function

Candidates must be able to participate in classroom, clinical, and laboratory learning environments in a timely, efficient, and effective manner. Candidates must be able to perform physical examinations (e.g., palpation, auscultation, percussion and other diagnostic maneuvers) using appropriate equipment. They must be able to respond to clinical situations in a timely, efficient and effective manner to provide general and emergency care, including adherence to universal precautions. Candidates must be able, with or without reasonable accommodation, to effectively operate a computer. These activities require some physical mobility, coordination of both gross and fine motor neuromuscular function and balance and equilibrium.

Intellectual, Conceptual, Integrative, and Quantitative Abilities

Candidates must be able to rapidly, consistently and accurately assimilate and analyze clinical data, perform observations, clinical measurements and calculations and problem-solve to make logical diagnoses and therapeutic judgments for patients. Candidates must be able to learn through a variety of modalities including, but not limited to, classroom instruction; small group, team and collaborative activities; individual study; preparation and presentation of reports; simulations and use of computer technology. Candidates must be able to memorize, measure, calculate, reason, analyze, integrate, synthesize, and transmit information. They must recognize and draw conclusions about three-dimensional spatial relationships and logical sequential relationships among events, as related to human anatomy and function. They must be able to formulate and test hypotheses that enable effective and timely problem-solving in diagnosis and treatment of patients in a variety of clinical settings and health care systems.

Behavioral and Social Attributes

Candidates must demonstrate the maturity and emotional stability required for full use of their intellectual abilities. They must accept responsibility for learning, exercising good judgment, and promptly completing all responsibilities attendant to their curriculum and to the diagnosis and care of patients. Candidates must display integrity, honesty, conscientiousness, empathy, a sense of altruism, and a spirit of cooperation and teamwork. They must understand the legal and ethical aspects of the practice of medicine, and must function within both the law and ethical standards of the medical profession. Candidates must be able to interact with patients and their families, health care personnel, colleagues, faculty, staff, and all other individuals with whom they come in contact in a courteous, professional, and respectful manner. Candidates must be able to contribute to collaborative, constructive learning environments; accept constructive feedback from others; and take personal responsibility for making appropriate positive changes. Candidates must be able, with or without reasonable accommodation, to tolerate taxing workloads and function in a competent and professional manner under highly stressful situations, adapt to changing environments, display flexibility, and manage the uncertainty inherent in the care of patients and the health care system.

Implementation

Implementation of these technical standards across the educational continuum is within the purview of the faculty of the School of Medicine operating through its faculty committee processes. It is the responsibility of the members of faculty committees to determine the appropriate interpretation and application of the standards in individual cases.

Approved by Executive Faculty: July 1, 2019

Pre-Med Requirements

Pre-Medicine Coursework

Because the prospective medical student with broad educational background profits most from the medical curriculum, preference is given to applicants with a bachelor's degree. Courses in paramedical schools (such as pharmacy, nursing, optometry, medical, etc.) do not fulfill the premedical science requirements. Courses taken in non-accredited institutions will not be accepted. Applicants who have been dismissed from other medical schools for scholastic or disciplinary reasons will

not be considered. The Admissions Committee reviews all coursework completed at the undergraduate, post-baccalaureate, and graduate levels.

In selecting courses, the premedical student should be aware of the broad scope of the medical profession. The biological basis for the practice of medicine is traditional and appropriate because medicine, in its technical aspects, is an applied biological science. Modern medical practice also requires a working knowledge of chemistry and physics to appreciate vital processes in both health and disease.

To be successful, medical students must be able to read rapidly and with understanding. They also must be able to express their thoughts clearly and concisely.

Premedical students should develop a solid background in the humanities, psychology, sociology, philosophy, and the arts. Understanding human relationships and human nature are vital to the practice of medicine. Students are encouraged to take courses, which would be difficult to acquire after the college experience is completed. The School of Medicine seeks to admit well-rounded students with broad and diverse experiences.

Each applicant must complete the following courses prior to matriculation:

Biology

The biology requirement is met by one semester of cellular biology with lab and one semester of organismic biology with lab. Survey courses (an introductory course of study that provides a general view of an academic subject) in anatomy and physiology cannot be substituted for this requirement. AP and IB Biology credit is not accepted toward this requirement. If your undergraduate institution accepted AP or IB Biology credit, two upper-level Biology courses with labs are required.

General Chemistry

This requirement is met by a one-year sequence in general inorganic chemistry with labs.

Organic Chemistry

This requirement is met by a one-year sequence in organic chemistry, including all major categories of organic compounds. While organic laboratory courses are valuable for individual student goals and degree requirements, our Admissions Committee does not require them.

Physics

This requirement is met by a one-year sequence in general physics with labs, including mechanics, electricity, heat, light, and sound. Specialized courses in sub-disciplines cannot be substituted for any part of this requirement.

English

Two semesters of writing, literature, and/or communication/speech courses meet this requirement. AP and IB credit is acceptable for one semester only, with one additional course required to be taken at the college level. We will not accept two semesters of AP or IB credit to fulfill this requirement.

Biochemistry

This requirement is met by a one-semester Biochemistry course. Please note that this course is a new requirement beginning in the 2021 admissions cycle.

A year is defined as a minimum of 32 weeks, including two (2) semesters or three (3) quarters of coursework. All science courses applied to the premedical requirements must include laboratory work except for Organic Chemistry. Applicants must receive a letter grade of C or higher for all required prerequisite courses. Substitutions for the premedical science requirements can only be allowed if replaced by advanced work in the same area.

ULSOM will not accept CLEP credit for any prerequisite coursework.

Additional information about the prerequisite requirements and the acceptance of Junior/Community College coursework, AP/IB credits, and online coursework can be found on the School of Medicine website (<http://louisville.edu/medicine/admissions/app-process/complete-prerequisites/>).

Suggested Coursework

In addition to the required courses above, a course in statistical methods is recommended. Since the Admissions Committee reviews the applicant's complete academic portfolio, advanced coursework strengthening the premedical academic foundation will be favorably viewed during the evaluation process.

Acceptance and Registration

Acceptance and Registration Information

Applications should not be submitted until all minimum requirements have been satisfied or evidence has been provided that they will be satisfied before the date for which admission is requested. Acceptance to the School of Medicine is contingent upon satisfactory completion of all requirements and conditions of admission. Acceptance may be withdrawn for failure to maintain high scholastic or behavioral standards during the remainder of premedical training.

The Office of Medical Student Affairs (502) 852-5192 handles registration.

Immunization Standards

All students in the School of Medicine must show evidence of immunity to certain infectious diseases. In addition, the tuberculin skin test, required annually, must be current. Matriculants must provide evidence of immunization or immunity to these infectious diseases. Compliance with the immunization program is required by the start of the first semester of medical school.

Transfer Students

General Directions for Transfer From an Accredited American Medical School

Transfer is defined as changing enrollment from one accredited American medical school to another, usually at the beginning of an academic year, and at a rank consistent with that held at the original school. The basic policy of the School of Medicine concerning transfer from an accredited American medical school is as follows:

- Applicants must be currently enrolled and in good standing in a LCME (<https://lcme.org/>) accredited medical school, and be eligible to continue at that school.
- Applicants must present reasons for transfer which are acceptable to the Admissions Committee. Transfers are ordinarily considered

only for compassionate reasons, including proximity to spouse, or a change in status of family (such as death of a parent or divorce of parents). Personal dissatisfaction with the training, administration or faculty of the current school is not an acceptable reason for transfer.

- Transfers may be accepted into the beginning of the second or third years but not into the fourth year or into the mid-term of any year.
- Second-year applicants must complete a curriculum equivalent to the first full-year at our medical school before they are eligible for transfer.
- Third-year applicants must complete two full years of pre-clinical study and must pass Step 1 of the USMLE.
- Transfers must complete no less than 50% of their medical school curriculum from the University of Louisville School of Medicine.
- Openings in the third-year class are relatively rare. Often we do not know how many, if any, places are available until about two weeks after the school year is over; therefore, we do not participate in the early decision program for transfer students.

Application deadline for transfers is April 30th

To complete your application to the University of Louisville School of Medicine, we must receive the following:

- a. A completed transfer application (email the ULSOM Office of Admissions (<http://louisville.edu/cgi-bin/uofl.mail?name=medadm&subject=Transfer+Application>) to request access to transfer application)
- b. A completed residency declaration form
- c. A completed violations form
- d. A processing fee of \$25 that is neither refundable nor applicable to registration fees should your application be accepted.
- e. Letter of support that also indicates good standing from the Dean/Dean of Students at the medical school of current enrollment.
- f. Official transcripts from all undergraduate and graduate programs.

MD Requirements

A candidate for the degree of Doctor of Medicine from the University of Louisville School of Medicine must meet the following requirements:

- a. Satisfactory completion of the medical school curriculum and USMLE Steps 1 and 2 examinations.
- b. Satisfactory demonstration of ability, ethical character, responsibility, integrity and personal characteristics suitable for a career in the practice of medicine.
- c. Satisfactory discharge of all financial obligations to the University.
- d. Students with federal loans and grants must attend a group or individual exit interview with the Medical Student Financial Aid Office and complete the exit interview information sheet as required by federal regulations before Commencement of the year in which graduating.

To satisfy the second requirement above, students must comply with the rules and regulation of the University, the School of Medicine, and the laws of the city, state and federal governments. In addition, students are expected to possess and display physical stamina, effective interpersonal skills and personal qualities consistent with the expectations of society and the medical profession. Consequently, the Dean, in accordance with the procedures set forth in *The Redbook*, may consider any questions of a

student's unwillingness, failure, or inability to fulfill these expectations to be an academic matter.

The School of Medicine may terminate the attendance of any student at any time or strike from the list of candidates for the degree any student whom the Dean determines is or will be unable to satisfy the standards of professional fitness required of all candidates for the Doctor of Medicine degree. Conduct that may result in such a determination by the Dean includes but is not necessarily limited to academic dishonesty, neglect of study, and illegal or inappropriate behavior.

Course Requirements

Year One

Clinical Anatomy, Development & Physical Examination (CADE): 19-week course in fall semester that integrates Gross Anatomy, Embryology, and Physical Examination content by body region.

Molecular Basis of Life, Defense and Disease: 16-week course in spring semester that integrates foundational biochemistry, medical genetics, immunology, tissue and body fluid physiology, pathology, and pharmacology to introduce immunologic function in disease and health; normal cellular and tissue histology in health, injury, and healing; foundational microbiology; and mechanisms, diagnosis, and treatment of neoplastic and hematologic diseases.

Introduction to Biostatistics and Evidence-Based Medicine: 2-week course in spring semester that concentrates principles of biomedical research, foundational statistics, medical informatics, and application of evidence to patient care.

Introduction to Clinical Medicine 1 (ICM 1): two-semester course that covers foundational patient interviewing skills, professionalism and ethics, medical system structure and health disparities, cultural competency, provision of health maintenance and use of health guidelines.

Year Two

Human Systems in Health and Disease 1: 19-week course in fall semester that integrates the normal physiology of the cardiovascular, respiratory, renal, gastrointestinal, hepatobiliary, nutritional/metabolic, and endocrine systems with their pathophysiologic function in disease, progression from normal histologic appearance to pathologic appearance, infecting microbes, and applicable pharmacologic treatments.

Human Systems in Health and Disease 2: 14-week course in spring semester that integrates the normal physiology of the reproductive, dermatologic, musculoskeletal, and behavioral systems as well as neurologic system diseases with their pathophysiologic function in disease, progression from normal histologic appearance to pathologic appearance, infecting microbes, and applicable pharmacologic treatments.

Introduction to Clinical Medicine 2 (ICM 2): two semester course that covers advanced clinical communication skills, specialized physical examination techniques, advanced medical ethics, medical socioeconomics and healthcare laws.

Year Three

Third Year core clerkships run concurrently throughout the academic year from July to June. The sequence of clerkships is organized on a track basis. Core clerkships include 6 weeks of Family Medicine, 8 weeks of Internal Medicine, 4 weeks of Neurology, 6 weeks of Obstetrics and

Gynecology, 6 weeks of Pediatrics, 6 weeks of Psychiatry, and 8 weeks of Surgery.

There are no required electives in the third year, however, there are 6 weeks in the third-year schedule that can be used for electives or for vacation. Up to 4 of the 6 weeks can be used for career exploration electives; other types of electives can be taken during the remaining 2 weeks that are available.

Year Four

Fourth Year runs concurrently throughout the academic year from July to early May. Required clinical rotations include 4 weeks of an Acting Internship, 2 weeks of Critical Care, 1 week of Palliative Care, and 26-28 weeks of electives. In addition, students must complete Topics in Clinical Medicine and Advanced Cardiac Life Support courses.

Time Limit for Completion of the MD Degree

A student must complete all degree requirements within six (6) years of enrolling in the School of Medicine. This time period includes, leave of absence, the repeat of an academic year, and additional time to take and pass USMLE Steps 1, and 2. A student who does not complete all degree requirements within this time period will be subject to dismissal.

Three-year Rural Medicine Accelerated Track (RMAT) Requirements at Trover Campus

The RMAT track may enroll up to two students annually and must require students to complete all of the core objectives and assessments of the four-year MD program as well as a minimum of 130 weeks of instruction prior to graduation. RMAT candidates must also complete additional program objectives and assessments related to their ability to evaluate and address community health needs in a rural setting. Several RMAT-only courses within this track fulfill the required objectives for courses that are not completed by RMAT students and contain the required assessments or equivalent assessments for those courses. Specifically, the courses that are added to the curriculum for RMAT students are: RMAT-1, RMAT-2, RMAT-3, RMAT-4, and RMAT-5 as well as the longitudinal primary care clinic placement during the third year. These courses and requirements are placed in RMAT to fulfill the programmatic objective and assessment requirements found within the M3 Family Medicine Clerkship, the M4 Acting Internship, and M4 Palliative Care Rotation, and the M4 Intensive Care Unit Rotation.

Ethical and Professional Requirements

Ethical and Professional Requirements

Ethical and professional behaviors are the foundation of medicine. As a medical student, you are about to embark on a career which embraces some of the highest human ideals. Society will place great expectations on your personal character. Professionalism begins from day one of medical school.

- Students are expected to put forth their best effort towards academic success and clinical competency including regular class attendance and faithful and diligent discharge of all academic and clinical duties.
- Students are expected to demonstrate honesty and integrity in all aspects of their education and be considerate and respectful in their interactions with patients, staff, faculty, and peers.
- Each student will dress and behave as a responsible member of the medical profession seeking to bring comfort and reassurance

to those he/she may serve. Each third and fourth year student is expected to wear a white coat with his/her name embroidered on it. Also, first and second year students should wear their white coats when they have contact with patients.

- Students should seek feedback on their own performance and are expected to accept ownership of mistakes and respond to constructive criticism by appropriate modification of their behavior.
- Students are expected to participate in the process of evaluating their teachers, courses, and educational experience.
- All patients deserve to be treated without prejudice. It is unethical for a student to refuse to participate in the care of a person based on race, religion, ethnicity, socioeconomic status, gender, age, or sexual preference.
- The patient's right to the confidentiality of his or her medical record is a fundamental tenet of medical care. The discussion of problems or diagnosis of a patient by professional staff/medical students in public violates patient confidentiality and is unethical.
- Professional relations among all members of the medical community should be marked with collegiality and respect. It is unethical and harmful for a student to disparage without good evidence the professional competence, knowledge, qualifications, or services of a colleague to staff, students, or patients. It is also unethical to imply by word, gesture, or deed that a patient has been poorly managed or mistreated by a colleague without tangible evidence.

Honor Code and Professionalism

Since professionalism is an integral part of medical education and being a physician, professional conduct is an academic issue. Students are expected to demonstrate integrity and honesty, concern and respect for others and act in a responsible and professional manner.

ULSOM Student Honor Code

Educational Program Committee Approved: October 7, 2020

The University of Louisville ("University") and School of Medicine ("School") have various policies and procedures that outline acceptable student, staff, and, faculty conduct, including but not limited to the following:

- The University Code of Student Conduct linked here (<https://louisville.edu/dos/students/codeofconduct/>) applies to all students, outlines conduct that the university does and does not allow, and the processes for submitting complaints and processing of those complaints.
- The University Title IX Student Sexual Misconduct Policy linked here (<https://louisville.edu/titleix/resources/titleix/>) governs sex discrimination and sexual misconduct.
- The University Code of Student Rights and Responsibilities outlines our Cardinal Principles and sets forth the standards and obligations of our students as it relates to academic integrity, classroom rights, and freedom of expression.

At the School unit level, all faculty, staff, and students are governed by the ULSOM Code of Conduct, included in the Bulletin here (<https://catalog.louisville.edu/professional/medical-bulletin/som-policies/#text>). Medical students are additionally expected to adhere to the ULSOM Honor Code outlined on this page, which is more specific in exploring the expected student professionalism attributes and behaviors that must be

continuously demonstrated to remain a student in good standing within the program.

The policies and procedures of the University and School govern a student's matriculation and progression through the School. Conduct may violate the School's Code of Conduct, including this Honor Code, in addition to other policies and procedures of the University. Violations of this Honor Code will be reviewed by the Office of Medical Student Affairs, while violations of other policies and procedures will be reviewed by the designated office in such policy and procedure. Within the School, these procedures often involve the School Student Promotions Committee and other committees. The Student Promotions Committee will review all relevant information submitted to it and will make a recommendation to the Dean of the School for action to be taken, which may include suspension or expulsion from the School. The Dean's decision regarding violations of the ULSOM Honor Code will be final. To the extent applicable, a student may request a review of this decision in accordance with the grievance procedures set forth in Chapter 6, Section 6.8, of The Redbook.

All students at the School are required to demonstrate the following professional attributes and behaviors throughout their MD Program experience:

1. **Honesty and Integrity in all academic pursuits and interpersonal interactions. Specific examples of actions expected of all medical students that demonstrate this attribute include:**

- Submit for course credit only the student's own work and not that of another, in whole or in part, nor take credit for passages taken either word-for-word or paraphrased from the work of another.
- Give full and clear acknowledgement to collaborators when collaboration to produce a project or report is permitted.
- Respect the intellectual property and learning materials of others understanding that to take, keep, tamper with or destroy such property would result in unfair academic advantage.
- Be truthful in communications with others, admit errors and not knowingly mislead others or promote themselves at a colleague's or patient's expense.
- Report promptly any suspected violations of student honesty and integrity to the Office of Medical Student Affairs.

2. **Responsibility to others, including demonstrating self-directed lifelong learning skills as an emerging medical professional and timely/organized completion of all assigned work and duties**

- Offer only individual work when instructed to do so, rather than working in groups; seek clarification from course director if in doubt as to whether work is to be done individually or in groups.
- Offer original work for course or research credit and not submit work done previously for credit in another course.
- Take all examinations and complete all assigned work when scheduled unless appropriately excused.
- Not create, distribute or use unauthorized materials or assistance to gain unfair academic advantage over colleagues prior to, during or after an examination or other evaluative procedure.

3. **Adherence to the standards set by moral, ethical, and legal codes of conduct of the educational and clinical environment and the profession, including remaining within the bounds of the described student role, remaining free of illegal substances, fulfilling the behavioral standards**

set by local and national laws, and reporting oneself, supervisors, or colleagues when any violations of these standards, ethics, or laws occur

- Use only access codes, passwords, login codes, keys, and facility access cards issued to oneself.
- Treat all clinical or research data as confidential, never sharing them outside of the approved circle of the research or clinical care team, and use them only for the completion of duties officially assigned to the student
- Observe all laws and site regulations regarding consent, privacy, and the rights of the patient and family to be informed of and participate in their own care
- Not to engage in romantic, sexual, or other nonprofessional relationships with a patient or patient's family members, even upon the apparent request of a patient.
- Express concerns about the clinical or ethical actions of another or patient safety issues only through approved and official channels so they can be properly investigated and assessed.
- Adhere to the boundaries of the student role in the clinical environment as laid out in official school policies, always identifying themselves as a student to patients and families

4. Respect for all persons in all interactions affecting the educational or clinical environment and people operating in those environments, including electronic interactions

- Treat patients, family members, and research subjects with respect and dignity both in their presence and in discussions with others.
- Deal with professional, staff and peer members of the health care team in a considerate manner and with a spirit of cooperation.
- Speak and act with an egalitarian spirit toward all persons encountered in a professional capacity regardless of race, religion, gender, sexual preference, disability or socioeconomic status.

5. Altruism and service to others by demonstrating perceptiveness and consideration of how their words and actions affect the feelings and well-being of others

- Use appropriate and respectful language in the educational and clinical environment
- Approach conflict calmly, and ask for help with conflict resolution to prevent unintentional harm to others
- Act to serve the interest and needs of the patient rather than in promotion of one's own interests or beliefs
- Refrain from words or actions that harm the safety, professional or personal reputation, or freedom of expression of patients, students, staff, or faculty in the educational or clinical environment
- Maintain neat and clean appearance, and dress in attire that is acceptable as professional to the medical community.

6. Support of diversity, inclusion and social justice, and dedication to the principles of free expression in which diverse views are encouraged and embraced.

- Demonstrate empathy for others and care and interest in experiences and backgrounds different than their own.
- Reflects on one's own biases as they affect the treatment of others in the clinical and educational environment
- Demonstrate willingness to make a plan to prevent personal bias from affecting patients or communities

- Explore new experiences or engages with people different from oneself to expand their personal experiences and increase their empathy for others

7. Participation in quality improvement processes, including evaluation of their educational and clinical environment, courses, and supervisors so that quality and safety can improve over time.

8. Effective self-regulation, defined as the ability to tolerate uncertainty/ambiguity, ability to identify personal emotional triggers, navigate stressful situations, and use positive coping strategies to manage oneself

- Strive to maintain composure in educational and clinical environment, specifically avoiding examples of unacceptable conduct laid out in the ULSOM Code of Conduct

9. Demonstrate awareness of one's own knowledge, skill, and emotional limitations, leading to appropriate use of help-seeking behaviors and ready admission of errors

- Undertake clinical duties and persevere to the best of the student's ability, striving to recognize limits on the capacity to persevere due to limited knowledge or skills, exhaustion, or impairment.
- Strive to recognize the limitations of the student's knowledge and skills and seek supervision or advice before acting when appropriate.
- Learn to recognize when his/her ability to function effectively is compromised, ask for relief or help, and notify the responsible person if something interferes with the ability to perform clinical or research tasks safely and effectively.

Honor and Professionalism Advocacy Council (HPAC)

The Honor and Professionalism Advocacy Council (HPAC) is a peer-to-peer professionalism accountability and advocacy system instituted in the Spring of 2014. This committee of students from M1 through M4 work to identify and address any professionalism issues brought to their attention by faculty, staff, and their fellow students. Through the use of an electronic submission form, the Early Concern Note (ECN), specific issues are securely handled by the HPAC, who contact the student of concern for an informal discussion on his or her Note. The goal of the HPAC is to make students aware of how he or she is being perceived by those around them and, more importantly, provide insight and advice as to how they can better the professionalism impressions that he or she makes in the future.

The first Early Concern Note is a low stakes opportunity for students to improve their professionalism issues. Hopefully, issues become resolved after the first Early Concern Note, reducing the chance of negative evaluations during clerkship years and negative statements on his or her Medical Student Performance Evaluation (MSPE), which is forwarded to residency programs. Students receiving second and third Early Concern Notes lead to more serious consequences with School of Medicine administration, as these students have shown a pattern of unprofessional behavior as well as a disregard for previous recommendations. Again, the HPAC is a body of medical students, serving to improve the future graduates of UofL School of Medicine and produce residents that uphold our university's reputation at their respective programs.

For more information about the Honor and Professionalism Advocacy Council and the Early Concern Note, visit the Medical Student Affairs web page at: louisville.edu/medicine/studentaffairs/student-services/hpac (<http://louisville.edu/medicine/studentaffairs/student-services/hpac/>).

Mandatory Self-Reporting Policy for Criminal Behavior

All accepted and currently enrolled medical students are required to promptly report any criminal charges ever filed against them, including felony and misdemeanor charges other than minor traffic violations. These reports should be made in writing and sent to the Associate Dean for Student Affairs. They should include conviction information, all types of adjudication, and all legal processes not yet resolved (e.g., an arrest record for an offense pending court disposition, an unresolved bench warrant, a failure to appear in court.) Any charges that were previously disclosed on the secondary admissions application need not be reported again.

The report will be reviewed by the Criminal History Review Committee, which consists of the Associate Dean for Student Affairs, Associate Dean for Admissions, Associate Vice President for Health Affairs/Diversity Initiative, Dept. of Public Safety representative, School of Medicine legal counsel, and a mental health professional (university student health counselor).

Discussion and the recommended course of action will be in the context of future implications for licensure, threat to patient safety and the ability to be an appropriate member of the medical profession.

Substance Use and Drug Screening Policy Relating to Substance Use and Drug Screening

Approved by Dean Toni Ganzel June 18, 2018

I. PURPOSE

The University of Louisville School of Medicine is committed to protecting the safety, health and well-being of all students, faculty, staff and patients. It is the policy of the School of Medicine to establish, ensure and maintain a drug-free working and educational environment for medical students and a safe clinical environment for patients, and to provide for compliance with federal law¹ regarding prevention of illicit use of drugs and the abuse of alcohol.

The University Of Louisville School Of Medicine also outlines technical standards required for matriculation and continuation in undergraduate medical education directed toward being graduated with the M.D. degree, and with the expectation that a student will be able to progress in training to become a licensed physician.²

II. SCOPE

It shall be a violation of this policy for any enrolled medical student to engage in the unlawful manufacture, distribution, dispensation, possession and/or use of a controlled substance. This includes, but is not limited to, being under the influence or impaired in activities anywhere in the educational environment of the School of Medicine, or affiliated institutions and clinics.

It shall be a violation of the technical standards and this policy for any enrolled medical student to engage in disordered use of legally obtained substances, whether scheduled or non-scheduled, regardless of the venue in which disordered use occurs. This includes, but is not limited to, manifestations of signs and symptoms of an active Substance Use Disorder. For purposes of this policy, an active Substance Use Disorder is defined as any condition, whether mild, moderate or severe, within the categories listed in the Diagnostic and Statistical Manual of Mental

Disorders (*DSM-5*) or subsequent editions of that manual as published by the American Psychiatric Association.

An enrolled medical student's arrest, charge, or conviction for any drug-related or alcohol related offense shall also constitute a violation of this policy.

III. DRUG SCREENING

The School shall have the right to require enrolled medical students to participate in a urine drug screen (UDS)³ administered by University of Louisville Campus Health Services at the following times:

- Upon enrollment;
 - Progression into certain clinical settings, including but not limited to within six (6) months of a student's required AHEC rotation; and
- Upon reasonable suspicion. For purposes of this policy, reasonable suspicion shall mean:
 - Observable phenomena, such as direct observation of drug use or possession and/or the physical symptoms of being under the influence of a drug or alcohol;
 - A pattern of abnormal conduct or erratic behavior;
 - Information provided by reliable and credible sources regarding the student's alleged violation of this policy;
 - Newly discovered evidence that the student tampered with a previous drug test;
 - Unexplained controlled substances missing or diverted from the clinical or laboratory environment, if the medical student had reasonable access to the controlled substances or alcohol during the time of the event; or
 - Evidence of circumstances or information which may cause a reasonable person to conclude that an enrolled medical student has more likely than not engaged in conduct that violates this policy.

Enrolled medical students shall sign a consent form allowing the results of the UDS and any additional screening to be released to the School's Associate Dean for Student Affairs and Student Promotions Committee.

The results disclosed to the School shall be limited to "pass" or "fail", where "pass" indicates no reasonable concern for an active problem and "fail" indicates the reasonable conclusion that an active problem is present. Any enrolled medical student who does not participate in the drug screen process, or who refuses to submit the required consent, will not be permitted to participate in clinical activity.

All enrolled medical students shall be relieved from patient care and clinical service pending the results of the UDS or other screening. The results of the UDS or other screening will be reviewed by the Medical Review Officer (MRO) of Campus Health Services' contracted vendor for determination of passage/failure.

A UDS, or other screening, is positive and the enrolled medical student has therefore failed the UDS or other screening:

- If the sample contains drugs and/or metabolites for which the Campus Health Services' contracted vendor concludes there is no legitimate explanation other than the use of a prohibited drug or alcohol;
- In situations where the Campus Health Services' contracted vendor determines that urine samples are dilute or fail to meet threshold as measured by the vendor's standards for adequate temperature, creatinine and specific gravity; of

- If an enrolled medical student refuses to submit to testing, fails to report to the designated area for testing, fails to provide a sample suitable for testing and/or attempts to alter or tamper with the specimen.

All information relating to a UDS, or other screening, shall be and remain confidential, to the extent permitted by law. An enrolled medical student's academic file shall include only the pass/fail result from the UDS or other screening.

The Associate Dean for Student Affairs shall dispense of all positive UDS or other screenings in accordance with Section IV of this policy.

IV. VIOLATIONS OF POLICY

Any enrolled medical student who violates this policy shall be reported to the Associate Dean for Student Affairs. The Associate Dean for Student Affairs shall direct the student to an independent third party provider selected by the School for evaluation and/or treatment. The student shall fully participate in the recommended evaluation or treatment plan determined and administered by the third party provider, or its designee, as a condition of continued enrollment in the School.

A student's cooperation and compliance with the third party provider and evaluation or treatment plan shall be monitored by the Associate Dean for Student Affairs. A student's failure to cooperate or fully participate in the evaluation or treatment plan may be reported by the Associate Dean for Student Affairs to the Student Promotions Committee for disciplinary action.

Any matter reported to the Student Promotions Committee shall be processed in accordance with the Committee's guidelines for disciplinary matters. Such guidelines may include the right of the School to dismiss an enrolled medical student who has violated this policy.

Students are encouraged to self-identify to the Associate Dean of Student Affairs when they have problems with drug or alcohol abuse. Students who self-identify may be granted a leave of absence to secure treatment without prejudice to their academic standing. In such cases, confidentiality will be maintained, to the extent permitted by law, by the School of Medicine administration.

¹ A controlled substance is defined as any substance in schedules I through V of section 202 of the Controlled Substance Act (21 U.S.C. 812). This categorization by federal legislation is understood by the University of Louisville School of Medicine to supersede any state, county or municipal statutes which might be perceived to allow latitude for legal use.

² See the Bulletin section on Technical Standards. (p. 11)

³ The School reserves the right to require administration of a UDS with an inquiry panel sufficiently broad as determined by situational need. A UDS panel may be supplemented with, or replaced by, other testing modalities including but not limited to those requiring blood, hair, nail and/or breath samples.

Mistreatment Policy

Student Mistreatment and Reporting

The University of Louisville School of Medicine is committed to ensuring an environment that is respectful of diversity of opinion, race, gender,

religion, sexual orientation, age, disability and socioeconomic status. Mutual respect and collegiality among faculty, residents, students, and staff are essential to maintaining an environment conducive to learning. All students, faculty, and staff in the School of Medicine are expected to adhere to the School of Medicine Policy on Professional Conduct (http://catalog.louisville.edu/professional/medical-bulletin/ethical-professional-requirements/mistreatment/professional-conduct-policy_rev_180710.pdf) as well as the university wide Code of Conduct (<http://louisville.edu/compliance/ico/code/>).

Student Mistreatment is defined as a behavior that shows disrespect for the dignity of others and unreasonably interferes with the learning process. It includes harassment, discrimination, or physical threats.

Specific examples of mistreatment can include, but are not limited to, being:

- Subjected to offensive remarks or names
- Pressured into performing personal services
- Intentionally neglected or left out of conversations
- Belittled or humiliated

Any abuse or misconduct of a sexual nature will be reported through the Title IX process (<https://louisville.edu/titleix/>) as outlined by the University of Louisville.

Students may report mistreatment using any of the following avenues:

- Directly report concerns about mistreatment confidentially to the Associate Dean for Student Affairs, the Assistant Dean for Student Affairs, the Vice Dean for Undergraduate Medical Education, the Assistant Dean for Clinical Skills or the Health Sciences Center Counseling Coordinator.
- Complete this online form (<https://louisville.edu/medicine/studentaffairs/mistreatment-form/>) with the option of anonymously reporting a mistreatment.
- Document the mistreatment on course evaluations.

All reports submitted through these mechanisms will be received by the Associate Dean for Student Affairs and will be reviewed with the Vice Dean for Undergraduate Medical Education on a monthly basis. Trends will be monitored. The individual mistreatment incidents as well as trends will be brought to the attention of the Vice Dean for Faculty Affairs (if faculty involved) or Associate Dean for Graduate Medical Education (if resident involved), as well as the appropriate Chair or Program Director, or appropriate administrator at the clinical site. The responsible supervisor will have ten (10) business days to initiate a response and communicate this to the Associate Dean for Student Affairs.

Incidents submitted through this form may be made anonymously, however, UofL is limited in its ability to investigate and respond to anonymous reports. The preference is for all reports to include contact information such that follow-up can occur.

Retaliation against students reporting mistreatment is regarded as a form of mistreatment and will not be tolerated. Accusations that retaliation has occurred will be handled in the same manner as accusations concerning other forms of mistreatments.

If you require an immediate response to protect your safety or the safety of others, notify law enforcement authorities immediately.

School of Medicine Policies

Policies of the School of Medicine

1. General Standards

1.2. Course & Clerkship Changes Requiring Educational Program Committee Approval

EPC Last Reviewed: February 19, 2020

The following types of changes to courses or clerkships require EPC action or approval prior to implementation:

- a. Changes in the number of total course or clerkship hours;
- b. Any increase in lecture hours, even if total course hours remain the same;
- c. Changes in the course or clerkship exam schedule;
- d. Significant changes in the course or clerkship schedule after it has been set for the year (with the exception of emergencies);
- e. Addition of new courses or electives;
- f. Elimination of required EPC questions from the course/clerkship student evaluation survey;
- g. Changes in course or clerkship objectives (changes in session objectives do not require EPC approval);
- h. Changes in course or clerkship policies that would result in non-compliance with any EPC policy or guideline;
- i. Changes in grading schema for courses or clerkships.
- j. Any major change in a course or clerkship, not described above.

1.3. Curriculum Review Policy

EPC Last Reviewed: February 19, 2020

Individual Courses and Clerkships

Individual courses and clerkships shall be reviewed on an annual basis.

The Curriculum Evaluation Subcommittee shall perform reviews of all courses and clerkships, with final recommendations determined by the Educational Program Committee (EPC).

Individual Years of the Curriculum

During each academic year, one curricular year (e.g., first year) and the significant outcomes for the program as a whole shall be reviewed at the Medical Education Program Annual Retreat (MEPAR) according to the schedule set forth by EPC. The MEPAR participants will include the EPC, its subcommittees, and the staff and academic deans of the School of Medicine with responsibility for maintaining the accreditation and quality of the MD program.

Four-Year Curriculum

The four-year curriculum, its mission, vision, and metrics related to its identified target outcomes shall be reviewed in its entirety every five years. The EPC will oversee this review through the annual MEPAR process every fifth year, including the ability to form ad hoc committees following the significant goals identified at MEPAR. The results of the review will be reported back to the EPC for final decisions regarding the curriculum.

Specific Curricular Topics

The EPC delegates the review of specific topics to its Integration Subcommittee, which reviews the content in detail and makes recommendations to the EPC to reduce gaps and redundancies and ensure the curriculum meets its objectives. Topics for review by the

Integration Subcommittee can be chosen from a variety of sources, including the AAMC Graduation Questionnaire, Step 1 or Step 2 CK Score Plots, student feedback sources, and/or faculty feedback sources. The curriculum database will be used as part of the review to help identify gaps and redundancies. Topics to be reviewed may be changed at the EPC's discretion.

- All objectives, content, and instructional and assessment methods shall be considered during reviews to ensure that programmatic learning objectives are achieved.
- Any subcommittee or individual conducting reviews shall report findings to EPC within a designated time period. In all cases, the EPC will make final decisions regarding curricular modifications.
- A calendar of planned evaluations shall be maintained for the EPC by the Undergraduate Office of Medical Education.

1.4. EPC Structure Policy

Educational Program Committee Approved: June 1, 2011

Educational Program Committee Last Revised: July 5, 2023

EPC Advisory Subcommittees

Five subcommittees will serve as advisory to the EPC: M1-2 Subcommittee, M3-4 Subcommittee, Evaluation and Assessment Subcommittee, Clinical Skills Subcommittee, and the Academic Technology Subcommittee.

1. M1-2 Curriculum Committee

Membership: Assistant Dean for Medical Education/Basic Sciences, who shall chair the committee, Senior Associate Dean for Undergraduate Medical Education, First and Second Year Course Directors and selected Thread Directors, Director of Undergraduate Medical Education; Student Affairs Academic Support Specialist, First and Second Year Class Presidents and Vice Presidents, Second Year Student EPC Representative, and Chair of the M3-4 Subcommittee.

Responsibilities: The M1-2 Subcommittee advises the EPC on policy and curricular changes. These changes must support EPC goals and maximize students' learning experiences and teaching effectiveness. The subcommittee is also responsible for collaborating with M3-4 subcommittee members to vertically integrate content and topics across all four years. Additional responsibilities include confirming the course and examination schedule for each semester and reporting M1-2 phase outcomes to the EPC.

2. M3-4 Subcommittee

Membership: Assistant Dean for Medical Education/Clinical Skills, who shall chair the committee, Directors of all required Clerkships; Trover Campus representative; Senior Associate Dean for Undergraduate Medical Education; Director of Undergraduate Medical Education Operations; Student Affairs Director, Course Director for Introduction to Clinical Medicine course, Third and Fourth Year Class Presidents and Vice Presidents, Third and Fourth Year Student Representatives to the EPC, and the Chair of the M1-2 Subcommittee.

Responsibilities: The M3-4 Subcommittee proposes policy and curricular changes to the EPC. These changes must support EPC goals and maximize students' learning experiences and teaching effectiveness. The subcommittee is also responsible for collaborating with M1-2 subcommittee members to vertically integrate content and topics across all four years. Additional responsibilities include reporting M3-4 phase

outcomes to the EPC and providing oversight for the in-house Clinical Skills Exams.

3. Evaluation and Assessment Subcommittee

Membership: The Business Intelligence Analyst and the Director of Undergraduate Medical Education and the Director of Undergraduate Medical School Operations, who shall co-chair the subcommittee, Assistant Dean for Undergraduate Medical Education/Basic Sciences, Assistant Dean for Undergraduate Medical Education/Clinical Skills, Director of Curriculum Management Information Systems, Evaluation and Assessment Coordinator, a minimum of four clinical faculty members and four basic science faculty members, and one student representative from each of the four classes.

Responsibilities: Through the evaluation of courses and quality of assessments, the Evaluation and Assessment Subcommittee (EAS) proposes curricular changes to the EPC that are designed to improve course quality. The EPC discusses EAS proposals and accepts, rejects, or revises them before making final recommendations to clerkship and course directors. The EAS is also responsible for reviewing curriculum outcomes at the program objective level.

4. Clinical Skills Subcommittee

Membership: Assistant Dean for Undergraduate Medical Education/Clinical Skills, who shall chair the committee, Vice Dean for Community Engagement and Diversity, Director of Standardized Patient Program, Director of the Simulation Center, Director of Technology, Introduction to Clinical Skills Course Directors, third year clerkship directors, and one student representative from each medical school class.

Responsibilities: The Clinical Skills Subcommittee evaluates and recommends to the EPC potential changes revolving around clinical skills training in the Introduction to clinical skills course for M1 and M2 students, simulation center training sessions, and standardized patient cases. The subcommittee also provides feedback regarding student performance to the EPC for recommendations of clinical remediation.

5. Academic Technology Subcommittee

Membership: Director of Technology, who shall chair the committee, Senior Associate Dean for Undergraduate Medical Education; first, second, third- and fourth-year Student Technology and Mobility Officers; one Basic Scientist; one Clinician; one library representative; and one representative from the Delphi Center.

Responsibilities: The Academic Technology Subcommittee coordinates and evaluates School of Medicine academic technology initiatives and recommends new initiatives to the EPC that utilize technology to support student learning. The Subcommittee oversees the Academic Technology Office to ensure effectiveness in serving the needs of students, faculty, and the school and for the technological infrastructure to support curriculum integration, delivery, and assessment.

Each EPC subcommittee will meet, on average, monthly or bimonthly. A subcommittee chair may appoint a limited number of ex-officio members to facilitate the work of the committee. Minutes of EPC advisory subcommittee meetings will be distributed to the EPC members.

1.5. First Year Class Size Coordination Policy

EPC Last Reviewed: February 19, 2020

The complexities of accreditation require a formal process that will ensure that all of the buildings used to educate our students (i.e.,

instructional facilities, clinical facilities) are adequate and appropriate for the proposed size of the first-year class. *

Policy:

The Dean of the University of Louisville School of Medicine is responsible for determining the number of students in the first-year class (newly admitted plus returning) based on the accepted policies of the LCME. This determination shall be made based upon the adequacy of the school's educational facilities and patient population as they relate to the school's ability to achieve its educational objectives and the adequacy of the applicant pool. The Dean shall make this determination annually by June 15 for the following year's class after receiving input from the Chair of the Educational Program Committee and the Associate Dean for Admissions. When appropriate, the Dean will also confirm with the Associate Dean for Admissions that a sufficient number of qualified applicants are available to achieve the Dean's proposed class size number. The Dean will notify the Associate Dean for Admissions and the Vice Dean for Medical Education of the total number of students to be in the first year by July 1 of each admissions cycle.

Annually, beginning on April 30, the Associate Dean for Student Affairs shall provide weekly written details on the number of students potentially returning to or repeating the first year to the Associate Dean for Admissions, the Vice Dean for Medical Education, and the Director for Admissions. At no time after April 30 and prior to the first day of classes shall an offer be extended to an applicant that would result in the total number of new first year students exceeding the total class size set by the Dean less the total number of potential returning and repeating students; the weekly reports from the Associate Dean for Student Affairs shall continue to be sent until such time as the Associate Dean for Student Affairs has provided written notice to the Associate Dean for Admissions, the Vice Dean for Medical Education, and the Director for Admissions that all potential returning and repeating student have either fulfilled the requirements for returning to the first year or successfully remediated any first year deficiencies. Note that all communication/reports must be documented in a traceable form (i.e., written or emailed).

1.6. Schedule Guidelines/Workload Policy for Preclinical Years

EPC Last Reviewed: February 19, 2020

EPC Schedule Building Guidelines

- **Allowable Percentage of Lecture**
 - The curriculum for years one and two must not exceed 50% lecture:
 - Any planned increase in lecture hours must be approved in advance by the EPC.
- **Average Contact Time Per Week**
 - Guideline is an average of 20 hours of contact time per week in the first and second years. This includes both in-class activities and other required activities (e.g., independent learning assignments), assigned to be completed outside of scheduled class time. Exams are not counted in this average.
- **Self-Directed Learning Requirements**
 - Each unit of the curriculum for years one and two will include self-directed learning (SDL) sessions.
- **Engaged Learning Requirements**
 - All courses will include engaged learning. Engaged learning includes some, but not all, aspects of self-directed learning. Some examples of engaged learning are labs, patient contact,

case-based learning, team-based learning, small group activities, independent learning, online learning, iClicker interaction, simulation sessions, standardized patient sessions, flipped classrooms, etc.

- The EPC will monitor preclinical student workload proactively and retroactively. This will be carried out annually by the Evaluation and Assessment Subcommittee team who will review the student course and unit surveys. This will also occur twice a year via the course director review of the proposed semester calendar, course hour totals by event type, and average contact hours by week. The EPC will also review all course director's submissions prior to the start of each semester. These counts will exclude vacation weeks from the weekly average.

Concerns about student workload may also be reported by student representatives, course directors, or EPC subcommittees at any time and addressed as needed. When concerns about student workload are noted, the EPC will require corrective action from the course director and lead faculty on an ongoing basis.

RedMed Calendar

- UME staff and faculty will create and manage the calendar for years one and two on RedMed.
- The final proposed schedule will be submitted to EPC for review and approval.
- No required class sessions may be held during the noon hour.
- Events that contain multiple identical sessions for groups of students, i.e., SIM sessions and SP clinic sessions, will be designated as "multi-session event" type on RedMed calendar. A single event will be created on the calendar for the true event type that corresponds to the time spent by a single student. When the entire class is not required to be present at the same time for a required learning experience, additional individually-completed assignments such as online assignments or precepting may be scheduled.
- After the EPC approves the final schedule, any minor changes, (i.e., shifting times of sessions) must go through UME. Larger changes (i.e., content) must first be approved by the EPC.

1.7. EPC Responsibilities and Expectations

EPC Last Reviewed: July 1, 2010

APPENDIX 2 of the SOM BYLAWS under "General Composition and Organization of Committees" covers attendance for all committees.

It states Attendance at committee meetings is mandatory. A record of attendance should be part of the committee's normal meeting.

Absences (total of excused and unexcused) from more than one-third of a committee's meetings within an academic year can, with the recommendation of the committee chair, cause an automatic vacancy."

1.8. Site Comparability Policy

EPC Last Reviewed: February 19, 2020

In order to assure that students receive comparable educational experiences and equivalent methods of assessment, the following data will be examined for each clinical site used in the required clerkships in February and August of each year:

- a. NBME Subject Exam Scores;
- b. Clinical Evaluation Scores;
- c. Overall Numeric Clerkship Grades;
- d. Student Ratings of Overall Clerkship Quality;

- e. Student Ratings of Overall Quality of Teaching in the Clerkship;
- f. Patient Encounter Logs; and
- g. Work Hours

Statistical analyses are conducted by the Undergraduate Medical Education (UME) Office on each of these measures and results will be reported to the M3-4 Subcommittee and the Educational Program Committee (EPC). The M3-4 Subcommittee will examine statistical differences and make a determination regarding their educational significance. If the statistical differences are determined to be educationally significant, the M3-4 Subcommittee will make recommendations for correction to the involved clerkship to the EPC. The EPC will make the final determination regarding required changes to the involved clerkship. Clerkship directors will make a plan to enact those recommendations with a timeline for correction and report it to the EPC within 30 days.

To further ensure comparability, the Evaluation and Assessment Subcommittee will review all pertinent data during clerkship reviews and examine responses on the Clerkship Director Portfolio Questionnaire which contains comparability questions. The Evaluation and Assessment Subcommittee will advise the EPC of any site differences found in its review and the EPC will make recommendations to the clerkship director to resolve site differences and report back on progress within 30 days.

In order to assure equivalent assessment, the syllabi of each clerkship will be examined by the Evaluation and Assessment Subcommittee prior to the start of each academic year. Any differences found will be reported to the EPC. The EPC will address the differences with the clerkship director to ensure that they are corrected prior to the beginning of the clerkship.

- a. Syllabus and other materials that are used continuously or apply to an entire course posted on the course home page on RedMed. Syllabi must also be posted on Blackboard for SACSCOC compliance with U of L.
- b. Selecting and posting Program Objectives/Course goals and Session objectives: This is the step that allows RedMed to demonstrate that the curriculum supports the educational standards for the school, a key LCME standard.
 - i. Course director selects SOM Program Objectives from list (that apply to the course as a whole) as Course Goals
 - ii. Individual faculty (or their designate) selects Program Objectives that apply to their individual teaching event from the Program Objectives list for the course. Individual faculty or their designate also enters specific learning objectives for each individual event and links them to the event's Program Objectives.
- c. All course materials assigned for student learning (lecture notes, handouts, PowerPoints, practice questions) must be posted within their associated learning event. These assigned materials should be posted no later than 1 week prior to the learning event, to allow time for students printing materials and studying ahead.
 - i. Groups of lectures covering a single topic, i.e. Renal Pathology 1-5, may post all of the necessary course materials once within the first lecture in a set and indicate they have done so in the description of the first learning event in the series.
 - ii. Do not repost the same teaching materials more than once as it will lead to unnecessary duplicate printing by students. Modified or updated documents that are uploaded will be flagged as new documents for student review, and outdated materials should be removed when updated materials are posted.

- iii. School guidelines for handouts/PowerPoints: post plain white-background notes/slides with black text to decrease printing costs and increase usability for note-taking. Color slides and figures are fine, but dark, patterned, or colored backgrounds are more costly and less usable than plain black and white backgrounds. PDF's of PowerPoints should be posted with four slides per page.
- iv. UME staff will post links to Tegrity sessions within that event the business day after the lecture is given.

Clerkships

Clerkships must include information about patient logging on RedMed in their syllabus and remind students about using the patient log during orientation. All patient logs in the clinical years will be kept on RedMed only.

1.9. Continuous Quality Improvement Policy

EPC Approved: October 2, 2019

Purpose

The University of Louisville School of Medicine reviews Liaison Committee for Medical Education (LCME) elements in accordance with Element 1.1. The school is dedicated to continuously improving the quality of its medical education program and ensuring effective monitoring of the program's compliance with accreditation standards on an ongoing basis.

Process

The Dean has assigned responsibility for each element to the appropriate administrator(s) who is responsible to review the element internally at least annually and present findings to the School of Medicine's LCME Continuous Quality Improvement (CQI) Committee on a pre-determined schedule. The CQI Committee monitors all LCME elements on a scheduled basis to ensure compliance with elements and their updates between LCME reviews. If any deficiencies are identified, recommendations and timelines for correction will be made.

Monitored Elements and Timing

Monitoring of elements is particularly focused on elements that are most commonly cited, elements for which we were previously cited, elements that require an explicit requirement for monitoring or involve a regularly-occurring process, new or recently revised elements or changes in LCME expectations related to performance in elements, elements that need reviewing to ensure that policies are congruent with current operations, and elements that directly or indirectly affect the core operations of the school. All other elements that do not fall into one of the above categories are reviewed on a regularly scheduled basis to ensure compliance.

Calendar

The calendar will include the elements that are monitored, timing of monitoring of the element, data source used to monitor element, individuals/groups receiving the results, and individuals/groups responsible for taking action.

1.10. Family Member as Preceptor Policy

EPC Last Reviewed: October 2, 2019

The School of Medicine does not permit students to be supervised or evaluated by any of the following primary or non-primary family members: mothers, fathers, sisters, brothers, sons, daughters, spouses, significant others, aunts, uncles, in-laws, step-parents, step-brothers, step-sisters, cousins, grandparents etc.

Students are allowed to be supervised by individuals in the same practice with primary or non-primary family members.

1.11. Faculty and Resident Preparedness to Teach

EPC Approved: May 20, 2020

Faculty Orientation to Teach:

At the beginning of the academic year, the course, clerkship, or thread director reviews with all faculty who teach MD program students the following aspects of program and course design and assessment. This training may be provided asynchronously or in-person, but certification of completion of this training including all of the topics below by all faculty who teach medical students must be received by the UME office by September 1st of each academic year.

- The MD Program Policy Handbook, with emphasis on policies affecting faculty and student interaction, mistreatment, and the learning environment.
- The Program Objectives for the ULSOM MD Program
- Overall four-year curriculum structure
- The specific program and course objectives assigned to that department's course(s) or clerkship(s), or that faculty within the department collaborate to deliver
- Syllabus for relevant course(s) or clerkship, including an overview of course teaching and assessment structure, syllabus criteria for the different grades available in the course as well as an overview of grade weighting within the course
- An overview of the required educational activities in the course or clerkship that must be completed to pass the course
- Any assessments of students that faculty are required to complete within the course, including:
 - Best practices for completing those evaluations,
 - An overview of all clinical evaluations, Mini-CEX instruments, mid-clerkship feedback forms, narrative evaluations, etc.
 - Expectations for minimum attainment/passing student performance during the course/clerkship vs. more independent performance
 - Required steps to take with underperforming students,
 - Review of the performance of that department's assessments in the prior year (may be obtained by the course or clerkship director from the Assessment Subcommittee)
- Role of residents or graduate students teaching medical students under their supervision

Resident Orientation to Teach:

At the beginning of the academic year, all incoming residents and fellows must complete the assigned AMA "Residents as Teachers" modules available through the GME office. Certification of completion of these modules by all incoming residents and fellows must be provided by the departments to the UME office by September 1st of the academic year. In addition to the above, in intern year, all Louisville campus residents must complete the "Residents as Teachers" retreat sponsored by the ULSOM GME office.*

Additional required training specifically for residents and fellows in core clinical departments: clerkship directors must annually review with all residents and fellows who teach MD program students the following aspects of MD program and clerkship design. This training may be provided asynchronously or in-person, but certification of completion of this training including all of the topics below by all residents and fellows who teach medical students must be received by the UME office by September 1st of each academic year.

- The MD Program Policy Handbook, with emphasis on policies affecting resident and student interaction, mistreatment, and the learning environment.
- The Program Objectives for the ULSOM MD Program
- Overall four-year curriculum structure
- Program and course objectives assigned to the course(s) or clerkship(s)
- Syllabus for relevant course(s) or clerkship, including an overview of course teaching and assessment structure, syllabus criteria for the different grades available in the course as well as an overview of grade weighting within the course
- An overview of the required educational activities in the course or clerkship that must be completed to pass the course
- Any assessments of students that residents or fellows may complete within the course, including:
 - Best practices for completing those evaluations,
 - An overview of all clinical evaluations, Mini-CEX instruments, mid-clerkship feedback forms, narrative evaluations, etc.
 - Expectations for minimum attainment/passing student performance during the course/clerkship vs. more independent performance
 - Required steps to take with underperforming students,
 - Review of the performance of that department's assessments in the prior year (may be obtained from Assessment Subcommittee)

*Trover campus Family Medicine residents do not have an assigned formal teaching or evaluative relationship with medical students and do not complete the Residents as Teachers retreat

2. MD Requirements and Procedures

2.1. University of Louisville School of Medicine Policy Relating to Substance Use and Drug Screening

EPC Approved: July 18, 2018

I. PURPOSE.

The University of Louisville School of Medicine is committed to protecting the safety, health and well-being of all students, faculty, staff and patients. It is the policy of the School of Medicine to establish, ensure and maintain a drug-free working and educational environment for medical students and a safe clinical environment for patients, and to provide for compliance with federal law[1] (p.) regarding prevention of illicit use of drugs and the abuse of alcohol.

The University of Louisville School of Medicine also outlines technical standards required for matriculation and continuation in undergraduate medical education directed toward being graduated with the M.D. degree, and with the expectation that a student will be able to progress in training to become a licensed physician.[2] (p.)

II. SCOPE.

It shall be a violation of this policy for any enrolled medical student to engage in the unlawful manufacture, distribution, dispensation, possession and/or use of a controlled substance. This includes, but is not limited to, being under the influence or impaired in activities anywhere in the educational environment of the School of Medicine, or affiliated institutions and clinics.

It shall be a violation of the technical standards and this policy for any enrolled medical student to engage in disordered use of legally obtained substances, whether scheduled or non-scheduled, regardless of the venue in which disordered use occurs. This includes, but is not limited to, manifestations of signs and symptoms of an active Substance Use Disorder. For purposes of this policy, an active Substance Use Disorder is defined as any condition, whether mild, moderate or severe, within the categories listed in the Diagnostic and Statistical Manual of Mental Disorders (*DSM-5*) or subsequent editions of that manual as published by the American Psychiatric Association.

An enrolled medical student's arrest, charge, or conviction for any drug-related or alcohol related offense shall also constitute a violation of this policy.

III. DRUG SCREENING

The School shall have the right to require enrolled medical students to participate in a urine drug screen (UDS) administered by University of Louisville Campus Health Services at the following times:

- Upon enrollment;
- Progression into certain clinical settings, including but not limited to within six (6) months of a student's required AHEC rotation; and
- Upon reasonable suspicion. For purposes of this policy, reasonable suspicion shall mean:

1. Observable phenomena, such as direct observation of drug use or possession and/or the physical symptoms of being under the influence of a drug or alcohol;
2. A pattern of abnormal conduct or erratic behavior;
3. Information provided by reliable and credible sources regarding the student's alleged violation of this policy;
4. Newly discovered evidence that the student tampered with a previous drug test;
5. Unexplained controlled substances missing or diverted from the clinical or laboratory environment, if the medical student had reasonable access to the controlled substances or alcohol during the time of the event; or
6. Evidence of circumstances or information which may cause a reasonable person to conclude that an enrolled medical student has more likely than not engaged in conduct that violates this policy.

Enrolled medical students shall sign a consent form allowing the results of the UDS and any additional screening to be released to the School's Associate Dean for Student Affairs and Student Promotions Committee.

The results disclosed to the School shall be limited to "pass" or "fail", where "pass" indicates no reasonable concern for an active problem and "fail" indicates the reasonable conclusion that an active problem is present. Any enrolled medical student who does not participate in the

drug screen process, or who refuses to submit the required consent, will not be permitted to participate in clinical activity.

All enrolled medical students shall be relieved from patient care and clinical service pending the results of the UDS or other screening. The results of the UDS or other screening will be reviewed by the Medical Review Officer (MRO) of Campus Health Services' contracted vendor for determination of passage/failure.

A UDS, or other screening, is positive and the enrolled medical student has therefore failed the UDS or other screening:

- If the sample contains drugs and/or metabolites for which the Campus Health Services' contracted vendor concludes there is no legitimate explanation other than the use of a prohibited drug or alcohol;
- In situations where the Campus Health Services' contracted vendor determines that urine samples are dilute or fail to meet threshold as measured by the vendor's standards for adequate temperature, creatinine and specific gravity; or
- If an enrolled medical student refuses to submit to testing, fails to report to the designated area for testing, fails to provide a sample suitable for testing and/or attempts to alter or tamper with the specimen.

All information relating to a UDS, or other screening, shall be and remain confidential, to the extent permitted by law. An enrolled medical student's academic file shall include only the pass/fail result from the UDS or other screening.

The Associate Dean for Student Affairs shall dispense of all positive UDS or other screenings in accordance with Section IV of this policy.

IV. VIOLATIONS OF POLICY.

Any enrolled medical student who violates this policy shall be reported to the Associate Dean for Student Affairs. The Associate Dean for Student Affairs shall direct the student to an independent third-party provider selected by the School for evaluation and/or treatment. The student shall fully participate in the recommended evaluation or treatment plan determined and administered by the third-party provider, or its designee, as a condition of continued enrollment in the School.

A student's cooperation and compliance with the third-party provider and evaluation or treatment plan shall be monitored by the Associate Dean for Student Affairs. A student's failure to cooperate or fully participate in the evaluation or treatment plan may be reported by the Associate Dean for Student Affairs to the Student Promotions Committee for disciplinary action.

Any matter reported to the Student Promotions Committee shall be processed in accordance with the Committee's guidelines for disciplinary matters. Such guidelines may include the right of the School to dismiss an enrolled medical student who has violated this policy.

Students are encouraged to self-identify to the Associate Dean of Student Affairs when they have problems with drug or alcohol abuse. Students who self-identify may be granted a leave of absence to secure treatment without prejudice to their academic standing. In such cases, confidentiality will be maintained, to the extent permitted by law, by the School of Medicine administration.

A controlled substance is defined as any substance in schedules I through V of section 202 of the Controlled Substance Act (21 U.D.V. 812). This categorization by federal legislation is understood by the University of Louisville School of Medicine to supersede any state, county or municipal statutes which might be perceived to allow latitude for legal use.

School of Medicine Bulletin 2017-2019, https://louisville.edu/medicine/studentaffairs/student-services/copy2_of_ULSOM20172019Bulletin.pdf (http://louisville.edu/medicine/studentaffairs/student-services/copy2_of_ULSOM20172019Bulletin.pdf), pp. 12-14.

The School reserves the right to require administration of a UDS with an inquiry panel sufficiently broad as determined by situational need. A UDS panel may be supplemented with, or replaced by, other testing modalities including but not limited to those requiring blood, hair, nail and/or breath samples.

2.2. Continuity of Instruction Policy

EPC Approved: July 20, 2016

All medical students are urged to sign up for the UofL mobile phone emergency information system, RAVE (<https://www.getrave.com/login/louisville> (<https://www.getrave.com/login/louisville/>)), which provides real time text communications about any emergencies or long-term catastrophes.

In the event that the course/clerkship is no longer able to meet face-to-face, students should immediately logon to the RedMed course website, where the course director or his or her designee will provide instructions for adjustments to the meeting schedule, delivery of instruction, assignments, or examinations and deadlines. Students are asked to check the RedMed site regularly throughout the interruption of instruction for updates. The course director will also use email to communicate regularly with students.

In the event that students as a whole do not have access to the internet, alternative approaches to communicating with students will be arranged.

However, should this occur, students should, depending upon their individual circumstances, make every effort to stay current with course/clerkship assignments/readings.

In the event that a student is unable to attend class for an extended period of time, he or she should contact the course/clerkship director to discuss alternative means of fulfilling requirements.

2.3. UL SOM Medical Student Work Hour/Workload Policy

EPC Last Revised: May 29, 2019

The aim in restricting work hours and course hours is to provide an optimum environment to facilitate medical student learning.

First and Second Year Courses

First and second year course evaluations will include questions about workload in courses, including student estimate of time spent completing independent learning assignments. The EPC will review this information annually in order to assure a balanced workload and adequate time for independent learning for students.

Required Clinical Clerkships

Student duty during the clinical clerkships will be designed with these requirements in mind and clinical course directors will monitor student duty hours. All clinical rotations and elective rotations must adhere to the medical student work hour policy as defined below:

1. Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities.
2. Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours. Students may remain on duty for up to 4 additional hours to participate in didactic activities, transfer care of patients, and maintain continuity of medical and surgical care.
3. Clinical rotations that are scheduled as shift work, such as the emergency medicine elective and night float, will be limited to approximately 12 consecutive hours of patient care, but should not exceed 14 hours. Shifts should be separated by 10 hours between work periods, but must be separated by at least 8.
4. Students must be provided with 1 day in 7 free from all educational and clinical responsibilities, averaged over a 4-week period, inclusive of call. One day is defined as one continuous 24-hour period free from all clinical, educational, and administrative activities (see EPC Days Off policy).
5. Adequate time for rest and personal activities must be provided. This should optimally be a 10-hour time period provided between all daily duty periods and after in-house call.

Limiting required duty hours does not imply that medical students must cease providing essential patient care services at arbitrary cut-off times. Priority must always be given to patient safety and well-being and to avoid the transfer of patient care responsibilities to others at inappropriate times in the continuum of care (e.g., during an operative procedure, in the midst of a rapidly evolving clinical event).

Compliance

This policy will be monitored for compliance by the course directors, clerkship directors, elective course directors, the Vice Dean for Medical Education and the Associate Dean for Student Affairs. EPC minutes will document discussion of preclinical and clinical work hour patterns using data from New Innovations, course evaluations, the clinical liaison process and individual student reporting. If any of these sources reveal that students have worked beyond the acceptable time frame described above, the Vice Associate Dean for Medical Education will meet with the specific course or clerkship director to assure compliance with the policy.

Dissemination

This policy will be discussed with medical students at third year orientation and will be made available to them by referencing it in each clerkship syllabus and by posting it on RedMed. Additionally, the policy will be shared with all faculty, residents, and fellows who work with medical students at the beginning of each academic year via email from clerkship directors or clerkship coordinators.

2.4. Medical Student Supervision/Clinical Care Policy

EPC Approved: February 6, 2019

Purpose

To ensure safety of patients and learners, and a supportive environment for student learning and growth in the clinical setting.

Overview

In keeping with our combined duties to patient care/safety and education of students in the practice of medicine, and in keeping with accreditation requirements, this policy describes the requirements to meet the standard of appropriate supervision in the clinical environment.

Policy

Students of the University of Louisville School of Medicine and visiting students must be appropriately supervised when participating in required or elective clinical activities.

1. Medical students may not provide care in an unsupervised fashion. Students are not credentialed independently. Students function under the direction of the credentialed staff member to whom they are assigned.
2. Supervisors must either hold a faculty appointment or be supervised in their teaching and assessment role by an individual who has a faculty appointment and may include physicians, residents, fellows, and other licensed health professionals supervising an activity within their scope of expertise or practice.
3. Students may be supervised at one of two broad levels as determined by the supervisor:
 - Direct Observation: the supervisor is present with the student and the patient
 - Immediately Available Indirect Supervision: the supervisor, while not in the presence of the student and/or patient, is immediately available to the learner and/or at the site of care to provide direct supervision
- a. Determination of appropriate level of supervision is made by the supervisor, based on many factors, including:
 - Level of training of the student
 - Previous experience and skill of the student with the clinical activity and setting
 - Familiarity of the supervisor with the abilities of the student
 - Acuity of activity and level of risk to patient
5. Students may not perform procedures without direct supervision by a licensed healthcare professional practicing within their scope of practice.

6. Students participating in an intimate exam (breast, pelvic, genitourinary, or rectal) must have a chaperone with them, irrespective of the gender of the patient or the student.

Procedures

1. The supervisor reviews and independently verifies all student findings, assessments, and care plans, and documents this review.
2. The director of the clerkship or course is responsible for communicating policies and procedures related to supervision to faculty and students participating in their curriculum, and for monitoring compliance with the policies and procedures with a report to the relevant governance committee.
3. The director of the clerkship or course is responsible for developing and communicating standard procedures through which students can report concerns regarding adequate and appropriate supervision of what they may deem a violation of this policy. Procedures may include, but are not limited to reporting through the Student Affairs website (to

report mistreatment or negative learning environment), direct reporting to a clerkship or course director or coordinator, and documenting concerns in course or clerkship evaluations at the end of the course or clerkship.

Expectation of Faculty and Clerkship Directors

1. Model professional behavior in interactions with patients, learners, staff and all other individuals in the health care team.
2. Inform patients and/or family members about the role of the medical student or trainee involved in patient care.
3. Provide opportunities for students to demonstrate responsibility and ownership for patient care responsibilities. These opportunities include, but are not limited to taking patient histories; performing complete and/or focused physical examinations; and reporting and entering findings in the patient's medical record with the explicit approval of the patient's supervising attending physician. The supervising physician will be responsible for reviewing student documentation and countersigning progress notes.
4. The faculty is ultimately responsible for the evaluation, treatment, management, and documentation of patient care.

Expectations of Students

1. Maintain professional behavior standards with the supervising physician, other members of the medical team, including resident physicians, other health professionals, members of the staff, patients and any other individuals encountered in the clinical setting.
2. Maintain self-awareness of own competence and seek assistance/advice when clarification is needed.
3. Inform patients and/or family members of their status as a medical student and the name of the supervising physician under whom they are working.
4. Proactively inform the supervising physician or clerkship director concerns about levels of supervision (excessive or sub-standard).

2.5. Expectation for Using RedMed

Educational Program Committee Approved: July 18, 2012

Year One and Year Two Courses

- a. All face-to-face teaching sessions placed on calendar as events with the correct designation (lecture, small group, IL, lab) and at least one teaching faculty member identified, and independent learning activities placed on calendar as Milestones.
- b. Syllabus and other materials that are used continuously or apply to an entire course posted on the course home page on RedMed. Syllabi must also be posted on Blackboard for SACS compliance with U of L.
- c. Selecting and posting Program Objectives/Course goals and Session objectives: This is the step that allows RedMed to demonstrate that the curriculum supports the educational standards for the school, a key LCME standard.
 - i. Course director selects SOM Program Objectives from list (that apply to the course as a whole) as Course Goals
 - ii. Individual faculty (or their designate) selects Program Objectives that apply to their individual teaching event from the Program Objectives list for the course. Individual faculty or their designate also enters specific learning objectives for each individual event and links them to the event's Program Objectives.

- d. All course materials assigned for student learning (lecture notes, handouts, PowerPoints, practice questions) must be posted. These assigned materials should be posted no later than 1 week prior to the learning event, to allow time for studying ahead.
 - i. Groups of lectures covering a single topic, i.e., Renal Pathology 1-5, may post all of the necessary course materials once within the first lecture in a set and indicate they have done so in the description of the first learning event in the series.
 - ii. Do not repost the same teaching materials more than once as it will lead to unnecessary duplicate printing by students. Modified or updated documents that are uploaded will be flagged as new documents for student review, and outdated materials should be removed when updated materials are posted.
 - iii. UME staff will post links to via Panopto the next business day after the lecture is given.

Clerkships

Clerkships must include information about patient logging on RedMed in their syllabus and remind students about using the patient log during orientation. All patient logs in the clinical years will be kept on New Innovations only.

2.6. Extra Credit Policy

EPC Reviewed: February 6, 2013

Extra credit assignments/points are not allowed. All activities deemed worthy of inclusion in a course or clerkship must be included in the "total points possible" for that course, thus eliminating the potential to exceed 100%.

2.7. Formative Assessment & Feedback Policy

EPC Last Reviewed: May 29, 2019

Didactic Courses in Preclinical Years

All courses must provide formative feedback to students early enough to allow students sufficient time for remediation.

Each course must provide **graded formative feedback**. * Graded formative feedback includes feedback on any graded assignment, including quizzes.

Each course must also provide at least one of the following types of **ungraded formative feedback**:

- Practice problems with solutions
- Practice tests with solutions
- Teacher consultation

Students must receive **ungraded and graded formative feedback** to assess their progress in meeting a course's goals while there is still sufficient time in the course to allow for changes in studying and approach to material. In practice, this means that both forms of feedback must be delivered to students while there are at least 2/3 of the overall course points remaining. Feedback must occur by at least the midpoint of the course.

Course/thread directors must be available to meet with students who have concerns about their performance in a course. They may refer certain students to the Learning Specialist. The Learning Specialist will assess student needs and refer the student, if indicated, to the appropriate resources, e.g., tutoring and/or meeting with their Advisory

Dean. Students are responsible for following up with the referred resources.

Formative feedback practices must be described in each course syllabus; these will be reviewed by the

Undergraduate Office of Medical Education (UME) and reported to the Educational Program Committee (EPC) as part of the syllabi review process each year.

**If a course is less than four weeks, formative assessment, both graded and ungraded, will be given by at least the midpoint of the course*

Percent of Final Grade

Formative assessment assignments (including quizzes, if any) will account for 20-30% of the final course grade in courses that are four weeks or longer.

Required Clinical Clerkships

All clerkships must provide mid-clerkship feedback to students. Residents should be encouraged to contribute to mid-clerkship feedback, however attending physicians are ultimately responsible for providing feedback and signing the mid-clerkship feedback form.

Mid-clerkship feedback must be delivered by the midpoint of a clerkship rotation or during a phase of the clerkship that will allow time for the student to make any adjustments or improvements prior to the end of the clerkship, if necessary.

Clerkship directors are required to review all clinical evaluations and meet with any student found to be at risk for failure based upon written feedback; this meeting should be used to develop an action plan to help the student improve his/her performance.

Mid-clerkship feedback practices must be described in each clerkship syllabus; these will be reviewed by the UME and reported to the EPC each year as part of the syllabi review process.

2.8. Narrative Assessment Policy for Required Courses and Clerkships

EPC Last Reviewed: January 6, 2016

- a. Students in required courses with longitudinal small group experiences and/or laboratory experiences with same facilitator for five or more sessions must receive narrative assessment, either formative or summative, on areas other than content or skills mastery. These include the Interdisciplinary Clinical Cases and Longitudinal Standardized Patient Program of the Introduction to Clinical Medicine course; and Problem Based Learning sessions. Required clinical clerkships also must include narrative assessment.
- b. Narrative assessment must include feedback and observations related to behavior, attitudes, interpersonal skills, interactions with peers and faculty, and/or professionalism.
- c. Narrative feedback must address both the student's strengths and specific areas for improvement.
- d. Courses that provide narrative feedback must describe the narrative feedback process in their syllabus.
- e. The Introduction to Clinical Medicine course, Problem Based Learning sessions, and required clinical clerkships must include both formative and summative narrative assessment. Summative assessment must be factored into student's final grade. Other courses may include

summative or narrative assessment based on the course design and EPC review and direction.

- f. Narrative assessment must be completed on New Innovations and must be reviewed by both the student and the course director.
- g. Summative comments must accompany the final grades to Student Affairs.
- h. Course evaluations must include questions about student satisfaction with narrative feedback. Undergraduate Office of Medical Education will monitor survey answers for student satisfaction with narrative feedback. The Educational Program Committee will review as part of annual course evaluation.
- i. If a student concern surfaces in the narrative feedback, the course director must discuss the concern with the student and the Associate Dean for Student Affairs.)

2.9. Self-Directed Learning Policy

EPC Last Reviewed: March 4, 2020

Self-directed learning sessions that incorporate all of the following elements must be included as a required part of the ULSOM curriculum:

- a. Medical students' self-assessment of their learning needs
- b. Independent identification, analysis, and synthesis of relevant information
- c. Independent and facilitator appraisal of the credibility of information sources
- d. Students are assessed on and received feedback on their information-seeking skills

In order to assure a learning environment that incorporates these elements in a cyclic manner as a curricular requirement, problem-based learning sessions (PBL) with graded assessments are incorporated into the first and second year of the curriculum. These PBL sessions meet all components of the LCME definition of self-directed learning (SDL).

- The EPC will discuss PBL topics in the context of the proposed schedule for each course in the first two years of the curriculum.

2.10. Service-Learning Policy

EPC Last Reviewed: May 6, 2015

Effective Date and Service-Learning Definition

Effective with the class of 2016, all students shall be required to complete an EPC-approved service-learning activity prior to graduation. EPC-approved activities include:

- AHEC Project in the Family Medicine clerkship
- Mission Trips/Service Trips
- Student-Run Clinics

A service-learning activity is defined as a structured learning experience that combines community service with preparation and reflection. *

Required Learning Objective

All service-learning activities should include the following learning objective: Students will develop an appreciation for community service and the contributions that physicians can make to their communities through such service.

Requirement for Reflection by Students

In order to qualify as a service-learning experience, a reflection must be included. Students may complete the reflection component individually or as part of a group. This component must be described in the syllabus of required courses, or in the course form in the case of electives.

Documentation of Service-Learning Activities by Students

Students must document their service-learning activities using the service-learning database. They must include the name of the service-learning activity and the number of hours involved; they must also upload their completed reflection assignment.

Procedures for Providing Feedback to Student's Reflection

A faculty member will provide feedback to students on their service-learning reflection assignments as follows:

- a. If there is a specified director of the service-learning activity (i.e., sponsor of international trip, student clinic directors, etc.), he/she will provide feedback to the student.
- b. If there is no specified director, the Associate Dean for Student Affairs, in conjunction with the Service-Learning Coordinator (SL Coordinator), will identify an appropriate faculty member to provide feedback.

Criteria for Approving Service-Learning Activities

New service-learning opportunities may be proposed by students or faculty members by submitting a proposal to the SL Coordinator. Any proposed service-learning activity that meets the service-learning definition as verified by the Associate Dean for Student Affairs and the SL Coordinator will be considered an approved service-learning activity.

Notification to Students Regarding Service-Learning Experiences

The SL Coordinator in Student Affairs will distribute a list of EPC-approved service-learning experiences to students by August 1 annually. In addition, the SL Coordinator will post a copy of this service-learning policy and maintain a current list of activities to a Service-Learning webpage at the Medical Student Affairs website. The SL Coordinator will be responsible for updating this list quarterly.

Tracking of Service-Learning Experiences – Procedures and Schedule

The SL Coordinator will produce and examine service-learning database reports on student completion of service-learning activities, reflection, and feedback. The SL Coordinator will provide composite reports to the Educational Program Committee in January (to include activities completed from July – December) and July (to include activities completed from January – June) of each year.

Educational Program Committee Responsibilities

- Review UME survey results regarding student satisfaction with service-learning experiences and reflection feedback annually in July.
- Discuss student completion of service learning and reflection requirements. Address any deficiencies.

2.11. Student Assignment to Learning Experiences (Clerkships)

EPC Approved: July 17, 2019

The School of Medicine assumes responsibility for managing students' selection of and assignment to learning experiences and responding to requests for change.

Regional Campus

Enrollment in the Trover regional campus for the clinical phase of the curriculum occurs prior to matriculation to medical school. Enrolled students who would like to withdraw from Trover Campus need to contact the Associate Dean for Student Affairs. The Associate Dean for Student Affairs will confer with Undergraduate Medical Education deans before making the final decision.

Clerkship Rotation Assignment

Assignment to clerkship rotations will be done in a fair and consistent manner. Student are informed by the Undergraduate Medical Education Office of the process to request the order of clerkships. Any request for changes in assignment should be sent to the Director of Curriculum Management Systems in the Undergraduate Medical Education Office.

Clerkship Site Assignments

Students will be allowed to rank specific sites and/or services within each clerkship. Clerkship site/service change requests will be processed by the individual clerkship. A student may email a clerkship director and coordinator to formally request an alternative site/service assignment at any time before or during his or her attendance at the site. The clerkship director and coordinator will determine if a change is warranted. Each change request will be evaluated on the nature of the request, impact on other students, and available options. Requests based on health issues, conflicts of interest, accommodations, compliance issues and mistreatment will be given priority.

If there is an issue that affects multiple clerkships, the student can contact the Associate Dean for Student Affairs who will work with the clerkship directors to determine site/service assignments.

2.12. Student Use of Electronic Medical Records

EPC Last Reviewed: May 29, 2019

The following rules apply to student use of electronic medical records. Students should be able to access electronic medical records using their own personal login information.

1. Students should be able to enter a full note including history of presenting illness, past medical history, family history, review of systems, physical exam, laboratory/imaging data, and assessment and plan.
2. Student notes should become a permanent part of the patient record.
3. Students should be able to view all patient notes, labs, radiology reports, pathology reports and images.
4. Students should have the ability to create orders. All student orders must be signed by a resident or attending physician.
5. A faculty member must review student notes to ensure accuracy and appropriateness and provide feedback to students.
6. A faculty member must sign student note.
7. All required clerkship syllabi must include this policy.

2.13. Students as Scribes Policy

EPC Last reviewed: May 29, 2019

Scribes are defined by the AAMC as "individuals whose role is to document as the physician performs the service." *

Medical students shall not participate as a scribe in any capacity for any physician or clinical rotation that participates in students' educational experiences. Students are allowed to write notes under their own user IDs, but these shall be attributable only to the student and are not to be used as physician notes. Furthermore, students may not receive compensation for writing their own notes, nor shall they be compensated for completing charts or electronic medical records during any clinical rotation during the time they are enrolled in the rotation.

This policy is meant to ensure that scribe duties do not overlap with educational responsibilities at any time. Students are permitted to work as scribes; however, they can do so for pay only when the work is done outside of any rotation or elective in which they are currently enrolled. They are not allowed compensation nor can they be required to scribe if it is related to education/school in any way.

If a student is asked to write a note or scribe under anyone's name other than their own, the student should report the request to any of the following: Clerkship Director, Student Affairs, Associate Dean for Medical Education, Assistant Dean for Medical Education.

2.14. Required Patient Diagnosis and Procedure Logging Process:

Educational Program Committee Approved: June 5, 2019

Educational Program Committee Last Revised: May 18, 2022

The Educational Program Committee (EPC) sets the list of diagnoses and procedures students are required to see in each required clerkship.

The purpose of this log in managing the required clinical curriculum is twofold:

- a. to ensure every educational site provides sufficient patient numbers and diversity to represent the range of diagnoses required for the clerkship; and
- b. to monitor across sites within a clerkship and make sure the patient load is comparable so that students at different sites have enough time to study.

The EPC will review student logs every 6 months to evaluate the required diagnosis list for each clerkship as well as the site assignments for students to maintain the highest quality clerkship educational experience. Accurate student data is key to ensuring these decisions are delivering the kind of patient experiences students need and want in their clerkships.

Each clerkship has required diagnoses and procedures. Recommendation for these required diagnoses and procedures are made to the EPC by the M3-4 Subcommittee. The EPC then selects the final diagnoses and procedures and assigns them to each clerkship, including the required level of participation. All required diagnoses and procedures must be seen and logged at least once during that clerkship to complete the clerkship educational requirements. Students should log patient diagnoses/procedures in all of the following circumstances:

1. Assigned patients, defined as: the patients students interview, examine, write notes or histories on; see on their own or with a preceptor

in clinic; directly participate in procedures or surgeries on; or are personally assigned to follow from admission or night float. Some examples:

- If a student sees the same patient in the hospital for five days, log them completely, once.
- If a student personally cares for 5 patients in clinic on the same day with the same diagnosis such as asthma, log all 5 patients separately on that day even though they have the same diagnosis.
- If a student has already seen a patient with that required diagnosis and logged it, but cares for a new patient with the same diagnosis in the hospital, log the patient.

2. Patients seen and discussed by the student's team or in clinic or after rounds while the student is present and learning from their care should also be logged the first time they are encountered by the student.

3. Patients that develop new diagnoses on subsequent days, ex. acute kidney injury or nosocomial infection, may have that diagnosis added to their log.

4. Patients seen in small groups or conferences *when the patient/survivor is present*, should be logged (ex. OB/GYN Ovarian Cancer Survivors session).

5. Virtual or online patient cases that the student is directed to use to fulfill a required diagnosis should be logged, with "virtual patient" chosen in the "location" field.

6. Procedures have a minimum required level of participation that is assigned by the EPC. This will be indicated to the student within the logger as well as during orientation to the clerkship and in the clerkship syllabus. Although all levels of participation may be logged, i.e., observation, the minimum expectation for participation identified by EPC must be met to pass the clerkship and will be monitored. Levels of participation include:

Levels of Participation for Required Diagnosis are:

Level 0 – Virtual Patient Case

Level 1: Active Exposure: Student actively observes clinical care of patient during key patient care tasks and subsequently discusses the interaction with the provider; participated in discussion for care of teammate's patients.

Level 2: Active Clinical Participation: Student actively participates in the clinical care of patients by performing key patient care tasks. This can include obtaining a patient history; conducting a physical examination; presenting the case including a discussion of differential diagnosis, assessment, and plan; and/or accepting a patient handoff with active listening and then performing required next steps in care.

Levels of Participation for Required Procedures are:

Level 0: Simulated procedure.

Level 1: Active Exposure: Student actively observes the specific demonstrated procedure and subsequently discusses the interaction with the provider.

Level 2: Active Participation (Assist): Student assists in the performance of a specific procedure under direct supervision.

Level 3: Active Participation (Full): Student fully performs a specific procedure under direct supervision

The following should NOT be logged:

- Patient cases discussed in small groups when the patient is not there to take part
- Morning report
- Morbidity & Mortality conference
- Autopsy conference
- Any other didactic sessions where the facts of the patient's case are shared but that the patient does not attend and/or that does not affect the actual care of the patient.

Monitoring of timing of log completion and points for completion:

Students are required to update their patient diagnosis and procedure logs at least weekly to help improve accuracy of logging as well as identify required diagnoses that are not being seen. Clerkship coordinators will check student logs and points will be docked if no entries are being made on at least a weekly basis. Students are also prompted to review their diagnosis and procedure logs with their supervising physician when they ask for formative feedback using the mid-clerkship feedback form, so that gaps in their clinical experience can be addressed.

Students who are missing required diagnoses in the last week of a clerkship should email their clerkship director and coordinator notifying them and asking them for guidance. They may either direct the student to a patient/team/site that will let them meet the requirement, or if that is not possible, they will direct the student to complete an online or virtual patient case or simulated procedure, and log that completion in the logging system. No student who has contacted the clerkship director appropriately a week prior to the end of the rotation and followed their directions will be docked points for missing a required diagnosis.

2.15. Privacy of Student Records

EPC Last Reviewed: September 9th, 2020

The University of Louisville hereby notifies students concerning the Family Educational Rights and Privacy Act (FERPA) of 1974. This Act, with which the institution intends to comply fully, was designed to protect the privacy of educational records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading information. Students also have the right to file complaints with the Family Educational Rights and

Privacy Act Office, Department of Education, concerning alleged failures by the institution to comply with the Act.

The University has adopted a policy which explains in detail the procedures to be used by the University for compliance with the provisions of the Act and the regulations adopted pursuant thereto. FERPA information can be found online here (<https://louisville.edu/counsel/ferpa-1/>).

Questions concerning the Family Educational Rights and Privacy Act may be referred to the FERPA Officer, University Archives and Records Center.

2.16. HSC Immunization Requirements

The following immunizations are required for Health Sciences Students

All students in the Schools of Dentistry, Medicine and Upper Division of the Nursing School including Graduate Nursing programs, Audiology

and Speech-Language Pathology are required to have the immunizations listed below, in addition to an annual TB skin test. Please print and complete the appropriate U of L Immunization Compliance Form (student (<http://louisville.edu/campushealth/files/student-immunization-tracking-form/>) or resident/fellow (<http://louisville.edu/campushealth/files/resident-immunization-tracking-form/>)) and submit it, along with all official documentation of your immunizations.

Questions concerning the Health Science Campus requirement can be directed to Immunize@louisville.edu.

Campus Health Services, located on the Health Science Campus, can take care of any immunizations you may need to be compliant.

Why We Require Vaccinations

Requirements:

Tetanus-Diphtheria Acellular Pertussis (Tdap)

- 1 Adult Tdap vaccine (Tetanus, Diphtheria, Pertussis).

Measles-Mumps-Rubella (MMR)

- Documentation of serologic immunity OR
- MMR vaccines (2 doses Measles, 2 doses Mumps and one dose Rubella if administered separately).

Hepatitis B Vaccine (HepB)

- doses of vaccine followed by HepBSAb titer, reported with a QUANTITATIVE value.

Varicella (Chickenpox) Vaccine

- doses of vaccine OR
- Positive antibody titer. Indeterminate titers require one dose vaccine.

Baseline and Annual TB (Tuberculosis) testing required

- No previous TST or your testing has elapsed >14 months:
- Complete two TSTs, at least one week apart.
- No prior history of positive TST:
- Proof of two annually consecutive TSTs: *one within 90 days of your start date*, OR
- Interferon Gamma Release Assay (IGRA) (Quantiferon TB Gold or T-spot) within 90 days of your start date.
- Prior history of (+) TST or IGRA, or active TB:
- Provide documentation of positive test results, medication treatment, and latest Chest x-ray report.
- If you received the BCG vaccine and your first or second TST were "positive" you will need to obtain an IGRA blood test.
- Complete TB Questionnaire (TBQ) upon starting and on an annual basis.
- Hepatitis A (recommended):
- doses vaccine

Seasonal Influenza:

- Vaccine is required annually but not available until Fall. You will be notified regarding its availability. Free to all students.

Pending Vaccine Documentation:

You will be contacted by e-mail once documents are reviewed and additional documentation may be requested by Campus Health Services.

2.17. Mistreatment Policy

EPC Last reviewed: May 15, 2019

The University of Louisville School of Medicine is committed to ensuring an environment that is respectful of diversity of opinion, race, gender, religion, sexual orientation, age, disability and socioeconomic status. Mutual respect and collegiality among faculty, residents, students and staff is essential to maintaining an environment conducive to learning. All members of the University community are expected to adhere to the Code of Conduct (<http://louisville.edu/compliance/ico/code/>).

Student Mistreatment is defined as a behavior that shows disrespect for the dignity of others and unreasonably interferes with the learning process. It includes harassment, discrimination, or physical threats.

Specific examples of mistreatment can include, but are not limited to, being:

- Subjected to offensive remarks or names
- Pressured into performing personal services
- Intentionally neglected or left out of conversations
- Belittled or humiliated

Any abuse or misconduct of a sexual nature will be reported through the Title IX process (<https://louisville.edu/titleix/>) as outlined by the University of Louisville.

Students may report mistreatment using any of the following avenues:

- Directly report concerns about mistreatment confidentially to the Associate Dean for Student Affairs, the Assistant Dean for Student Affairs, the Vice Dean for Undergraduate Medical Education, the Assistant Dean for Clinical Skills or the Health Science Counseling Coordinator.
- Complete this online form (<https://louisville.edu/medicine/studentaffairs/mistreatment-form/>) with the option of anonymously reporting a mistreatment.
- Document the mistreatment on course evaluations.

All reports submitted through these mechanisms will be received by the Associate Dean for Student Affairs and will be reviewed with the Vice Dean for Undergraduate Medical Education on a monthly basis. Trends will be monitored. The individual mistreatment incidents as well as trends will be brought to the attention of the Vice Dean for Faculty Affairs (if faculty involved) or Associate Dean for GME (if resident involved), as well as the appropriate Chair or Program Director, or appropriate administrator at the clinical site. The responsible supervisor will have ten business days to initiate a response and communicate this to the Associate Dean for Student Affairs.

Incidents submitted through this form may be made anonymously, however, UofL is limited in its ability to investigate and respond to anonymous reports. The preference is for all reports to include contact information such that follow up can occur.

Retaliation against students reporting mistreatment is regarded as a form of mistreatment and will not be tolerated. Accusations that retaliation has occurred will be handled in the same manner as accusations concerning other forms of mistreatments.

If you require an immediate emergency response to protect your safety or the safety of others, notify law enforcement authorities immediately.

2.18. Criminal Background Check Policy

A Criminal Background Check will be administered through AAMC on all applicants at the time of acceptance, and on alternate applicants at the request of the Admissions Office. Applicants must consent, submit to, and satisfactorily complete a criminal background check investigation as a condition of matriculation into ULSOM. For more information go to the following web address: <https://louisville.edu/medicine/admissions/policies/criminal-background-check-policy> (<https://louisville.edu/medicine/admissions/policies/criminal-background-check-policy/>).

2.19. Exposure to Infectious and Environmental Hazards Policy

EPC Last Revised: September 16, 2020

Policy:

All medical students will be educated and trained in the prevention of exposure to infectious diseases and environmental hazards including process for evaluation, diagnostic testing and treatment as appropriate.

A copy of this policy is posted in the on-line Medical Student Bulletin as well as on the School of Medicine Redmed student site at <https://redmed.louisville.edu/lcms> (<https://redmed.louisville.edu/lcms/>).

Procedure:

a. Bloodborne Pathogens and Environmental Hazard Training

- i. Students are introduced to the concept of infection control, work-related exposure and environmental hazards upon matriculation through Bloodborne Pathogen and Environmental Hazard Training module at the beginning their first year of medical school and through annual refresher training thereafter.
- ii. Training meets all state and federal requirements in the OSHA Bloodborne Pathogen Training standard.
- iii. Student upon completing the training and quiz attest that they have read and understand the BBP and Environmental Hazards Policy.
- iv. Students will receive additional training regarding occupational exposures during Junior Clerkship orientation just prior to starting their junior year.

b. Information Cards

- i. Students receive a plastic information card that is carried with their ID card that has instructions on the initial management of an exposure or injury and how to contact Campus Health for further guidance.

c. Exposure or Environmental Hazard Injury Evaluation and Management Procedure:

i. Immediate First Aid Procedure:

1. Wash or irrigate blood or other body fluid with soap and/or water.
2. Mucous membrane exposure – flush with copious amounts of water.
3. Report the exposure to immediately to supervisor (resident or attending)

ii. Urgent Follow Up Procedure

1. Contact Campus Health Services Exposure Hotline at 502-852-6446 as soon as clinically safe to do so but preferably within 1 hour.

2. The hotline is answered by the Campus Health Service and is available 24/7 for consultation.
3. The hotline is staffed by providers from the Campus Health Service who will assist the student with the assessment of BBP exposures or environmental hazards injuries.
4. Students may also simply walk-in to the HSC Health Center for an urgent evaluation and/or treatment for BBP exposures or environmental hazard injuries during regular office hours.

d. Visiting Medical Students:

- i. All visiting medical students must provide proof of current bloodborne pathogen and Environmental Hazard training with their VSAS application.
- ii. The visiting student coordinator will include information regarding Bloodborne Pathogen Exposure and Occupational Environmental Injury Policy in the student's acceptance email at least one week prior to their arrival on campus.
- iii. The coordinator will also provide instructions on how to attest that they have read and understand the policy.
- iv. Upon arrival visiting students will receive an exposure card with the hotline number to carry with their ID badges once the coordinator has verified that the student has attested that they have read and understand the School of Medicine Bloodborne Pathogen and Occupational Environmental injury Policy.
- v. Visiting students follow the same procedures outline in Sections 2 and 3 above and are treated like any other UofL School of Medicine medical student including BBP initial and follow-up testing as well as prophylactic medications for up to 28 days at no cost.

e. Cost of evaluations and/or prophylaxis

- a. All costs of BBP evaluations, laboratory tests, and post-exposure prophylaxis for up to 28 days including serial surveillance testing for up to 6 months for properly reported bloodborne pathogen exposures are covered by Health Professionals Fee at the Campus Health Center.
- b. Any treatment needed for a clinical condition that develops as a result of the exposure or injury are covered by the student's health insurance policy.
- c. Students who are determined to have been exposed to a patient with a communicable illness (e.g. meningitis, hepatitis A) are offered prophylactic medications when determined to be necessary by the Campus Health Service at no cost to the student.

2.20. Students Infected with Blood Borne Pathogen Policy

EPC Approved: June 3rd, 2020

The intent of this policy to limit the possibility of transmitting a BBP infection to or from a student or patient. This policy applies to all medical students enrolled in the University of Louisville ("UofL") School of Medicine ("School of Medicine"), as well as all visiting medical students.

Further, this policy defines the procedures for the assistance of students infected with bloodborne pathogens ("BBP"), which is defined by the Occupational Health and Safety Administration (OSHA) as infectious microorganisms in human blood that cause disease in humans. These pathogens include, but are not limited to, Hepatitis B (HBV), Hepatitis C (HCV), and Human Immunodeficiency Virus (HIV).

Procedure:

a. Admissions

- i. An applicant's BBP status will not be used as a determinant of admission or matriculation to the School of Medicine.

b. Bloodborne Pathogen Training

- i. BBP training is required of all medical students upon matriculation and annually thereafter. Upon completion of the initial BBP training or annual refresher training, students will attest within the training module that they have read and understand the Infected Student Policy.

c. Students Responsibilities and Rights

i. Responsibilities

1. Any student engaged in patient-care activities who knows, or reasonably believes that they may be infected with a BBP is expected to seek expert medical advice.
2. Any student engaged in patient-care activities who knows, or reasonably believes that they may be infected with a BBP must conduct themselves responsibly for the protection of patients and other members of the UofL community.
3. To disclose that they have an active BBP infection (disclosure of the specific virus is not necessarily required) to the Executive Director of Campus Health Services, who will arrange for a review by the Expert Review Panel in accordance with Section 5.

- a. If a student sustains an injury that may have exposed himself or herself or, if the student is infected and may have exposed a patient to the infected student's blood or bodily fluid, the student shall immediately notify the attending physician or the responsible faculty member about the incident, who should then communicate with Campus Health Office to initiate an evaluation.

b. Rights

- i. Any student with a chronic BBP infection has the right to request:
 1. Reasonable accommodations for an ADA recognized disability through the University's Disability Resource Center.
 2. Right to appeal the report provided by the Expert Review Panel in Section 5 to the Dean of the SOM.
- ii. The student has right to have reasonable accommodations including parallel or alternative opportunities for patient-care activities.

a. Visiting Medical Students:

- i. Must comply with the HSC Immunization Policy.
- ii. Must provide proof of BBP and hazards training or complete UofL's BBP and Hazard Course.
- iii. The visiting student coordinator will include information regarding this policy in the student's acceptance email at least one week prior to their arrival on campus.
- iv. The coordinator will also provide instructions on how to attest that they have read and understand the policy.
- v. Visiting students with an active BBP illness are required to notify the Visiting Student Coordinator before their arrival date.

b. Expert Review Panel

i. Composition

1. The panel shall be comprised of, but not limited to, the following individuals: Executive Director Campus Health Services, infectious disease specialist, specialist in infection control; a medical ethicist, and a representative from the Disability Resource Center. Additional representatives such as hospital infection control staff are included on an as needed basis to advise in non-voting capacity.

2. The HSC Counsel will serve in an advisory capacity but is not a member of the committee.
- ii. Purpose of Expert Panel
 1. Determine if reasonable accommodations recommended by the Disability Resource Center can be reasonably accommodated by the SOM
 2. Make individualized recommendations regarding the nature, duration and severity of the risk, the probability an injury will occur, and whether and to what extent reasonable adjustments or modifications can be made to mitigate risk.
- a. Provide recommendations for adjustments or modifications for a student infected with an active BBP infection to the Associate Dean of Student Affairs
- b. Provide guidance to the student, clerkships, school or affiliated facilities as needed.
- c. Provide resources regarding career counseling
- d. Process
 - i. The Expert Panel reviews the recommends from the DRC and medical history provided by the student.
 - ii. To protect the student's identity all information is deidentified during the review process.
 - iii. The Expert Review Panel will monitor the status of a student with an active BBP infection, which may include the student undergoing periodic follow-up evaluations in order to furnish a report to the Expert Panel including laboratory studies indicating viral loads, etc. In cases where a BBP infection has become chronic or progressed additional adjustments or modifications may be made by the committee.
 - iv. Although the School of Medicine may be able to operationalize reasonable accommodations and make adjustments or modifications for a student with a chronic BBP infection through graduation, this is not a guarantee that the student, once graduated, can be licensed, secure a residency or other training position, obtain malpractice coverage or disability insurance in any given state due to individual state licensing boards and state laws.
 - v. Once finalized by the Expert Panel, a report of the recommended adjustments or modifications, if any, shall be provided to the student and the Associate Dean of Student Affairs for implementation. The Expert Panel may supplement the initial report as needed in the course of monitoring a student.

a. **Appeal Process**

- i. A student has the right to appeal recommendations made by the Expert Review Panel by submitting, in writing, a proposed amendment to the recommendations along with the supporting rationale for such amendment to the Dean of the SOM. A student may submit additional documentation from a healthcare provider in support of the amendment.
 - ii. The student shall forward the appeal to Dean of the School of Medicine, along with a copy of the Expert Panel report within ten (10) business days from the receipt of the Expert Panel's report.
 - iii. The Dean will review the appeal and provide a written decision within ten (10) business days from the date of receipt of the appeal.
- b. **Confidentiality, Limitation of Disclosure, and Notification**
- i. The School of Medicine recognizes the importance of protecting the confidentiality and privacy of any student who has an active

BBP infection to the greatest extent possible and within the bounds provided by law under HIPAA and/or FERPA.

- ii. The SOM also has the responsibility to protect against a direct threat to the health or safety of others.
- iii. The SOM has the responsibility to protect a student with an active BBP infection from being placed in educational situations where the student clinical experience could threaten the health of the student.
- iv. The School of Medicine Expert Review Panel may recommend notification to patients when a student may have exposed a patient to a BBP on a case by case basis after considering the nature and severity of the risk, confidentiality issues and legal responsibilities.
 1. If the Expert Review Panel recommends patient notification, the panel will submit a written report outlining the facts of the case and the need for patient notification to the Dean of the SOM who will in turn notify the appropriate clinical administrators.

3. Curriculum

3.1. Step 1, Step 2 Policy

Educational Program Committee Approved: February 18, 2004

Educational Program Committee Last Revised: June 12, 2024

Step 1

All students are required to pass Step 1 of the United States Medical Licensing Examination (USMLE) at the national passing level prior to progressing in the third-year curriculum. There are some situations, however, that may prevent students from taking and passing the exam according to the usual timeline. The primary purposes of this policy are to ensure all students are engaged in advising that need it, to keep students on time for the optimal progression through the curriculum, and to limit however possible the need for students to take leaves of absences (LOA) related to Step 1 or delay a required clerkship, due to the adverse effect this can have on their fourth-year match schedule.

This policy applies to students in the ULSOM four-year MD program curriculum and students in the Oral & Maxillofacial Surgery (OMFS) program curriculum prior to beginning M3 rotations. Students in the combined MD/PhD program are expected to take the exam prior to beginning the PhD portion of their education (see associated MD/PhD policies).

Step 1 examination is optimally scheduled during May and June following successful completion of the second-year curriculum and an independent dedicated study period. Step 1 may not be scheduled or taken for students who have not completed or remediated all M1-2 curricular requirements.

Below are the specific requirements in place to ensure all students are adequately prepared to take this exam on an optimal timeline:

- a. All students in the independent dedicated study period must submit two NBME practice exam scores for Step 1. Each practice exam must be taken timed (not on tutor-mode) to be usable to track student progress. Non-timed exam scores will not be accepted. This score and screenshot of the score report should be emailed to the designated individual Affairs from the Step 1 progress committee. Two NBME self-assessment exams are required to test for score validity.

- b. Students must submit their first NBME score by the fourth Monday following the beginning of the independent study period or two weeks prior to their Step 1 exam date (whichever comes first). The second NBME score must be submitted one week before their scheduled exam.
- c. Students who have not reached that year's required minimum cutoff score* by the fourth Monday following CBSE or two weeks prior to their scheduled Step 1 exam, are required to engage in the advising process with the Step 1 Progress Committee.
- d. Students scoring at or above that year's required minimum cutoff score* on an NBME self-assessment are required to take Step 1 prior to the start of M3 orientation.
- e. Students not meeting the required score on their NBME self-assessment or are not able to schedule the Step 1 exam prior to the M3 orientation will be reviewed for permission to delay their FIRST M3 clerkship and enter the Directed Studies elective.
- f. Students who fail to engage with the Step 1 Progress Committee, fail to submit CBSSA scores as directed, or elect to take the exam without meeting the required minimum cutoff score, will receive a Letter of Concern (Policy 5.11 Professional Accountability) which may result in documentation of professionalism concerns in the MSPE letter or a hearing with the Student Promotions Committee.

DIRECTED STUDIES

Directed Studies is a continuation of Step 1 preparation intended for students who have fully utilized their dedicated study period but require additional time to continue their studies. It is not designed to extend the dedicated study period to allow for vacations, weddings, research, or other events. Acceptance into Directed Studies is determined by the Step 1 Progress Committee and is not guaranteed. Further details regarding Directed Studies are provided below:

1. In order to be considered for the Directed Studies elective, students must engage with the advising process as laid out by the Step 1 Progress Committee. Students deemed ineligible who still require additional time for exam preparation will need to take a personal leave of absence (LOA) to continue their studies.
2. In July, students approved for Directed Studies will enter the 1-credit hour Directed Studies course and delay the first scheduled clerkship in their track until the beginning of M4 year.
3. Earning credit for the Directed Studies elective requires that students continue to engage with the advising process, including reporting scores or emailing/calling with updates, and attending meetings with advisors as required by the Step 1 Progress Committee.
4. Students must take Step 1 before the end of their directed studies course so that they can start the next clerkship in their previously determined schedule. Failure to do so will necessitate a LOA to continue studying for the exam.
5. Failure to meet communicated deadlines for score and progress reporting set by the committee will result in the student being withdrawn from Directed Studies and placed on a LOA.
6. Students taking a LOA may be required to return any previously disbursed loans that they received at the start of third year. Due to this and other significant financial aid implications, all students taking a LOA who receive financial aid must meet with and discuss their situation with the Financial Aid office prior to making a decision.

7. Students who take a LOA to prepare for Step 1 must secure a passing score on Step 1 to be re-enrolled in school and return to 3rd year clerkships.

8. Students who delay a clerkship for Directed Studies are not able to be included in M3 class rank calculations.

**The required score on the NBME self-assessment may change over time due to possible changes in the passing score and is decided yearly by the Student Progress Committee and announced to students prior to the study period.*

STEP 2

Students are not permitted to take Step 2 until they have successfully completed all required rotations and courses in years 1-3 of the curriculum. All students are required to pass Step 2 of the United States Medical Licensing Examination (USMLE) at the national passing level during their fourth year and before receiving the Doctor of Medicine Degree. The primary purpose of this policy is to ensure that students finishing their medical education have adequate basic and clinical science preparation to be successful in a residency program and eventually to be licensed.

All students who have not reached the year's required minimum cutoff score* on the CCSE will be required to engage in the advising process with Undergraduate Medical Education/Student Affairs. This process will require an NBME self-assessment submission at or above the passing cutoff, at least one week prior to their scheduled NBME exam. The practice exam must be taken timed (not on tutor-mode) to be usable to track student progress. Non-timed exam scores will not be accepted. This score and screenshot of the score report should be emailed to the designated individual in Medical Student Affairs.

Students must attempt the Step 2 exam before the last semester of their fourth year. Any exceptions must be approved by the Associate Dean of Student Affairs.

Failures of Step 1 or 2

When the scores are received, students who did not pass Step 1 or Step 2 exam will meet individually with members of the Step 1 Progress Committee to assess their individual needs and to develop a plan to retake the exam.

Students who receive a failing Step 1 score while on a clerkship will be given the option of completing their current clerkship or withdrawing immediately from their clerkship. Students who have not previously taken Directed Studies (above) will be permitted to delay the following clerkship and enroll in the Directed Studies course for up to the length of that clerkship. If students require additional time (beyond the length of the next clerkship) to study for and retake the exam, they must take a formal leave of absence (LOA).

Students who have a failing score on Step 1 will not be permitted to begin a new clerkship without remediating the exam.

Students who are on a leave of absence may be re-enrolled and resume their third-year curriculum only after receiving a passing score for Step 1.

Students will be permitted up to three (3) attempts within a twelve (12) month period. The 12-month period will begin with the date of their first attempt. Failure to secure a passing score by the end of the 12-month period will result in referral to the Student Promotions Committee with the recommendation for dismissal.

*Unique situations will be address an individual basis by the Student Progress Committee.

3.2. M1-4 Curriculum and Electives Policy

Educational Program Committee Approved: February 20, 2013

Educational Program Committee Last Revised: May 17, 2024

The curriculum of the School of Medicine should foster the development of graduates who are knowledgeable, skillful, and ethical while providing an opportunity to individualize the student's experiences based on his/her own unique needs and interests. Required courses ensure that the program's objectives are being met and assessed at the minimum expected level for every graduate as required by the EPC for MD program candidates. Electives are provided to broaden and balance the overall educational development of each student, while allowing for career exploration and assuring that students are prepared for their desired area of graduate medical education and residency training.

A candidate for the degree of Doctor of Medicine from the University of Louisville School of Medicine must meet the following requirements:

- Satisfactory completion of the medical school curriculum and USMLE Step 1 and Step 2 examinations.
- Satisfactory demonstration of ability, ethical character, responsibility, integrity and professional characteristics suitable for a career in the practice of medicine.
- Satisfactory discharge of all financial obligations to the University.
- Students with federal loans and grants must attend a group or individual exit interview with the Medical Student Financial Aid Office and complete the exit interview information sheet as required by federal regulations before Commencement of the year in which graduating.

To satisfy the second requirement above, students must comply with the rules and regulation of the University, the School of Medicine, and the laws of the city, state and federal governments. In addition, students are expected to possess and, effective interpersonal skills and professional qualities consistent with the expectations of the medical profession. Consequently, the Dean, in accordance with the procedures set forth in the REDBOOK, may consider any questions of a student's unwillingness, failure, or inability to fulfill these expectations to be an academic matter. The School of Medicine may terminate the attendance of any student at any time or strike from the list of candidates for the degree any student whom the Dean determines is or will be unable to satisfy the standards of professional fitness required of all candidates for the Doctor of Medicine degree. Conduct that may result in such a determination by the Dean includes but is not necessarily limited to academic dishonesty, neglect of study, and illegal or inappropriate behavior.

Three-year Rural Medicine Accelerated Track (RMAT) Requirements

The RMAT track may enroll up to two students annually and must require students to complete all of the core objectives and assessments of the four-year MD program as well as a minimum of 130 weeks of instruction prior to graduation. RMAT candidates must also complete additional program objectives and assessments related to their ability to evaluate and address community health needs in a rural setting. Several RMAT-only courses within this track fulfill the required objectives for courses that are not completed by RMAT students and contain the required assessments or equivalent assessments for those courses. Specifically, the courses that are added to the curriculum for RMAT students are: RMAT-1, RMAT-2, RMAT-3, RMAT-4, and RMAT-5 as well as the longitudinal

primary care clinic placement during the third year. These courses and requirements are placed in RMAT to fulfill the programmatic objective and assessment requirements found within the M3 Family Medicine Clerkship, the M4 Acting Internship, and M4 Palliative Care Rotation, and the M4 Intensive Care Unit Rotation.

First and Second Year

The first- and second-year curriculum shall consist of 37 required weeks in M1 and 33 required weeks in M2. Students are required to pass or successfully remediate any course in this phase as described in the Student Promotions Committee Guidelines. Students may choose to take EPC-approved electives (if offered); however, electives are not required during the first and second year.

While students are welcome to take electives for elective credit, any electives taken in the first or second year will not count towards elective requirements for the third or fourth year. This includes the required courses for the Rural Medicine Accelerated Track program, RMAT-1 and RMAT-2, should the student elect to leave this accelerated track and return to the 4-year curriculum track. All required course and elective credit hours are calculated according to the EPC's policy governing awarding credit to courses and clerkships.

Third Year

The third-year curriculum shall consist of 44 required weeks plus 6 weeks that are available for electives. The 44-week curriculum will include seven core clerkships, identified below. The first- and second-year courses must be passed or successfully remediated. Students entering third year will complete rotations in the following clerkships:

- Family Medicine – 6 weeks
- Internal Medicine – 8 weeks
- Neurology – 4 weeks
- Obstetrics and Gynecology – 6 weeks
- Pediatrics – 6 weeks
- Psychiatry – 6 weeks
- Surgery – 8 weeks

Electives:

- o There are no required electives in the third year, however, there are 6 weeks in the third-year schedule that can be used for electives or for vacation. Up to 4 of the 6 weeks can be used for career exploration.

*Financial aid may be impacted if no electives are taken.

- o The Directed Studies elective can be taken during the third year for 1 week of credit. This would count for 1 elective week of the 6-week elective total.

- o No more than 6 elective credit hours during third year can apply toward the fourth-year 26-28 weeks of required electives described in the next section.

Fourth Year

The fourth-year curriculum shall consist of 34 required weeks as described below. The third-year clerkships must be passed or successfully remediated prior to entering this phase of the curriculum. Students must complete all of the requirements below as well as the minimum required weeks of elective time in order to graduate from the MD program. Students have the responsibility of thoroughly investigating electives and then discussing them with an advisory dean, clerkship or

residency program director, faculty mentor, or the Assistant or Associate Dean of Student Affairs who then must approve the student's schedule. The signed approval form must be returned to the registrar in Student Affairs.

- Acting Internship (Anesthesia, Emergency Medicine, Family Medicine, Internal Medicine, Neurosurgery, Obstetrics & Gynecology, Orthopedics, Otolaryngology, Pediatrics, or Surgery) – 4 weeks. Acting internships must be completed at the student's home institution.
- Intensive Care rotation (Medical, Surgical, or Pediatrics) – 2 weeks
- Palliative Medicine rotation – 1 week
- Advanced Cardiac Life Support (ACLS)
- Topics in Clinical Medicine (TCM) Course
- Electives – 26-28 weeks

a) Up to 6 weeks of electives available in third year may be used to fulfill part of the fourth-year requirement. The Directed Studies elective can be used during third year to fulfill 1 week of this requirement; students can take the Directed Studies a second time during fourth year for an additional 1 week of elective credit.

b) Students may take up to a maximum of 16 weeks of electives at other institutions.

- a. Electives should be planned to include Residency Preparation Track Recommendations and other areas of interest.

3.3. Comprehensive Basic Science Exam for Second-Year Students and Comprehensive Clinical Science Exam for Rising Fourth-Year Students

Educational Program Committee Approved: November 19, 2014

Educational Program Committee Last Revised: April 17, 2023

All second-year students are required to take the Comprehensive Basic Science Self-Assessment (CBSE) offered by the National Board of Medical Examiners. The cost of the required CBSE will be covered by the School of Medicine. This is a proctored standardized examination provided by the NBME

All rising fourth-year students are required to take the Comprehensive Clinical Science Examination (CCSE) as they finish their required M3 clerkships. Several dates will be offered by the UME office due to the different dates that students finish their requirements, and students are expected to schedule with the UME office for the available date that is closest to the end of these required clerkships to plan their study for Step 2 CK.

The purpose of requiring students to take both examinations at these points in their curriculum the CBSE is to help students identify areas of strength and need as they enter dedicated Step 1 and Step 2 study and to evaluate students' long-term retention of curricular material over time. Support and advising is available to all students following these examinations.

4. Student Assessment and Academic Performance

4.1. Non-Involvement of Providers of Student Health Services in Student Assessment/Location of Student Health Records

EPC Revised: September 16, 2020

Non-Involvement of Providers of Student Health Services in Student Assessment

Students have the right to strict confidentiality of their health and medical conditions, inclusive of both physical and mental health or learning disability.

Any clinical preceptor and/or faculty member who provides psychiatric care, psychological counseling or physical health services to a student must have no role in the academic assessment of, or in decisions about, the promotion or graduation of that student.

Likewise, advisory deans must have no role in the academic assessment or promotion of their assigned mentees.

This policy does not prevent clinical preceptors and/or faculty from treating students in an emergency situation. In these instances where students are treated by clinical preceptors, care should be handed over to qualified clinicians after the student is stabilized. In all such cases, decisions should be made with the best interest of the student's health taking precedence. Once a preceptor has provided clinical care, he/she cannot be that student's primary assigned clinical instructor or evaluator.

Clinical preceptors and/or faculty members who have provided clinical care services to a student may function as a large-group classroom teacher and may provide general support for classroom-based learning experiences. However, they may not participate in assessment or grading activities for that student.

A formal statement will be included on both student and faculty evaluation forms for all third-year clerkships, acting internships, intensive care rotations, palliative care rotations, Humanism and Compassion in Medicine sessions, and Problem-Based Learning (PBL) sessions. On the student evaluation form, the statement reads, "To my knowledge, I (Students will mark have or have not) received psychiatric, psychological counseling, or other health care services from this faculty/fellow/resident. On the faculty/fellow/resident evaluation form, the statement reads, "To my knowledge, (Faculty/resident/fellow will mark have or have not) provided psychiatric, psychological counseling, or other health care services to this student."

Any member of the Student Promotions Committee is required to recuse him or herself if they have been involved in providing psychiatry, psychological counseling, or other health care services to the student being discussed.

This policy will be included in all required course and clerkship syllabi. This policy will also be discussed at all student orientations and at the annual new faculty orientation and the new resident orientation.

Location of Student Health Records

All student health records are subject to HIPAA and FERPA requirements for confidentiality and are stored in an electronic medical record (EMR) in a special security group within Campus Health. Mental health records for psychiatry and counseling notes are secured and accessible only to

the mental health care providers and executive director of campus health services. The security lock on mental health records cannot be accessed utilizing "break glass". No medical school personnel have access to the records.

4.2. Standardized Grading, Honors, & Remediation Policy

Educational Program Committee Approved: April 18, 2012

Educational Program Committee Last Revised: May 17, 2024

Required M1-2 Courses

To increase the consistency of student assessment between courses within the educational program, 1st and 2nd year courses will follow the requirements below. Introduction to Clinical Medicine (ICM) courses 1 and 2 are exempt from any regulations marked with an asterisk*:

1. All M1-2 courses will be graded Pass/Fail.
2. Course grade composition will consist of 70-80% high stakes assessments (e.g., high stakes exams, NBME custom exams, clinical skills exams) with 20%-30% formative, low-stakes assessments (e.g., PBL, TBL, SoftChalks, quizzes). *
3. Course or thread directors must monitor student aggregate performance on high stakes exams and make corrective adjustments if assessments perform outside the expected acceptable performance range. Course leadership will perform this review with support from UME, including providing past performance data, statistical and qualitative analysis of item and exam performance as well as course overall performance, and identification and analysis of factors influencing the educational experience and student performance on assessments. Review will be performed after every major examination and again at the end of the course. Decisions made by the course director following these reviews are final.
4. Actions taken by course directors after analysis and discussion with UME may include, but are not required to include:
 - a. Adjustment of exam or quiz scores either immediately following an assessment, or at the end of the course when performing retrospective review of overall performance.
 - b. Accepting additional answers or all answers for items that perform poorly.
 - c. Addition of points to any assessment grades as appropriate, limited by the top scoring student in the class for that assessment, whose score cannot exceed 100%.
5. Universal minimum criteria for "Pass" vs "Fail" grades:
 - a. $\geq 70.0\%$ minimum overall course grade required by all courses (rounding is not permissible).
 - b. A $\geq 70.0\%$ average on the summative exams within the course is required to pass, regardless of overall grade average.
 - i. High stakes exams include section, unit, or module exams; NBME custom exams; and other high-stakes exams that assess knowledge prior to going on to new material within a course or to other courses.
 - ii. Courses may have additional Pass/Fail requirements that are outlined in the syllabus.

6. Final course grades in all courses, including ICM 1 and ICM 2, must accurately reflect the results of all of the evaluation methods used in a course in a student's grade. Comments made on any assignment or evaluation that recommend failing a student must be investigated by the course director and if substantiated by the course director is sufficient grounds for course failure despite overall grade average.

7. Courses that require cumulative NBME custom examinations will award 12.5% percent of the overall course high stakes assessment grade from this source in M1 and M2. There are no "must-pass" final examinations in M1 and M2.

8. Remediation of courses: See Remediation Policy for M1-2 Major Courses (4.9)

Required Clinical Clerkships

GRADING POLICY

To increase the consistency of student assessment between courses within the educational program, all M3-4 courses will use the following grading criteria:

1. Overall grades for clerkships will follow this rubric:
 - a. NBME shelf exam equated percent correct score = 40%
 - b. Evaluation score = 40%
 - c. Administrative responsibilities = 5%
 - d. Other course components, at clerkship director discretion = 15%
2. All M3-4 courses will be graded Honors, High Pass, Pass, or Fail. Each clerkship's threshold score for Honors, High Pass, and Pass will be determined separately.
 - a. **Honors:** All passing range evaluations, fulfills all administrative responsibilities, and meets the Honors Score threshold for each clerkship (see clerkship syllabus for details).
 - b. **High Pass:** Does not meet Honors criteria, however, has all passing range evaluations and meets the minimum High Pass Score threshold set for each clerkship (see clerkship syllabus for details).
 - c. **Pass:** 4th percentile on the NBME shelf set for each clerkship (see clerkship syllabus for details) of the student's year AND all passing range clinical evaluations AND $\geq 70\%$ average in the course overall. Students who do not meet all 3 of these requirements have failed the course. Off cycle students will be evaluated for pass/fail based on the number of clerkships they have completed to date.
 - d. **Fail:** Students may receive a grade of "Fail" for the following reasons:
 - i. Failure to achieve the 4% threshold for each clerkship's NBME Shelf Exam
 - ii. Receipt of a "Fail" on a clinical evaluation (See below)
 - iii. Gross professionalism violations, academic dishonesty, or medical malfeasance, or other conduct deemed worth of Failure by the Clerkship Director

iv. At the discretion of the Clerkship Director

3. Failing NBME Shelf: Students who fail the NBME shelf examination for a single clerkship will be given an “incomplete” grade for the clerkship and allowed to retake a different NBME shelf exam for that clerkship at the end of the M3 year. The pass/fail decision for this shelf retake will be based on the academic year that they failed the clerkship shelf regardless of when the retake occurs. Students who pass the retake shelf using the criteria above will have their incomplete grade corrected to “Pass”, a notation made in the RedMed gradebook, and their new transcript grade resubmitted. The student will receive the minimum passing NBME shelf score and course grade will be recalculated. Students who fail the retake the shelf using the criteria above will have their “incomplete” grade changed to “failure” and required to meet with the Student Promotions Committee.

Students who fail the clerkship or fail the shelf retake and who are required to repeat the entire clerkship will have their original clerkship failing grade recorded on their transcript, in RedMed, and for class rank purposes. Their retake of the entire clerkship will give them a new, additional grade that is calculated and weighted according to the rules of the academic year that they repeat the clerkship.

4. Failing Clinical Evaluations: A failing clinical evaluation or written recommendation to fail a student from any evaluator, regardless of numeric evaluation grade, if investigated and substantiated by the clerkship director, is sufficient grounds for clerkship failure despite overall grade average or shelf score.

- a. **Withholding Honors/High Pass:** The clerkship director or clinical department reserves the right not to award Honors or High Pass scores if the student demonstrates a deficiency in any core competency (patient care, medical knowledge, interpersonal and communication skills, systems-based practice, practice-based learning and improvement, professionalism) regardless of numerical score.

CLERKSHIP EVALUATIONS

All clerkship directors will have authority over instructors providing graded student evaluations and written feedback. Specifically, clerkship directors can delineate who evaluates students during clerkships. Clerkship directors shall have oversight in the mechanism of student evaluation grade calculation and components.

Students may participate in the selection of their evaluators only at the discretion and direction of clerkship directors. Completed clinical evaluations as assigned by clerkship directors and coordinators will stand as submitted, pending CD review for extenuating circumstances. If it is perceived that students have attempted to solicit or produce evaluations from biased or non-representative sources, that student may be given a grade of “fail” for either/or their evaluation grade and clerkship grade as decided by the clerkship director. Additionally, students who attempt to falsify or manipulate evaluations will be subject to the ULSOM Code of Conduct (5.2).

MID-CLERKSHIP (FORMATIVE) FEEDBACK

All clerkships shall provide mid-clerkship feedback to students. Residents should be encouraged to contribute to mid-clerkship feedback, however attendings are ultimately responsible for providing feedback and signing the mid-clerkship feedback form.

Mid-clerkship feedback must be delivered by the midpoint of the clerkship.

Clerkship directors are required to review all clinical evaluations and meet with any student found to be at risk for failure based upon written feedback. This meeting should be used to develop an action plan to help the student improve performance.

Mid-clerkship feedback practices must be described in each course syllabus; these will be reviewed by the UME and reported to the EPC each year.

OSCE PERFORMANCE FOR CLERKSHIPS

Student performance on OSCEs/SP Encounters will be monitored through all clerkships and followed by the by either the M1/2 or M3/4 subcommittees as lead by the SP Director. Those students whose performance falls outside one standard deviation below the mean/median score on two separate OSCEs shall be required to remediate these OSCEs until a passing score can be achieved. This remediation will occur following additional instruction as outlined by the Clinical Skills Committee, under the direction of the Assistant Dean for Clinical Skills and the SP Program Director.

CLERKSHIP REMEDIATION

1. A student may not remediate a clerkship without going through Student Affairs.
2. Passing grades must be attained on all remediated work.
3. Remediation of a clerkship is not permitted until the end of the academic year.
4. Student Affairs will address all special situations.

4.3. Grade Reporting and Testing Policy

Educational Program Committee Approved: January 16, 2013

Educational Program Committee Last Revised: May 17, 2024

1. All course/clerkship requirements, including examinations, should be completed by the last day of a course/clerkship, unless extenuating circumstances are documented. These special cases should be handled by course or clerkship directors on an individual student, case-by-case basis.
2. Decisions about honors/pass/fail criteria developed by clerkship faculty and pass/fail criteria by course faculty must be in compliance with any applicable Educational Program Committee (EPC) or School of Medicine (SOM) guidelines.
3. All course and clerkship grades must be released to students and to Student Affairs within four to six weeks of the last day of a course or clerkship rotation. In addition, students must receive written evaluation comments with their final clerkship rotation grades.
4. The UME Coordinator will report any course or clerkship with grades not received within four weeks after a course or clerkship rotation ends to the Vice Dean of Medical Education. The Vice Dean will contact the course or clerkship director and advise the date by which grades absolutely must be received by students (i.e., the date that falls six weeks after the end of the course/rotation).

5. The undergraduate medical education office tracks course and clerkship grade receipt dates, and confirms all courses and clerkships were in compliance.
6. The senior registrar will provide an official annual report to the EPC in September of each year regarding grade report dates. The report will include ending dates of courses and clerkship rotations, the date grades were received for each, and whether or not grades were received within the six-week time frame. The September report should be a cumulative report for the full academic year.
7. 1. In addition to senior registrar reports, course and clerkship directors will report compliance with grades being issued to students within six weeks of the end of the course or clerkship on their annual course or clerkship director portfolio questionnaire.
8. Deferred grades may be awarded only to students who are unable to complete a preclinical course due to illness or other unforeseen circumstances; a deferred grade may not be awarded to a student in academic difficulty.
9. All required courses will be included in class rank computations.

Electronic Exams

Technology Failure:

The following rules apply when a student experiences problems during an electronic exam:

- a. Any regional campus issues, i.e., a power failure at one campus or fire drill at one campus that does not affect another campus, will be handled regionally according to the guidelines.
- b. Students should immediately report to the exam monitor when experiencing issues with their computer during an exam.
- c. If the issues cannot be resolved with the exam monitor, a representative from IT will assess the issue and work to resolve any technical difficulties. The IT representative will report findings to the Senior Associate Dean for Undergraduate Medical education and clerkship/course director, who will determine whether the reported technical issues could affect a student(s) exam outcome.
- d. If any reported technical issues were deemed to directly affect a student(s) exam outcome, the following steps will be followed:
- e. If a technology failure occurs during the block of time when an exam is scheduled, students are required to stay in the exam room until formally dismissed by SOM faculty or staff.
- f. The Senior Associate Dean and clerkship/course director will determine whether the technical issue was on the part of the user, ULSOM or the software team providing the exam.
- g. If the ULSOM or the software team providing the exam is responsible for the reported technical issues, the course/clerkship director will work with the Senior Associate Dean of the UME to determine a retake exam date based on availability of a new exam and open days for testing.
- h. An option to retake the exam on the agreed date, as determined by the clerkship/course director, will be offered to affected students.
- i. If a student(s) opts to retake the exam, he or she must accept the retake exam outcome as the final grade. He or she will not be able to choose the higher of the two grades.
- j. If technology failure or other event/disaster prevents all students from starting the exam, or interrupts the testing experience for all students, the clerkship director and UME office will be notified, and the following procedure followed:
 - If the exam never started and service is not reestablished:
 - Students will be given permission to leave the testing room and instructed to check their email for updates. It will be the goal to re-launch the exam as soon as service is restored.
 - Students will be instructed to stay on campus and given updates 15 minutes before the hour letting them know if they should return to the testing room to start the exam.
 - Updates will be given to the students via email by the clerkship director or coordinator.
 - If service is not restored, the exam will be rescheduled for the first day possible the next week, and students updated via email when the rescheduled date and time and location is known.
 - Students who have vacation in the week following an exam interruption or failure that cannot be corrected will have their exam rescheduled the day that they return from vacation.
 - Students who are starting another course the next working day will be scheduled for their exam at the soonest date possible in cooperation with the course director for that next course.
 - Clerkship directors and UME office staff and faculty will work together with the next clerkship on the track schedule to ensure that the rescheduled time and date is chosen collaboratively with minimal impact on the next clerkship.
 - If the exam is started but service is interrupted, affected students will be required to stay in the exam room as staff and faculty contact the NBME/ExamSoft and work to restore service.
 - Students will not be able to access their belongings or phones or talk to each other during this time as they have had access to the exam questions.
 - If a prolonged outage occurs the exam will be canceled and a new exam date rescheduled using the process above.

4.4. Administrative Responsibilities Grade Policy

Educational Program Committee Revised: May 3, 2022

The Administrative Responsibilities grade is intended to credit students for timely and attentive participation in their learning process. The grade should comprise 2.5% of the final grade and will be based on the student's participation in formative feedback, completion of case logs, duty hour reports, and documentation of self-directed learning when applicable. The clerkship may include additional components in their syllabus that contribute to this grade. Student will receive 0% for any instance of non-compliance or 2.5% for full compliance. Students must complete the Administrative Responsibilities criteria to be eligible for Honors.

Students will receive a one-time reminder in each clerkship to log administrative information. points will not be awarded to a student that fails to complete all administrative responsibilities.

4.5. Approved Formats for Graded Assessments

EPC Reviewed: February 19, 2020

Approved written assessment formats for all years based on best practice guidelines include:

- a. Essay questions, provided they have a clearly written rubric prior to the exam that reflects scoring, including points given for partial credit;
- b. Short-answer questions, provided they have a clearly written best answer rubric prior to the exam that reflects scoring, including points given for partial credit and allowance for synonyms or spelling/grammatical errors that do not change the meaning of the answer given;
- c. Fill-in-the-blank questions, with a written best answer and synonyms for the best answer accepted for the same credit;
- d. One-best-answer multiple choice questions, including extended-choice type questions (choices A-H);
- e. Matching questions;
- f. Vignettes that give rise to multiple linked questions within the same assessment;
- g. *Negative stem, "none of the above," or K-type questions will not be accepted in graded assessments.*

General best practice rules for writing one-best-answer items:

- a. Each item should focus on an important concept that links back to a specific learning objective assigned by faculty;
- b. Each item should assess application of knowledge, not recall of an isolated fact;
- c. The stem of the item must pose a clear question about the specific problem or situation described in the stem, and it should be possible to arrive at an answer with the options covered (i.e., do NOT use, "Which of the following statements is correct about this diagnosis?" but rather, "Which of the following risk factors in this patient's history increased the likelihood of contracting this disease?");
- d. All distractors must be homogeneous, i.e., should fall into the same category as the correct answer (e.g., all diagnoses, tests, treatments, epidemiologic data, etc.);
- e. Avoid technical item flaws that give the answer away or add irrelevant difficulty (e.g., one or more distractors do not flow grammatically from the stem, uses absolutes like "always" or "never" in answer choices, uses imprecise statements about frequency like "often" or "usually" that test takers will interpret variably).

4.6. Appeal Policy for Course and Clerkship Grades

Educational Program Committee Approved: June 5, 2019

Educational Program Committee Last Revised: July 15, 2020

Any student concerns about discrimination, student mistreatment, criminal behavior towards a student, sexual harassment or sexual assault are of a very serious nature by definition and handled separately from student academic complaints. Additionally, all students should be aware that complaints of sexual harassment, sexual assault, or criminal behavior towards the student or by the student have to be reported according to the Title IX Act and the Clery Act. Please use these sources of information linked below to learn more about how to address concerns of this nature:

Title IX and Clery Act Mandatory Reporting Guidelines (<https://louisville.edu/hr/employeerelations/title-ix-and-clery-mandatory-reporting-guidelines-training-1/>)

UofL Sexual Harassment Policy (<http://louisville.edu/dos/students/studentpoliciesandprocedures/student-handbook/student-handbook/#sexualharassmentpolicy>)

UofL Student Sexual Misconduct Policy (<http://louisville.edu/dos/students/studentpoliciesandprocedures/student-sexual-misconduct-policy/>)

Overview:

Students who do not feel that their grade accurately reflects their performance in a course or clerkship has the right to ask for clarification or appeal the grade from the course or clerkship director. Generally, course and clerkship directors are the first contact for student concerns about grades and are empowered to make decisions about those concerns. If the course or clerkship director is involved in the issue that is causing the concern, the complaint may be received instead by the Associate Dean of Medical Student Affairs or the Senior Associate Dean for Undergraduate Medical Education. UofL has an overall student grievance policy and process that outlines the actions for concerns that are not resolved through the initial processes described below. This may be viewed at: <https://louisville.edu/dos/help/studentgrievance> (<https://louisville.edu/dos/help/studentgrievance/>)

M1-2 course grades:

In-class quizzes, Team-Based Learning (TBL) and Question Attack Sessions (QAS) quizzes:

Concerns about a question's validity may be discussed during class. If a question contains an error and needs to be corrected that was used in TBL and QAS, the question scores will be corrected for the individual quizzes, but not the group quizzes.

M1-2 NBME shelf examinations:

Students have one week after posting of NBME shelf grades to request a regrading of the examination from NBME by emailing the Student Records Coordinator in Medical Student Affairs. The student will have to pay the associated fee that is charged by the NBME for regrading. NBME shelf examinations are otherwise not allowed to be reviewed or appealed per the NBME's rules.

Peer, Interdisciplinary (ICC), Problem-Based Learning (PBL) tutor, and non-OSCE Standardized Patient narrative evaluations:

Any student with concerns about a written evaluation in an M1-2 course should first contact the course director and outline their concern and specify whether they are asking that the evaluation be discussed with the peer, faculty member or standardized patient (SP). If discussion occurs, peer evaluators will always remain confidential, and the name of the student completing the concerning evaluation will not be discussed with the concerned student. The final authority for making changes or leaving the evaluation as originally submitted after assessing the situation resides with the course director.

OSCE examination grades:

Naturally, there will be occurrences when a student will want to request review or appeal of a high stakes standardized patient grade. The process to do so is as follows:

1. Email the course or clerkship coordinator and the Director of the Standardized Patient Program. This will let the coordinator know that you wish to have a grade reviewed. In your email, please state specifically what you feel warrants review.
2. The Director of the SP program will review your checklists, score and your performance. This may include consulting the standardized patient

with whom you worked for the assessment. The Director will offer insight about your current grade and inform the Assistant Dean for Clinical Skills that you are requesting a review/appeal.

3. The Assistant Dean for Clinical Skills will review your performance and the feedback you received for the activity. You will have the opportunity to discuss your performance in person. Any changes to your grade will be determined by the Director of the SP program and Assistant Dean for Clinical Skills. Grade changes are granted for calculation errors.

It is rare to find an error in the checklist completed by the standardized patient; however, this process exists to capture such errors as well. On occasion, you may have the opportunity to repeat the assessment. This does not guarantee that your grade will be changed.

4. Any changes to the grade are reported to the course or clerkship coordinator by the Director of the Standardized Patient Program.

Loss of credit or course failure due to failure to complete required assignments or attend required graded sessions:

Graded required-attendance assignments or assessments are covered in the Excused Absence Policy. Students not meeting requirements for an excused absence will receive a zero for that session and any associated work.

Failure to complete required assignments by the due date will result in a zero for that assignment. If the student wishes to appeal this loss of credit, they may email the course director and explain the reason for failure to complete and ask for an extension. In general, reasons that would be acceptable for an excused absence will usually also be acceptable as a basis for an extension on an assignment due date. Students who have not responded to email reminders to complete the assignment on time will generally not be eligible for extensions.

The course director's review of the above complaints and decision to resolve the student's complaint may be appealed using the UofL Student Grievance Process: <https://louisville.edu/dos/help/studentgrievance> (<https://louisville.edu/dos/help/studentgrievance/>)

M3-4 Grades:

All grades except NBME shelf examination grades:

Concerns about a specific graded component or evaluation in a clerkship must be emailed to the clerkship director and coordinator within one week of the receipt of the grade for consideration. The clerkship director has one week to respond to the student's concern and will keep all correspondence related to the concern. The clerkship director's decision may be appealed by the student using the UofL Student Grievance Process: <https://louisville.edu/dos/help/studentgrievance> (<https://louisville.edu/dos/help/studentgrievance/>)

NBME examination grades:

Students have one week after posting of NBME shelf grades to request a regrading of the examination from NBME by emailing Ms. Sherri Gary in Medical Student Affairs. The student will have to pay the associated fee that is charged by the NBME for regrading. NBME shelf examinations are otherwise not allowed to be reviewed or appealed per the NBME's rules.

4.7. Awarding Credit Hours to SOM Courses and Clerkships

EPC Reviewed: August 22, 2020

Introduction: The University of Louisville policy states that "in general, one credit hour of lecture, discussion, or seminar requires at least 50 contact minutes per week during a regular semester."

Historically, the number of credits per course has been determined by "face to face contact time." For the past year, the Educational Program Committee (EPC) has been reviewing credit hours for all required SOM medical student courses, primarily due to changes in course hours and design of the courses themselves. The University also requires all units to submit documentation of the unit's process for assigning credits to courses. This policy governing credits in the MD program for the School of Medicine supports most strongly LCME elements 6.3 and 8.8. Element 6.3 exists to ensure that teaching and assessment of self-directed learning skills is taking place within the formal curriculum. Element 8.8 exists in part to ensure that sufficient time is preserved in the student class schedule for students to complete additional self-directed learning on their own time outside of required class activities.

The EPC uses the guidelines below for assigning credit hours, effective AY 2016-2017.

Guidelines for Preclinical Courses:

- a. The total number of credits for each preclinical required course will be calculated as follows: all required course learning activities will be totaled using the list of EPC-generated learning experiences (see number 2 below). This total will be divided by 15 (the nationally used average for weeks per semester), which will produce the total number of credits for each course. The EPC will round off to the nearest credit or half credit.
- a. The following required learning experiences will be used to calculate credit count for preclinical courses: live or recorded lecture, independent study, formal/scheduled test preparation or test review sessions, small group activities, preceptor/shadowing experiences, team-based learning (TBL), problem based learning (PBL), standardized patient encounters, laboratory sessions, clinical correlations (lectures), and patient simulation experiences.

For example, a course that includes the following required learning activities will be listed as a 3 credit hour course: 35 hours of lecture, 5 hours of lab, and 7 hours of independent learning activities will be a 3-credit course (total = 47, divided by 15 = 3.1, which, when rounded off to the nearest half credit would be 3 credits).

- a. In general, only learning experiences that are required and structured will be used to calculate course credit hours. Self-directed learning occurring outside of the classroom environment will NOT be included in the credit hour calculation. Other activities not included are homework, studying, practice questions, quizzes and examinations. It is anticipated that medical students will spend an average of 40 hours per week in out-of-class self-directed learning activities.
- a. The EPC will be consulted to address questions regarding credit hour calculations.

Guidelines for Clinical Courses:

- a. "Clerkships" are courses that require student attendance and work primarily in the clinical care environment with some classroom contact time. Clinical work can range based on patient needs, season of the year, and area of study between 40-80 hours per week. The total number of credit hours for each required clerkship will be calculated using a 1 week = 1.25 credit hours formula. For all other

clinical rotations, they will be calculated using a 1 week = 1 credit hour formula.

Distinguishing between Independent Learning and Self-Directed Learning:

- **Independent study:** Opportunities either for medical student-directed learning in one or more components of the core medical curriculum, based on structured learning objectives to be achieved by students with minimal faculty supervision, or for student-directed learning on elective topics of specific interest to the student. (Element 6.3)
 - Independent learning experiences support the LCME “self-directed learning” standards 6.3 and 8.8 and are generally a replacement for content that was previously taught via lecture, ex. online learning modules, posted resources with specific learning objectives and self-assessments, etc. Independent learning activities are linked to assessments in the course, will be included in credit hour calculations, and will appear on the schedule.
- **Self-directed learning:** Includes medical students’ self-assessment of their learning needs; their independent identification, analysis, and synthesis of relevant information; and their appraisal of the credibility of information sources. (Element 6.3)
 - The LCME definition above of self-directed learning can occur as part of scheduled class time with peers in a group learning environment, or out of class based on the students’ needs. Some self-directed learning is required as part of the formal curriculum and is linked to assessment, ex. problem-based learning sessions.
 - Self-directed learning that occurs as part of scheduled class time with peers in a group learning environment and has an attendance and assessment requirement will appear on the schedule and will be included in credit hour calculations (ex. problem-based learning case times).
 - Additional self-directed learning that happens outside of the classroom on the student’s own time will not appear on the schedule and will not be included in credit hour calculations (ex. completing extra practice questions, homework, researching topics, reviewing assigned readings or class materials to deepen learning.)

4.8 Distinction Track Policy

Educational Program Committee Approved: June 5, 2024

The Distinction Track program at the University of Louisville School of Medicine was created to meet two primary goals: to increase the number of students choosing a career in academic medicine and to provide students with opportunities to focus on areas in medicine for which they have a passion. The University of Louisville currently has six Distinction Tracks including: **Business and Leadership, Global and Public Health, Health Equity and Medical Justice, Medical Education, Research, and Urban Primary Care.**

Distinction Track Directors shall have authority over the contents of their tracks and requirements, overseen by the Advisory Steering Committee and chaired by the Vice Dean for Undergraduate Medical Education. All tracks must have a final product of scholarly work as one metric for track completion. Successful completion of distinction track requirements is noted on the student’s official transcript and in the Medical School Performance Evaluation (MSPE) letter for residency application. Students are acknowledged at the Senior Honors Banquet and receive a certificate at graduation.

Application for Distinction Tracks – Business and Leadership, Global and Public Health, Health Equity and Medical Justice, Medical Education, and Urban Primary Care Track

Application for Distinction Tracks (except Research) shall occur during the Spring of M1 with the following requirements:

- Successful passing of first semester M1 courses on first attempt with a 75% or greater average on high stakes assessments

Students may apply for more than one Distinction Track but may only enroll in a single track.

Application for Distinction Track – Research

Application for the Distinction Track in Research (DIR) shall occur in July between the M1 and M2 year with the following requirements:

- Successful completion of first and second semester M1 courses on first attempt
- Evidence of previous research experience and previous successful completion of a research program or project. UofL’s Summer Research Scholar Program (SRSP) or an equivalent research program/project that has approval by the Directors of DIR may qualify.

Continuation in Distinction Tracks

Students must remain in good Academic Standing in the School of Medicine to continue participating in Distinction Tracks throughout the M2, M3, and M4 years. The following metrics are needed:

- Successfully passing all M1,2 classes on first attempt
- Successfully passing USMLE Step 1 on first attempt
- Successfully passing all M3 Clerkships (remediation of one NBME shelf examination is allowed)
- Completion of all track requirements/assignments by due date
- Continued professionalism

Students who do not maintain these may be subject to dismissal from Distinction Tracks by the Track Director(s), under supervision of the Advisory Committee. Extenuating circumstances will be considered on a case-by-case basis by the Vice Dean for Undergraduate Medical Education and Directors of their track.

Leave of Absence

Track Directors will be notified when a student takes a leave of absence from ULSOM.

4.9 Summer Remediation Policy for M1-2 Major Courses

Educational Program Committee Approved: June 12, 2024

General Eligibility Criteria

- A student is eligible for summer remediation if they fail a major course (defined as greater than four credit hours) during the first or second year of medical school.
- Eligibility requires passing 50% or more of exams and achieving a final high-stakes grade of 68% or higher (No rounding of grade is allowed).
- Summer remediation is already available for courses less than four credit hours.

Major M1/M2 Courses and Exam Requirements

- Clinical Anatomy, Development, and Examination (CADE): Must pass three of six high stakes, written exams (not practical) to be eligible for remediation.
- Molecular Basis of Life, Defense, and Disease (MBLDD): Must pass three of six high stakes exams to be eligible for remediation.
- Human Systems in Health and Disease (HSHD1): Must pass three of five high stakes exams to be eligible for remediation.
- Human Systems in Health and Disease (HSHD2): Must pass two of four high stakes exams to be eligible for remediation.

Limitations

- Any student who has previously failed a major course is not eligible for remediation of any major course.
- Students may only remediate one major course in the first two years. If a student fails an additional major course, they must appear before the Student Promotions Committee.
- Students can refuse summer remediation and repeat the failed semester the following year. However, these students will not be eligible for future summer remediation of a later failed M1-2 major course.

Remediation Schedule and Structure

- Remediation is only offered in the summer.
- There will be a minimum one-week break after the end of the spring semester before remediation starts.
- Remediation will consist of a six-week block.
- There will be a final NBME custom exam at the end of the six-week block, covering the entirety of the remediated course. Students must make a 70% or higher on the NBME custom exam to pass remediation.
- The highest grade achievable through remediation is 70%.
- Efforts will be made to set the P value of NBME custom exams at ~82%.

Additional Course Remediation

- If the Student Promotions Committee approve the remediation a major course and minor course, then remediation for the Biostatistics and Evidence-Based Medicine and the Introduction to Clinical Medicine courses will follow successful remediation of the major course, before starting M2 or entering the Step 1 study period.

Exam Scheduling

- Exams will be conducted on the undergraduate medical education (UME) schedule, not on a student-preferred schedule. All students from the same year will test on the same day.

Academic Probation and Support

- Students failing a major course will be on academic probation until the successful completion of two additional semesters.
- Students must meet with a learning specialist to create a learning strategy and work with a tutor from the time of failure, through remediation, and the following semester.
- Students must engage with the academic advising system weekly (learning specialist/student success coordinator). Students must meet with supervising faculty upon faculty request.
- The student will be referred to the Student Promotions Committee if they are non-compliant with academic advising and communications during remediation.

Grading and Records

- Students eligible for remediation will receive a failing grade for the course initially. If they pass remediation, a separate grade of "pass" will be entered on the transcript. If they fail remediation, the grade will remain "fail" and the student will be referred to the Student Promotions Committee to repeat the semester, the year, or face dismissal.

- Remediated work will be noted on the Medical Student Performance Evaluation (MSPE).

4.10. Good Standing Policy

Educational Program Committee Approved: September 6, 2023

All ULSOM students are expected to remain in good standing throughout their time in medical school. A medical student in good standing has met the academic and professionalism requirements of the medical school and is eligible to continue enrollment, while not being subject to any form of remediation, probation, suspension, or disciplinary censure.

A student in good standing:

- a. Has received the minimum required ULSOM passing grades in all courses, clerkships, electives, standardized patient exams, and other mandatory requirements/exercises
- b. Is not currently on academic probation
- c. Has passed the appropriate USMLE exams within the recommend time period during medical school
- d. Makes adequate progress towards graduation
- e. Completes all required immunizations, certifications, and trainings (HIPAA, OSHA, etc.)
- f. Conducts themselves in accordance with the professional and academic ethics governed by the UofL Code of Conduct and ULSOM Honor Code as well as other professionalism requirements governed by ULSOM policies: School of Medicine Policies < University of Louisville (<https://catalog.louisville.edu/professional/medical-bulletin/som-policies/#text>)
- g. Has not been the recipient of any adverse actions or sanctions by either the medical school (Student Promotions Committee) or by the University

Loss of good standing:

- a. Loss of good standing ends a student's eligibility for some special programs or activities which include, but are not limited to, the following:
 - i. Eligibility to run or retain an elected school office
 - ii. Eligibility to be appointed to or retain scholarly appointments:
 - ex. Includes such positions as course representatives, academic officers, EPC representatives, admission committee representative, student promotions committee representatives
 - iii. Eligibility to be considered for or continue in the Distinction Tracks (see Distinction Track Policy for specifics)
 - iv. Eligibility to be considered for internal awards
 - v. Eligibility to be recommended for external awards, scholarships, membership for national organizations or educational experiences
 - vi. Eligibility to be approved for conference travel
 - vii. Eligibility to take clinical electives at other institutions
- b. Loss of good standing may result in loss of scholarships depending on individual scholarship criteria.

Return to good standing:

- a. A student may return to good standing upon completion of the required remediation, or upon completion of the required probationary time frame.

5. Professionalism and Promotion

5.1. Medical Student Performance Evaluation & Medical School Transcript Policy

EPC Approved: September 4, 2019

MSPE

The MSPE is comprised of School of Medicine's identifying information; three noteworthy characteristics written by the student (approved by Associate Dean for Student Affairs unless student requests another person), academic history, professional progress, academic progress (including academic performance, preclinical coursework and clerkship evaluations) and a summary statement. The MSPE is a template with the student's information and clinical evaluations and is generally signed by the Associate Dean for Student Affairs. If a student has concerns regarding a potential conflict of interest with the Associate Dean the student may request to have the Assistant Dean for Student Affairs or the Vice Dean for Undergraduate Medical Education work with him/her on his/her MSPE and sign the document.

All students will have an individual meeting with Associate Dean for Student Affairs in the spring of their third year, unless another of the Dean's representative (see above) is designated. At this meeting they will discuss their career plans, CV and their completed MSPE questionnaire, along with three noteworthy characteristics. All students will have their final noteworthy characteristics to the Residency Match Administrator by July 1.

All students will be able to review, in person, a copy of the first draft of their MSPE in early September. Students will review the letter and request corrections to any clerical or typographical errors, while in the Student Affairs office. Any errors noted by the student will be edited and the student will sign a release for the MSPE to be uploaded to residency application services for distribution to programs. The MSPE cannot be photographed, copied, or taken out of the office by the student.

A student who has substantive concerns regarding the tone and/or accuracy of their MSPE can submit a written request with the specific concerns noted, to the Residency Match Administrator within 48 hours of reviewing the MSPE. An advisory committee consisting of undergraduate medical education leadership will review the draft MSPE with the noted concerns and if warranted, will amend the MSPE for balance and accuracy. The review committee's decision and any MSPE amendments will be conveyed in writing to the student. The decision of the review committee will be final and the approved document will be the final MSPE. The student may review final edits and sign a release to allow the school to upload the document to residency application services to be distributed to residency programs.

MEDICAL SCHOOL TRANSCRIPT

A copy of each student's transcript will be uploaded in mid-September so that it will be available to programs when they begin downloading residency applications on October 1. Students must sign a release to allow the school to upload the document to residency application services to be distributed to residency programs.

An updated copy of the transcript will automatically be uploaded by the Student Affairs office if a student has a third year clerkship grade added after September 15.

A student may request one updated transcript be uploaded to residency programs at any time before rank begins.

All students must sign the MSPE and medical school transcript release form for these documents to be uploaded and sent out to residency programs.

5.2. ULSOM Code of Conduct

EPC Reviewed: September 16, 2017

Values Statement: At the University of Louisville, School of Medicine, we value (as stated in the University of Louisville, Code of Conduct)

- Honesty and rigor in all pursuits;
- Adherence to free inquiry and critical thinking;
- Commitment to the creation, preservation and dissemination of knowledge;
- Dedication to preparing students for what the future has to offer;
- Respect for diversity and all individuals regardless of position;
- Professionalism in our interactions;
- Accountability for resources and relationships;
- Transparency and integrity in decision-making;

Our school is committed to fostering a positive work and learning environment that encourages the freedom of scientific inquiry and the collaborative exchanging of ideas. All students, faculty, staff in the School of Medicine are expected to demonstrate and foster the University's values and missions, including but not limited to integrity, accountability, mutual respect, professionalism, diversity, courtesy, fairness, and trustworthiness. All faculty, staff, and students are expected to conduct themselves in a professional manner at all times.

Scope: Faculty, staff, and trainees at the University of Louisville School of Medicine.

Definitions:

- **Professionalism in education:** commitment to the highest standards of scholarship, innovation in teaching methods, respect for the student-teacher relationship, and leadership through modeling of life-long learning.
- **Professionalism in the conduct of research:** commitment to intellectual integrity, welfare of human subjects and research animals, diligent and unbiased acquisition, evaluation, and reporting of scientific information, adherence to university research regulations, and collegial and fair treatment of trainees and research staff.
- **Professionalism in clinical practice:** protecting the care needs and privacy concerns of patients and the adherence to established standards on patient safety, timeliness of completing medical records, quality improvement initiatives, communication and follow-up with patients, reporting errors, following regulations governing billing practices, and collegial and fair treatment of trainees and clinical staff. All healthcare professionals bear a professional responsibility to identify and proactively address conflicts between their beliefs and the needs of the workplace or patient. In cases where a predictable conflict will likely occur due to the beliefs of the provider and the scope of their patient population, the provider will take responsibility for developing a proactive management plan with their clinical supervisor that meets the needs of patients while recognizing the individual provider's beliefs.

- **Acceptable Conduct:** Applying altruism, accountability, excellence, duty, honesty, integrity, and respect, with intentions of diversity and inclusion, when engaging in interactions with peers, subordinates, supervisors, students, staff, and, in the clinical setting, patients and patient families.
- **Disruptive Behavior:** Behaviors that are intimidating or which could adversely affect morale or otherwise compromise our educational, research, and clinical missions. Behavior that is unusual, unorthodox, or different is not alone sufficient to be classified as “disruptive behavior”.

Examples of Unacceptable Conduct include but are not limited to:

- Discrimination of any form based on age, gender, gender identity, gender expression, race, ethnicity, national origin, religion, disability or sexual orientation
- Disregard for applicable regulations, policies and bylaws
- Sexual harassment
- Profanity, especially directed at another individual
- Use of threatening or abusive language
- Non-constructive criticism addressed to the recipient in such way as to intimidate, undermine, belittle, or humiliate
- Derogatory comments about the performance of colleagues, trainees, or staff outside of appropriate administrative channels
- Loss of civility (i.e. shouting, personal attacks or insults, throwing objects or other displays of temper)
- Retaliation against any person who reports an incident of alleged unprofessional conduct, fraud, or perceived malpractice
- Uncooperative attitude with others
- Insubordination, refusal to complete assigned tasks
- Reluctance or refusal to answer questions, failure to return phone calls, pages or messages
- Accessing pornographic material by use of University computing equipment, which includes University issued mobile devices, tablets, laptop and desktop computers, or use of the University wireless network or internet connection.

Procedure: When any member of the School of Medicine community believes that they have witnessed or have been a recipient of behavior manifested by a SOM faculty or staff member that is inconsistent with our stated professional goals and purpose, the following options serve as a mechanism for action.

Reporting the incident:

Unprofessional conduct should be reported first to the immediate supervisor of the offending employee which may include:

- Office manager, faculty member
- The appropriate program director
- The appropriate divisional chief
- The chair of the department(s) involved
- Vice Dean of Faculty Affairs and Advancement
- The Dean of the School of Medicine

You may also report the incident to the University of Louisville Office of Compliance Hotline at 1-877-852-1167 or Online via the Compliance website (<https://app.mycompliancereport.com/report.aspx?cid=uol>) (<https://app.mycompliancereport.com/report.aspx?cid=uol>).

- If the behavior falls under discriminatory or sexual harassment as described in the University of Louisville Human Resources: PER-1.10 Discriminatory Harassment Policy (<http://louisville.edu/hr/policies/per110/>), you must follow the reporting provisions in the Discriminatory Harassment Policy. For more information on this policy, please see the Human Resources Policies.
- Immediately report the incident to the University of Louisville Police if the disruptive behavior poses an immediate threat of harm to any individual in order to safeguard the health and safety of others.
- Non-Retribution: University of Louisville policy, and in many cases federal law, protects individuals bringing such concerns forward in good faith from any retaliation and/or retribution.
- Incidents of unprofessional conduct occurring in hospital/clinical settings may also be subject to the professional conduct policies of those entities.

Investigation and Response:

For any report made suggesting violation of this policy, the School of Medicine leadership, consisting of the Executive Dean's Council and SOM legal counsel, will review the concerns and may conduct an investigation. The School of Medicine leadership may take disciplinary action, up to and including termination, against those violating this policy.

To respect the privacy and confidentiality of all people involved, the School of Medicine may not share specific details of the discipline or other action taken without a signed consent to furnish information to third parties.

Additional Resources:

- OMBUDS Office Compliance Hotline: Phone: 1-877-852-1167 or Online: via ULink (https://ulink.louisville.edu/psp/paprod/EMPLOYEE/EMPL/h/?tab=PAPP_GUEST)
- Human Resources Employee Relations: Phone: 502-852-6258
- Staff Grievance Officer: Phone: 502-852-4652

5.3. The Student Promotion Committee Policy

Educational Program Committee Approved: November 4, 2020

Educational Program Committee Revised: June 12, 2024

The Student Promotions Committee reviews the academic progress of all students with unsatisfactory performance or other academic problems and makes recommendations to the Dean for corrective action or dismissal. The Student Promotions Committee also makes recommendations to the Dean concerning requests for leaves of absence.

The Student Promotions Committee consists of one representative from each department of the School of Medicine, one representative from the Trover Campus, and three elected student representatives (one from the 2nd, 3rd, and 4th year classes - who together constitute one vote). The department representatives are appointed by the department chair after consultation with members of the department during a faculty meeting; the Trover Campus representative is appointed by the Associate Dean of the Trover Campus.

The Committee meets at the end of each academic year and at other times as necessary to make recommendations to the Dean concerning students whose academic progress, behavior or clinical competence is reported to be unsatisfactory. The Committee may recommend that a

student remediate or repeat a course or clerkship, remediate an entire academic year, or be dismissed from the School of Medicine.

The Student Promotions Committee may recommend dismissal for poor academic progress regardless of the number of failures or the number of credit hours these failures represent. The Committee may also recommend remedial action or dismissal for students whose behavior is considered inappropriate by school or community standards for a practicing physician. The Committee will investigate thoroughly the causes of poor academic progress and may recommend a variety of remedial measures.

Unless dismissed, students failing a major course (greater than 4 credit hours) will be placed on academic probation until successful completion of two additional semesters. Additional failures incurred during the probationary period may be considered grounds for academic dismissal. Students on probation are not permitted to work outside the School of Medicine for which they receive remuneration of any form unless written permission is obtained from the Associate Dean for Student Affairs. Violation of this rule may be cause for dismissal from the School of Medicine. Students on probation who hold office in student organizations or serve on committees are strongly advised to resign from their duties.

The Committee deals with each student's situation individually and uniquely. Actions taken in a unique set of circumstances may provide general guidelines as opposed to precedence for similar cases.

Members of the Student Promotions Committee are instructed to recuse themselves if a conflict of interest is perceived. This includes serving in an advisory role, awarding a failing grade or evaluation, or having a personal relationship with any student who appears before the committee.

Any student who is being considered for adverse action by the Student Promotions Committee has the right to appear before the committee in person (or virtually if the committee is meeting virtually) and to write a letter for the committee's consideration of their case.

Guidelines for Student Promotions Committee Actions

The Student Promotions Committee (SPC) is often required to make difficult recommendations concerning students' progress through medical school. Although each case coming before the Committee must be considered individually, fairness dictates that decisions be as reasonable and consistent as possible. On the other hand, rules of operation should not be so rigid as to thwart fairness in unique circumstances; therefore, the guidelines below are intended to help the Committee avoid arbitrary or inconsistent actions.

The Student Promotions Committee is advisory to the Dean. The Committee thoroughly reviews all aspects of the academic progress of students with unsatisfactory performance and makes recommendations to the Dean for corrective action or dismissal. Students whose performance or actions make dismissal a possibility must appear before the Student Promotions Committee for a hearing.

The decision of the Dean is considered final. If the student disagrees with the Dean's decision, the student has the right to file an academic grievance in accordance with Chapter 6 of the Redbook, to the extent applicable.

All procedures will be consistent with the Redbook, Bylaws of the School of Medicine, and the Code of Student Rights and Responsibilities.

Academic Failures:

FIRST YEAR:

Failure of a major course (defined as greater than 4 credit hours):

If student eligible for remediation (See Remediation Policy eligibility requirements): student will continue as scheduled in summer remediation.

Failure of summer remediation: student will be placed on academic leave and referred to the Student Promotions Committee for a hearing.

Hearing - recommendations:

- a. Repeat the entire semester (inclusive of all courses within the semester) the following academic year
- b. Repeat the entire first year
- c. Dismiss

Failure of a major course (defined as greater than 4 credit hours) for which a student is not eligible for summer remediation: student will be placed on academic leave and referred to Student Promotions Committee for a hearing.

Hearing - recommendations:

- a) Repeat the entire semester that includes the failed course the following academic year
- b) Dismiss

Failure of one course less than 4 credit hours:

Complete remediation after spring semester as recommended by course director and approval by Educational Program Committee (EPC)

Failure of more than 1 course, whether eligible for summer remediation or not:

Hearing---recommendations:

- a. Remediate the courses during summer (if eligible)**
- b. Repeat the entire semester**
- c. Repeat the entire year**
- d. Dismiss**

If a student is on probation

Any failure:

Hearing – recommendations:

- a) Repeat entire semester
- b) Repeat entire year
- c) Dismiss

SECOND YEAR

Students must remediate their failure before taking USMLE Step 1.

Failure of a major course (defined as greater than 4 credit hours):

If student eligible for remediation (See Remediation Policy eligibility requirements): student will continue as scheduled in summer remediation.

Failure of summer remediation: the student will be placed on academic leave and referred to the Student Promotions Committee for a hearing.

Hearing - recommendations:

- a. Repeat the entire semester (inclusive of all courses within the semester) the following academic year.
- b. Repeat the entire second year
- c. Dismiss

Failure of a major course (defined as greater than 4 credit hours) for which a student is not eligible for summer remediation:

Student will be placed on academic leave of absence and referred to Student Promotions

Committee for hearing.

Hearing - recommendations:

- a) Repeat the entire semester that includes the failed course the following academic year
- b) Dismiss

Failure of one course less than 4 credit hours:

Complete remediation after spring semester as recommended by course director and approval by EPC

Failure of more than 1 course, whether eligible for summer remediation or not:

Hearing---recommendations:

- a. Remediate the courses during summer (if eligible)**
- b. Repeat the entire semester**
- c. Repeat the entire year**
- d. Dismiss**

If a student is on probation

Any failure:

Hearing – recommendations:

- a) Repeat entire semester
- b) Repeat entire year
- c) Dismiss

THIRD/FOURTH YEAR:

Professionalism/Clinical Failures:

In the event of any clinical failure due to professionalism and/or clinical performance:

Hearing – recommendations:

- a) Repeat clerkship/rotation
- b) Complete remediation as recommended by the SPC
- c) Dismiss

In the event of two clinical failures due to professionalism and/or clinical performance:

Hearing – recommendations:

- a) Repeat clerkships/rotations
- b) Repeat entire year
- c) Complete remediation as recommended by the SPC
- d) Dismiss

THIRD YEAR

Shelf Exam Failures:

In the event of any shelf exam failures, students should continue in their scheduled clerkships until the end of the academic year, or until a 3rd shelf failure is obtained, at which point the student will be placed on academic leave and will appear before the SPC.

Failure of one or two clerkship shelf exams in the entire year:

Prior to start of M4 (upon completion of all M3 clerkships/requirements):

- a) Repeat shelf exam(s)

Three shelf failures:

Student is placed on academic leave of absence

Hearing – recommendations:

- a) Repeat clerkships
- b) Repeat entire year
- c) Dismiss

Any additional failures:

Hearing – recommendations:

- a. Repeat year
- b. Dismiss

If a student is on probation

In the event of two shelf exam failures while on probation:

Hearing – recommendations:

- a. Repeat shelf exams
- b. Repeat clerkships
- c. Repeat entire year
- d. Dismiss

FOURTH YEAR:

Failure of one required or elective rotation:

As soon as possible:

- a) Complete remediation as recommended by department, including repeating rotation as an option

Failure of two required or elective rotations: referral to SPC for a hearing.

Hearing – recommendations:

- a) Repeat rotations
- b) Repeat entire year
- c) Dismiss

If a student is on probation:

Failure of one or more rotations: failure to SPC for a hearing.

Hearing – recommendations:

- a) Repeat rotation(s)
- b) Complete remediation as recommended by department(s)
- c) Repeat entire year
- d) Dismiss

ALL STUDENTS

Professionalism:

Any student who has a serious professionalism offense or significant breach of policy will appear before the Student Promotions Committee. Recommendations can range from remediation to dismissal.

Substance Abuse:

An enrolled medical student who does not pass required drug screening shall be reported to the Associate Dean for Student Affairs who shall direct the student to an independent third party, the (Kentucky Physicians Health Foundation [KPHF]), for assessment and treatment. A student's failure to cooperate or fully participate in the KPHF evaluation and/or treatment plan, as outlined in the School of Medicine's Policy Relating to Substance Use and Drug Screening, will appear before the Student Promotions Committee for disciplinary action. Recommendations can include an additional opportunity to comply with treatment or dismissal.

NOTES:

Failure of any course automatically and immediately places a student on "Academic Probation" until successful completion of two subsequent semesters.

For the clinical clerkships, a student will be given the opportunity to remediate two shelf exam failures at the end of the academic year. Any additional shelf failures will be addressed in the above guidelines.

A clinical clerkship or basic science course may be taken a maximum of three times (i.e., a clinical clerkship may be repeated a maximum of two times).

A student may only repeat one year in his/her medical school career.

All students have a maximum of six years to complete all degree requirements, with very few exceptions.

In the event that a student requires a medical leave of absence within 4 weeks of the end of a course, the student may receive a failure if there is no mathematical probability of achieving a passing grade at the time leave is declared.

5.4. Title IX

University of Louisville Revised: 2020

The University strives to provide a safe environment and is committed to keeping the health and well-being of the campus community in the forefront of our thinking. The Title IX Coordinator is in charge of the University's preventive education about, and response to, sexual misconduct including sexual harassment (includes quid pro quo and hostile environment); sexual assault; domestic violence; dating violence; and stalking.

The Title IX Coordinator's contact information is:

Dr. David Parrott

Title IX Coordinator

Dean of Students Suite, SAC W301

2100 S. Floyd Street

Louisville, KY 40208

502-852-5787

Email: titleix@louisville.edu

Webpage: <https://louisville.edu/titleix> (<https://louisville.edu/titleix/>) (policies)

5.5. Mandatory Self-Reporting Policy for Criminal Behavior

EPC Revised: September 16, 2020

All accepted and currently enrolled medical students are required to promptly report any criminal charges ever filed against them, including felony and misdemeanor charges other than minor traffic violations.

These reports should be made in writing and sent to the Associate Dean for Student Affairs. They should include conviction information, all types of adjudication, and all legal processes not yet resolved (e.g., an arrest record for an offense pending court disposition, an unresolved bench warrant, a failure to appear in court.) Any charges that were previously disclosed on the secondary admissions application need not be reported again. The report will be reviewed by the Criminal History Review Committee which consists of the Associate Dean for Student Affairs, Associate Dean for Admissions, Associate Vice President for Health Affairs/Diversity Initiatives, Dept. of Public Safety representative, School of Medicine legal counsel, and a mental health professional (university student health counselor). Discussion and the recommended course of action will be in the context of future implications for licensure, threat to patient safety and the ability to be an appropriate member of the medical profession.

5.6. Outside Employment Policy

EPC Reviewed: September 3, 2020

Students are discouraged from accepting outside employment of any kind. Outside activities must not be allowed to interfere with study time particularly for students whose records indicate that they risk failing unless they devote their energies exclusively to their school work. In

no case will outside employment be considered an excuse for poor academic performance.

In the event of academic probation students are not permitted to engage in employment without written permission of the Associate Dean for Student Affairs.

5.7. Dual Enrollment Policy

EPC Revised: September 3, 2020

Students enrolled in the School of Medicine are not permitted to enroll in any other school of the University or in any other institution of learning without the prior written consent of the Dean of the School of Medicine.

5.8. SOM Diversity Policy

The students, trainees, staff, faculty, and administration of the University of Louisville School of Medicine (SOM) acknowledge, as part of its mission, that diversity, equity, and inclusion are essential to improving the health of our patients and our communities through excellence and leadership in education, clinical care, research and community engagement. The SOM recognizes the unique contribution that individuals with diverse backgrounds, cultures, experiences, and identities bring to the institution and seeks to create an environment that is welcoming, inclusive, respectful, and supportive of all people. To best meet our health care challenges, we are actively partnering with our rural, urban, and traditionally underrepresented communities to understand distinct circumstances and needs, so that the SOM can provide excellent health care and training of medical practitioners and researchers that are ready and able to serve the people of Kentucky and beyond.

Our policy is supported with a three-point framework: presence, climate, and policies/practices/programs.

Presence. Presence refers to the headcount data of the institution and is compiled in accordance with the LCME reporting requirements. This includes documenting our diversity by race, gender, and rural background status. The SOM has defined the following diversity categories:

- Students: African American/Black, Latinx, women, individuals raised in rural areas;
- Faculty: African American/Black, Latinx, women; and
- Senior administrative staff (defined as decanal staff, department chairs, chief of staff, executive directors or directors in medical administration offices): African American/Black, Latinx, and Women.

Climate. Climate refers to creating and sustaining an environment of inclusive excellence, where all faculty, staff, and students feel included, welcomed, and supported. Data is gathered iteratively using multiple instruments, including school-specific, university-wide, and national assessments.

Policy/programs/practice. Policy/programs/practice refers to examining the day-to-day operations of the organization to ensure that all of the activities of the organization are consistent with our diversity goals and outcomes. In accordance with this policy, the SOM actively recruits qualified students, faculty and senior administrative staff from diverse backgrounds, iteratively works to ensure the success of this policy, and measures and communicates progress.

The SOM has adopted four goals to enhance the diversity and excellence across the educational continuum.

1. Develop activities, programs and partnerships focused on enhancing diversity within the applicant pool to increase the presence of students,

faculty, staff, and senior administrative leadership from traditionally underrepresented populations;

2. Create a climate that supports and values the unique contribution that each individual contributes to the organization;
3. Enhance the opportunity and scope of professional development for faculty and staff that promote diversity, empathy/compassion, and community engaged scholarship; and
4. Develop curricular innovation for cultural competence/humility, implicit bias, diversity and inclusion for students at all levels.

5.9. Student Survey Completion Policy

Educational Program Committee Approved: July 7, 2022

All students of the University of Louisville School of Medicine play a vital and essential role in contributing to the continual improvement of the medical education program and all aspects of the School of Medicine. The responsibility to provide feedback is critical to the medical profession. Consequently, all students are expected to actively participate in the school's comprehensive evaluation program. The Undergraduate Medical Education (UME) Office collects and compiles all evaluation data, and then provides anonymized reports and analysis to the appropriate curriculum committees. These committees utilize the data to formulate and implement curriculum improvement and faculty development strategies. In order to attain valuable participation of every student in the process, the UME Office has established the following guidelines.

Course and clerkship evaluations are mandatory; students are required to complete 100% of these curriculum evaluations assigned to them as part of their professional responsibilities at the School of Medicine. Failure to do so will result in a professionalism violation and other disciplinary action by the School of Medicine. The evaluations include, but are not limited to, the following:

- Unit evaluations in pre-clinical courses
- Final Course and Clerkship evaluations

Evaluations that students must complete will be assigned at appropriate times throughout the curriculum, with a clearly designated timeframe (2 weeks) for required completion. Faculty and staff of the School of Medicine commit to assigning as few evaluations as possible to achieve the goal of ongoing curricular improvements and faculty development/evaluation.

Confidentiality of all Student Responses

Confidentiality of student responses on all evaluations is assured. However, should a comment on an evaluation be considered an overt or covert expression of potential self-harm, harm to others or property, or otherwise cause concern for the well-being of the student or community, the faculty member and/or course director may notify the Office of Medical Student Affairs dean(s). The Medical Student Affairs dean(s) may request that the 3rd party evaluation person identify the student to the deans of Medical Student Affairs. In all other situations, responses to evaluations are always compiled and anonymized prior to being reported. Should a student have any concerns or questions about the anonymity of an evaluation, he/she may speak to the course or clerkship director and/or the Undergraduate Medical Education Office.

Quality of Student Responses

Students are expected to complete all evaluations assigned to them in a highly professional manner. All comments submitted in evaluations are shared verbatim with faculty, so we expect them to be high quality, meaningful, constructive, and free of personal slurs.

Failure to Complete Assigned Evaluations

Student completion rates and timeliness of completion on all evaluations will be tracked by the Undergraduate Medical Education Office. Once an evaluation is released, the student will receive the first reminder email on Day 5 and the second/final reminder on day 10. The evaluation will close on day 15 and will not be reopened. In the event that a student has still not completed the evaluation(s) after receiving two reminders, he or she will be referred to the Office of Medical Student Affairs for a professionalism violation.

5.10. ULSOM Professional Communication and Email Policy

Educational Program Committee Approved: August 3, 2022

The University of Louisville School of Medicine uses electronic mail (email) as the primary means of communicating official university and school of medicine information. Email is an essential tool for accomplishing academic and administrative responsibilities and all students are responsible for the information delivered to their individual university email addresses.

Students are expected to check email frequently and respond to faculty and staff if a response is indicated. It is generally expected within 2 business days of receipt, unless otherwise specified by the sender. The inappropriate use of email, or failure to respond in a timely manner, is considered a violation of this policy and will result in a referral to the Office of Medical Student Affairs for professionalism concerns. It is important to note that all emails may be subject to inspection under the Kentucky Open Records Act.

Related LCME Standards

3.5: Learning Environment/Professionalism

5.11. ULSOM Professional Accountability Policy

Educational Program Committee Approved: August 3, 2022

The ULSOM is committed to fostering the highest standards of personal responsibility and ensuring that all medical students develop competencies in professionalism. Professionalism is an integral part of medical education and professional conduct is an academic issue. All students are expected to abide by the expectations delineated in the ULSOM Honor code, as well as all ULSOM policies and procedures. Students must take time to familiarize themselves with the Honor Code and SOM policies and monitor their behaviors in accordance with expectations.

Examples of professional behaviors include, but are not limited to,

- Arriving to educational sessions on time
- Attending mandatory meetings and wellness events
- Responding to emails in a timely manner
- Completing evaluations
- Being prepared for all clinical and non-clinical learning experiences
- Recognizing limitations and seeking help

Violations of the Honor Code, ULSOM Policies or professionalism expectations may result in referral to the Office of Medical Student Affairs. Upon receipt of an alleged violation, the Associate Dean for Student Affairs will review the issue, in consultation with the student and others as needed, and determine appropriate next steps, which may include the issuance of a Letter of Concern. All Letters of Concern (LC) will be placed in the student's file in accordance with applicable storage and retention rules. Information contained in an LC will be reviewed by the MSPE committee to determine if this should be noted in the medical student performance evaluation (MSPE).

If a student receives more than two LC's during matriculation, the student will be required to meet with the Associate Dean for Student Affairs and may be referred to the Student Promotions Committee (SPC) for further review.

The School of Medicine reserves the right to refer a student who displays unprofessional conduct to other appropriate review bodies within the University and School of Medicine.

6. Absences

6.1. Days off and Absence Policy

Educational Program Committee approved September 7, 2011

Educational Program Committee Revised June 12, 2024

Summary

Students are expected to be present and on time for all scheduled examinations, quizzes, clinical assignments, and all mandatory academic activities or required student assemblies and orientations and to turn in required assignments on time.

The course or clerkship director are the leaders of the course/clerkship - not individual teaching faculty within a course present at a particular session. All clinical time, missed assignments, graded activities or assessments, or mandatory sessions will be required to be made up for credit to be awarded, with the nature of the make-up being determined by the responsible faculty.

Absences (excused and unexcused) may be recorded on the final evaluation for courses and clerkships, which is submitted to the Medical Student Affairs Office. A zero will be placed in the gradebook for all missed graded assignments/assessments and will remain in place until the graded work is made up by the student via the process outlined below. **Consistent unprofessional behavior / ignorance of policy regarding absences may result in referral to the Student Promotions Committee for action as well notation on the Medical Student Performance Evaluation letter.**

Anticipated Excused Absences—absence criteria:

Requests for planned absences from school must be made in writing via submission of the absence request form (<https://forms.office.com/r/REZBEXN1sK/>) a minimum of 30 days prior. The following list below will be considered for an excused absence.

- Attendance as a representative * of the university at an extramural or intramural event
- Presentation of student scholarly work at an academic conference

- An anticipated significant family event that **requires** the student's attendance
- An anticipated religious observation (see U of L website for list of work-restricted religious holy days)
- Weddings are not generally an excused absence for M1-2 as the attendance availability expectation is 8a-5p Monday-Friday. In M3-4, planned absences for wedding attendance on a weekend can be arranged by working ahead of time with your clerkship or elective coordinator and responsible faculty as described above, and will count towards the total days off for that rotation.

Students are encouraged to seek healthcare when needed, and will be excused for all diagnostic, preventative, and therapeutic services. This includes routine planned medical or dental care, physical or other forms of therapy, and counseling appointments. Due to the nature of making routine appointments in the medical system, only one week's notice is required, leeway will be given to students who need to attend appointments urgently.

*The school of medicine defines a representative as someone who presents and/or serves in a leadership role at the school of medicine. Other requests will be handled on an individual basis.

Other than the requirement for advance notice, the process for requesting an anticipated vs. an unanticipated absence is identical and is covered in detail below.

Unanticipated Absences:

Unanticipated absences are generally due to significant personal emergencies for reasons such as bereavement, housing or transportation crises or interruptions, acute physical or mental illness in self or a dependent person, etc. Absences or tardiness for a scheduled academic assignment (examination, mandatory class/student assembly, small group session, assigned SP clinic appointment, clinical assignment, etc.) due to these reasons are to be reported as soon as possible to the required responsible faculty or staff member as described below. As outlined above for planned medical therapeutic care, students are encouraged to seek healthcare when needed for urgent or acute problems, and will be excused for all diagnostic, preventative, and therapeutic services. This includes medical or dental care, physical or other forms of therapy, and counseling appointments.

In case of emergency with limited time for notification, the Office of Medical Student Affairs can be notified at (502) 852-5192 and/or by sending an email giving the reason for the absence to medstuaf@louisville.edu.

All verbal communication must be followed up with written communication from the student to the responsible faculty and staff and the Office of Medical Student Affairs as outlined above in the instructions for students' section. Written documentation to support the inability to attend (physician note, receipt for car repair, etc.) may be required in order for graded activities to be remediated or excused.

Process for Requesting an Excused Absence:

1. Student will identify the need for an absence and complete the absence request form (<https://forms.office.com/r/REZBEXN1sK/>). Absence requests will be generated and received by each course or clerkship director. Each course director and clerkship director or clerkship coordinator will then approve or deny the absence. Students will receive an emailed copy of their approval or denial for absence. Requests and outcomes will also be tracked centrally by student status coordinator

in the office of medical student affairs with the assistance of the office of undergraduate medical education.

2. A zero will be placed in the gradebook for missed graded assignments/assessments and will remain in place until the graded work is made up by the student

3. In this process, **students are responsible for:**

- a. Following up with course team and UME re: length of absence and need for making up missed work until all work is completed.
- b. Making their own determination of the duration of the needed absence based on their individual circumstances, with the understanding that all missed work will need to be made up.
- c. Acknowledging that prolonged absences from school >1 week or more may require discussion of a leave of absence with Medical Student Affairs due to the pace and intensity of the medical school curriculum.
- d. Communicating with all involved as time goes on if the length of the absence changes, particularly if absence becomes longer than predicted, and may be asked to furnish documentation related to absences, including doctor's notes, emails from contact tracing, etc.

4. **Course/clerkship faculty or coordinators are responsible for:**

- a. Asking for any documentation related to absence as needed
- b. Answering student questions about the length of the absence related to what make-up work is needed.
- c. Referring to Student Affairs via forwarding email any student who seems to be struggling: reasons can include bereavement, family illness, prolonged illness, emotional, financial, social, economic distress, or concerns for mental health
- d. Rescheduling within their course/dept any make-ups that use course resources: HCM, SP events, mandatory events that require a written make-up, exams or quizzes proctored by departmental faculty or coordinator (shelf exams and clerkship quizzes), etc.

5. **UME is responsible for:** managing make-up scheduling for UME-proctored work/assessments (large written exams and quizzes within M1-2 courses and PBL). UME has to manage make-up proctoring on the basis of when a proctor can be available, and it is expected that the opportunities for make-ups will be somewhat limited due to resource management and the number of assessments scheduled weekly.

- a. For any proctored assessment that is missed, UME staff will follow up on the initial email about the missed assessment and communicate to the student and course director the time and date available to schedule a make-up for proctored assessments in the coming week.
- b. The student will then identify from those limited options when they feel is best for them to schedule their make-up assessment, and communicate this back to the course director and UME, who will confirm scheduling the make-up assessment.
- c. It is the usual expectation that students will make up a missed quiz or exam within a week of the absence, and UME will offer an opportunity for a make-up with that time frame in mind.

Unexcused Absences

6. Any student who is absent from an academic assignment and has not been granted an excused absence by responsible faculty/staff will receive an **unexcused absence** and the student will receive a **ZERO** for any scheduled academic activity that is missed. No-call, no-show absences may also result in a zero for that assignment/assessment. The student may still be required to complete the scheduled learning activity or an alternate learning activity without receiving a grade, if deemed necessary by the course director in order to proceed through the remainder of the course. An example might include an important SP clinic interaction that is required to ensure competent future practice or completion of a presentation required to achieve the learning objectives for the course. **Consistent unprofessional behavior / ignorance of policy regarding absences may result in referral to the Student Promotions Committee for action as well notation on the Medical Student Performance Evaluation letter.**

Days Off

M1-2 Students:

The M1 and M2 years will follow the MD Program Academic Calendar. Additional days off may be granted by course directors on an individual basis. Students should check their class calendar on RedMed.

M3-4 Students:

- Students will be given an average of at least four days off for averaged over a 4-week rotation (average of one day off per week). Clerkship directors have authority to grant additional days off for excused absences.
- Weekends and holidays that occur during a clerkship should not be presumed as "automatic" days off.
- The schedule for days off will be prepared by the clerkship director, clerkship coordinator or another individual designated by the clerkship director.
- **Remediation of any days off beyond four days will be determined by the individual clerkship director.**

6.2. Inclement Weather Policy for Medical School Courses and Clerkships

EPC Last Reviewed: May 29, 2019

PRECLINICAL STUDENTS

The School of Medicine follows the University's policies regarding delayed openings and closings.*(**) If there is a delayed opening until 10:00 a.m., all medical school classes will begin at 10:00 a.m. with the courses scheduled in that time slot. If the University is closed, there will be no medical school class sessions that day. Make-up arrangements for any missed class sessions will be made by instructors and communicated to students. In the event of a cancelled ULSOM mandatory attendance event, all students will be notified of the rescheduled date within 48 hours of the cancelled event. Students with pre-existing conflicts on the rescheduled date will be addressed by the Deans for Medical Education on an individual basis.

CLINICAL - LOUISVILLE CAMPUS

The School of Medicine follows the University's policies regarding delayed openings and closings.*(**) If there is a delayed opening until 10:00 a.m., clinical duties will begin at 10:00 a.m. When classes are

cancelled due to severe weather, all clinical duties for third and fourth year students at the Louisville Campus will also be cancelled.

CLINICAL STUDENTS - TROVER CAMPUS

Due to the distance between the Louisville Campus and the Trover Campus, weather conditions may vary considerably between the two sites. Because of this, the Associate Dean at the Trover Campus will determine whether or not Trover students should report for clinical duties based on weather conditions in the Madisonville area and will notify those students when they should not report for clerkship duties.

ALL YEARS - EXAM DAYS

When the University is on a delayed schedule because of severe weather, all exams originally scheduled to begin before the delayed start time (usually 10:00 a.m.) will instead begin at the new opening time. For example, if the exam was originally scheduled for 8:00 a.m., but the University delays opening until 10:00 a.m., the exam will begin when the University opens at 10:00 a.m. Later exams will begin on time unless they are affected by the timing of an exam that was delayed earlier in the day. In that case, their start times will be adjusted accordingly and they will immediately follow the first exam that day unless students are advised otherwise.

When the University closes completely due to severe weather when an exam is scheduled, all exams originally scheduled for that day will be rescheduled for a later date.

*If the delay/cancellation specifies Belknap Campus only, medical students will report for classes and clinical duties according to their regular schedule.

** Should inclement weather be a factor on a day when the University is not in session, and medical school activities are scheduled, the Senior Associate Dean for Undergraduate Medical Education will make a decision before 3:30 am of the day in question and alert all affected students of the decision via email.

6.3. Leave of Absence Policy

Educational Program Committee Last Revised: September 03, 2020

Students may petition, in writing, the Leave of Absence Subcommittee of the Student Promotions Committee for a leave of absence for one year or less. The Subcommittee convenes as necessary to consider such requests and then submits its recommendation to the Dean for a final decision. Students requesting a leave should expect to appear before the Subcommittee to discuss the reasons for the request.

Students may obtain a medical leave of absence by submitting a written request as well as a note from a treating physician recommending time away from school, to the Associate Dean for Student Affairs. Prior to returning from a medical leave of absence, students must submit a separate note from a treating physician that states the student is approved to return to school.

Students may obtain maternity or paternity leaves of absence by submitting a written request to the Associate Dean for Student Affairs.

Extension of any leave of absence beyond the period originally granted requires a written petition and a personal appearance before the Leave of Absence Subcommittee to discuss the need for the extension.

University Policies



University Policies

University of Louisville policies are in addition to, or supercede, unit policies. These policies can be found at: louisville.edu/dos/students/studentpoliciesandprocedures/student-handbook (<https://louisville.edu/dos/students/studentpoliciesandprocedures/student-handbook/>)

Code of Student Conduct

The Code of Student Conduct is the University's policy regarding non-academic misconduct and discipline of students. The primary purpose for the imposition of non-academic discipline in the university campus setting is to preserve and protect a quality educational environment.

The Code of Student Conduct is published at louisville.edu/dos/students/codeofconduct (<http://louisville.edu/dos/students/codeofconduct/>) and through the Dean of Students Office, Student Activities Center, Room W301.

If you have any questions or would like information pertaining to reporting an alleged incident of non-academic misconduct, please contact the Dean of Students Office at (502) 852-5787.

Code of Student Rights

Purpose

The Code of Student Rights and Responsibilities is set forth in writing in order to give students general notice of certain of their rights and responsibilities at the University of Louisville. Further rights and responsibilities are set forth in other University rules and policies, including the Code of Student Conduct, Residence Hall contracts, and academic unit bulletins. It is the students' responsibility to be aware of all University rules and policies; students should check with the Office for Student Life and with their academic units if they have any questions about the purposes or intent of these policies.

The University is a public educational institution for adults rather than a custodial institution. Consistent with the role of the University to educate its students and to stimulate student autonomy and independence, University regulation and supervision of student life on and off campus is limited. The University does not assume responsibility or liability for the conduct of its students; responsibility and liability for student conduct rests with the student as inherent attributes of his or her adult status, concurrently with the student's freedom of choice regarding his or her presence at the University and his or her own conduct and associations.

Definitions

When used in this Code:

The term "academic dishonesty" means obtaining or seeking to obtain an unfair academic advantage for oneself or for any other student; it includes lying, cheating, stealing, or engaging in otherwise dishonest conduct in the course of or related to any academic exercise.

The term "academic exercise" means a test, quiz, examination, speech, presentation, paper, field or laboratory work, or any other academic activity on which a student is evaluated.

The term "group" means a number of persons who are associated with each other and who have not complied with the University requirements for recognition as an organization.

The term "organization" means a number of persons who are associated with each other and who have complied with the University requirements for recognition.

The term "student" means any person taking courses at the University, either full time or part time, pursuing undergraduate, graduate or extension studies on a regular quarter, semester, or summer term basis.

The term "student broadcast" means oral material published on a student operated radio or television station.

The term "student press" means either a student publication or a student broadcast.

The term "student publication" means written material published by a student organization.

The term "teacher" means any person hired by the University to conduct classroom activities. In certain situations, a person may be both "student" and "teacher." Determination of the person's status in a particular situation shall be determined by the surrounding circumstances.

The term "University" means the University of Louisville and, collectively, those responsible for its control and operation.

Admission and Financial Aid

All applicants for admission and financial aid to the University shall be considered without regard for race, color, national origin, religion, sex, handicap not affecting qualification, or political beliefs.

Classroom Rights and Responsibilities

A student shall be evaluated on demonstrated knowledge and academic performance, and not on the basis of personal or political beliefs or on the basis of race, color, national origin, religion, sex, age, or handicap not affecting academic performance.

A student has freedom of inquiry, of legitimate classroom discussion, and of free expression of his or her opinion, subject to the teacher's responsibilities to maintain order and to complete the course requirements.

A student is responsible for fulfilling the stated requirements of all courses in which he or she is enrolled.

A student has the right:

- To be informed in reasonable detail at the first or second class meeting about the nature of the course and to expect the course to correspond generally to its description in the appropriate University catalog or bulletin;

- To be informed in writing and in reasonable detail at the first or second class meeting of course requirements and assignments;
- To be informed in writing and in reasonable detail at the first or second class meeting of standards and methods used in evaluating the student's academic performance;
- To be informed in writing of any necessary changes in assignments, requirements, or methods of grading during the semester with the reasons for such changes.

A student has the right to confidentiality in the student/teacher relationship regarding the student's personal or political beliefs. Disclosures of a student's personal or political beliefs, expressed in writing or in private conversation, shall not be made public without explicit permission of the student.

Charges of violations of these classroom rights and responsibilities shall be handled through the appropriate academic unit level procedures.

Academic Dishonesty

Academic dishonesty is prohibited at the University of Louisville. It is a serious offense because it diminishes the quality of scholarship, makes accurate evaluation of student progress impossible, and defrauds those in society who must ultimately depend upon the knowledge and integrity of the institution and its students and faculty.

Academic dishonesty includes, but is not limited to, the following:

Cheating

- Using or attempting to use books, notes, study aids, calculators, or any other documents, devices, or information in any academic exercise without prior authorization by the teacher.
- Copying or attempting to copy from another person's paper, report, laboratory work, computer program, or other work material in any academic exercise.
- Procuring or using tests or examinations, or any other information regarding the content of a test or examination, before the scheduled exercise without prior authorization by the teacher.
- Unauthorized communication during any academic exercise.
- Discussing the contents of tests or examinations with students who have not yet taken the tests or examinations if the instructor has forbidden such discussion.
- Sending a substitute to take one's examination, test, or quiz, or to perform one's field or laboratory work; acting as a substitute for another student at any examination, test, or quiz, or at a field or laboratory work assignment.
- Conducting research or preparing work for another student, or allowing others to conduct one's research or prepare one's work, without prior authorization by the teacher. Except when otherwise explicitly stated by the teacher, examination questions shall become public after they have been given

Fabrication

- Inventing or making up data, research results, information, or procedures, such as:
- Inventing or making up data, research results, information, or procedures.
- Inventing a record of any portion thereof regarding internship, clinical, or practicum experience.

Falsification

- Altering or falsifying information, such as:
- Changing grade reports or other academic records.
- Altering the record of experimental procedures, data, or results.
- Altering the record of or reporting false information about internship, clinical, or practicum experiences.
- Forging someone's signature or identification on an academic record.
- Altering a returned examination paper in order to claim that the examination was graded erroneously.
- Falsely citing a source of information.

Multiple Submission

The submission of substantial portions of the same academic work, including oral reports, for credit more than once without prior authorization by the teacher involved.

Plagiarism

- Representing the words or ideas of someone else as one's own in any academic exercise, such as:
- Submitting as one's own a paper written by another person or by a commercial "ghost writing" service,
- Exactly reproducing someone else's words without identifying the words with quotation marks or by appropriate indentation, or without properly citing the quotation in a footnote or reference.
- Paraphrasing or summarizing someone else's work without acknowledging the source with a footnote or reference.
- Using facts, data, graphs, charts, or other information without acknowledging the source with a footnote or reference. Borrowed facts or information obtained in one's research or reading must be acknowledged unless they are "common knowledge". Clear examples of "common knowledge" include the names of leaders of prominent nations, basic scientific laws, and the meaning of fundamental concepts and principles in a discipline. The specific audience for which a paper is written may determine what can be viewed as "Common knowledge": for example, the facts commonly known by a group of chemists will differ radically from those known by a more general audience. Students should check with their teachers regarding what can be viewed as "common knowledge" within a specific field or assignment, but often the student will have to make the final judgment. When in doubt, footnotes or references should be used.

Complicity in Academic Dishonesty

Helping or attempting to commit an academically dishonest act. The academic units may have additional guidelines regarding academic dishonesty. It is the student's responsibility to check with their teachers and academic units to obtain those guidelines.

Discipline Procedures for Academic Dishonesty

Charges of academic dishonesty shall be handled through the appropriate academic unit level procedures.

An academic unit that determines that a student is guilty of academic dishonesty may impose any academic punishment on the student that it sees fit, including suspension or expulsion from the academic unit.

A student has no right to appeal the final decision of an academic unit. However, a student who believes that he or she has been treated unfairly, has been discriminated against, or has had his or her rights abridged by the academic unit may file a grievance with the Unit Academic Grievance Committee, pursuant to the provisions of the Student Academic Grievance Procedure; the Unit Academic Grievance Committee may not

substitute its judgment on the merits for the judgment of the academic unit.

An academic unit that suspends or expels a student from the academic unit because the student has been found guilty of academic dishonesty may recommend to the University Provost in writing that the student also be suspended or expelled from all other programs and academic units of the University. Within four weeks of receiving such a recommendation, the Provost shall issue a written decision. Neither the student nor the academic unit shall have the right to appeal the Provost's decision. However, a student who believes that he or she has been treated unfairly, has been discriminated against, or has had his or her rights abridged by the issuance of a decision by the Provost may file a grievance with the University Student Grievance Committee, pursuant to the provisions of the Student Academic Grievance Procedure; the University Student Academic Grievance Committee may not substitute its judgment on the merits for the judgment of the Provost.

Campus Expression

Students have the right of freedom of expression to the extent allowed by law.

Students may picket or demonstrate for a cause, subject to the following conditions:

The students must act in an orderly and peaceful manner.

The students must not in any way interfere with the proper functioning of the University.

Where students demonstrate in an area not traditionally used as an open public forum, the University reserves the right to make reasonable restrictions as to time, place, and manner of the student demonstrations.

Students may distribute written material on campus without prior approval, providing such distribution does not disrupt the operations of the University or violate University rules.

Students may invite to campus and hear on campus speakers of their choice on subjects of their choice; approval will not be withheld by any University official for the purpose of censorship.

The Student Press

The student press is free to deal openly, fearlessly, and responsibly with issues of interest and importance to the academic community. There shall be no prior approval of student press content by the University.

The student press is responsible for adhering to the canons of responsible journalism and for complying with the law. Student publications and broadcasts shall not publish libelous or slanderous matter, or any other content that violates the law.

All student publications and broadcasts shall explicitly state that the opinions expressed are not necessarily those of the University or its student body.

Students may not be disciplined by the University for their participation with the student press except for violations of University rules that are not inconsistent with the guarantees contained herein.

University Facilities

Appropriate University facilities shall be available to organizations within the University community for regular business meetings, for social programs, and for programs open to the public.

Reasonable conditions may be imposed to regulate the timeliness of requests, to determine the appropriateness of the space assigned, to regulate time and use, and to insure proper maintenance.

Preference may be given to programs designed for audiences consisting primarily of members of the University community.

Allocation of space shall be made based on priority of requests and the demonstrated needs of the organization.

Charges may be imposed for any unusual costs for use of facilities.

Physical abuse of assigned facilities may result in reasonable limitations on future allocation of space to offending parties and will require restitution of damages.

The organization requesting space must inform the University of the general purpose of any meeting open to persons other than members and the names of outside speakers.

Use of University Name and Insignia

No individual, group, or organization may use the University name or insignia without the express authorization of the University except to identify the University affiliation. University approval or disapproval of any policy or issue may not be stated or implied by any individual, group, or organization.

Campus Residence Facilities

Students have the right of privacy in campus residence facilities.

Nothing in the University relationship or residence hall contract may expressly or implicitly give the institution or residence hall officials authority to consent to search of a student's room or residence by police or other law enforcement officials unless they have obtained a search warrant.

The University reserves the right to enter a student's room in a residence hall or a student's apartment in a campus residence:

- In emergencies where imminent danger to life, safety, health, or property is reasonably feared;
- To make necessary repairs, improvements, or alterations in the facility;
- To provide necessary pest control services; or
- To inspect the facility as deemed necessary by the university.

Student Records

The privacy and confidentiality of all student records shall be preserved in accordance with applicable laws. The University shall establish and adhere to a clear and definitive records policy.

Campus Organizations

Organizations and groups may be established within the University for any legal purpose. Affiliation with an extramural organization shall not, in itself, disqualify the University branch or chapter from University privileges. A group shall become a formally recognized organization through procedures established by the Student Government Association, upon approval of the Vice President for Student Affairs.

Groups of a continuing nature must institute proceedings for formal recognition if they are to receive benefits from the University.

Recognition of an organization by the University infers neither approval nor disapproval of the aims, objectives, and policies of the organization, nor liability for the actions of the organization.

Membership in all University related organizations shall be open to any member of the University community who is willing to subscribe to the stated aims and meet the stated obligations of the organization, provided such aims and obligations are lawful.

Membership lists are confidential and solely for the use of the organization, except that names and addresses of current organization officers shall be reported to the University as a condition of continuing University recognition.

Any organization that engages in activities either on or off campus that are illegal or contrary to any University policy may have sanctions imposed against it, including withdrawal of University recognition.

Promulgation of University Rules Affecting Students

Rules and Policies affecting the students shall be published in Student Handbook, in the appropriate University bulletins, or in any other appropriate publication prior to their enforcement. Included in the Student Handbook are the following: Academic Grievance Procedure, Code of Student Conduct, Code of Student Rights and Responsibilities, Policy on Consumption of Alcoholic Beverages for Recognized Student Organizations, Hazing and Initiation Activities Policy, Non-academic Grievance Policy and the Sexual Harassment Policy. Copies of the Student Handbook are available from the Office of Student Life.

Residency

In-State or Out-of-State Tuition

Initial Determination and Deadline to Appeal

The initial determination of residency status is made during the admission process. Once admitted, students will continue to be billed at the resident or nonresident rate each semester for the duration of their enrollment, unless an appeal has been approved by the Residency Appeals Office. A status may be appealed by filing an affidavit and documentation with the Registrar's office no later than 30 calendar days after the first day of classes of the term for which a determination of residency status is requested. Academic calendars are available on the university web site and with the Offices of Admission.

Pursuant to the residency regulation, 13 KAR 2:045 (https://apps.legislature.ky.gov/Law/KAR/013/002/045.pdf#xml=https://apps.legislature.ky.gov/LRCSiteSessionSearch/dtSearch/dtisapi6dll?cmd=getpdfhits&u=1a702ce5&DocId=5428&Index=E%3a%5cProduction%5cDTSearch%5cDTSearchIndex%5cKY_Administrative_Reg&HitCount=10&hits=c+d+e+f+10+11+12+13+14+15+&SearchForm=&.pdf), an institution may set other deadlines for submission of other information required by the institution in a determination of residency status. Information packets are available from the residency website (<http://www.louisville.edu/residency/>).

Special procedures may apply to students entering a University of Louisville professional program (DMD, JD, or MD). Please contact the office of admissions within your professional school for details on residency determination and appeal processing.

Statutory reference: Sections 13 and 14 of 13 KAR 2:045. Effective February 21, 2007.

Applications for Change in Residency Status and Appeals

Application for change in residency classification for purpose of tuition and fee assessment by a student enrolled in or an applicant to a program at the University of Louisville ("University") shall be made in writing to the residency appeals officer for initial consideration along with such information forms as the residency appeals officer may specify. The application for a change in residency classification must be filed no later than thirty (30) calendar days after the first day of classes of the academic term for which the change is requested. Appeals of residency determinations shall be based on administrative regulations promulgated by the Kentucky Council on Postsecondary Education. A written appeal of the decision of the residency appeals officer must be postmarked no later than fourteen calendar days from the date of receipt of notification of the residency appeals officer's written decision.

The Residency Review Committee is appointed by the executive vice president and provost (or designee) and shall be composed of four faculty and/or staff members and one student. The chairperson shall be elected by the committee. The faculty and/or staff members normally shall have staggered two-year appointments; the student member shall have a one-year appointment. The committee shall have authority to establish procedural rules and schedule meetings. A quorum shall consist of three members, and a quorum shall be necessary for committee action.

The Residency Review Committee shall consider appeals from applicants whose initial request for change in residency status has been denied by the residency appeals officer based upon the applicant's written appeal and the file in that matter to the extent provided by the Family Educational Rights and Privacy Act, 1974 (FERPA). The applicant shall be notified in writing as to the committee's decision.

If the decision of the committee is adverse to the applicant, the applicant may request a formal hearing by submitting a written request to the executive vice president and provost (or designee). This request must be postmarked no later than fourteen (14) calendar days from the date of receipt of notification of the committee's written decision.

The executive vice president and provost (or designee) shall appoint a hearing officer from outside the University to preside over formal residency hearings. Formal hearings shall be arranged based on a timely request from the applicant. The formal hearing shall provide for due process, including notice of hearing, examination of the information on which the University decision is based, and the right of an applicant to be represented by legal counsel and to present information and testimony in support of a claim of Kentucky residency. Hearing procedures will be consistent with 13 KAR 2:045 (https://apps.legislature.ky.gov/Law/KAR/013/002/045.pdf#xml=https://apps.legislature.ky.gov/LRCSiteSessionSearch/dtSearch/dtisapi6dll?cmd=getpdfhits&u=1a702ce5&DocId=5428&Index=E%3a%5cProduction%5cDTSearch%5cDTSearchIndex%5cKY_Administrative_Reg&HitCount=10&hits=c+d+e+f+10+11+12+13+14+15+&SearchForm=&.pdf).

The hearing officer shall make a report with findings of fact and a recommendation to the executive vice president and provost (or designee) with a copy to the applicant. The executive vice president and provost (or designee) will decide the appeal on the record on behalf of the University and the Board of Trustees and will notify the applicant in writing within thirty days of receipt of the hearing officer's report. In the event the decision of the executive vice president and provost (or designee) is not in accord with the recommendation and findings of

the hearing officer's report, a written explanation will be provided to the applicant.

Council on Postsecondary Education Administrative Regulation

Relates to: KRS Chapter 13B, 164.020, 164.030, 164A.330(6).

Necessity, Function, And Conformity

KRS 164.020(8) (<https://apps.legislature.ky.gov/law/statutes/statute.aspx?id=53677>) requires the Council on Postsecondary Education to determine tuition and approve the minimum qualifications for admission to a state-supported postsecondary education institution and authorizes the council to set different tuition amounts for residents of Kentucky and for nonresidents. This administrative regulation establishes the procedure and guidelines for determining the residency status of a student who is seeking admission to, or who is enrolled at, a state-supported post-secondary education institution.

Tuition, Fees & Expenses

Tuition and Fees

NOTE: Actual charges will be finalized in June.

For the 2023-24 academic year, the tuition for residents of Kentucky is \$44,088,610 per year. For nonresidents, the tuition is \$67,564 per year. These amounts do not include the following fees: technology fee, HSC health fee, disability insurance fee, drug screening fee, recreation fee, application for degree, reinstatement, replacement diploma and transcripts. The first transcript after completion of a degree is free.

Fees and refund schedules are established by the University of Louisville Board of Trustees and are subject to change without prior notice. The current Schedule of Courses should be consulted for current fees and refund schedules.

Payment

Tuition and fees are due on, or before, the designated due date for the semester. Payment may be made by cash, paper check, money order, or financial aid credit. All electronic check (ACH) or credit card payments (transaction fee applies) may only be remitted electronically via the web payment portal. Payments may be made by mail, by use of the deposit box in the front entrance of the Houchens Building, or at the Office of the Bursar.

Failure to receive the Statement of Account will not relieve the student of the responsibility for making financial settlement by the designated due date. Continuing registrations which are not financially settled by the designed due date will be placed on financial hold and affected students will not be permitted to add or swap classes until their student account is financially settled.

The continuing registration designated due dates are listed in the current Registration Information newspaper and on the Bursar's web site at: louisville.edu/finance/bursar (<http://louisville.edu/finance/bursar/>) (Payment Due Dates).

Failure to Settle Account

Students whose accounts are not paid by the established semester payment due dates may be subject to financial penalties such as a Bursar Registration Hold. A Bursar Registration Hold may prevent a student from registering and/or obtaining an official transcript or diploma. When the student account is paid in full, this Bursar Registration Hold may be lifted. If your payment is remitted via a paper or e-check, a 21 day delay must pass before the lifting of the Bursar Registration Hold.

Effective Spring 2015 a late payment fee of \$100 may be assessed when student accounts are not paid by the last day to drop/add. A student whose payment is not honored by the bank on which it was drawn may be assessed a return payment fee of \$25.00. If restitution is not made within 10 days of notification, the student may be subject to course cancellation, financial penalties and/or legal action.

Students whose accounts are not paid by the established semester deadlines may be subject to financial penalties. Students with unpaid account balances will have a Bursar Registration Hold placed on their student account. Students that have a Bursar Registration Hold become ineligible for further registration and transcripts will not be released until the student account is paid in full. Effective Spring 2015 a late payment fee of \$100.00 may be assessed when student accounts are not paid by the last day to drop/add for the semester.

A return payment fee of \$25.00 may be assessed when payment is not honored by the bank on which it was drawn. If restitution is not made within 10 days of notification, the student may be subject to financial penalties and/or legal action.

Debtors who do not make satisfactory payment arrangements on their past due accounts may have their accounts placed with a billing service. If not paid through the billing service, the unpaid account may be forwarded to a collection agency. It is the policy of the University that unpaid accounts will be assessed the costs and expenses of collection, including attorney fees. Any E-check or Paper Check payment that is remitted on a Past Due by a previously enrolled student will be subject to a 21 day delay on having their Bursar Registration Hold lifted.

Refund/Withdrawal Policy

When a student officially withdraws from the University or from any course, or courses, for which hourly tuition rates apply, tuition and student activity fee charges will be adjusted according to the tuition reduction schedule located within the University's withdrawal policy: catalog.louisville.edu/undergraduate/university-wide-unit-specific-policies/adding-dropping-withdrawing-courses/ (<https://catalog.louisville.edu/undergraduate/university-wide-unit-specific-policies/adding-dropping-withdrawing-courses/>).

The full amount of tuition/fee charges for the semester will be due unless the withdrawal occurs during the tuition reduction period, or in the event of a compassionate withdrawal. The effective withdrawal date is the date on which the withdrawal is processed in the Student Records System. This date is used in calculating any applicable tuition reduction. This policy applies to all tuition and student activity fees except for nonrefundable deposits. Course fees, special fees, and laboratory fees are reduced only with the 100% adjustment. For more information see louisville.edu/bursar.

Paying for Your MD

Financial Aid, Scholarship, and Loans

Financial Aid

The Office of Financial Aid is responsible for providing financial assistance information to students enrolled in the School of Medicine. Please take time to read about the individual aid programs offered at UofL to be an informed borrower. The responsibility to remain informed and to select the appropriate methods of financing your medical education lies with the students and their families.

Students needing financial assistance are encouraged to contact the Financial Aid Office to obtain information and current financial aid publications. The formal application period begins October 1. The application priority date is March 15 for the following academic year.

For more information contact:

Office of Student Financial Aid

School of Medicine
University of Louisville
A Building, Suite 205
Louisville, KY 40202
(502) 852-5187 (voice)
(502) 852-5871 (fax)

Online: louisville.edu/medicine/financialaid (<http://louisville.edu/medicine/financialaid/>)
Email: lrkael01@louisville.edu

Satisfactory Progress

Medical students are considered to be making Satisfactory Academic Progress (SAP) and are eligible to receive federal financial aid as long as they are allowed to continue to be enrolled in the School of Medicine. All medical students are monitored by the Office of Medical Student Affairs by both qualitative and quantitative measures. Students are reviewed if they fail any courses and/or if they exceed the 6-year rule for completing their degree.

Students who fail to meet the School of Medicine standards must appear before the Student Promotions Committee. The Student Promotions Committee reviews the academic progress of all students with unsatisfactory scholarship, behavior or clinical competence and makes a recommendation to the Dean of the School of Medicine for corrective action or dismissal. All students appearing before the Student Promotions Committee are not considered to be making Satisfactory Academic Progress and are ineligible for federal financial aid. If the Student Promotions Committee recommends to the Dean that the student return to school and the Dean concurs, he/she will be placed on an academic plan outlining what he/she must do to remain enrolled in the School of Medicine. He/she will be on financial aid probation and will be eligible to receive federal financial aid as long as he/she meets the conditions of the plan.

The Medical School Financial Aid Office will be notified of all students appearing before the Student Promotions Committee and the final decision of each student's hearing.

Scholarships

The Medical School Admissions Office will award all UofL scholarships to incoming students based on various criteria; academic merit, MD/PhD, rural county of residence, need or health equity status. The Admissions Office will notify individual students if they are selected for a UofL scholarship; no application is needed. Most UofL endowed funds are pooled to offer scholarships in the above categories. Please contact the Admissions Office if you have any questions.

For other types of scholarship opportunities available for prospective students, visit the following web page at: louisville.edu/medicine/financialaid/scholarships (<http://louisville.edu/medicine/financialaid/scholarships/>).

Loans

Beginning in the Fall 2009 semester, UofL began participating in the William D. Ford Direct Loan Program. The Direct Loan Program is when eligible students borrow directly from the federal government. Direct Loans include un-subsidized Direct Stafford Loans, Direct Graduate/Professional PLUS Loans, and Direct Consolidation Loans. Eligible students repay these loans directly to the U.S. Department of Education.

Effective July 1, 2012, there were no longer subsidized Stafford loans for Graduate/Professional students.

For more information about the specific loans referenced above, visit: louisville.edu/medicine/financialaid/loans (<http://louisville.edu/medicine/financialaid/loans/>).

Prizes & Awards

School of Medicine Prizes & Awards

There are a number of awards presented at the School of Medicine's Fall Honors Convocation and Senior Honors Convocation each year. Categories of prizes and awards include academic excellence, community leadership, research and extracurricular activities. Awards include certificates, plaques, books, or cash prizes. Some prizes and awards are sponsored and selected by individual departments, organizations, or classes. The School of Medicine Prizes and Awards Committee selects recipients of awards funded by either external organizations or memorials according to criteria established by these groups.

For information about the Fall Honors and the Senior Honors Convocations, please visit louisville.edu/medicine/studentaffairs/student-services/ (<http://louisville.edu/medicine/studentaffairs/student-services/>).

Departmental Awards

The Dr. S. Spafford Ackerly Awards

These awards were established in 1963 by Mr. and Mrs. Barry Bingham, Sr., as a trust fund in honor of Dr. S. Spafford Ackerly, Distinguished Professor Emeritus of the Department of Psychiatry, and Chair from 1947 to 1963. The Department of Psychiatry and Behavioral Sciences presents one award in the fall to a third-year medical student and one in the spring to a fourth-year medical student, who have shown the greatest proficiency in psychiatry.

The Dr. Billy F. Andrews Academic Excellence in Pediatrics Award

This award is presented to a third-year student who best exemplifies qualities of scholarship, aptitude for pediatrics, and potential for an academic career in pediatric medicine.

The Henry Gray Barbour Memorial Award in Medical Pharmacology

This award was established in 1964 in memory of Dr. Barbour, Chair of the Department of Pharmacology from 1923 to 1931. It is given to a second year student selected by the department faculty on the basis of performance during the medical pharmacology course.

The Biochemistry and Molecular Genetics Physician/Scientist Award

This award is presented in recognition of a graduating medical student who has pursued research in the Department of Biochemistry and Molecular Biology leading to scholarly publications or a degree in biochemistry.

The Thomas B. Calhoon Memorial Physiology Award

This award honors the late Dr. Thomas B. Calhoon, former Chair of the Department of Physiology and Biophysics. The award is presented to a medical student who has shown excellence in academic performance and scholarly achievement in the study of the physiological basis of medical practice.

The Dr. William M. Christopherson Society Award

This award is presented by the Christopherson Society in honor of Dr. William M. Christopherson, Distinguished Professor and former Chair of the Department of Pathology from 1956 to 1974, to a fourth-year student demonstrating unusual ability and performance in pathology.

The Chloe Coleman Prize

The Chloe Coleman Prize is presented to a fourth-year medical student who has shown promise in pediatric and/or adolescent psychiatry.

The Society for Academic Emergency Medicine Excellence in Emergency Medicine Award

This award is sponsored by the Society for Academic Emergency Medicine. It is given to a fourth-year medical student who has demonstrated excellence in the specialty of emergency medicine.

The Dr. Stanley A. Gall Award

This award was established in 2001 to honor Dr. Stanley A. Gall, Donald E. Baxter Professor and Chair of the Department of Obstetrics and Gynecology from 1989-2000. It is presented to a graduating senior student who excels beyond expectations on the High-Risk Obstetrics service. The student must demonstrate compassion, dedication and ability well above the level of training, and must plan to enter this specialty field.

The Dr. Samuel S. Gordon Award

Three alumni of the School of Medicine and their families established this award to honor Dr. Samuel S. Gordon, Class of 1932, for his outstanding devotion to students and patients, academic excellence in his specialty of obstetrics and gynecology, and his ability to stimulate and inspire other physicians to high achievement. The Department of Obstetrics, Gynecology, and Women's Health presents this award to a fourth-year student who has excelled in the study of obstetrics and gynecology and who plans to enter that field.

The Mary A. Hilton Award for Excellence in Biochemistry

This award is presented annually to the most outstanding first-year medical student in biochemistry. The award honors Dr. Mary Anderson Hilton, a longtime faculty member of the Department of Biochemistry, who retired in 1995 and was an outstanding medical educator.

The O.J. Hurt Award

This is presented by the Department of Orthopaedic Surgery to a graduating student displaying the traits most reflective of Dr. Hurt and his philosophy of orthopaedics and patient care, i.e., dedication to orthopaedics, honesty, integrity and medical knowledge.

The Dr. Vernon O. Kash Award

The Vernon O. Kash Award was established by Mrs. Vernon Kash to honor her husband, a 1936 graduate of the University of Louisville School of Medicine. This award is given to an outstanding student in anatomy.

The Helene & Walter Zukof, MD, Memorial Scholarship Award

The Kentucky Academy of Family Physicians provides an award each year to a fourth-year medical student who has demonstrated the most interest in family medicine during his/her course of studies in medical school.

The Letitia Shelby Kimsey-Taylor Award for Excellence in Microbiology and Immunology

This award is presented by the Department of Microbiology and Immunology to honor the late Letitia Shelby Kimsey-Taylor, M., who was an outstanding teacher in this department from 1947 to 1976. The award is given to the second-year student achieving highest honors in the course of medical microbiology.

The Dr. Atwood P. Latham Memorial Prize in Anatomy

In 1928, Mrs. Mary B. Latham established this award in memory of her husband. This award is given to the first-year medical student deemed most proficient in anatomy.

The Benjamin M. Rigor, MD, Excellence in Anesthesiology Award

Dr. Benjamin M. Rigor, MD, served as Chair of the Department of Anesthesiology at the University of Louisville School of Medicine from 1981-1999. This award is given to the member of the graduating class who demonstrates great interest and proficiency during elective and tutorial courses in anesthesiology.

The Louisville Academy of Ophthalmology Excellence Award

The award is given to the graduating medical student who exhibits enthusiastic dedication to the field of Ophthalmology. This can be displayed in clinical rotations as well as research involvement.

The Dr. John Walker Moore Scholarship Award

This scholarship is awarded in memory of Dr. John Walker Moore, Dean of the School of Medicine from 1928 to 1949, in recognition of his great skill and competence as an internist and teacher. It is given to the outstanding third-year student in medicine.

The American Academy of Neurology Medical Student Prize for Excellence in Neurology

The American Academy of Neurology provides an award to the senior student who has demonstrated the most promise for a career in neurology during the course of studies in medical school.

The Dr. Morris Newberg Scholarship Award

This scholarship was established in memory of Dr. Morris Newberg and is awarded for proficiency in internal medicine.

The School of Medicine Student Diversity Award

This award is presented to a graduating student to recognize extraordinary contributions to medical education and healthcare of groups underrepresented in medicine.

The Department of Obstetrics, Gynecology, and Women's Health Outstanding Third-Year Student Award

This award is given to the student achieving the highest level of academic performance and demonstrating superior clinical performance in obstetrics, gynecology, and women's health.

The Pathology Honor Society

The Pathology Honor Society, presented by the Inter-society Council for Pathology Information, a national honor society, selects student members on the basis of scholastic achievement in the pathology curriculum, research accomplishments as a medical student, leadership potential as evidenced by activities as a medical student, and overall excellence with potential to develop further academically. Students are selected in their second year.

The Hiram C. Polk, Junior, Scholarship Award

This award was established by the graduating surgical residents in 1986 and 1987 to provide financial assistance to a fourth-year medical student who has demonstrated outstanding scholarly achievement as well as an interest in pursuing a career in surgery.

The Dr. Morton and Ann Kasdan Plastic Surgery Outstanding Student Award

In 2012, Dr. Adam Augenstein and Dr. Arun Rao, the graduating plastic surgery residents, established this award to honor their commitment to medical student education. This award is given to the fourth-year medical student that best exemplifies Dr. Kasdan's commitment to the field of plastic surgery.

The HSC Office of Diversity & Inclusion Health & Social Justice Scholar

This award is presented to the student who has shown demonstrable commitment to addressing health disparities in their research, respective professions, and daily life. Moreover recipients completed the planning and implementation of a community-based participatory research project, with real-life community applications.

The Dr. E. Owsley Grant Award for Academic Excellence in Urology

The Department of Urology established this award to honor his commitment to Urology and to the University of Louisville. Dr. Grant, a Louisvillian, was the first person appointed to the University of Louisville faculty as a full-time urologic surgeon. This award is given to a senior student who has excelled in the study of Urology, shown great dedication, work ethic, and plans to enter this specialty field.

The Morgan Williams Award

Dr. Hugh C. Williams, former Associate Professor of Surgery and Associate Dean for Academic Affairs, established the Morgan Williams Award in memory of his son. This award is presented to the student who demonstrates the best performance in surgery during the third year. This award is based on an evaluation of scholarship, devotion to humane patient care, imagination and acceptance of responsibility as judged by the Chair and faculty members.

The Dr. Carroll L. Witten Memorial Award

This award is presented to the outstanding fourth-year medical student entering a family practice residency program in Kentucky.

The Dr. Peter Knoefel Award

Dr. Peter Knoefel joined the faculty in 1935 and served as Professor and Chair of Pharmacology from 1941 to 1966. This award is presented to a fourth year student who has demonstrated ability and interest in clinical pharmacology.

The George I. Uhde Award for Excellence in Otolaryngology

The Dr. George I. Uhde Award for Excellence in Otolaryngology is presented in honor of the late Dr. Uhde who is recognized as the father of modern otolaryngology in the city of Louisville.

The Dean's Award for Scholarship

This award is given annually to the graduating senior with the highest four-year record of academic achievement.

The Dean's Award for Leadership

The Dean's Award for Scholarship is given annually to the member of the graduating class who has demonstrated outstanding leadership during all four years of medical school.

The Leonard Tow Humanism in Medicine Award presented by the Arnold P. Gold Foundation

Recognizes a graduating medical student for excellence in both compassionate patient care and scientific achievement.

The George P. Caldwell Award

In 1954, Dr. William G. Caldwell, an alumnus of the class of 1943, established an award in honor of his father, Dr. George P. Caldwell. The award is presented to a student who has exhibited special proficiency in the study of medicine.

The Dr. Carl Cooper, Jr. Award

This award was established by the Kentucky Medical Insurance Company and is presented to the senior student who has exhibited excellence in the area of doctor-patient relations and communication.

The Merck Manual Book Awards

Books are awarded to outstanding seniors who have shown great scholarly interest. Each year the number of recipients is determined by Merck and is based on the number of graduation seniors.

The Dr. Norvin Green Memorial Prize

In 1919, Miss Susan T. Green established an annual award in memory of her father, Dr. Norvin Green. Dr. Green graduated from the University of Louisville School of Medicine in 1840.

The Tim Lee Carter Award

This award, funded by University of Louisville Medical School Student Senate in honor of Congressman Tim Lee Carter, M.D., is made annually to a fourth year medical student who, during his/her medical studies at the University of Louisville School of Medicine, has made an outstanding contribution in an area of non-academic extracurricular student life.

The Alpha Nu Chapter of the Alpha Kappa Kappa Medical Fraternity Award

This award was established in 1995 by Drs. Hoyt D. Gardner and Letitia Kimsey-Taylor. This award is given in honor of the late Dr. Kimsey-Taylor, a "sister" member of the Alpha Kappa Kappa Fraternity by the Brothers of the Alpha Nu Chapter of the AKK Medical Fraternity. It is given each year to a student who has overcome significant obstacles to achieve his/her degree.

The Dr. Parish B. Cleveland Achievement Award

This award was established in 1954 in honor of Dr. Parish B. Cleveland, an alumnus of the Class of 1943. It is given to the senior who has shown

the greatest improvement by virtue of his/her own efforts during his/her medical career.

The Dr. Ethel Larosa Scholarship Award

This award was established by the Jewish Hospital & St. Mary's Foundation in honor of Dr. Ethel Larosa-Klemens, a physiatrist and champion of innovative pediatric rehabilitation. Dr. Larosa-Klemens was a 1994 graduate of the University of Louisville School of Medicine and was a champion of pediatric rehabilitation in the Louisville community before her death in 2006. This award is presented annually to a female medical student, preferably interested in the field of rehabilitation or pediatrics, for excellence scholastic achievement and service to the community.

The Presley F. Martin Memorial Award

Each year, a graduating senior is chosen by his/her peers to receive the Presley F. Martin award. The student must possess and reflect characteristics of a good physician - ones you would seek in choosing your own physician: competence, ethical behavior, leadership, compassion, humor.

The Student Affairs Award

This award is given annually to a student who has exhibited outstanding cooperation and service to his/her class and the school through joint efforts with the Office of Medical Student Affairs.

The Medical Alumni Award

The Medical Alumni Award was established from the funds contributed by the Medical Alumni Association. It is usually presented to a student (Class of 2024) who has exhibited academic excellence and scholarship during their medical career.

The Dr. Israel Muss Memorial Prize

This award is given annually by those who cherish the memory of Dr. Israel Muss. This award is presented to a student (Class of 2024) who has demonstrated a combination of scholarship, an avid search for technical knowledge, a breadth of interests, and a deep concern for the humanity of all people.

The Dr. Max L. Garon Scholarship Award

The Dr. Max L. Garon Scholarship Award was established by the Sidney I. Kornhauser Foundation. This award honors Dr. Max L. Garon, a graduate of the class of 1929. It is given to a medical student who is an outstanding member of the class (Class of 2024). The Kornhauser Foundation chooses the recipient from three (3) nominations submitted by the Prizes and Awards Committee.

The Schwartz Insurance Group Scholarship Award

This scholarship is awarded to a medical student (Class of 2024) who demonstrates academic achievement, involvement in student activities, and dedication to community service. Need based scholarship as well. The Schwartz Group is interested in 'humanism' members.

The Dr. Herbert Wald Phi Delta Epsilon Scholarship Award

The Phi Delta Epsilon Scholarship Award was first presented in 1975. The award was established with the Sidney I. Kornhauser Foundation by Dr. & Mrs. Herbert Wald. This award is presented to a student who, during their second year (Class of 2025), was outstanding in scholarship,

student leadership, and dedication to service in the community. The Prizes and Awards Committee submits the names of three (3) nominees to the Kornhauser Foundation, from which one (1) recipient is chosen.

The Drs. Murrell H., Martin Z., and Benjamin M. Kaplan Award

This award is administered by the Sidney I. Kornhauser Foundation, and was established by Mr. & Mrs. Joseph H. Kaplan in honor of Mr. Kaplan's three brothers, Drs. Murrell H., Martin Z., and Benjamin M., graduates of the University of Louisville School of Medicine, Class of 1934, 1941, and 1946, respectively. This award is presented annually to a student (Class of 2026) who has exhibited scholarship, leadership, and a keen interest in medicine. The Kornhauser Foundation chooses the recipient from (3) nominations submitted by the Prizes and Awards Committee.

The Janke B. Mains Memorial Award

This award was established in 1979 by the Class of 1982 in memory of their classmate, Janke B. Mains. In March of 1979, Ms. Mains was involved in an automobile accident and she and her child were killed. At the time of her unexpected death, Janke was a first year student who had excelled in Human Embryology. This award honors Janke and her child.

It is presented each year to a student who was in their first year in the previous academic year (Class of 2026). The student must be a parent.

Honor Societies

Medical Honor Societies at UofL

ΑΩΑ: Alpha Omega Alpha

The national honor medical society Alpha Omega Alpha, Alpha Chapter of Kentucky, elects to membership students in their third and fourth years that are outstanding in scholarship and character.

The Gold Humanism Honor Society

The Gold Humanism Honor Society (commonly abbreviated GHHS) is a national honor society that recognizes senior medical students, residents, physician teachers and exemplars for demonstrated excellence in clinical care, leadership, compassion and dedication to service. Students are elected to GHHS during the spring of the third year.

University Services

Student Support Services

Campus Health Services

Bloodborne Pathogen Exposures

In an effort to improve the delivery and follow up care of all UofL students, residents, and staff who experience exposure to bloodborne pathogens, Campus Health Services (CHS) is the designated site for the evaluation and treatment for bloodborne pathogen exposures within the Health Sciences Center. CHS will provide all students, residents and staff with initial and follow up evaluations, risk determinations and treatment for bloodborne pathogen exposures in conjunction with infectious disease specialists if warranted.

Immunizations

The maintenance and tracking of the students, residents, and fellows' immunizations in the HSC Immunization Program is essential for the safety of our patients and trainees as well as for the accreditation of the

clinical facilities that the UofL Schools of Medicine, Nursing and Dentistry use as well as the training programs in Audiology, and Speech Pathology. Failure to maintain appropriate immunizations could lead to disastrous results for patients, healthcare workers, and our affiliated institutions. Compliance with the program's requirements is mandatory for all students, residents, and fellows in clinical training programs. Failure to comply with the program can result in removal from academic programs, suspension without pay, or even termination.

Other services offered by Campus Health Services include:

- Unlimited routine office visits for health maintenance, physicals, blood pressure checks
- Gynecological exams (does not cover outside laboratory charges)
- Medical office visits for illnesses
- Allergy injections
- Phlebotomy services (lab and x-ray fees are paid by patient or patient insurance)
- In-office lab tests such as strep, flu, pregnancy, urinalysis
- Annual surveillance TB skin testing and influenza immunizations
- Low cost generic medications dispensed out of the health office
- Low cost birth control pills
- Post-exposure evaluation, and testing for exposures to blood-borne pathogens such as HIV, Hepatitis B, and Hepatitis C including prophylactic medications when prescribed by the health service for up to thirty days.

Mandatory Health Insurance Requirement

All students enrolled in the MD, DMD, upper division Dental Hygiene and Registered Nurses, ARNP, and the Audiology & Speech Pathology programs are required to have major medical insurance.

The major medical insurance may be waived with proof of similar coverage. Waiver information is sent to students using UofL e-mail accounts giving details on how to enroll or waive the medical insurance. E-mails are sent out starting mid-July for the Fall semester, mid-November for the Spring semester, and mid-May for the Summer semester. You cannot submit a waiver prior to receiving an e-mail.

Health Professional Health Fee

The mandatory health fee is charged to students enrolled on the Health Sciences Center campus, including: the Schools of Medicine, Dentistry, Upper Level Dental Hygiene, Upper Division Nursing, APRN, Speech Pathology, Audiology and School of Public Health and Information. It is designed to meet the special needs of students in the healthcare professions.

Coverage includes:

- Unlimited medical office visits
- Gynecological exams (lab or x-rays are paid by patient or patient insurance)
- Flu shots
- Annual surveillance TB skin testing
- Post-exposure evaluation and testing for Tuberculosis
- Low cost generic medications dispensed out of the health office
- Discounted pharmaceuticals through the UofL Hospital Outpatient Patient Benefits Program
- Post-exposure evaluation, and testing for exposures to blood-borne pathogens such as HIV, Hepatitis B and Hepatitis C including prophylactic medications prescribed by the health service

- Confidential access to a counselor based on the HSC Campus
- Confidential psychiatric consultation

This fee does not provide hospitalization or coverage for tests and services other than those listed above. Students without major medical coverage should purchase the university sponsored medical insurance plan to be fully covered for any illness beyond the scope of this fee.

The mandatory health fee is not medical insurance and does not meet requirements for health insurance.

For more information about Campus Health Services and a listing of their services and resources, please visit their website, louisville.edu/campushealth (<https://louisville.edu/campushealth/>).

Military and Veteran Services

The mission of the Office of Military and Veteran Student Services is to smooth the transition from military life to student life by devoting individualized support to veteran students and their families in providing a broad range of services, coordinating with VA, university departments, and other community organizations.

The staff can assist with the following:

- Identifying federal and state education benefit options
- Advocating military transfer credit
- Withdrawals/re-admit due to deployments or call to Active Duty status
- Connecting veteran students with campus resources, veteran service providers, and other agencies encouraging academic success at the University of Louisville

For more information, visit louisville.edu/veterans (<http://louisville.edu/veterans/>).

Disability Resource Center

The Disability Resource Center fosters an inclusive campus climate through education, service, collaboration, and outreach to the University of Louisville community. We provide support for students with documented disabilities by promoting equal access to all programs and services. Students are strongly encouraged to make early contact with the Disability Resource Center to assure adequate time to implement support services. Please contact the Disability Resource Center at (502) 852-6938 or visit their website at louisville.edu/disability (<http://www.louisville.edu/disability/>).

Courses and Programs

The Medical Education Program

At the University of Louisville School of Medicine, an educational program has been developed that provides each student with the basic knowledge, skills, and attitudes considered essential to all 21st century physicians, yet has sufficient flexibility to allow effective development of a student's individual abilities and interests. The three major components of the program are:

Core Curriculum

The core curriculum, which extends over the four-year course of study, stresses understanding concepts and general principles. It provides vertical and horizontal integration of the sciences so that information in one block of study reinforces ideas and builds upon concepts developed in another.

Year One begins with the normal anatomic structures and their embryologic development along with learning clinical examination skills, and then explores the molecular basis of life and molecular basis of life and molecular mechanisms of disease, infection, and immunity. Year Two investigates the normal cellular structure and function, the pathology and pathophysiology of disease, and corrective treatment for each major organ system. The Introduction to Clinical Medicine course runs throughout Years One and Two and teaches communication and humanism skills, medical history taking, physical exam skills, foundations of medical ethics, culturally competent patient-centered care, interprofessional team care, healthcare systems, and evidence-based medicine.

The core curriculum for the last two years follows a track system of clerkship and elective rotations that exposes students to the major clinical fields of medicine. Required third-year clerkships include Family Medicine, Internal Medicine, Neurology, Obstetrics and Gynecology, Pediatrics, Psychiatry, and Surgery. As part of the Family Medicine clerkship, students complete a four-week rotation at rural or urban AHEC sites to gain experience in caring for patients located in underserved areas of the Commonwealth. The fourth-year schedule includes a sub-internship, selectives in intensive care, and a palliative care rotation, plus at least 26 weeks of elective opportunities.

Additionally, select students have the opportunity to complete their entire third and fourth years of clinical training at the Baptist Health Deaconess Campus (Trover Campus) in Madisonville, KY.

Pre-clinical Electives

Pre-clinical electives are not required; however, there are several offered for credit. The purpose of preclinical electives is to allow each student to extend his/her education in certain areas of scientific knowledge. The electives make it possible to construct a program of medical education that best meets the needs, abilities, and goals of the individual student. Electives can occur in the local or global community and include clinical experiences with under-served populations or global experiences. Students also are permitted to take classroom courses as electives in divisions of the University of Louisville other than the School of Medicine, class schedule permitting. In addition to the courses offered, students with a research interest are permitted to participate in an approved research activity for credit. Elective courses constitute an integral part of the student's total program in medical school.

Clinical Electives

Third-Year students are offered a four-week block plus two additional weeks enabling them to explore a career in sub-specialty areas of medicine that are not required within the core third year clinical clerkships. Fourth-Year students are offered an additional 26 weeks of electives. Of those 26 weeks, approximately 12 of those weeks are spent in electives directly related to the student's choice of residency. Virtually every member of the full-time clinical faculty participates in electives, as do many members of the basic sciences faculty. Students may select an intensive exposure to any of the clinical areas or a research experience in any of the basic science or clinical areas.

For more information about the medical education program mission and objectives, curriculum and curriculum overview visit: louisville.edu/medicine/ume (<http://louisville.edu/medicine/ume/>).

Dual Degree Programs

MD/PhD

The PhD can be earned from any of the basic research departments in the School of Medicine. A wide variety of research experiences are available in top-flight research laboratories. The small size of the program ensures great flexibility in designing a research program and access to the best laboratories on campus.

Read more at: louisville.edu/medicine/degrees/mdphd (<http://louisville.edu/medicine/degrees/mdphd/>).

Questions, contact: Co-Directors Dr. Maxwell Boakye, MD, MBA, FACS, FAANS at (502)-407-3276 or Dr. Kenneth Palmer, PhD at (502) 852-5773 or via email at: mdphd@louisville.edu.

MD/MBA

With the healthcare industry rapidly changing, strengthen your depth of business operations with the dual UofL MD/MBA program. UofL Medical School students are eligible to participate upon completion of their second or third year of medical school, or as a UofL Medical School Alum. Dual degree seeking students must gain admission to both programs independently. As a dual degree student, all business electives are waived in the MBA program although you have the option of enrolling while a student at no cost.

Note: MCAT scores are accepted in lieu of GMAT. Whether your career goals include managing your own practice, developing and marketing biomedical discoveries and medical devices, working to enhance the delivery of outstanding clinical care or improving the health care system, the MD/MBA dual degree will serve you well.

More information is available at: louisville.edu/medicine/degrees/dualdegree/md-mba (<http://louisville.edu/medicine/degrees/dualdegree/md-mba/>).

Questions, contact: School of Medicine – In Kim, MD, MBA at: in.kim@louisville.edu. College of Business – Melanie Higgs, MBA Admissions Director, College of Business, UL at: melanie.higgs@louisville.edu or by phone at (502) 852-2169.

Trover

Baptist Health Deaconess (Trover) Rural Track

In 1998, the University of Louisville Trover Campus at Madisonville began offering medical students from UofL the opportunity to complete the last two years of medical school in a rural community. The Trover Campus is based in Madisonville, KY and is designed to accommodate up to 12 third-year and 12 fourth-year students for their clinical rotations. Students may apply for dedicated admission to the Trover Rural Track Program by indicating their interest on UofL's Secondary Application and completing the Trover Rural Track application.

To view more information about the Baptist Health Deaconess (Trover) Campus, go to baptisthealthdeaconess.com or contact Dr. William Crump, Associate Dean of Trover Campus and Professor of Family Medicine at UofL at william.crump@baptistdeaconess.com or Kendall Denny at kendall.denny@baptistdeaconess.com.

Interested students may also call (270) 824-3515 or (800) 217-9149 for more information.

Distinction Tracks

Distinction Track Goals

The Distinction Track Program is an extracurricular program at the University of Louisville School of Medicine. It was created to meet two primary goals:

- To increase the number of students choosing a career in academic medicine, and
- To provide students with the opportunity for academic exploration and scholarly productivity in an area in medicine for which they have a passion.

The University of Louisville currently has six Distinction Tracks:

- Business and Leadership
- Global and Public Health
- Medical Education
- Research
- Health Equity and Medical Justice
- Urban Primary Care

Each distinction track is unique in its requirements, ensures a mentored longitudinal experience, and culminates in a scholarly project. Students have the option to apply for a distinction track in years one or two depending upon track. louisville.edu/medicine/distinction-tracks (<http://louisville.edu/medicine/distinction-tracks/>)

Distinction in Business and Leadership

The Distinction in Business and Leadership Track provides a fundamental knowledge base that explores the intersection of business and medicine, and arm trainees with a vital skill set to succeed in our health economy.

Distinction in Global and Public Health

The Distinction in Global and Public Health Track introduces students to various aspects and perspectives of global and public health through the lenses of clinical, social, political, and epidemiological study. The track facilitates extensive interdisciplinary participation in the professional fields of global and public health. Goals are to provide service-oriented learning and to train and mentor the next generation of innovative physician leaders who care for the world's poor and work to combat health inequities.

Distinction in Medical Education

The MD with Distinction in Medical Education is a longitudinal experience that will introduce students to core principles in medical education and allows them to develop and apply skills in multiple teaching formats. The track provides insight into the structure and function of academic medicine.

Distinction in Research

The Distinction in Research track provides medical students with meaningful and productive research experiences that enrich their medical school training. The role of clinician as researcher and the methods of basic and translational research will be taught throughout the DIR track. The format will include equipping the students with commonly used tools for research and hands-on mentored research experience.

Distinction in Health Equity and Medical Justice

The Distinction in Health Equity and Medical Justice (DHEMJ) track is designed to provide professional and personal development opportunities to refine student skills and competencies as change agents for health equity using a social justice framework.

Distinction in Urban Primary Care

The Urban Primary Care Distinction Track aims to produce competent, compassionate primary care physicians equipped with the skills to serve urban populations, particularly in underserved areas. The track focuses on practical experience, community engagement, and an in-depth understanding of urban health dynamics.

Doctor of Medicine Coursework

Course Index for the MD Program

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

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Anatomical Sciences and Neurobiology (ASNB)

Courses numbered 800+ are considered professional/first-professional-level courses. Courses numbered 500-799 are considered Graduate-level coursework, but may be appropriate for some students (e.g., those in dual degree programs).

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

ASNB 816. Special Project-Anatomy**1-16 Units****Prerequisite(s):** Permission of the instructor.**Description:** This course is offered to meet the individual needs of students whose background exempts them from portions of the traditional anatomy courses or students who desire advanced study. The student and any faculty member design the course together. Credits and schedule to be arranged.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ASNB 909. Independent Study or Research**1-16 Units****Prerequisite(s):** Permission of the instructor.**Description:** This course is designed to provide an in-depth study of anatomy working with a faculty member in the field of the students' interest. Goals: The student will develop with the supervising faculty member's approval objectives and a plan of study which will meet the academic needs.**Note:** Method of Evaluation to be determined by the supervising faculty member.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Anesthesiology (ANES)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

ANES 816. Special Project-Anesthesiology**1-16 Units****Description:** This course is to be arranged to fit individual needs to cover topics of current interest or to participate in research projects or to receive some advanced training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ANES 860. Introduction to Anesthesiology**2 Units****Description:** This elective course seeks to introduce the second-year student to anesthesiology and related areas of patient care in the setting of the operating room. Short reading assignments will augment the clinical experience and explore the relationship between pharmacology, physiology and routine anesthetic care.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ANES 865. Introduction to Pain Management

1 Unit

Description: Second-year elective. This is an introduction to comprehensive management of pain, which includes the techniques and methods for the diagnosis and treatment of acute and chronic pain. This comprehensive approach will be shown in the Pain Clinic on multidisciplinary aspects of the pain control and management including the psychosocial aspects.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ANES 905. Area Health Education Center Rotation-Anesthesia **1-4 Units**

Prerequisite(s): Fourth-year standing.

Description: A four-week clinical experience will be obtained in various anesthesiology practices in rural Kentucky. The student will be encouraged to participate in the community to gain an understanding of how the community characteristics affect medical care delivery. Method of Evaluation: Observation of performance

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ANES 906. Clinical Elective-Urban

1-4 Units

Prerequisite(s): Third-year standing.

Description: This elective will allow the student to obtain a clinical experience in the private practice of a community anesthesiologist. The student must complete the Off-Campus Request Form and have it approved by the departmental course director. Method of Evaluation: Observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ANES 907. Clinical Elective-Off-Campus

1-4 Units

Prerequisite(s): Fourth-year standing.

Description: A clinical experience may be obtained in an approved program in Anesthesiology under the supervision of a full-time member of the faculty of a duly recognized educational or research institution. The student must complete the Off-Campus Request Form and have it approved by the departmental course director. Method of Evaluation: Observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ANES 911. Clinical Anesthesia

1-16 Units

Prerequisite(s): Third-year standing.

Description: This is a four-week elective. A broad experience in the operating room where the students will be taught general and regional anesthetic techniques under supervision with emphasis on pre-anesthetic evaluation, intraoperative management, post anesthesia recovery and respiratory care. Students will also have the opportunity to rotate through critical care, OB-anesthesia and pain management. This elective is designed to provide experience in clinical anesthesiology and to attain experience in the technical aspects of the specialty. The hands-on experience will enhance the understanding of the basics of the specialty. Method of Evaluation: Attendance at morning conference and observation of performance.

Note: Withdrawal from this elective must take place 30 days prior to start date.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ANES 912. Anesthesiology Research

1-16 Units

Prerequisite(s): Fourth-year standing.

Description: Participation in research activities through the use of experimental animals. This elective is intended to provide firsthand experience in basic surgical and anesthetic techniques, as well as exposure to anesthesiology research methodology to familiarize the student with a wide variety of patient monitoring devices and their proper application.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ANES 916. Acting Internship in Anesthesiology**Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** Fourth Year Standing.

Description: AI Selective This course is designed to provide medical students with an introductory experience into the many facets of the practice of Anesthesiology. Students will spend 4 weeks rotating with anesthesia providers in the main OR, pre-op clinic, pain clinic, labor and delivery unit, neurosurgical intensive care unit, and regional anesthesia/acute pain service. Students will be responsible for performing preoperative evaluations and will receive increasing intraoperative responsibilities as dictated by the attending faculty. Students will function at all times under the direct supervision of junior and senior residents, and service attending physicians. Students will present a formal case presentation to the clerkship director and their peers. The case must come from a patient seen on the service, and the presentation will be evaluated by faculty using the Grading Rubric for Presentations attached to this document. Presentations must include the preoperative evaluation, intraoperative documentation, and relevant post-operative information. Students should do a relevant literature review and have prepared discussion topics.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

4 Units**BIOC 547. Advanced Biochemistry II****Term Typically Offered:** Spring Only

Prerequisite(s): BIOC 545 Biochemistry of nucleotides and nucleic acids; RNA, DNA and protein biosynthesis, biomembrane phenomena, enzyme properties, kinetics, and control mechanisms; ligand binding.

Description:

Note: Credit may not be earned in both BIOC 547 and BIOC 647.

3 Units

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 603. Special Topics in Biochemistry**1-4 Units**

Prerequisite(s): BIOC 645 and BIOC 647 (or concurrently), or consent of instructor.

Description: Arranged to fit individual needs on topics of current interest or to receive some advanced training or conduct research project.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 606. Biochemistry Seminar**1 Unit**

Description: Both Fall and Spring semesters.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 611. Techniques in Biomolecular Interactions**4 Units**

Term Typically Offered: Fall Only

Prerequisite(s): Student must be registered in the graduate school.

Description: Biochemical, molecular, and bioinformatic techniques to understand cellular interactions, including chromatin associations that inform DNA structure, editing, and gene expression; protein-protein interactions; and protein: ligand associations that influence enzyme activity.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 613. Biochemistry Laboratory**2-4 Units**

Grading Basis: Pass/Fail

Description: The course will consist of participation in the research programs of two laboratories in the department. A half-semester will be devoted to each laboratory. Pass/Fail grading.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 619. Research**1-15 Units**

Grading Basis: Pass/Fail

Description: Biochemistry research.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Biochemistry (BIOC)

Courses numbered 800+ are considered professional/first-professional-level courses. Courses numbered 500-799 are considered graduate-level coursework, but may be appropriate for some students (e.g., those in dual degree programs).

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

BIOC 545. Biochemistry I**3 Units**

Term Typically Offered: Fall Only

Description: Chemistry of amino acids, protein structure and function; metabolism of carbohydrates, fats and amino acids.

Note: Credit may not be earned in both BIOC 545 and BIOC 645.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 620. Scientific Method and Grant Writing**2 Units****Grading Basis:** Pass/Fail**Term Typically Offered:** Spring Only**Prerequisite(s):** Restricted to students in the Biochemistry and Molecular Genetics graduate programs; permission of course director.**Description:** This objective of this course is to introduce students to the fundamentals of grantsmanship. The topics incorporate all aspects for grant application process as well as overview of the scientific method, generation of hypotheses, and research design. Student-directed learning is a major component for this course with the summative event being completion of a grant proposal. A reiterative writing process for proposal development will be ongoing throughout the course.**Note:** May be repeated once for up to 4 credits.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 630. Responsible Conduct of Research: Survival Skills and Research Ethics**1-4 Units****Grading Basis:** Pass/Fail**Description:** The topics covered include 11 areas of Research Compliance training mandated by the NIH for training grants and focuses on contemporary research ethics in biomedical sciences.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 640. Principles of Biochemistry**5 Units****Term Typically Offered:** Spring Only**Prerequisite(s):** Consent of instructor.**Description:** Covers general aspects of biochemistry with special emphasis given to areas applicable to dentistry. Topics include protein structure and function; chemistry and metabolism of carbohydrates, lipids, amino acids, and nucleotides; molecular genetics; nutritional biochemistry; calcification; and molecular endocrinology. Clinical conferences keyed to current lecture topics are presented by clinical faculty.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 645. Advanced Biochemistry I**4 Units****Term Typically Offered:** Fall Only**Prerequisite(s):** Students must be registered in the graduate school.**Description:** Chemistry of amino acids, protein structure and function; metabolism of carbohydrates, fats and amino acids.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 647. Advanced Biochemistry II**4 Units****Term Typically Offered:** Spring Only**Prerequisite(s):** BIOC 545 or BIOC 645 or consent of instructor.**Description:** Biochemistry of nucleotides and nucleic acids; RNA, DNA and protein biosynthesis, biomembrane phenomena, enzyme properties, kinetics, and control mechanisms; ligand binding.**Note:** Credit may not be earned in both BIOC 547 and BIOC 647.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 648. Journal Club in Biochemistry and Molecular Genetics **1 Unit****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall Only**Description:** This course will consist if student presentations of primary, peer-reviewed literature featuring current knowledge and techniques relevant to biochemical, molecular, and genetic understanding of molecular and cellular processes in health and disease.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 661. Molecular Mechanisms of Toxicology**3 Units****Term Typically Offered:** Spring Only**Description:** Molecular interactions of drugs and toxicants on cellular processes; including foreign compound metabolism, signal transduction, cell cycle, DNA repair/DNA replication are covered and put in context topics in molecular epidemiology.**Note:** Crosslisted with PHTX 661.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 662. Biomedical Research Data Analysis Methods**1 Unit****Term Typically Offered:** Summer Only**Prerequisite(s):** Currently enrolled graduate students in good standing.**Description:** A lecture and discussion course designed for graduate students desiring to learn the basic statistical methods and data presentation approaches that are used in biomedical research.**Note:** This course requires permission from the instructor.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 663. High-Throughput Sequencing Data Analysis**3 Units****Term Typically Offered:** Fall Only**Prerequisite(s):** Students must be registered in the graduate school and are expected to have a basic understanding of molecular biology.**Description:** Permission from the course director is needed for students not meeting these prerequisites. High-Throughput Sequencing Data Analysis will focus on current issues in bioinformatics, including: next generation sequencing; microRNA and mRNA integrative analysis; epigenetics, metagenomics, personalized genomics, and single cell sequencing.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 667. Cell Biology**3 Units****Term Typically Offered:** Spring Only**Prerequisite(s):** One quarter of graduate level biochemistry or consent of instructor.**Description:** An advanced treatment of contemporary cell biology including membrane structure and function, cytoskeleton, signal transduction, regulation of cell cycle, apoptosis, and molecular mechanisms of cellular differentiation. Graded.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 668. Molecular Biology**3-4 Units****Term Typically Offered:** Spring Only**Prerequisite(s):** Student must be registered in the graduate school.

Description: Students are expected to have a basic understanding of molecular biology principles and protein structure. Best preparation for succeeding in the course is previous course in biochemistry and experience with reading scientific literature. Permission from the Course Director is needed for students not meeting these prerequisites. This course examines the fundamental principles of molecular biology as they apply to mechanisms controlling gene expression. Topics include: transcriptional and post-transcriptional regulation of gene expression; RNA and miRNA biology; and protein synthesis and regulation. An emphasis will be on student-directed learning requiring completion of pre-class reading, and in-class discussion of current literature.

Note: Crosslisted with BIOL 668.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 670. Biomedical Genetics and Genomics**3-5 Units****Term Typically Offered:** Fall Only**Prerequisite(s):** Students must be registered in the Graduate School.

Description: This course examines the fundamental principles of genetics and genomics as they apply to biomedical research. Topics include: Mendelian, population, quantitative genetics, epigenetics, and bioinformatics. An emphasis will be on reading and critiquing current literature.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 675. Cancer Biology**4 Units****Prerequisite(s):** BIOC 545 or BIOC 645 or equivalents.

Description: A comprehensive course on cancer biology with emphasis on molecular mechanisms and research. Topics will include: the public health impact of cancer, molecular mechanisms of carcinogenesis and metastasis, host-tumor interactions, current and future molecular therapies and prevention, apoptosis, tumor immunology, cancer genetics and genomics, prevention, metabolism in cancer cells, signal transduction, cell cycle, and oncogenes and tumor suppressor genes. There will also be clinical-based lectures.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 680. Biomolecular Interactions**2 Units****Prerequisite(s):** BIOC 645 and BIOC 647 or equivalents.

Description: This course examines techniques used to characterize biomolecules and their interactions including surface plasmon resonance, equilibrium dialysis, microcalorimetry, analytical ultracentrifugation, dynamic light scattering and absorption fluorescence and circular dichroism spectroscopies.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

BIOC 816. Special Project-Biochemistry**1-16 Units**

Description: This course is to be arranged to fit individual needs to cover topics of current interest or to participate in research projects or to receive some advance training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Cardiovascular and Thoracic Surgery (CATS)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

CATS 816. Special Project**1-16 Units****Grading Basis:** Pass/Fail

Description: This course is to be arranged to fit individual needs to cover topics of current interest, to participate in research projects or to receive some advanced training. Student must complete the Special Project form, have it signed by your mentor and return to Student Affairs in order to receive credit.

Note: Method of Evaluation to be determined by faculty mentor based on the specific project.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

CATS 906. Clinical Elective-Urban**1-4 Units****Grading Basis:** Pass/Fail**Prerequisite(s):** Fourth-year standing.

Description: This elective is designed to offer the student an opportunity to obtain clinical experience in the private practice of a community surgeon in the Louisville Metropolitan Area. The student will participate in both office and hospital settings and learn both the clinical as well as the organizational aspects of surgical practice. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

CATS 907. Clinical Elective, Off-Campus**1-4 Units****Grading Basis:** Pass/Fail**Prerequisite(s):** Fourth-year standing.

Description: The purpose of this course is to offer a clinical experience in an approved program in Surgery, usually under the supervision of a full-time member of the faculty of a duly recognized educational or research institution. This experience will provide the student an opportunity to further develop clinical surgical knowledge and to assume responsibility for all aspects of patient care as a member of the surgical resident team. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

CATS 911. Adult Thoracic Surgery**4 Units****Prerequisite(s):** Third-year standing.

Description: In this four-week elective students will rotate through the adult thoracic surgery service at Jewish Hospital/University of Louisville Hospital. Students will participate in morning rounds, preoperative planning, assist in operations, follow all patients on whom they were present for the operation and participate in post-operative and discharge planning. It is expected that the student will attend clinic at least once day a week. The student is expected to write daily notes, develop a daily plan, and present the patients to the attending physician. Students will be expected to observe/assist in a wide variety of procedures, include but not limited to lung resection for benign & malignant disease, surgery for tracheal disease, surgery for benign & malignant disease of the esophagus, and lung transplantation. The student is expected to keep a daily log of the procedures and the learning points of the day. In addition, the student is expected to attend weekly fellow's teaching conferences and be responsible for one presentation during the rotation, the weekly department conference, and any additional conferences pertaining to the management of the patients which they are following, (i.e., tumor board). The student will not take call but will be required to round on one weekend during the rotation.

Note: Method of Evaluation is 1) the student will be required to keep a procedure log with daily activities as well as a journal of the learning points of the day; 2) the student will prepare and present a PowerPoint presentation during the rotation that will follow the American Board of Thoracic Surgery Curriculum; 3) attendance policy is strictly enforced; and 4) the student evaluation is based on their attendance, availability, quality of participation in cases and the aforementioned case presentation and weekly lectures.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

CATS 912. Adult Cardiac Surgery**4 Units****Prerequisite(s):** Third-year standing.

Description: In this four-week elective the student will rotate through the adult cardiac surgery service at Jewish/UofL Hospital, assigned to a specific surgeon daily with every effort made for the student to follow a single surgeon and patients for a complete week. The student will participate in morning CVICU rounds, preoperative planning, assist in cardiovascular operations, follow patients on whom they were present for the operation, and participate in postoperative and discharge planning. It is expected that the student attend clinic at least one day a week. The student is expected to write daily notes, develop a daily plan, and present the patients to the attending physician. Students will be expected to observe/assist in a wide variety of procedures, to include but not limited to: coronary artery bypass grafting, valve repair and replacement, advanced aortic reconstruction, transcatheter aortic valve replacement, endovascular aortic repair, ventricular assist device, and cardiac transplantation. The student is expected to keep a daily log of the procedures and learning points of the day. In addition, the student is expected to attend the weekly fellow conference and be responsible for one presentation during the rotation as well as attend the weekly department conference. The student will not take call but will be required to round on one weekend during the rotation.

Note: Method of Evaluation is that 1) the student will be required to keep a procedure log with daily activities as well as a journal of the learning points of the day; 2) students will prepare and present a PowerPoint presentation during the rotation that will follow the American Board of Thoracic Surgery Curriculum; 3) the attendance policy is strictly enforced; and 4) the student evaluation is based on attendance, availability, quality of participation in cases and the aforementioned case presentation and weekly lectures.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

CATS 913. Cardiovascular Intensive Care Unit**4 Units****Prerequisite(s):** Third-year standing.

Description: In this four-week elective the student will rotate through the cardiovascular intensive care unit. The student will assist the mid-level health professionals and fellows in assessing patients in the CVICU. The student is expected to select 5 patients daily and will write daily notes, develop a daily plan, and present patient on multidisciplinary rounds to the intensivist and rounding team. Students will be expected to observe/assist in a wide variety of procedures, to include but not limited to: central line placement, arterial line placement, thoracentesis & thoracostomy tube placement, & bedside chest explorations and ECMO cannulation. The student is expected to attend weekly fellow conference and be responsible for one presentation during the rotation, weekly department conference, as well as the bimonthly intensivist meeting. The student will not take call but will be required to round on one weekend during the rotation.

Note: Method of Evaluation is 1) the student will be required to keep an active log with daily activities as well as participate in a minimum of 10 procedures; 2) prepare and present a PowerPoint presentation during the rotation that will follow the American Board of Thoracic Surgery Curriculum; 3) attendance policy is strictly enforced; and 4) the evaluation is based on attendance and availability, quality of participation in cases and the aforementioned case presentation, and weekly lectures.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Diagnostic Radiology (RADI)

Courses numbered 500-799 are considered Graduate-level coursework. Courses numbered 800+ are considered professional/first-professional-level courses.

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

RADI 816. Special Project-Radiology 1-16 Units

Description: This course is to be arranged to fit the individual needs to cover topics of current interest, to participate in research projects or to receive some advanced training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

RADI 905. Area Health Education Center Rotation-Radiology 1-4 Units

Prerequisite(s): RADI 911, fourth-year standing; this experience must be scheduled through the clinical coordinator for the Radiology department and the AHEC Office.

Description: A four-week clinical experience will be obtained in various radiological practices in rural Kentucky. The student will be encouraged to participate in the community to gain an understanding of how the community characteristics affect medical care delivery.

Note: Method of evaluation is attendance, observation of performance and participation.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

RADI 906. Clinical Elective-Urban 1-16 Units

Prerequisite(s): RADI 911, fourth-year standing.

Description: This elective allows the student to obtain clinical experience in the private practice of a community radiologist or in a community hospital setting. The goal of the elective is for the student to be a participant in the same hospital. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

RADI 907. Clinical Elective-Off Campus

1-16 Units

Prerequisite(s): RADI 911, fourth-year standing.

Description: This elective allows the student to obtain clinical experience in an approved program in Diagnostic Radiology under the supervision of a full time member of the faculty of a duly recognized educational or research institution. The student must complete the Off-Campus Request Form and have it approved by the departmental course director. Method of evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

RADI 911. Diagnostic Radiology

1-4 Units

Prerequisite(s): Fourth-year standing.

Description: This rotation can be two or four weeks. The goals of this rotation is to expose the student to both clinical and technical aspects of Diagnostic Radiology; to provide a broader understanding of the principles of radiology and with the many imaging modalities used; to provide an understanding of the values and limitations of various imaging studies and how they may best be used in patient management; to review the basic anatomy and pathology as seen on imaging studies; and to provide advice and mentoring of students who are interested in Diagnostic Radiology as a career. Students will rotate through 6 core rotations: Chest, ER, GI/GU, Neuroradiology, Body Imaging and Musculoskeletal. Other subspecialties available upon permission. The student will attend morning readouts with attending and residents, will observe various imaging exams, the working interpretive sessions between the attending and resident and the interaction of radiology with the referral services. Specific didactic

Note: Method of evaluation includes attendance, quality of participation in discussions, multiple choice exam and teaching file case.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

RADI 913. Interventional Radiology

2-4 Units

Prerequisite(s): Fourth-year standing.

Description: Two or four weeks. Students will be expected to observe and assist in a wide variety of procedures including, but not limited to, venous access, arteriography, chemoembolization, image guided biopsies, radioembolization, TIPS, and percutaneous vertebroplasty. The student expected to attend any vascular & interventional conferences provided by the faculty. The student will not take call. Reporting time is 7:30 am and will assist the rotating resident in consenting the patients prior to procedures. Method of Evaluation: The student will prepare and present a case observed during the rotation, attendance policy is strictly enforced, the student evaluation is based on their attendance & availability, quality of participation in cases and the case presentation.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

RADI 916. Basic Imaging Skills for Pediatric Care**1 Unit****Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** 2nd year standing.

Description: This elective is a lecture series discussing imaging topics critical to pediatric practice. It is set up as a "how to" seminar designed to teach medical students basic skills for approaching/interpreting scans using various imaging modalities. The series will consist of 7 1-hr sessions; 6 lectures and 1 final exam. Students will be expected to study 1 hour outside of class per lecture hour and 2 hours per exam hour. The topics discussed include how to: Read a chest X-Ray, interpret Emergent Abdominal Imaging, Locate Fractures, Read Emergency, Head CT's, Image the Enlarged or Misshapen Infant Head, Identify imaging findings of child abuse. Overall, the course targets medical students interested in pediatrics, teaching the basic principles of radiology with an emphasis on recognizing significant pediatric pathology and emergent conditions regardless of specialty.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Emergency Medicine (EMED)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

EMED 816. Special Project-Emergency Medicine**1-16 Units**

Description: This course is to be arranged to fit individual needs to cover topics of current interest of to participate in research projects or to receive some advanced training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

EMED 825. Intro Emergency Medicine-Overview Spec**1 Unit**

Description: Second-year elective. Emphasis will be placed on clinical presentations, recognition and treatment of various medical and surgical emergencies, including blunt and penetrating trauma, pulmonary and cardiac emergencies, with emphasis placed on anatomy, physiology and pathology.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

EMED 826. Medical Toxicology**1 Unit**

Description: The primary goal of this second-year, elective course is to introduce the student to the management of common poisonings and overdoses. Resources unique to toxicology (such as poison control centers) will also be discussed.

Note: Method of Evaluation-Examination.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

EMED 902. Advance Cardiac Life Support**1 Unit**

Prerequisite(s): Current BLS certification.

Description: Fourth-year requirement. At the end of this course, students will have recognition and advanced management of cardiac arrhythmias and dysrhythmias, with emphasis on pharmacologic and non-pharmacologic treatment modalities and ancillary skill procedures.

Note: Method of Evaluation: Passing score on written examination and satisfactory skill performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

EMED 905. Area Health Education Center Rotation-Emergency Medicine**1-4 Units**

Prerequisite(s): Fourth-year standing.

Description: This rotation is scheduled through the clinical coordinator in Emergency Medicine and the AHEC Office. This four-week clinical experience will be obtained in various Emergency Medicine practices or programs in rural Kentucky. The student will be encouraged to participate in the community to gain an understanding of how the community characteristics affect medical care delivery.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

EMED 906. Clinical Elective-urban**1-16 Units**

Description: This elective will allow the student to obtain a clinical experience in the practice of a community Emergency Medicine setting. The student must complete the Off-Campus Request Form and have it approved by the departmental course director. Method of Evaluation: Observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

EMED 907. Clinical Elective, Off-Campus**1-4 Units****Prerequisite(s):** Fourth-year standing.**Description:** A clinical experience may be obtained in an approved program in Emergency Medicine under the supervision of a full-time member of the faculty of a duly recognized educational/research institution. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.**Note:** Method of Evaluation is observation of performance.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

EMED 910. Ambulatory Rotation-Emergency Medicine**1-4 Units****Prerequisite(s):** Fourth-year standing.**Description:** AR or AI Selective course. During this four-week experience, students will spend approximately 40 hours per week in the Emergency Department (ED) providing patient emergency care. Clinical responsibilities include: initial ED triage and evaluation, formulation of diagnostic and therapeutic plans, disposition and referral to appropriate services. In addition to clinical management, there will be an examination at the end of the rotation and weekly lectures.**Note:** Methods of Evaluation: Observation of clinical skills includes that knowledge base and acquisition of skills is evaluated by the faculty and residents for a composite evaluation; 75% of final grade is based on this evaluation, a written final examination, based on the lectures and textbook will comprise 20% of the grade, and the other 5% of the grade comes from quizzes, while a patient log must be maintained and submitted to the department at the completion of the rotation.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

EMED 912. Emergency Medicine Bootcamp**2 Units****Prerequisite(s):** 4th-year student who matched in Emergency Medicine.**Description:** This elective is only offered 4/10-4/21/23. This two-week elective is designed to offer the fourth-year medical student who successfully matched in an Emergency Medicine residency the skills needed during the first year of residency. Based upon ACGME Milestones, simulation-based education, web-based modules and didactic lectures by Emergency Medicine faculty will provided the foundation necessary to be successful as an Emergency Medicine resident.**Note:** Method of Evaluation is that students will complete a test at the end of the elective and the course faculty will observe the student perform all skills taught during the elective.**Note:** This elective will only be offered 4/5-4/16/2021.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

EMED 913. EMS**1-2 Units****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring, Summer**Description:** The EMS Student Elective is open to second-, third-, and fourth-year students (second-year students can only take this elective between first and second year) and will focus upon the basic concepts of EMS delivery as it relates to the Louisville metro area as well as pre-hospital experiences. The course teaches students what the scope of pre-hospital care is as well as how to best be prepared when patients enter their scope of practice. Further, this elective allows students to explore the city of Louisville and learn about the dynamics of the differing population demographics.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Family Practice (FMED)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

FMED 816. Special Project-Family Medicine**1-16 Units****Description:** This course is to be arranged to fit individual needs to cover topics of current interest, to participate in research projects or to received some advanced training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 835. Elective in Rural Medicine
1 Unit

Description: Second-year elective. This elective meets 3 hours/month, mostly evenings, including an informal evening meal. The goal of this elective is to provide regular exposure to the issues of rural practice. Dr. Bill Crump and the Kentucky Academy of Family Physicians will assist with providing speakers to address common issues of rural medicine. Occasional site visits to rural practice will replace the monthly session. Topics include: practice management, time management, understanding Medicaid, working with the local school system, keeping your practice young, women's health in rural areas, working with local leaders, mental health in rural areas, when to consult and when to refer, telemedicine and working with the local health department.

Note: Method of Evaluation is paper and oral presentation.

Note: Meets 3 hrs/month throughout the academic year, except December and April.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 901. Family Medicine Clerkship
7.5 Units

Description: Required third-year clerkship. This six-week family medicine clerkship will enable students to understand the principles of family medicine and their application in community practice. Four weeks of the rotation will be spent with a family physician in an approved AHEC location in Kentucky. The remaining two weeks will be spent with the UofL DFGM faculty. The student will work primarily in the outpatient setting although opportunities for inpatient care and nursing home care are a part of many of the practice sites. The students will observe the family physician's interactions with sub-specialists and use of allied health professionals. The students will gain an appreciation of different skills required to manage patients in the outpatient setting and in the context of the family unit. Small-group sessions and web-based cases will complement required readings for delivery of course content. The curriculum focuses on common problems, preventive medicine, community health, and geriat

Note: Method of Evaluation: Observation of performance, Service Learning Project, Web-based nutrition cases, clinical competency cards, standardized patient encounters and Family Medicine Subject Examination from the National Board of Medical Examiners.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 902. Acting Internship in Family Medicine
4 Units

Prerequisite(s): Fourth-year standing, superior performance in core family practice.

Description: AI selective. During this four-week experience, students will assume the role of interns on the family medicine hospital service, working at University, Jewish, Norton and Kosair hospitals. The student will take in-house overnight call once a week and will make rounds on weekends and holidays following the direction of the upper level resident and attending. Students will be given responsibilities appropriate for their level of training and will have supervision by interns, upper level residents and service attendings. In general, students will be responsible for 2-4 patients at a time. Responsibilities of the student would include: initial evaluation of assigned patients including written H&P for the chart, daily rounds with hospital team, writing progress notes and orders on the charts for assigned patients, appropriate consultation and follow-up of consults, dictate discharge summaries, assist other team members in care of patients, presentation of topics relevant to assigned pa

Note: Student will be evaluated via the following methods: Faculty and residents on the service will evaluate the student on knowledge, skills and attitudes, service attending will grade the student's verbal presentation of topics and/or articles and score from a departmental exam.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 903. Senior Honors Program In Family Medicine
1-8 Units

Prerequisite(s): Fourth-year standing, superior performance in core family practice.

Description: This four-to-eight week elective is intended to pair observation students with a preceptor of choice in order to complete a structured experience in community oriented primary care. The site of this elective may be local, regional, national or international. Each student will select a problem with the assistance of the program director and the preceptor, develop a project to collect data, reach a diagnosis and plan for intervention. The problem selected may be targeted at the individual patient, family, community or physician level. A presentation of the project will be expected at the conclusion of the elective at Senior Seminar. The student will develop an increased awareness of the issues involved in carrying out effective primary care prevention programs; will apply the epidemiological principles to the community oriented assessment of health status and formulate and report a plan to intervene in an identified health problem by synthesizing the data collected from interviewing a wide variety of those concerned with health care delivery.

Note: Method of Evaluation is observation of clinical performance and final presentation.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 905. Area Health Education Center-Family Medicine 1-16 Units
Prerequisite(s): Fourth-year standing.

Description: This rotation must be scheduled with the clinical coordinator for Family Medicine and the AHEC Office. Arrangements should be made eight weeks before the start of the rotation with the Clinical Coordinator in Family Medicine and AHEC Office. This four-week clinical experience will be attained in various family physicians offices in designated AHEC areas of rural Kentucky. The exact nature of the rotation will vary depending on the site. Private practices, public health clinics, other ambulatory care facilities and inpatient facility experience may be included. The student will be encouraged to participate in the community to gain an understanding of how the community's characteristics affect medical care delivery. Students are expected to live in the area of the practice they select for the four-week period.

Note: Method of Evaluation: Observation of performance and submission of patient log and diagnosis seen during the rotation.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 906. Clinical Elective-Urban 1-4 Units

Prerequisite(s): 4th year standing FMED 901; arrangements should be made four weeks before the start of the program.

Description: This rotation will take place in a family physicians office within Jefferson County. Experience will be gained in the outpatient and, when applicable, the inpatient setting in hospitals around the community. Attendance and participation in family practice residency conferences will be encouraged but not required. The goal of the elective is to expose the student to the field of family practice as it is practiced in an urban community. The student is expected to gain not only an understanding of the practice of family medicine but the role of the physician in the community at large. Objectives are for the student to gain an understanding of the concept of continuity of care, preventive medicine and the principles of cost effectiveness. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance and submission of patient log and diagnoses seen during the rotation.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 907. Clinical Elective, Off-Campus 1-16 Units

Prerequisite(s): Third-year standing; FMED 901; arrangements should be made four weeks before the start of the program.

Description: This is a rotation in urban family medicine to be taken outside of Jefferson County in a non-AHEC area of the state of Kentucky. This rotation will take place in a family physician office within Lexington or northern Kentucky area. Experience will be gained in the outpatient and when applicable, the inpatient setting in hospitals around the community. The goal of the rotation is to expose the student to the field of Family Medicine as it is practiced in an urban community. The student is expected to gain not only an understanding of the practice of family medicine, but the role of the physician in the community at large. The student should gain an understanding of continuity of care, preventative medicine, and the principles of cost effectiveness. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance and submission of patient log and diagnoses seen during rotation.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 908. Clinical Elective, Outside Kentucky 1-4 Units

Prerequisite(s): Fourth-year standing; arrangements should be made four weeks before the start of the program and the student is expected to meet with FMED residency director before departure.

Description: This elective will take place within the United States but outside the Commonwealth of Kentucky and may include the other 49 states and the District of Columbia. The local preceptor should be a board certified family physician. The exact course description will vary with the site of the elective. Possible sites may include other departments of family medicine and medical schools, other community/hospital-based family practice residency programs, rotations in private physician's offices, rotations in departments of public health or another applicable rotation as arranged by the student. The student will be encouraged to participate in the community and to gain the understanding of how its characteristics affect the delivery of health care. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 910. Ambulatory Rotation-Family Medicine
1-4 Units

Prerequisite(s): Fourth-year standing.

Description: AR Selective. The medical student will spend four weeks in an ambulatory clinical experience assuming the responsibility for patients in cooperation with a preceptor and participating in community activities with the preceptor. Students are expected to perform at the level of an acting intern. Supplementary instruction will include independent self-learning (assigned readings) and attending Family Practice Grand Rounds on Friday mornings at Jewish Hospital.

Note: This rotation is for a private practice ambulatory setting, not Sports Medicine; to schedule Sports Medicine, please use FMED 923.

Note: Method of Evaluation: Objective & subjective evaluation by the preceptor of knowledge, skills, attitudes of student by direct observation; pre- & post- skills assessment by the student and a patient log must be maintained and submitted to the department at the end of this rotation.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 912. Geriatric Medicine
2-4 Units

Prerequisite(s): Third-year standing, FMED 901; this elective must be scheduled with the clinical coordinator for Family Medicine.

Description: This two-to-four-week elective is designed to provide the medical student with an in-depth exposure to comprehensive care for the geriatric patient. The rotation focuses on evaluation and management of the medical & psychosocial aspects of aging. It exposes the student to different environments of caring for the geriatric patient, from nursing homes and home visits to outpatient clinic visits. Students will gain an understanding of routine medical management of the geriatric patient in the outpatient setting, preventative care, geriatric syndromes and management, care of the hospitalized patient, and palliative care.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 917. School Health
2 Units

Prerequisite(s): Fourth-year standing; this elective must be scheduled with the clinical coordinator for Family Medicine and student must meet with faculty four weeks before rotation begins for discussion.

Description: This is a two-week elective. Schools are a major institution that can influence the health and well being of youth. Experience will be gained by assisting school staff in the health needs of students; observing children with behavioral disorders, learning disorders and physical disabilities; interacting with students and teachers in classroom situations; and working with school resource centers. The goals of this rotation are to increase the understanding of the role of physicians in schools, gain knowledge of how schools function and the role of the schools in family and community health. Students will be able to identify medical problems and issues in school health; present age appropriate health information; recognize children with medical conditions that may inhibit learning; and examine community resources to assist school age children. Students must submit a journal detailing their experiences.

Note: Method of Evaluation includes observation of performance and evaluation of student's journal; the evaluation completed by the school personnel and students will account for part of the evaluation.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 918. Introduction to Medical Informatics
1-4 Units

Grading Basis: Pass/Fail

Prerequisite(s): Fourth-year standing; this elective must be scheduled through the clinical coordinator in Family Medicine.

Description: In this four-week elective, the student will have the opportunity to: Acquire and demonstrate basic computer skills, or expand existing skills; experience or investigate a broad range of topics in the realm of medical informatics; complete a defined set of projects related to areas of special interest; and define possible future involvement in the area of medical informatics. Proposed topics to include: Office Systems, Computer Systems & Technology, Web Applications, Expert Systems, Decision Science, Hospital Systems, Structured Language Research, Information Search, Retrieval and Management, Standards Systems and Organizations, Medical Informatics Community, Medical Education, Telemedicine and Telecommunications and Basic Computer Skills and Usage.

Note: Method of Evaluation is subjective grade based on the student's displayed initiative, interest, and completion of individual objectives as defined with the faculty mentor.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 922. Community Clinic
1-4 Units
Prerequisite(s): Third-year standing.

Description: This two-, three-, or four-week rotation will take place in a free clinic within Hopkins County. Experience will be gained in the outpatient setting caring for the low-income working uninsured. The student will be exposed to issues involved with free clinic care including administrative issues of negotiation for lab, imaging and consults; practicalities of current pharmaceutical assistance programs; clinical issues of providing comprehensive care in this environment; and use of an electronic medical record in this setting.

Note: Method of Evaluation is observation of performance.

Note: This elective located at the Trover campus, Madisonville, Kentucky, and must be scheduled through the Trover Office.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 923. Sports Medicine
1-4 Units
Prerequisite(s): Fourth-year standing.

Description: This four-week clinical elective is for students interested in sports and sports related care. Students will work with the sports medicine faculty at the Owsley Brown Frazier Sports Medicine Center seeing patients with sports related injuries. There will also be exposure to athletic training facilities where the faculty physicians care for collegiate athletes. Depending on the time of year, the students may participate in event coverage.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 924. Medical Jurisprudence-Introduction to Health Law
2 Units
Grading Basis: Pass/Fail

Description: Second-year elective. This course is an examination of medical jurisprudence: the law, legal system and legal reasoning related to medicine. This introduction to health law undertakes a survey of legal issues in medicine focusing on the four ultimate health care system concerns: quality, autonomy, or personhood; equitable access and cost. Coverage includes: (a) introduction to law, the legal system and legal reasoning; (b) quality control regulation through licensing of health care professionals; (c) the physician-patient relationship, informed consent and confidentiality; (d) professional liability and reforming the tort system for medical injuries; (e) cost and access to health care in the health care delivery system; (f) professional relationships in health care enterprises, staff privileges, managed care contracts, labor & employment, & discrimination law; (g) Medicare & Medicaid fraud and abuse, false claims & Start law self-referrals; (h) reproduction and birth, legal status of the embryo/fetus, medical intervention in reproduction, and fetal maternal decision-making; (i) legal issues in human genetics; and (j) life and death decisions, advance directives, withholding/withdrawing life support, treatment refusal for religious reasons, decisional capacity and guardianship, deciding for children, futile treatment.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 925. Rural Practice Assessment
4 Units

Description: Required course for the RMat program only. This rotation is focused on a detailed analysis of a rural physician's practice with an emphasis on continuity of care. The vehicle for the needed clinical learning portion will be the chronic care note, which is currently used in the third-year Family Medicine Clerkship. The RMat student will: 1) with a physician's guidance, choose a common condition see in practice, e.g., hypertension, dyslipidemia, diabetes, 2) develop a protocol for management based on published guidelines, 3) complete the chronic care notes on patient visits that occurred during their rotation, including the student's telephone call or home visit follow-up some time after the index visit, and 4) prepare original patient education materials for the chronic condition suitable for continuing use in the practice, including a checklist shared by the patient and the provider that lists the key milestones of management. Goals & Objectives To teach the student clinical skills through observation and practice; to have the student become familiar with the types of clinical problems managed in rural primary care; to have the student become familiar with the process of individual practice site assessment by interviewing key personnel in the practice; to have the student understand important aspects of continuity of care by studying a series of visits by patients with a common illness; and to have the student understand how clinical guideline can drive the development of patient education materials.

Note: Method of Evaluation will include assessment by the preceptor, assessment of the chronic care notes, practice assessment report and the patient education materials.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 926. Rural Community Health Assessment**4 Units**

Description: Required course for the RMAT program only. This rotation is focused on patient education, community assessment, anticipatory guidance for children, and physical examination skills. Students will complete this component as part of the Trover Preclinical program during July of their second year. This four-week block includes a community-driven project that provides free school physicals (required in Kentucky) to 6th-grade students in two Health Professional Shortage Area (HPSA) counties near Madisonville, the home of the Trover Campus. This activity is referred as PSST. The guidance materials and teaching props will be produced by the RMAT students working with the Pre-Med Trover Rural Scholars. The RMAT students will complete the physical examinations under the supervision of certified Health Department nurses and the Associate Dean for the Trover Campus. Past Trover Scholars and preclinical student have jointly prepared and presented a final report summarizing their findings from the examinations as well as the results of a county-wide community assessment. Goals & Objectives are 1) To reinforce the development of clinical skills through observation and practice; 2) To have the students understand the details of the clinical decision-making process used in rural primary care; 3) To have the students become familiar with the process of community health needs assessment by participating in a county-wide assessment; and 4) To have the students obtain hands-on experience, under appropriate medical supervision, in administering screening physical examinations and anticipatory guidance in rural community clinics.

Note: Method of Evaluation includes paper assessment by the preceptor, evaluation of small group participation and performance during PSST, oral presentation of the report, and an assessment of the written report; feedback is received from the nurses participating in PSST, both on individual student performance and in a group debriefing at the conclusion of each PSST session.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 927. Rural Practice Clerkship**4 Units**

Description: RMAT program only. This is the third component of the RMAT and is a four-week experience in Family Medicine that encompasses 5 of the 8 goals of the existing third-year family medicine clerkship. This rotation is in a rural community practice. At the end of the rotation, students will be able to discuss the principles of family medicine; gather information, formulate differential diagnosis and propose plans for the initial evaluation & management of patients with common presentations; develop evidence-based health promotion/disease prevention plans for patients of any age or gender; demonstrate competency in advanced elicitation of history, communication, physical exam and critical thinking skills; utilize appropriate techniques to communicate with patients of all levels of health literacy.

Note: Method of Evaluation includes standard clinical evaluation form and the NBME examination.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 928. Longitudinal Ambulatory Experience**4 Units**

Description: RMAT program only. This is the fourth component of the RMAT and is a required four-week experience in the free clinic for working, low-income, uninsured families of Hopkins and Webster counties in Kentucky. Three of the eight goals of the existing family medicine clerkship are encompassed in this rotation and focuses on longitudinal continuity of outpatient care within a matrix of performance improvement concepts, using a simple electronic health record, chart review, staff interviews, protocol development and new patient intake clinics and evening experiences in treating patients in a continuity clinic.

Note: Method of Evaluation includes standard clinical evaluation form and student's final report of a performance improvement project.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 929. Rural Family Medicine-Acting Internship**4 Units**

Description: RMAT program only. This is the final component of the RMAT and is a required six-week experience. Student will be working with the upper-level residents and hospital attending and will assume responsibility for daily patient care of assigned patients, including the ICU. The student will outline the evaluation and management of common inpatient problems in family medicine and will demonstrate the ability to work with all team members including ancillary services and consultants.

Note: Method of Evaluation includes standard clinical evaluation by Family Medicine faculty and a departmental exam.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 930. Medical Spanish**2 Units**

Prerequisite(s): Fourth-year standing; completion of at least one (1) year of Spanish beyond high school.

Description: ELECTIVE NO LONGER AVAILABLE This two-week elective is designed to provide the medical student with an opportunity to acquire skills necessary to interview Spanish speaking patients. The elective focuses on communication skills and professional behavior. Through didactic sessions, direct observation and interactive group meetings, students will learn medical terminology and acquire skills in medical interviewing. Summative evaluation will include conducting a complete interview in Spanish.

Note: Method of Evaluation includes observation of participation by faculty and student instructors and assessment of student's completion of all assigned tasks.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 932. Family Nutrition Resources**1 Unit****Prerequisite(s):** Fourth-year standing.

Description: This one-week elective is designed to provide the medical student with an opportunity to acquire skills necessary to assess patients' nutritional status and offer suggestion for intervention that will improve the overall health of the patient and family. The rotation focuses on independent study, observation, reflective writing, and professional behavior. Through self-study, direct observation, and planning of an outreach event, students will gain knowledge in nutritional topics and acquire skills in methods of intervention to improve the nutritional status of the patients. Summative evaluation will include faculty evaluation of the student's completed assignments.

Note: Not currently available; this elective was only offered 9/18-9/22/17 and 3/25-3/31/18.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 933. Sexual Health SP Encounters**1 Unit****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** First-, third-, or fourth-year medical student.

Description: This elective is aimed to create the optimal learning environment for students to practice taking sexual histories, while addressing concerns around sexual dysfunctions/abnormalities, educating on best sexual health practices, and providing a safe space to discuss sexual trauma and normal reproductive health.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

FMED 934. Family Medicine Bootcamp**2 Units****Grading Basis:** Pass/Fail**Term Typically Offered:** Spring Only

Description: This course is designed as preparation for intern year-two weeks of practical skills and knowledge that will help graduating medical students who have matched into Family Medicine hit the ground running as interns. It will be a mix of didactic sessions, procedure workshops, interactive case-based learning, and Q&A sessions with residents and faculty. We will cover typical medical issues that will be encountered in both inpatient and outpatient settings - headache, chest pain, congestive heart failure, kidney failure, musculoskeletal complaints, etc. All of these will be approached from a high-yield, practical information perspective. We will also cover basics in quality improvement, evidence-based medicine and information mastery, and mindfulness and self-care. We will also do procedure workshops on suturing, splinting, and joint injections.

Note: This elective will only be offered 4/10-4/21/23.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Interdepartmental Courses (IDEP)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

IDEP 811. Clinical Anatomy, Development, Examination and Neurosciences**20.5 Units****Grading Basis:** Pass/Fail

Description: The Clinical Anatomy, Development, Examination and Neuroscience course will train first-year medical students in the fundamental structures of the human body-its gross anatomy & neuroanatomy, development and methods of the clinical physical examinations. This is an integrated course that merges the disciplines of Gross Anatomy, Embryology, Physical Diagnosis and Neurosciences to help students understand the connections between these sciences from the earliest days of their training as physicians. This course teaches students some of the clinical skills required to enter the clinical years of medical school and the knowledge and behaviors needed to pursue a medical career of lifelong learning and patient care.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 812. Molecular Basis of Life, Defense, and Disease**15 Units****Grading Basis:** Pass/Fail

Description: The goal of the course is to provide yearfirst- medical students a solid foundational understanding of the molecular basis of life highlighting mechanisms of immunity, defense and disease. The course will integrate the disciplines of biochemistry, genetics, histology, immunology, microbiology, pathology, pharmacology and physiology in first building a molecular foundation of life and then how these processes both protect humans from disease but also lead to disease when homeostatic mechanisms fail. Both basic science and clinical faculty will be involved in both designing the course including content, learning modalities and means of assessment. Upon completion of the course, students will be prepared to apply molecular concepts to pathophysiology of human disease & their effective treatments.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 813. Systems in Health and Disease I**18.5 Units****Grading Basis:** Pass/Fail

Description: This course serves as an introduction to the normal cellular and tissue structure, physiology, diseases, pathology, infectious diseases, and drug treatments for each of the following organ systems: cardiovascular, respiratory, renal, male and female genitourinary, and endocrine.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 814. Systems in Health and Disease II**15 Units****Grading Basis:** Pass/Fail

Description: This course serves as an introduction to the normal cellular and tissue structure, physiology, diseases, pathology, infectious diseases, and drug treatment for each of the following organ systems or functional areas: dermatologic, musculoskeletal, gastrointestinal, hepatobiliary/pancreatic exocrine, central and peripheral nervous, behavioral and mental, sexual health.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 815. Introduction to Clinical Medicine I**3 Units****Grading Basis:** Pass/Fail

Description: This course seeks to teach the necessary skills, knowledge and attitudes for the successful practice of modern medicine. This course emphasizes core patient history-taking, as well as skills & behaviors related to medical professionalism, patient care documentation, cultural competency, health promotions & disease prevention & doctor-patient communication. Community-based shadowing/preceptorship experiences, longitudinal small group learning & patient continuity training are also required to complete this course.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 816. Introduction to Clinical Medicine II**3-3.5 Units****Grading Basis:** Pass/Fail

Description: Required second-year course. This course is the second year of a cumulative, two-year course concerning the clinical application of medical sciences. The second-year course builds on the skills taken from the first year and is intended to provide a foundation for second-year students to develop skills in the patient encounter or doctor/patient relationship. The course also provides a foundation for study in biostatistics, epidemiology, and behavioral sciences. The course will require that students successfully complete an OSCE examination geared to second-year students at the end of the year. This course will contribute to the students' capacity for completing the USMLE Step 1 examination. At the completion of this course, students will be expected to accurately collect, record and report pertinent physical and biological data from adult patients and formulate problem lists and assessments; understand the manifestations and underlying dynamics of human behavioral diversity and apply that understanding as a basis for establishing a therapeutic patient-physician relationship; increase physician interpersonal skills and improve clinical diagnosis; apply skills and concepts learned in the behavioral sciences to better deal with the normal fears and anxiety that accompany medical illness; use the learned concepts in behavioral science and psychiatry to better deal with difficult patients and the stresses experienced by physician; and have an understanding of the doctor/patient relationship and human development.

Note: 3 1/2 credits fall; 3 credits spring.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 834. Compassion Cultivation Training (CCT)**2 Units**

Description: Second-year elective. Compassion Cultivation Training (CCT) is designed to develop the qualities of compassion, empathy, and kindness for oneself and others. CCT integrates traditional contemplative practices with contemporary psychology and scientific research on compassion. Cultivating compassion goes beyond feeling more empathy and concern for others. It develops the strength to be with suffering, the courage to take compassionate action, and the resilience to prevent compassion fatigue. These qualities support a wide range of goals, from improving personal relationships to making a positive difference in the world. The process of cultivating compassion involves training our own minds, developing specific skills in how we relate to others, and ourselves and intentionally choosing compassionate thoughts and actions. The training process includes: daily meditation practices to develop loving-kindness, empathy and compassion; a two-hour weekly class that includes lecture, discussion, and in-class partner and small group listening and communication exercises; and homework assignments to practice compassionate thoughts and actions. Course Objectives include: develop a compassionate mind & heart; cultivate compassion for others; develop appreciation of others; make a positive difference in the lives of your patients and loved ones; and understand that compassion is a process that unfolds in response to suffering.

Note: Method of Evaluation includes attendance at weekly sessions, completion of homework assignments, and quality of participation in class.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 835. Mind-Body Medicine**2 Units****Grading Basis:** Pass/Fail

Description: First-year elective. This eight-week course, consisting of eight, two-hour sessions, plus independent study and practice, will focus on Mind-Body Medicine approaches, including meditation, guided imagery, biofeedback, breathing techniques, art and movement, all of which are skills that can alleviate stress and foster self-awareness and self-care. The purpose of this elective is to introduce a variety of mind-body medicine modalities to medical students so that they can experience them and gain insights into the personal and professional applications of these techniques. Students will meet weekly with two faculty facilitators and will learn the techniques, practice them and discuss their experiences with members of the group. Students will have an opportunity for individual attention and instruction and for sharing what they are learning about mind-body medicine and themselves. Students will be expected to practice skills taught on their own for 20 minutes/day, five (5) days a week. Recommended readings will be distributed.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 871. Biostatistics and Evidence-Based Medicine**2.5 Units****Grading Basis:** Pass/Fail

Description: This course creates a scientific framework for medical students to understand the processes of medical research design, data collection, analysis, and application to patient care. Lecture, TBL, flipped classrooms, and online self-instructional modules with self-assessment quizzes are used over this two-week course to teach and apply the concepts core to these skills and give students formative feedback on their learning.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 880. Longitudinal Ambulatory Clinic**2 Units****Grading Basis:** Pass/Fail

Description: This course offers second-year students early exposure to the clinical practice of medicine under the supervision of community physicians in practice. The course teaches students to apply their medical knowledge and physical exam skills to diagnosing and treating patients at free community clinics. In this pilot version of the course, approximately half of the class will participate.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 881. Bilingual Standardized Patient, Spanish-English**1 Unit****Grading Basis:** Pass/Fail**Prerequisite(s):** Second-year standing.

Description: Perform standardized patient visits in Spanish including history & physical exams with a bilingual standardized patient.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 882. Eat 2B Well Culinary Medicine**2 Units****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** Second-year standing.

Description: This eight-session course consists of two-hour sessions plus independent study and practice. The course will focus on developing a more extensive understanding of the impact of nutrition and healthy cooking on health and wellness. Students will learn about healthy food choices while practicing food preparation techniques. A primary purpose of this elective is to teach medical students to be aware of their own dietary intake and will be taught in such a way as to promote student learning around patient discussions pertaining to diet and lifestyle changes and improved nutrition.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 883. Procedure Skills Grading Basis: Pass/Fail Term Typically Offered: Fall, Spring, Summer Description: This elective course offers second-year students early exposure and opportunity to practice clinical procedures that are likely to be seen and used during clinical training. This course teaches students to apply medical knowledge to clinical simulations and to correctly perform procedural interventions via medical simulators. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	2 Units	IDEP 911. Global Health Medicine I Description: Many medical students seek opportunities to expand their knowledge of disease, treatments, culture and health care systems through global health experiences. This elective offers a route to receive service learning credit by working in a new healthcare delivery model and completing a reflective piece at the end of the experience. This will prepare the student for experiences abroad focusing on the ethical considerations of global health and a post trip debriefing to ensure the student has the opportunity to reflect and identify strengths and weaknesses of the experience. Students must complete pre-departure forms 3 months prior to departure and proposed countries for study must be approved by the administration. Note: Method of Evaluation includes the following: 1) Prior to departure each student must complete the pre-departure lectures and score at least a 70% on post-lecture quizzes to show comprehension; 2) the student must complete a patient log and submit to trip physician leader or advisor; 3) a reflection piece is required to be submitted to trip leader upon return. Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	2-4 Units
IDEP 884. Physical Exam Skills Peer Teaching Grading Basis: Pass/Fail Term Typically Offered: Fall, Spring, Summer Description: Students will participate in a physical exam skills boot camp with ICM faculty prior to the start of the semester. These students will then serve as peer-teachers in the physical exam lab throughout the fall and spring semesters. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-2 Units	IDEP 912. Business of Medicine Grading Basis: Pass/Fail Term Typically Offered: Fall, Spring, Summer Prerequisite(s): Fourth-year standing. Description: This elective will only be offered 8/30-9/24/21 or 3/14-4/8/21. This online elective is taken over a 4-week period, with the majority of the work completed independently by the student. The curriculum is based on resources used in the Distinction in Business and Leadership in Medicine track program, but designed to make these resources and lessons accessible to more students entering their fourth year of the MD program. To pass the course requires student participation in all aspects of the course, completion of about 3 assignments per week and a video on course evaluation. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units
IDEP 885. M1 Research Foundations Grading Basis: Pass/Fail Term Typically Offered: Summer Only Description: The M1 Research Foundations course is part of the Summer Research Scholar Program (SRSP). The SRSP is a 10-week mentored research experience provided to medical students during the summer between M1 & M2 years. This is a full-time commitment to training in research methods requiring 350 hours (min 37.5/week for 10 weeks) of mentored independent work to complete a short project. Students are supported by NIH training grants must attend weekly meetings. The objective of these meetings is to provide pre-clinical medical students with the vocabulary, facts, and concepts of current research to enhance their understanding of the molecular basis of normal and pathological states relevant to their research projects. All SRSP students are eligible to participate in these meetings/conferences. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	2 Units		
IDEP 901. Directed Studies Grading Basis: Credit/No Credit Description: Directed Studies is a variable-hour course designed to offer additional academic support to students preparing for the USMLE licensing exams. To be eligible, students must be identified by the Student Affairs Office or the Office of Undergraduate Medical Education as needing such course in order to fulfill the graduation requirement of passing USMLE Step 1 and Step 2. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-5 Units		

IDEP 913. Medical Education**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: Students will learn some of the basic tenets involved in teaching and evaluation. Students will become familiar with basic educational principles by reading a set of core medical education articles. The student will be assigned to teach a set of students while being observed by a medical educator who will provide formative feedback on the performance. The student will develop a curriculum project using the curriculum quality improvement project model and expose the student to unique challenges of teaching and evaluating undergraduate medical education. Students will develop & critique a standardized patient case and a behavioral checklist to evaluate learners; develop and critique a human patient simulation case and a behavioral checklist to evaluate learners; develop and critique a didactic lecture using medical education tenets that will maximize the learner's educational experience; describe in general terms the idea of continuous quality improvement; describe the types of skills academic physicians should master; and describe some of the teaching, learning and evaluation challenges that are unique to undergraduate medical education.

Note: Method of Evaluation includes the following: observation of teaching, presentation, and evaluation of standardized patient case; small-group educational activity; human patient simulator case or large group instructional session project using the curriculum quality improvement project model to the staff of the Office of Medical Education.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 914. Career Exploration**1-4 Units**

Description: Second- and third-year elective. This is a one-, two-, three-, or four-week experience. Choosing a specialty is one of the most difficult, but important, decisions a student will ever make. This course will create opportunities for students to gain insight into the problem content, patient population, practice setting and the daily practice experiences in a career field that interest them. The course will provide a career planning framework that students can use to determine whether a field would be a suitable career fit for their professional and personal goals.

Note: Method of Evaluation requires that students will submit a reflective paper on their experience.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 916. Palliative Medicine**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: This is a required one-week experience in fourth year. Students join a multidisciplinary Palliative Medicine team that provides a unique educational experience emphasizing the opportunities and challenges of caring for seriously ill and/or dying patients. Determining goals of care for patients and therapies to relieve suffering and/or to improve quality of life will be discussed in depth. Students will participate in patient consultations where they will be expected to identify all palliative care issues-medical, psychosocial, ethical and discharge planning; attend daily teaching rounds; research topics for team discussion; and attend weekly Palliative Medicine Thursday afternoon Conference. The conference will include Journal Club and reflective writing/journaling. Methods of Evaluation includes: regular attendance at all conferences, teaching, and patient care activities; faculty will continually assess the student's skill in patient care assessment, with a focus on symptom and psychosocial data gathering and the student's skill in developing care plans that match the clinical needs and patient-oriented goals. Evaluation of clinical knowledge, skills and attitude is by observation of performance by faculty preceptors. Students must achieve a minimum of 75 on their clinical evaluations and participation in all required activities and conferences to pass this course.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 919. Campus Health Services**1-16 Units****Grading Basis:** Pass/Fail**Prerequisite(s):** Fourth-year standing.

Description: This is a two, three or four-week elective. Students participate in the evaluation and treatment of patients at the Belknap Health Center. Students will learn basic primary care medicine in the unique population. Students will gain experience in primary care medical skills for the diagnosis of both acute and chronic illnesses, understand management of contraception options including emergency contraception, gain experience in the diagnosis, management and prevention of sexually transmitted infections, understand role of health promotions, PEACC, psychiatry and counseling in this population, gain experience and understanding of travel medicine needs for this population and experience and understand public health role of CHS for the University.

Note: Method of Evaluation includes subjective evaluation of clinical performance and a short presentation on a topic related to campus health.

Note: This rotation is no longer available.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 921. Medical Students as Teachers**1-4 Units****Prerequisite(s):** Fourth-year standing.

Description: This two- or four-week elective provides students with an opportunity to develop skills by teaching first-, second-, or third-year medical students. The elective consists of a required half-day orientation, held in July of the fourth year. All students must commit to attending this program to enroll in this elective. Each student must select one track in which to participate; each track is associated with a class/clerkship or teaching case-based integrative sessions in the ICC's. Depending upon the track, students will be required to attend at least one training session and document 8-10 hours of actual teaching. Course hours will be as follows: orientation (5 hours); training (2-4 hours); preparation (16-20 hours); and actual teaching (8-10 hours). Goals & Objectives: Expand communication and leadership skills by active participation in teacher training and teaching; develop teaching skills by observing, coaching and direct teaching of medical students and participating in teacher education activities; and enhance professional attributes by serving as a role model for medical students. Method of Evaluation Evaluation of student mastery of course objectives will be determined by each course director track leader. At a minimum, evaluation will consist of evaluation of student teaching skills through direct observation by the course director or his/her designee; student evaluations; completion of all required course activities and self evaluations. No student will receive a passing grade without satisfactory teaching evaluations and documentation of the minimum number of required teaching hours. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 922. Longitudinal Ambulatory Rotation**1-4 Units****Prerequisite(s):** Fourth-year standing.

Description: AR Selective. This is a required fourth-year rotation that takes the place of the four-week ambulatory rotation. There will be two-week block of time to initiate the clerkship followed by 20 weeks of half days for a total equivalent to 4 weeks. Students need to be better prepared to practice in the ambulatory setting when they complete medical school and residency and this clerkship is designed to help prepare the students for competencies related to ambulatory care. Learning of certain program objectives not covered in other parts of the curriculum can be designed to occur optimally in the ambulatory setting. The rotation will include demonstration of competencies related to both clinical specialty and program objectives. The learning objectives and evaluations will be a shared partnership between the participating specialties and the central curriculum office. Medical knowledge, clinical skills and attitudes related to the specialty will be the responsibility of the discipline, and the medical knowledge, skills and attitudes related to non-discipline specific program objectives will be the responsibility on the curriculum office. Goals & Objectives: Taking on primary responsibility for the patient; focusing histories, physicals, and oral and written communication appropriately; sharing information effectively with a patient and family; prioritizing and organizing work effectively; anticipating what a patient will need during the course of hospitalization and communicating this information effectively in hand-overs; re-evaluating a patient when you take on their care and looking further when the clinical picture does not fit; continuing to think about and re-assess the patient during the course of the day; coping with uncertainty in patient care issues; functioning as a "team player" with residents, attendings, nurses, ancillary staff and all others involved in the care of the patient and coordinating the care of your patient. **Note:** Method of Evaluation includes evaluation of clinical performance (70% of course grade); Scholarly Project evaluation (25% of course grade); and attendance for the non-clinical seminars (5% of course grade).

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 923. Distinction in Research**1-8 Units**

Description: This is one of several educational tracks, which the goal is to provide a small group of medical students with meaningful and productive research experiences that will enrich their medical school training. The DIR will be longitudinal and will include contact with mentors and research groups, development of research-oriented skills, and the completion of a research project in the clinical years. This program will be coordinated by the HSC Office of Research under the direction of the SOM Associate Dean for Research. This elective will provide students a block of time in their 4th year to conduct hypothesis driven research as partial fulfillment of the DIR track. The time will be spent under the supervision of their individual DIR mentor and will conclude with a "product" which can be presented in one of several avenues for the dissemination of research. The role of clinician as researcher and the methods of basic and translational research will be taught throughout the DIR track. Goals: Students will learn critical thinking and problem solving skill; will gain knowledge of the mechanisms of disease through research and how to apply it to the clinical practice; will learn study design, data collection, management, and analysis; and will learn to give oral and written presentations of their work.

Note: Method of Evaluation: Mentor evaluation, completion of student logs and completion of the research project as defined by the DIR curriculum.

Note: Grading will be Pass/Fail.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 924. Topics in Clinical Medicine**0.5 Units**

Description: Fourth-year requirement. The goal of this course is to address topics in clinical medicine that are felt to be important from a central medical school educational perspective, but which are not covered in any existing clinical clerkships. The course is intended to fill educational gaps in the clinical years. The main instructional format will be short didactic presentations to support independent student reading and small group discussion. Goals & Objectives: Define and describe key concepts related to societally important topics in medicine; apply basic science principles to patient care and decision-making; and describe key aspects of modern patient management in selected clinical topics areas.

Note: Method of Evaluation includes: students will receive a single grade based on the content of all sessions; attendance; small group participation; and completion of all required quizzes.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 925. Health Equity Learning Project (HELP) for Community**1-6 Units**

Description: This experiential primary care outreach model for basic medical services provides diverse cultural exposure to UL medical students with the Louisville community as a teaching laboratory. Learning goals of personal growth, academic learning, and civic learning will be formally incorporated as students consider how social determinants of health onsite in the environment in which their patients are born, grow up, live, work, and age, as well as, the systems put in place to deal with illness—their medical home. This exploration will consider disparate populations of race, ethnicity, age, gender, sexual orientation, cultural orientation, geographic location, education, and income. Student self-discovery through emotional intelligence and innate bias assessments will be incorporated into effective patient communication competencies, as students teach health literacy for identified chronic diseases in a non-medical setting. Student skill sets in taking blood pressure, glucose measurements, peak flows, and obesity determinations will be reviewed prior to patient engagement. Patient clinical data (blood pressures, glucose readings, peak flows, weights, etc.) will be transmitted to the patient's identified medical home that day by written reports. Community tours of affected neighborhoods will be part of the elective as students gain appreciation of the patient's residential resource-poor areas. The most common chronic diseases affecting Louisville populations will be discussed in didactic format using Louisville Metro Health Equity Report: The Social Determinants of Health in Louisville Metro Neighborhoods, as well as, Health Louisville 2020: Creating a Healthier City. The final project will be a reflexive writing piece using the DEAL (D-Describe E-Examine AL-Articulate Learning) model of Critical Reflective Learning with a problem-solving scenario generated from patient exposure. Students may participate in a community mapping activity, community motor tour, as well as, an individual poverty simulation project.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 926. Advanced Clinical Medicine**1 Unit**

Grading Basis: Pass/Fail

Prerequisite(s): Second-year standing.

Description: A required, third-year course that emphasizes a practical understanding of medical system and patient care topics that cross all specialties. The course uses a combination of didactic and small group instruction methods. Topics covered include: Patient Safety, Quality Improvement, Complementary/Alternative/Integrative Health, Global Health, Health Advocacy, Community Health, Palliative Care, Medical Negligence and Liability, Inter-professional Care of Patients, and Medical System Financial Basics. Completion of this course is required to enroll in fourth-year medical student courses.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 927. Global Health-Research**2-4 Units****Grading Basis:** Pass/Fail

Description: This course is meant to be used when students are traveling to an international site for the purpose of research (as opposed to clinical work). In these instances, the on-site preceptor may be anyone qualified to supervise research including MDs, DOs, PhDs and other approved to be site leaders for IRB-approved research projects. A UofL faculty will still be assigned to the student, whether or not the faculty is personally involved with the research, to assure that the student's protocol and travel plans meet university requirements.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 928. Global Health II**2-4 Units****Grading Basis:** Pass/Fail

Description: This course title is meant to be used by upper-level medical students traveling to international sites to perform clinical work. Students may have completed Global Health I prior to this course, but this is not required. Students must complete or refresh their pre-departure training and apply through the Global Education Office and International Center. Students will work with an assigned mentor to develop individual learning goals for their rotation and review these goals again in debriefing. The location and clinical activities will be determined by the student's desires but will need to be approved by their rotation mentor.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 929. Global Health International Academic Experience**2-4 Units****Grading Basis:** Pass/Fail

Description: This course title is meant to be used when students enroll in an international medical school for course work at a foreign university. In this instance, UofL faculty are not needed as on-site preceptors, but a UofL faculty will be assigned to help the student develop his/her own goals for the rotation and to ensure that all travel associated paperwork and academic work is completed. The student must identify a local MD or equivalent as an on-site preceptor to get credit. The rotation in which they enroll may be clinical or classroom work only.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 930. Global Health: Refugee Health Medicine**2 Units****Prerequisite(s):** Third-year standing.

Description: This elective will provide opportunities for medical students to learn about refugee health and the broad healthcare issues that are present in this population. The health conditions include communicable and non-communicable disease that are interwoven with the many social determinants of health. Around 3,000 new refugees, adult and children, are settled in Kentucky every year and represent a growing population of diverse individuals. Caring for this population required population-specific knowledge including health conditions prevalent in differing refugee population. Through this elective, students will be able to see the many health conditions and needs represented in these populations and develop a framework and skill set for providing culturally tailored care.

Note: This elective is no longer available.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 931. Developmental Medicine**2-4 Units****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** Fourth-year standing.

Description: This four-week elective will train fourth-year medical students in the care of individuals with intellectual/developmental disabilities across the lifespan. Students enrolled in the elective will attend clinic at the Lee Specialty Clinic and will complete on-line modules created by the National Curriculum Initiative in Developmental Medicine. This unique interdisciplinary clinic serves all of the outpatient healthcare needs for adults with intellectual and developmental disabilities and offers a variety of health care services, such as primary care, dentistry, psychiatry, clinical psychology, ophthalmology, neurology, behavioral analysis, crisis intervention and therapeutic services.

Note: Students must provide notice of 45 days before the scheduled start date to withdraw from this elective.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 932. Koru Basic**1 Unit****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring, Summer

Description: This course explores science and practice of mindfulness as pathways to becoming stress resilient. Students learn to shift from reactive brain to creative brain, the key to responding wisely to life challenges. Students will be introduced to the practice of mindfulness and learn several skills, including meditation, for managing stress and enriching their lives. Mindfulness is about developing the ability to be fully attentive to all the moments of life, reducing the amount of time spent worrying about the future or fretting about the past. An important aspect of mindfulness is developing a non-judgmental, accepting, even curious attitude about one's moment-to-moment experiences. The more a person develops this attitude, the less they will feel overwhelmed by changes and challenges. Students will learn and implement methods to increase their flexibility and range of options for thinking, feeling and reacting to life's challenges and stressors. Mindfulness and mediation will be explored through in-class discussions and practice plus reading, daily practice, and reflective writing. By active participation in all dynamics of the course, students will gain increased stress resilience capacity.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 933. Koru 2.0**1 Unit****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** IDEP 932.

Description: Koru 2.0 is a mindfulness and meditation class, and is the "advanced" class for students who have already completed Koru Basic. Koru 2.0 builds on the skills developed in Koru Basic and provides an opportunity for students to further their practice and deepen their skills. Koru 2.0, like Koru Basic, emphasizes both meditation and mindfulness-based stress management skills. Koru 2.0 gives the students a chance to continue practicing the skills they learned in Koru Basic and to connect with other students in a supportive environment that encourages them to push their mindfulness abilities broader and deeper. Each class is 75 minutes in length.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 934. Online Non-Clinical Elective Grading Basis: Pass/Fail Term Typically Offered: Occasionally Offered Description: Online course offerings are offered at no charge to the student or home institution for qualified U.S. medical students in good standing to explore educational topics related to the healthcare system in a non-clinical setting. The topics are critical for improving the medical care system and include topics such as Global Health, Complementary and Integrative Healthcare, and Cultural Competency. Course offerings typically require participation by the student in a required number and frequency of didactic sessions, and completion of a written paper that is graded by the lead faculty member at the hosting medical school. These courses are all sponsored by national medical education associations such as the American Medical Association and are hosted by accredited schools of medicine. Participation in courses of this type cannot exceed four credit hours of the fourth year of medical school. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units	IDEP 938. Student Leadership in Medicine Grading Basis: Pass/Fail Term Typically Offered: Fall, Spring, Summer Description: This course is designed to be completed mostly online, with a couple of in-person meetings. If unable to meet in person, those course sessions will be adapted to online meetings. The course will meet approximately once a month for 10 months, with weekly assignments that range from one to a few hours in effort. Assignments include reading from assigned texts, completion of group discussions and other collaborative work, and applied problem-solving. Students are expected to interact with each other as well as with the course faculty in a supportive, respectful, and engaged manner that reflects the attitudes of self-motivation and accountability to others that are core to leadership in any profession. The course uses a cohort model to group students in working teams for independent and cooperative work as well as discussion and reflection of assigned course work. Participation and engagement in the course is required for course credit, as is completion of the course assignments. A capstone project that demonstrates application of leadership lessons in successfully leading change to improve an organization is a required and graded part of the course. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units
IDEP 935. Law and Medicine Grading Basis: Pass/Fail Term Typically Offered: Spring Only Description: This course will cover topics pertinent to law and medicine in today's society. The following topics will be covered by a variety of instructors, including lawyers as well as experts in the field of medical law: Introduction and Overview of Medicine and Law, patient care, types of healthcare providers, medicare, mental health, false claims/qui tam actions, fraud and abuse, Anti-Kickback statute, Stark Law, tax exemption and relates issues, how hospitals operate, medical staff issues, regulation of hospitals, licensure/CON, and many more topics. Note: No more than 3 sessions can be missed, final essay. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	4 Units	IDEP 939. Community Service Learning Grading Basis: Pass/Fail Term Typically Offered: Fall, Spring, Summer Description: This elective requires the student to serve a need expressed by a community or on behalf of a community via a service/nonprofit organization. 30 hours of in-person service are required as well as completion of a 2-page reflection paper and in-person discussion with peers at the end of the academic year. All service projects or participation for elective credit must be proposed by the students to Dr. Holthouser in writing and approved prior to credit being earned. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units
IDEP 936. On-line Specialty Clinical Topics Grading Basis: Pass/Fail Term Typically Offered: Fall, Spring, Summer Description: This elective delivers online education and assessment on specialized topics in clinical medicine that expose the learner to the practice of this specialty in preparation for internship. This course form can house topics in a variety of departments that deliver content in an online environment to prepare interns for handling core specialty decision-making in common clinical scenarios. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units	IDEP 940. Street Medicine Grading Basis: Pass/Fail Term Typically Offered: Fall, Spring, Summer Description: The Street Medicine elective provides an all-encompassing look at the many aspects of the practice of healthcare for the homeless. Addressing homelessness, both as a whole and in Louisville, and healthcare for the homeless are approached from multiple angles-in the form of pre-recorded video lectures, journal clubs, small group sessions, analysis of TED talks and a summative reflection. Topics relating to street medicine-human trafficking, safety and de-escalation, trauma-informed care, compassion fatigue, and harm reduction- are presented as integral components in the practice of street medicine. The needs of specific patient populations, including those of the LBGT+ community and homeless minors are address. The course also touches on homelessness in the age of COVID-19. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	2 Units
IDEP 937. Disaster Medicine Grading Basis: Pass/Fail Term Typically Offered: Fall, Spring, Summer Description: This elective will not be offered in 2021-22 academic year. This is an online elective that gives an exposure to the major conceptual and practice areas of disaster medicine via online assignments, reading assignments, community service hours, and independent learning activities. The course is self-paced by the student and may be completed as a defined block of time or over the course of an entire academic year. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units		

IDEP 941. Financial Well-being as a Physician**2 Units****Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** 4th year standing.

Description: This course will focus on pertinent financial topics to physicians in training to better prepare them for financial well-being in the future. We will have invited speakers to discuss a variety of topics including debt repayment, financial planning, taxes, insurance, investing and more with specific information and guidance to physicians.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

IDEP 942. Bluegrass Biodesign**4 Units****Grading Basis:** Credit/No Credit**Term Typically Offered:** Fall, Spring

Prerequisite(s): Must be enrolled as a medical student The goal of this curriculum is to standardize the process of biomedical innovation through a robust lecture series that introduces and describes the basic principles of product design.

Description: Early on in the series, lectures focus on helping students develop the skills needed to formulate initial questions. As the lecture series progresses, it will expand on core concepts that will help students further refine their initial questions as well as begin the initial stages of product design. Beyond the invent stage, the students will be taught the importance of financial resources and the value that a business model will have in helping them during the implementation stage of their product design journey.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Medicine (MED)

Courses numbered 500-799 are considered Graduate-level coursework. Courses numbered 800+ are considered professional/first-professional-level courses.

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

MED 816. Special Project-Medicine**1-16 Units**

Description: This course is to be arranged to fit individual needs to cover topics of current interest, to participate in research projects or to receive some advanced training. Student must complete the Special Project form, have it signed by your mentor and return to Student Affairs in order to receive credit.

Note: Method of Evaluation to be determined by faculty mentor, based on the specific project.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 862. Radionuclides in Medicine**1 Unit**

Description: Second-year elective. Selection of a radionuclide for medical diagnosis and therapy. Application of scinti-imaging in organ diseases. In-vitro radionuclide applications and radioimmunoassays.

Note: Method of Evaluation is choice of writing a review paper or taking a multiple-choice exam.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 901. Internal Medicine Clerkship**10 Units**

Description: Required Third-year clerkship. This eight-week medicine clerkship has two components: 1) a general medicine hospital rotation, and 2) two sub-specialty rotations. Students will encounter a broad diversity of patients and disease states. Students will be provided an opportunity to learn clinical medicine using the patient's history and physical examination, diagnostic modalities and medical literature; and to develop strong interpersonal and professional skills.

Note: Method of Evaluation includes evaluation of clinical knowledge skills and attitudes by observation of performance by the attending physician, residents and fellows; students must receive a passing score on the clinical evaluation, National Board of Medical Examiners Subject Examination in Internal Medicine; complete all required assignments; and pass a review by the Department of Medicine Education and Evaluation Committee.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 902. Acting Internship in Internal Medicine

Term Typically Offered: Fall, Spring, Summer

Prerequisite(s): Fourth-year class standing.

Description: AI selective. This four-week rotation is designed to help students prepare for the enormous responsibility of caring for hospitalized patients during their first postgraduate year. During this rotation, students will be assigned many of the responsibilities and activities that they will experience during internship; using these experiences as the basis for learning. Students join a teaching team, composed of a full-time faculty attending, fellow and/or an upper level resident, interns and third year students. As an acting intern, the fourth year student's level of responsibility is that of a graduate intern. Students are responsible for the evaluation and management of their assigned patients and the timely completion of medical records, including hospital discharge summaries. Students are expected to take call with their team, including night, weekends and holidays.

Note: Method of Evaluation includes evaluation of clinical knowledge, skills and attitude by observation of performance by attending physicians, residents and fellows; and receiving a minimum score on Self-Directed Learning Presentation.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 903. Practical Internal Medicine

Grading Basis: Pass/Fail

Term Typically Offered: Fall, Spring, Summer

Prerequisite(s): Fourth-year standing; this elective is only offered 4/24-5/5/23.

Description: You must be ACLS certified prior to taking this elective. A two-week course in practical skills/knowledge that will help graduating seniors be better prepared for intern year. It will be a mix of didactic sessions, interactive case-based learning, simulation sessions, and standardized patient experiences. We will cover how to approach medical emergencies in the hospital, such as chest pain, arrhythmia, shortness of breath, bleeding, and altered mental status. We will also cover non-medical but important topics such as Quality Improvement, Evidence Based Medicine, and balancing clinical responsibilities with need for independent study. We will discuss and students will have the opportunity to practice skills such as calling consults, giving hand-off, discussing code status and having other difficult discussions. Lastly, students will have simulated mock code, central line, and standardized patient experiences.

Note: This elective will only be offered 3/22-4/2/21.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

4 Units

MED 905. Area Health Education Center (AHEC) Rotation-Medicine

1-4 Units

Prerequisite(s): Fourth-year standing; the elective must be scheduled through the Clinical Coordinator in Internal Medicine and the AHEC Office.

Description: This is a four-week experience. The Kentucky Area Health Education Center (AHEC) System offers students the opportunity to participate in Internal Medicine practices located throughout the Commonwealth, providing a unique educational experience away from the university setting. The program emphasizes and promotes primary care. Students are encouraged to participate in the community to gain an understanding of how community characteristics affect health care delivery. Students are expected to live in the area of the practice they select for the length of their rotation. The six regional AHEC Offices provide financial assistance to students in the form of reimbursement for housing expenses and meals. Students residing with family or friends during the rotation receive only the meal reimbursement. To receive a dislocation allowance, students must complete a Fact Sheet, mailed to them after their choices of an AHEC practice is confirmed by the preceptor. To allow sufficient time for c

Note: Method of Evaluation is evaluation of clinical knowledge, skills and attitude by observation by the faculty preceptor.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 906. Clinical Elective-Urban

1-4 Units

Prerequisite(s): 4th year standing.

Description: This is a two- or four-week experience. Students participate in the care of ambulatory patients in an urban internal medicine private practice. Students will become more knowledgeable and skilled in the diagnosis and treatment of patients with conditions commonly seen in a community-based medical practice. The student must complete the Off-Campus Request Form and have it approved by the departmental clerkship director.

Note: Method of Evaluation includes: evaluation of patient care, medical knowledge, and interpersonal and communication skills; systems-based practice; practice-based learning; and improvement, and professionalism.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 907. Clinical Elective, Off-Campus

1-16 Units

Prerequisite(s): Fourth-year standing; the student must complete the Off-Campus Request Form and have it approved by the departmental clerkship director.

Description: This is a two- or four-week elective. A clinical experience may be obtained in an approved program in Internal Medicine under the supervision of a full-time member of a duly recognized educational or research institution or a private community physician.

Note: Method of Evaluation includes: evaluation of patient care, medical knowledge, interpersonal & communication skills, systems-based practice, practice-based learning & improvement, and professionalism.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 909. Medicine Research

1-16 Units

Prerequisite(s): Fourth-year standing, permission of faculty mentor, and students must complete the Independent Study/Research Form to receive credit for this elective.

Description: This is a two- or four-week experience. The research elective can be taken in any area of research in which a Department of Medicine faculty member is involved. It is expected that the student will participate in and do a research project and participate in its publication or presentations on completion. The student will learn research techniques and the general approach to research, as well as improve the ability to evaluate published research. In general, projects will be assigned that can be completed in the time allotted.

Note: Method of Evaluation is evaluation of medical knowledge, interpersonal & communication skills, practice-based learning & improvement, and professionalism.

Note: Third-year students will also be considered on a limited basis.

Note: The department of Dermatology is not participating in the research elective.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 910. Ambulatory Rotation-Medicine

1-4 Units

Prerequisite(s): Fourth-year standing.

Description: AR Selective. This is a four-week ambulatory experience at the 550 Clinic. Students wanting to register for an AR in Allergy or Dermatology must use course number MED 922 (Allergy) or MED 925 (Dermatology). All other arrangements must be made through the Clinical Coordinator for the Internal Medicine Department.

Note: Method of Evaluation includes evaluation of patient care, medical knowledge, interpersonal and communication skills, system-based practice, practice-based learning and improvement, and professionalism.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 912. EKG Interpretation

2 Units

Prerequisite(s): Fourth-year standing.

Description: The elective is available for two weeks. The student in this course will learn EKG interpretation. Students will participate in extensive self-study EKG curriculum, and have intensive in-person instruction sessions on EKG readings weekly.

Note: Method of Evaluation is EKG skills quiz and evaluation of medical knowledge, interpersonal and communication skills, practice-based learning & improvement and professionalism.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 915. Cardiology

1-4 Units

Prerequisite(s): 4th year standing.

Description: This elective is available for two or four weeks, inpatient or with a private practice group. This course will offer the student an opportunity to observe and participate in the practice of clinical cardiology. The student will provide the initial diagnostic history and physical examination on the patients and, with the guidance of the resident and the overseeing of the fellow, will prepare a presentation for the faculty assigned to the service. Patients will be seen in the CCU and on general wards. The student will be responsible for electrocardiographic interpretation to be checked by the resident/fellow, and attending. The student will attend and participate in daily morning rounds; perform cardiovascular consultation and admissions; daily case presentation and discussion of management with attending and team. Students will have the opportunity to observe cardiac catheterizations, echos, and stress tests.

Note: Method of Evaluation is evaluation of patient care, medical knowledge, interpersonal & communication skills, systems-based practice, practice-based learning & improvement and professionalism.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 925. Dermatology
1-4 Units
Prerequisite(s): Fourth-year standing.

Description: Fourth-year AR Selective. This is a four-week elective or a four-week AR Selective and offers a clinical experience in dermatology. The student will see dermatologic patients in the clinics at Ambulatory Care Building, Veterans Administration Medical Center, Kosair Children's Hospital, UofL Division of Dermatology, and other private practice offices. The student will also spend time in dermatologic surgery and dermatopathology. At the end of the experience, students will appreciate the intricacies of cutaneous medicine, surgery and pathology; be able to communicate linguistically with the dermatologic consultant and would know when to obtain appropriate dermatologic consultation.

Note: Method of Evaluation is evaluation of patient care, medical knowledge, interpersonal and communication skills, systems-based practice, practice-based learning and improvement, and professionalism.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 930. Endocrinology and Metabolism
1-4 Units
Prerequisite(s): Third-year standing.

Description: This elective can be taken for two or four weeks and is a clinical experience dealing with a wide spectrum of endocrine and metabolic problems as seen on both inpatient consultative as well as outpatient clinic settings. Students will be given reading assignments from major textbooks of endocrinology as well as literature reviews on the subjects commonly encountered in clinical practice and of current research interest. Students will revisit endocrine physiology and its application to clinical situations; will be given an overview of the relationships of clinical laboratory to the care of patients with endocrine problems and enhance the student's skills in interpretation of laboratory data; will understand the appropriate utilization of laboratory tests for endocrine patients and experience the diagnosis of endocrine and metabolic disorders and their management.

Note: Method of Evaluation is evaluation of patient care, medical knowledge, interpersonal and communication skills, systems-based practice, practice-based learning and improvement, and professionalism.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 940. Infectious Diseases
1-4 Units
Prerequisite(s): Third-year standing.

Description: This is a two- or four-week elective and is designed to allow students to acquire familiarity with and expertise in dealing with diagnostic and therapeutic problems in infectious diseases. Students will answer clinical infectious diseases consultative requests with extensive patient evaluations resulting in coherent concise problem lists, recommendations for diagnosis and therapy modalities and appropriate references to the literature. Students will be expected to become familiar with clinical presentations of bacterial, viral, fungal rickettsial, spirochaetal and parasitic infections as well as with the clinical microbiology and immunology. Instruction in the above and on a wide range of antimicrobial agents used in the treatment of infections, including clinical indications, pharmacology and toxicology will be offered. Aspects of preventive medicine and epidemiology will be included. Students will also be expected to act independently and to read extensively on subjects pertinent

Note: Method of Evaluation is evaluation patient care, medical knowledge, interpersonal and communication skills, systems-based practice, practice-based learning and improvement, and professionalism.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 945. Pulmonary Consultation
1-4 Units
Prerequisite(s): Third-year standing.

Description: This two- or four-week elective is a practical clinical experience in pulmonary disease and applied physiology will be provided. Patients from the wards as well as clinics will be seen. Students will have the opportunity for correlation of history, physical examination and physiological roentgenographic studies. They will be expected to be present for invasive diagnostic procedures including bronchoscopy. The student will learn how to approach the patient with respiratory complaint, take an adequate history, do an adequate physical examination, observe x-rays and come up with a logical differential diagnosis and suggest practical and cost effective diagnostic procedures. The patients will be followed on a daily basis as consultant. The important objective of this course is to teach the students how to act as consultants rather than primary care physicians. Attendance and participation in Journal Club and teaching conferences are part of the elective experience. The student will have sufficient time for reading in conjunction with the clinical experience.

Note: Method of Evaluation is evaluation of patient care, medical knowledge, interpersonal and communication skills, systems-based practice, practice-based learning and improvement, and professionalism.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 946. Pulmonary/Critical Care**1-4 Units****Prerequisite(s):** Fourth-year standing.

Description: ICU Selective. This is a two-week ICU experience. Students will be active members of physicians teams who admit and care for patients in the Medical Intensive Care Unit. Emphasis will be placed on the comprehensive care of critically ill patients, airway and ventilator management, and handling medical emergencies.

Note: Method of Evaluation is evaluation of patient care, medical knowledge, interpersonal and communication skills, systems-based practice, practice-based learning and improvement and professionalism.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 950. Hematology/Medical Oncology**1-4 Units****Prerequisite(s):** Third-year standing.

Description: This two- or four-week elective is designed to permit students to gain clinical experience dealing with all aspects of the treatment of adult malignancies. Students will be expected to round with the attending/fellow and to evaluate consults referred to the Hematology/Oncology Service. At the end of the experience, students should be familiar with the principles of diagnosis and treatment of oncology disorders; understand the role of the consultant in patient management; and understand the importance of and techniques for critical evaluation of medical literature. The student will participate in ambulatory care of patients with attending staff at the Brown Cancer Center, and in weekly conferences at the Cancer Center Tumor Board, Radiation Oncology/Medical Oncology conferences, Hematology conferences and Hematology/Oncology Journal Club.

Note: Method of Evaluation includes evaluation of patient care, medical knowledge, interpersonal and communication skills, systems-based practice, practice-based learning and improvement and professionalism.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 951. Bone Marrow Transplant**1-16 Units**

Prerequisite(s): Fourth-year standing; this elective must be scheduled through the Clinical Coordinator for the Internal Medicine Department.

Description: This is a four-week elective and will provide an in-depth experience in Bone Marrow Transplantation for leukemias, lymphomas and solid tumors. The student will follow patients from preparative regimen to engraftment and participate in bone marrow harvesting in the operating room. Additionally, the student will gain experience in intensive care hematology/oncology; and management of the immunocompromised neutropenic and thrombocytopenic patients. The goals of this rotation is to understand the role of both autologous and allogeneic marrow transplantation in the treatment of advanced malignation and to gain experience in the management of patients with complex medical problems.

Note: Method of Evaluation is patient management, write-ups, and participation on rounds.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 955. Nephrology**1-4 Units****Prerequisite(s):** Third-year standing.

Description: This elective can be taken for two or four weeks. Principles of renal and electrolyte physiology and hypertension mechanisms will be introduced as they apply to clinical situations. This will be accomplished by direct observation and management of renal service patients, many of who will undergo acute and chronic dialysis for renal failure, urine sediment analysis and interpretation of renal biopsies. Opportunity will exist to participate in the hemodialysis, transplant and hypertension programs. The pathophysiology and treatment of fluid, electrolyte and acid-base disorders will be stressed. The goal of this elective is to have the student develop a more complete understanding of the pathophysiology and treatment of patients with kidney disease.

Note: Method of Evaluation is evaluation of patient care, medical knowledge, interpersonal and communication skills, systems-based practice, practice-based learning and improvement, and professionalism.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 957. Nephrology Research**1-16 Units****Prerequisite(s):** Fourth-year standing and permission of Division Chief.

Description: This elective is available for 4-12 weeks. The Nephrology Division faculty members are all actively engaged in research. Research activities include: second messenger function as it is involved with signal transduction, biological transport, drug disposition in patients with uremia, renal drug metabolism, nephrotoxicity and research with artificial membranes used in dialysis. The student will choose a principle investigator and will spend 1-3 months in the laboratory. When possible, students will be assigned individual projects under the close supervision of their mentor. Students will be involved in study design, data collection and preparation of abstracts and manuscripts of the data as appropriate.

Note: Method of Evaluation is that student will be evaluated subjectively by the principle investigator and the Division Chief.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 965. Gastroenterology/Hepatology**1-4 Units****Prerequisite(s):** Third-year standing.

Description: This is a two- or four-week elective that allows the student to obtain clinical experience with disorders of gastrointestinal tract, liver, pancreas and nutrition. The student will be assigned patients for whom consultation from the Division is requested. After performing a history and physical examination and after presentation to the supervisor, the student will outline the diagnostic impression and recommendation. This activity will be supervised by the attending team in Gastroenterology including a faculty member of the Division. The student will participate in all rounds of the Division as time allows, including work rounds and formal Division teaching conferences such as GI grand rounds, Pathology, Radiology, Research Conferences and Journal Club. The student will have exposure to endoscopic, intubation and biopsy procedures and an attempt to teach how to perform sigmoidoscopy. Outpatient exposure for follow-up of patients will occur in ACB and VAMC settings. The goal of this

Note: Method of Evaluation is evaluation of patient care, medical knowledge, interpersonal and communication skills, systems-based practice, practice-based learning and improvement, and professionalism.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MED 970. The Art of Wellness**2 Units****Prerequisite(s):** Fourth-year standing.

Description: This longitudinal elective will focus on the intersection between physician wellness and the arts. The course will be highly individualized and will emphasize developing personal strategies to protect against future burnout and promote wellness through attention to body, mind and spirit. The foundation for the course lies in five required general sessions throughout the year that include faculty presentations of pertinent content, individual assessment of wellness, development of individual goals for the year, group reflection, and a final sharing of personal projects. General sessions will be enhanced by student assignment to specific tracks; each student will be required to select a mentor from a list of track leaders with expertise in an art. The student must contact the mentor on a monthly basis, meet quarterly with the mentor to address progress on individual goals (including a course project), and participate in an experience of their chosen "art" at least once each quarter. Experiences may occur individually or in a group setting as determined by the mentor and student. These may include attending art exhibits, live performances, readings by authors, and field trips with mentors. The elective will culminate with a final session in which students will present the product of their wellness experiences to one another and their mentors. Examples of tracks: Therapy and Patient Health (music, art, expressive); Music and Physicians (attend, learn, appreciate, reflect, compose); Physician as Author (reading or writing poetry, screenplays, narratives); Physician as Painter; Physician as Photographer. By the end of the elective the student should be able to describe at least two ways in which the arts promote physician wellness; explain protective personal factors that may prevent burnout, identify individual risk factors for burnout and the clinical signs of burnout; and demonstrate and cultivate specific practices to promote personal wellness and protect against future burnout.

Note: Method of Evaluation is 70% demonstration of wellness practices, 10% participation in didactic sessions and final project presentation, 20% mentor evaluation of student initiative and effort.

Note: Requirements for Honoring the course are 1) achievement of "excellence" in achieving personal goals and 2) participating in required and offered activities determined by mentor and course director.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Microbiology and Immunology (MBIO)

Courses numbered 500-799 are considered Graduate-level coursework. Courses numbered 800+ are considered professional/first-professional-level courses. Students in dual-degree programs (e.g., PhD-MD) may be interested in graduate-level coursework.

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific

fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

MBIO 600. Lab Rotations**1-2 Units****Grading Basis:** Pass/Fail

Description: Research experience in different faculty members' laboratories in areas of interest to the student. The purpose is to help the student select a Research Advisor. Acceptance by the faculty members is required. The course consists of one or two laboratory rotations (one rotation per quarter) with one credit hour per rotation. This course may be taken more than once if deemed necessary. Fall and spring semesters only. Pass/fail grading.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MBIO 601. Molecular Microbiology**2 Units****Term Typically Offered:** Fall Only

Description: This is an advanced graduate course in Microbiology and material will be presented at a first year graduate level, assuming that the students have a background in microbiology from previous undergraduate coursework, or have a high interest and sufficient motivation to learn at the state of the art level in this field. The course is primarily intended as a required class for all students seeking a PhD degree in Microbiology and Immunology, and will therefore provide the basic foundation of knowledge needed to build on to become an expert in the field, or in closely related fields in Biology and Oral Biology.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MBIO 602. Immunology**3 Units****Prerequisite(s):** Permission of course directors.

Description: This course provides an advanced introduction to innate and adaptive immunity at cellular and molecular levels including: identification of the cells of the immune system and their roles in various immune responses, the role and mechanisms of intercellular communication in induction and regulation of immune responses, gene rearrangement in formation of antigen receptors, regulation of antibody responses in response to infection, cytotoxic T cell responses against tumors and infectious agents, hypersensitivity reactions and autoimmunity.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MBIO 604. General Virology**1 Unit****Term Typically Offered:** Fall Only

Description: This is an introductory course that focuses on building basic virology concepts including the basic replication steps common to viruses, entry, replication and egress, interaction of virus with host cellular proteins during the replication cycle, general virus replication cycle, how and why some viruses cause disease (viral pathogenesis), and how viral diseases spread (mode of transmission), and current approaches of vaccines and antivirals. Format: lectures, student presentations. Graded.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MBIO 606. Seminar**1 Unit****Grading Basis:** Pass/Fail**Prerequisite(s):** Consent of instructor.**Description:** Pass/Fail grading.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MBIO 610. Methods and Analysis in the Biomedical Sciences **2 Units**

Description: The primary goal of the course is to provide first-year graduate students with the conceptual framework to become familiar with key tools and techniques used in biomedical science research. We will examine the kind of information the methodology can provide, the strengths and weaknesses of the approach, and how data obtained can be judged and used to address scientific problems.

Note: Cross-listed with ASNB 610, BIOC 610, PHTX 610, PHZB 610.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MBIO 611. Learning Theories & Instructional Strategies in Science Education **2 Units****Term Typically Offered:** Summer Only

Description: This course covers how to actively engage all students in the classroom and prepares students to teach in graduate courses at the School of Medicine or other schools of higher education. Students will create a lesson plan, PowerPoint presentation and activities to engage the students; an assessment plan to measure student's performance; and a teaching philosophy statement.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MBIO 618. Topics in Advanced Microbiology**1-3 Units****Prerequisite(s):** Consent of instructor.

Description: An in-depth examination of one or more topics not included in regularly offered courses in the curriculum. Topics vary.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MBIO 619. Research**1-12 Units****Grading Basis:** Pass/Fail**Prerequisite(s):** Consent of instructor.**Description:** Pass/Fail grading.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MBIO 621. Advanced Immunology: Innate and Adaptive Immunity **2 Units****Prerequisite(s):** MBIO 602 or consent of instructor.

Description: This is an advanced interdisciplinary graduate level course focused on acquiring deeper knowledge about cells and associated concepts involved in innate and acquired immunity. The cells include dendritic cells, macrophages, neutrophils, innate lymphoid cells, NK cells and T cells. Concepts such as cell differentiation, development, activation and function, antigen presentation, thymic selection, and cell cross-talk will be discussed. Format: short lectures, analysis of pertinent high-profile papers. Graded.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

MBIO 622. Immunity to Microbes and Tumor**2 Units****Term Typically Offered:** Fall Only**Prerequisite(s):** MBIO 601 and MBIO 602 or consent of instructor; Completion of all first year graduate courses & an average of 3.0 GPA is required.**Description:** The course focuses on the cellular and molecular components of the immune response that perpetuate or protect against pathogenic and commensal microbes, tumor cells and autoimmunity. Short lectures will be followed by student analysis of pertinent high profile papers.For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)**MBIO 623. Scientific Writing and Hypothesis Testing****1 Unit****Grading Basis:** Pass/Fail**Term Typically Offered:** Summer Only**Prerequisite(s):** Permission of instructor.**Description:** This course will teach students writing and presentation skills necessary to compete successfully for grant funding, and more generally to succeed as a scientist. Topics covered in this course include how to write Abstract, Specific aims, Significance and Approach sections, and how to prepare an effective biosketch. Didactic lectures on these topics will be combined with in class presentations by students.For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)**MBIO 631. Basic Microbiology, Immunology, and Virology****2 Units****Term Typically Offered:** Summer Only**Prerequisite(s):** Consent of instructor.**Description:** A general course in infectious diseases and immunology. Special emphases are placed on oral infections, immune phenomena, and natural resistance mechanisms. Specific topics include the human immune response, pathogenesis of microbial infections, molecular and microbiological basis of periodontal diseases, pulp and periapical infections and cariogenesis. Graded. Summer semester only.For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)**MBIO 632. Basic Immunology****1 Unit****Term Typically Offered:** Summer Only**Description:** This course is designed to teach graduate students in programs related to biomedical research the basics of Immunology.For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)**MBIO 687. Microbial Pathogenesis****2 Units****Term Typically Offered:** Spring Only**Prerequisite(s):** MBIO 601, BIO 645, or consent of instructor.**Description:** A detailed discussion of host-parasite interactions, focusing on the characteristics (i.e., virulence factors) of bacteria that enable them to cause disease. Exotoxins, capsules, adherence mechanisms, intracellular replication, and iron metabolism will be described in detail. Specific bacterial diseases will be examined to illustrate how each virulence factor is required in the infectious process. The use of animals and other model systems will be discussed. Graded. Spring.For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)**MBIO 690. Research Methods in Microbiology and Immunology** **2 Units****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall Only**Description:** A series of lectures and laboratory demonstrations emphasizing current research techniques used in areas of immunology, virology, microbiology, biochemistry and molecular biology. A limited amount of hands-on experience may be utilized in some areas. Fall semester only. Pass/fail grading.For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Neurological Surgery (NSUR)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

NSUR 816. Special Project-Neurosurgery**1-16 Units****Grading Basis:** Pass/Fail**Description:** This course is to be arranged to fit individual needs to cover topics of current interest, to participate in research projects or to receive some advanced training.For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)**NSUR 907. Clinical Elective, Off-Campus****1-16 Units****Prerequisite(s):** Fourth-year standing.**Description:** A clinical experience may be obtained in an approved program in neurological surgery under the supervision of the faculty of a duly recognized educational or research institution. This rotation would be especially useful for those students planning a career in neurological surgery and wishing to experience another institution first hand. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.**Note:** Method of Evaluation is observation of performance by preceptor.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NSUR 920. Neurological Surgery**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: The student will be assigned full-time to work with one of the faculty of neurological surgery and a senior resident during this two-week elective. The student will actively participate in the diagnostic work-up and the management of intracranial vascular lesions, brain tumors, and head trauma. The student will learn the principles of good history taking, physical examination and surgical evaluation of the patient. The student will gain experience with the correct application of the various radiological, isotopic and other neurological diagnostic procedures and the pre- and post-operative care of the intracranial and intraspinal neurological procedures. Attendance is mandatory at scheduled clinics and conferences.

Note: Method of Evaluation includes observation of the degree and quality of the student's participation in the daily clinical and teaching activities of the service.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NSUR 921. Sub-Internship in Neurosurgery**1-4 Units****Prerequisite(s):** Fourth-year standing.

Description: Surgical/Perioperative Selective. This is a four-week rotation that acquaints students with the diagnosis, operative treatment and post-operative care of patients suffering from a wide variety of neurological problems including tumors of the brain and spine, cerebrovascular abnormalities, infection, trauma and congenital abnormalities of the central and peripheral nervous system. Students work closely with the neurosurgical faculty and resident team at the University of Louisville Hospital, a Level One Trauma Center, evaluating patients in the outpatient clinic and in the hospital. The students observe diagnostic and operative procedures and participate in post-operative care. There are daily teaching rounds, weekly tutorial sessions, and weekly conferences in Neurosurgical topics. The medical student is heavily incorporated into the neurosurgery team. Duties include heavily participating during morning rounds, operative assistance, post-operative patient care, and clinic. Students are required to participate in all educational activities with the residents and prepare a brief presentation for the faculty and residents.

Note: Method of Evaluation is combined subjective and objective observation by preceptor.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NSUR 922. Physical Medicine & Rehabilitation**2-4 Units****Prerequisite(s):** Fourth-year standing.

Description: This is a two- or four-week elective and is hospital based at Frazier Rehabilitation Center, but includes out-patient evaluation with additional observation of electromyography and nerve conduction studies and cinefluoroscopic swallowing assessment. Rotations are divided among the traumatic brain injury unit, stroke unit, spinal cord unit, orthopedic unit, general rehab unit and cardiopulmonary unit. Instruction is by both the attending and resident physician on the unit. Emphasis is on history and physical examination with physiatric application, therapeutic exercise and modality prescription writing, equipment and assistive device assessment, daily rounding and participation in weekly multi-discipline team conferencing and family teaching. Introductory lectures & observation of the allied disciplines of Physical Therapy, Occupational Therapy and Speech Therapy are interspersed during this rotation. The goal of this experience is to gain knowledge of skills needed in the field of physiatry, to perform a thorough history and physical with physiatric emphasis; to gain knowledge in diagnostic procedures of EMG, NCS, cinefluoroscopic swallowing assessment; to become familiar with the scope of allied health disciplines important to the field of Physical Medicine & Rehabilitation; and to become familiar with therapeutic approaches in treating patients with debilitating injury and/or illness.

Note: Method of Evaluation is evaluation of patient care, medical knowledge, interpersonal and communication skills, systems-based practice, practice-based learning and improvement, and professionalism.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NSUR 923. Acting Internship in Neurosurgery**4 Units****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** Fourth-year standing.

Description: This four-week course is designed to educate the students wishing to pursue a career in neurosurgery about the issues a neurosurgery intern deals with on a daily basis. To be eligible, students must be planning to apply for a neurosurgery residency.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Neurology (NEUR)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

NEUR 816. Special Project-Neurology
1-16 Units

Description: This course is to be arranged to fit individual needs to cover topics of current interest, to participate in research projects or to receive some advanced training.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 901. Neurology Clerkship
5 Units

Description: Required third-year clerkship. In this four-week clerkship, students are required to spend at least two weeks of the four-week rotation on the wards at either University or Veteran's Hospital. Those electing to spend all four weeks on the wards will be assigned to both locations in two two-week blocks. Those wishing to spend only two weeks on hospital wards may elect to take two weeks of Neurological Surgery, Pediatric Neurology or outpatient clinics. The rotation emphasizes recording complete history and physical examinations concluding with an analysis of cases and appropriate diagnostic tests. Students must demonstrate a thorough neurologic examination by the end of the rotation. One of the main educational goals is localization of lesions in the nervous system and accordingly, assessments of new patients should always include statements addressing this. Students are urged to consult literature pertinent to clinical problems they encounter and are required to attend several ho

Note: Method of Evaluation--students must take and pass the National Board of Medical Examiners Subject Exam in Neurology and will receive a subjective evaluation by the preceptor.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 905. Area Health Education Center (AHEC) Rotation-Neurology
1-4 Units

Grading Basis: Pass/Fail

Prerequisite(s): NEUR 901 is recommended, not required; this elective must be scheduled through the clinical coordinator in the Neurology department and the AHEC office and application must be made no less than six (6) weeks prior to rotation.

Description: This four-week clinical experience in Neurology is offered through the Kentucky Area Health Education Center (AHEC) System, offering students an educational clinical experience participating in Neurology private practices located throughout rural areas in the Commonwealth of Kentucky.

Note: Method of Evaluation is observation of performance by preceptor and students are required to write and submit to the Neurology Education Office a one-page summary of the experience immediately following the rotation.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 906. Clinical Elective-Urban
1-4 Units

Prerequisite(s): Third-year standing; NEUR 901 is not required, but recommended; and this course must be scheduled through the clinical coordinator for the Neurology department.

Description: This elective will allow the student to obtain experience in the private practice of an urban physician of neurology. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance by preceptor.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 907. Clinical Elective, Off-Campus
1-4 Units

Prerequisite(s): Fourth-year standing; NEUR 901 is recommended, but not required; this elective must be scheduled through the clinical coordinator for the Neurology department.

Description: The off-campus neurology elective aims to prepare fourth-year medical students for residency training in neurology or related fields at a duly recognized educational or research institution. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance by preceptor.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 910. Ambulatory Rotation-Neurology**1-4 Units**

Prerequisite(s): Fourth-year standing; NEUR 901 is recommended, not required; this elective must be scheduled through the clinical coordinator for the Neurology Department.

Description: AR Selective. This four-week ambulatory rotation allows the student to be exposed to all areas of outpatient neurology, including stroke, multiple sclerosis, epilepsy, neuromuscular disorders, neuro-oncology and headache. In addition, the student will attend neurology residents' continuity clinic during the rotation. The teaching technique will be 1:1 preceptor to student ratio with assigned readings. Goals: The core goal of all clinical rotations within the department is to acquire knowledge and skills that will enhance the function and quality of life of patients who have neurological diseases. Towards this end, we hope students will be able to obtain a detailed and relevant neurological history; conduct a neurological examination that is comprehensive yet tailored to the patient's symptoms; recognize the presence of impaired neurological function upon examination; identify what site within the nervous system is responsible for the functional impairment, i.e. lesion localization;

Note: Method of Evaluation include the following: faculty will assess students based upon their active participation in patient care and conferences; clinical performance when interviewing and examining patients; depth of medical knowledge, as assessed through patient encounters and/or informal oral examination; proficiency of case presentations (concise, coherent and accurate formulations); independent review of the medical literature, which should be targeted toward enhancing patient care; and a formal evaluation at the end of the rotation will be made and discussed with student.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 911. Stroke**1-4 Units**

Prerequisite(s): Third-year standing; NEUR 901 is recommended, not required; this elective must be scheduled through the clinical coordinator for the Neurology department.

Description: This elective is available for two, three, or four weeks. The stroke elective provides exposure to inpatient management of acute ischemic and hemorrhagic stroke as well as outpatient clinics focused on secondary stroke prevention. Students learn cerebrovascular anatomy, common stroke syndromes, interpretation of imaging studies (including MRI and ultrasonography) and the NIH stroke scale. The evidence supporting various medical and surgical treatment options is discussed in the setting of patient care. There is also instruction in neurocritical care topics such as elevated intracranial pressure. Students interested in interventional neurology may attend endovascular procedures such as intra-arterial thrombolysis. The core goal of all clinical rotations within the department is to acquire knowledge and skills that will enhance the function and quality of life of patients who have neurological diseases. Toward this end, we hope students will be able to obtain a detailed and relevant new. concise, coherent and accurate formulations); independent review of the medical literature, which should be targeted toward enhancing patient care; a formal evaluation at the end of the rotation will be made and discussed with student.

Note: Method of Evaluation includes: Faculty assessment of students based upon their active participation in patient care and conferences; clinical performance when interviewing and examining patients; depth of medical knowledge, as assessed through patient encounters and/or informal oral examinations; proficiency of case presentations (i.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 912. Outpatient Neurology**1-16 Units**

Grading Basis: Pass/Fail

Prerequisite(s): Fourth-year standing, NEUR 901, and this elective must be scheduled through the clinical coordinator for the department of Neurology.

Description: This two-week outpatient Neurology elective aims to prepare fourth-year medical students for residency training in neurology or related fields. The elective emphasizes skills needed to independently manage inpatients with neurological diseases. Students work under the supervision of outpatient faculty and senior residents to complete functions similar to interns and junior residents. The experience can be tailored for individual needs, including the addition of specific outpatient clinical experiences. The faculty will happily provide mentorship in regards to further training for those who are contemplating a career in neurology. Method of Evaluation is observation of performance by preceptor.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 913. Sub-Internship In-Patient Neurology 1-4 Units

Prerequisite(s): Third-year standing; NEUR 901 is not required, but recommended; this elective must be scheduled through the clinical coordinator for the department of Neurology.

Description: This four-week subinternship elective aims to prepare medical students for residency training in neurology or related fields. The clerkship emphasizes skills needed to independently manage inpatients with neurological diseases. Subinterns work under the supervision of inpatient faculty and senior residents, and will complete functions similar to interns and junior residents. The experience can be tailored for individual needs, including the addition of outpatient clinic time. The faculty will happily provide mentorship in regards to further training for those who are contemplating a career in neurology. The core goal of all clinical rotations within the department is to acquire knowledge and skills that will enhance the function and quality of life of patients who have neurological diseases. Toward this end, we hope students will be able to obtain a detailed and relevant neurological history; conduct a neurological examination that is comprehensive yet tailored to the patient's symptoms; recognize the presence of impaired neurological function upon examination; identify what site within the nervous system is responsible for the functional impairment, i.e., lesion localization; define the most likely underlying etiology, in addition to a reasonable differential diagnosis; describe which ancillary tests might clarify the localization and/or etiology; recommend appropriate, evidence-based treatments; counsel patients regarding their diagnosis and prognosis; identify clinical questions that should be the focus of further reading and possibly further research within the field.

Note: Method of Evaluation is faculty assessment of students based on their active participation in patient care and conferences; clinical performance when interviewing and examining patients; depth of medical knowledge, as assessed through patient encounters and/or informal oral examinations; proficiency of case presentations; independent review of the medical literature, which should be targeted toward enhancing patient care; and a formal evaluation which will be discussed with the student.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 914. Epilepsy 1-4 Units

Prerequisite(s): Fourth-year standing; NEUR 901 is not required but recommended; this elective must be scheduled through the clinical coordinator for the Neurology department.

Description: This elective is available for two, three, or four weeks. The epilepsy elective is designed to provide an introduction to the diagnosis and management of seizure disorders. Students will attend epilepsy clinics at the University of Louisville, follow patients admitted to the epilepsy monitoring unit, and participate in the emergency management of status epilepticus. All activities will be supervised by the clinical neurophysiology faculty. At the end of this elective students will be able to distinguish between seizures and other paroxysmal phenomena that may mimic seizures and understand the classification of seizures and epilepsy syndromes. Students will have exposure to EEG and other neurophysiological studies, such as evoked potentials. Students who have a particular interest in sleep medicine may arrange to attend the sleep disorders clinic during the elective. The core goal of all clinical rotations within the department is to acquire knowledge and skills that will enhance the function and quality of life of patients who have neurological diseases. Toward this end, we hope students will be able to obtain a detailed and relevant neurological history; conduct a neurological examination that is comprehensive yet tailored to the patient's symptoms; recognize the presence of impaired neurological function upon examination; identify what site within the nervous system is responsible for the functional impairment, i.e., lesion localization; define the most likely underlying etiology, in addition to a reasonable differential diagnosis; describe which ancillary tests might clarify the localization and/or etiology; recommend appropriate, evidence-based treatments; counsel patients regarding their diagnosis and prognosis; identify clinical questions that should be the focus of further reading and possibly further research within the field.

Note: Method of Evaluation is faculty assessment of students based upon their active participation in patient care and conferences; clinical performance when interviewing and examining patients; depth of medical knowledge, as assessed through patient encounters and/or informal oral examinations; proficiency of case presentations; independent review of the medical literature, which should be targeted toward enhancing patient care; and formal evaluation, which will be discussed with the student.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 916. Neuromuscular Disorders**1-4 Units**

Prerequisite(s): Third-year standing; NEUR 901 is not required, but recommended; course must be scheduled through the clinical coordinator for the Neurology department.

Description: This elective is available for two, three, or four weeks. The neuromuscular elective is an introduction to diseases of the peripheral nervous system including neuropathies, myopathies and disorders of the neuromuscular junction (e.g., myasthenia gravis). Students will be exposed to electromyography and nerve conduction studies as well as peripheral nerve and muscle ultrasonography. The clerkship includes participation in the motor neuron disease (amyotrophic lateral sclerosis) clinic at University of Louisville. The clerkship is held predominantly in the outpatient setting but students follow patients admitted for neuromuscular emergencies (e.g., Guillain-Barre syndrome). The core goal of all clinical rotations within the department is to acquire knowledge and skills that will enhance the function and quality of life of patients who have neurological diseases. Toward this end, we hope students will be able to obtain a detailed and relevant neurological history; conduct a neurological

Note: Method of Evaluation is faculty assessment of students based upon their active participation in patient care and conferences; clinical performance when interviewing and examining patients; depth of medical knowledge as assessed through patient encounters and/or informal oral examinations; proficiency of case presentations; independent review of the medical literature, which should be targeted toward enhancing patient care; and evaluation which will be discussed with the student.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 917. Headache**1-4 Units**

Prerequisite(s): Third-year standing; NEUR 901 is not required but recommended; course must be scheduled through the clinical coordinator for the Neurology department.

Description: This elective is available for two, three, or four weeks. The headache elective offers exposure to patients with various cephalgias, including migraine, tension-type headache, cluster headache, cranial neuralgias and secondary forms of headache, (e.g., pseudotumor cerebri). Students will gain knowledge of International Headache Society classification guidelines and learn which historical and examination features facilitate accurate diagnosis of headache disorders. Students will attend the multi-disciplinary headache clinic at the University of Louisville. While predominately an outpatient elective, students may assist the University of Louisville inpatient general neurology team in caring for patients who require dihydroergotamine or other intravenous headache therapies. The core goal of all clinical rotations within the department is to acquire knowledge and skills that will enhance the function and quality of life of patients who have neurological diseases. Toward this end, we hope students will be able to obtain a detailed and relevant neurological history; conduct a neurological examination that is comprehensive yet tailored to the patient's symptoms; recognize the presence of impaired neurological function upon examination; identify what site within the nervous system is responsible for the functional impairment, i.e., lesion localization; define the most likely underlying etiology, in addition to a reasonable differential diagnosis; describe which ancillary tests might clarify the localization and/or etiology; recommend appropriate, evidence-based treatments; counsel patients regarding their diagnosis and prognosis; identify clinical questions that should be the focus of further reading and possibly further research within the field.

Note: Method of Evaluation is faculty assessment of students based upon their active participation in patient care and conferences; clinical performance when interviewing and examining patients; depth of medical knowledge, as assessed through patient encounters and/or informal oral examinations; proficiency of case presentation; independent review of the medical literature which should be targeted toward enhancing patient care; and evaluation, which will be discussed with the student.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 918. Movement Disorders**1-4 Units**

Prerequisite(s): Third-year standing; NEUR 901 is not required, but recommended; this elective must be scheduled through the clinical coordinator for the Neurology department.

Description: This elective is available for two, three, or four weeks. The movement disorders elective provides exposure to adults and children with various forms of involuntary movement. Disorders seen in this clinic include: Parkinson disease, atypical parkinsonism (multisystems atrophy, progressive supranuclear palsy, corticobasal degeneration), Huntington disease, essential tremor, dystonia (e.g., torticollis and blepharospasm), Tourette syndrome, ataxia, myoclonus, medication-induced movement disorders including tardive dyskinesia, restless legs syndrome, and functional movement disorders. Students will also learn about deep brain stimulation therapy and chemodenervation with botulinum toxin. Over half of patients seen in this clinic have neurodegenerative disorders, students who have a particular interest in neurodegeneration may elect to also attend the dementia and motor neuron disease clinics. The movement disorder group holds monthly video rounds, during which interesting or challenging

Note: Method of Evaluation is faculty assessment of students based upon their active participation in patient care and conferences; clinical performance when interviewing and examining patients; depth of medical knowledge, as assessed through patient encounters and/or informal oral examinations; proficiency of case presentations; independent review of the medical literature, which should be targeted toward enhancing patient care; and a formal evaluation at the end of the course will be made and discussed with student.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 919. Child Neurology**1-4 Units**

Prerequisite(s): Third-year standing; NEUR 901 is not required, but recommended; this course must be scheduled through the clinical coordinator for the Neurology department.

Description: This elective is available for two, three, or four weeks. The child neurology elective aims to introduce medical students an overview of child neurology. The elective emphasizes skills needed to independently manage inpatients with neurological diseases. Students work under the supervision of child neurology faculty and senior residents. The experience can be tailored for individual needs and interest. The faculty will happily provide mentorship in regards to further training for those who are contemplating a career in child neurology. The core goal of all clinical rotations within the department is to acquire knowledge and skills that will enhance the function and quality of life of patients who have neurological diseases. Toward this end, we hope students will be able to obtain a detailed and relevant neurological history; conduct a neurological examination that is comprehensive yet tailored to the patient's symptoms; recognize the presence of impaired neurological function upon examination; identify what site within the nervous system is responsible for the functional impairment, i.e., lesion localization; define the most likely underlying etiology, in addition to a reasonable differential diagnosis; describe which ancillary tests might clarify the localization and/or etiology; recommend appropriate, evidence-based treatments; counsel patients regarding their diagnosis and prognosis; identify clinical questions that should be the focus of further reading and possibly further research within the field.

Note: Method of Evaluation is faculty assessment of students based upon their active participation in patient care and conferences; clinical performance when interviewing and examining patients; depth of medical knowledge, as assessed through patient encounters and/or informal oral examinations; proficiency of case presentations; independent review of the medical literature, which should be targeted toward enhancing patient care; and a formal evaluation at the end of the course will be made and discussed with student.

Note: Formerly cross-listed with PEDI 932.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

NEUR 920. Research in Neurology**1-16 Units**

Prerequisite(s): Third-year standing; NEUR 901 is recommended, but not required; this course must be scheduled through the clinical coordinator for the Neurology department.

Description: This two, three, or four-week Neurology Research elective is designed to allow the student to engage in clinically guided research with a faculty mentor within the Department. Any neurology research project will be determined by advance discussion with the faculty mentor and may consist of a case report, case series, retrospective chart review, or completion of a review-type article. The project should be completed within the four-week time frame, however, additional time may be required for submission of the article for publication. The scope of the project should be proportionate to the time committed. Students are encouraged to present their findings at a teaching conference within the department. Upon completion students should have a detailed knowledge of their area of study through review of medical literature; have identified a gap in current medical knowledge and sought to provide additional data (or, if a review article is planned, the student should identify a topic for which the published literature has not been adequately synthesized into a comprehensive review); understand data collection methods and study design and be aware of the methodological limitations of their study; understand the ethical obligations of medical researchers; be comfortable with scientific writing in neurology; submit the research project for scholarly publication; and identify areas for further research within the field.

Note: Method of Evaluation is subjective evaluation form, to be completed by the attending neurology physician mentoring the student, and interim weekly evaluations, which will be discussed with the student throughout the project.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Obstetrics and Gynecology (OB&G)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

OB&G 816. Special Project-Obstetrics and Gynecology**1-16 Units**

Description: This course is to be arranged to fit individual needs to cover topics of current interest, to participate in research projects or to receive some advanced training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 901. Obstetrics and Gynecology**7.5 Units**

Grading Basis: Pass/Fail

Description: Required third-year clerkship. This is a six-week rotation. Important concepts of obstetrics and gynecology are presented in lectures and conferences. Practice is afforded in gynecologic history taking and physical examination by specific assignment of patients on the wards and in clinics. Each student is required to observe and participate in obstetrical and gynecological procedures.

Note: Method of Evaluation includes observation of performance, passing the National Board of Medical Examiners Subject Exam in Obstetrics & Gynecology, attendance/participation in seminars and assigned small group case studies, and attendance during the clinical rotation is highly relevant to the final grade.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 905. Area Health Education Center (AHEC) Rotation-OB/GYN**1-16 Units**

Prerequisite(s): Fourth-year standing; this elective must be scheduled through the clinical coordinator in OB/GYN and the AHEC Office.

Description: This four-week elective will allow the student to obtain a clinical experience in the practice of an obstetrician/gynecologist at an Area Health Education Center (AHEC). Approved OB/GYN preceptor lists are available in the Obstetrics/Gynecology departmental office.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 906. Clinical Elective-Urban**1-16 Units**

Prerequisite(s): Fourth-year standing.

Description: This two- or four-week elective will allow the student to obtain clinical experience in the practice of a community physician. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 907. Clinical Elective, Off-Campus**1-16 Units****Prerequisite(s):** Fourth-year standing.**Description:** This two- or four-week clinical experience may be obtained in an approval program in Obstetrics/Gynecology under the supervision of a full-time member of the faculty of a duly recognized educational or research institution. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.**Note:** Method of Evaluation is observation of performance.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 908. Urogynecology and Reconstructive Pelvic Surgery**1-16 Units****Prerequisite(s):** Fourth-year standing.**Description:** Students are welcomed to discuss the elective with a faculty member prior to requesting the elective. The student choosing this two- or four-week rotation will participate in the evaluation and management of female patients with pelvic floor dysfunction. The participant will examine and assist in performing diagnostic testing on patients with urinary incontinence, fecal incontinence, pelvic organ prolapse and constipation. They will assist in the surgical correction of incontinence and prolapse. The student will become familiar with female pelvic floor anatomy; understand the concept of pelvic floor dysfunction, i.e., urinary incontinence, fecal incontinence, pelvic organ prolapse and constipation; become familiar with the initial evaluation of female patients with pelvic floor dysfunction; and become familiar with the nonsurgical and surgical treatment options to female patients with pelvic floor dysfunction.**Note:** Method of Evaluation is observation of performance, attendance and participation; grading will be subjective.**Note:** Two-week notice is required to withdraw from program.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 910. Ambulatory Rotation-OB/GYN**1-4 Units****Prerequisite(s):** Fourth-year standing.**Description:** AR Selective. Students will obtain a four-week clinical experience in the office practice of a community physician. They will be exposed to the unique aspects of caring for all types of patients by choosing from one of the options listed below. Private Office Rotation: The student will observe and participate to as great extent possible in ambulatory obstetrical and gynecologic cases within a private practice. Reproductive Endocrinology: Observation and participation in the evaluation of patients with infertility and hormonal abnormalities. Students will participate in divisional conferences and will be asked to present a paper in an area of special interest of the subspecialty. Sites utilized in this rotation are hospital outpatient clinics, in-vitro fertilization clinics, radiology facilities and private physicians offices. Some outpatient surgical exposure is involved. A paper presentation is required.**Note:** Method of Evaluation is subjective observation of performance, evaluation of paper presentation, and a patient log will be submitted and evaluated as part of the performance evaluation.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 911. Gynecological Oncology**1-16 Units****Prerequisite(s):** Fourth-year standing; this elective must be scheduled through the clinical coordinator for the OB/GYN department.**Description:** Students are welcomed to discuss the elective with a faculty member prior to requesting it. Two-week notice is required for withdrawing from the program. This four-week elective will expose the student to the entire range of cancer evaluation and treatment as seen by the Gynecologic Oncologist. Total patient care will be emphasized with exposure in the areas of radiation therapy, radical surgery and chemotherapy. The emphasis will be on clinical participation with private patients being utilized. The student will also be exposed to colposcopy and have an opportunity to learn the techniques of obtaining cytologic specimens, biopsies and certain other minor operative procedures. Attendance and participation at both the Oncology and Ob/Gyn conferences will be required and the student will be asked to present a paper in an area of special interest. Method of Evaluation: Observation of performance, attendance and participation at the Oncology and Ob/Gyn conferences and presentation of paper.**Note:** This rotation is no longer available.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 913. Maternal and Fetal Medicine**1-16 Units**

Prerequisite(s): Fourth-year standing; this elective must be scheduled through the clinical coordinator for the OB/GYN department.

Description: Students are welcomed to discuss this elective with a member of the faculty under whom primary guidance will occur. In this four-week elective, students will be exposed to problems of prematurity, diabetes, Rh Isoimmunization, preeclampsia and intra-uterine growth, retardation, can affect the sizable percentage of obstetrical patients and significantly influence perinatal mortality and morbidity. The student taking this elective will be involved in the evaluation and management of problem pregnancies at this teaching hospital and in the private referral practice of the University Ob/Gyn Associates. An effort will be made to expose the students to patients in the order that a basic understanding of pathophysiology, therapy and prevention is accomplished. Students will participate in the High Risk Clinic, perinatal conferences and in-patient care at the hospital. Students will be exposed to techniques in amniotic fluid analysis, amniocentesis and ultrasonography. The emphasis will be on the evaluation of performance and written thesis.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 914. Reproductive Endocrinology**1-16 Units**

Prerequisite(s): Fourth-year standing.

Description: Students are welcomed to discuss the elective with a faculty member prior to requesting it. In this four-week elective, the student will participate in evaluation and treatment of reproductive endocrinologist problems including infertility. Emphasis will be placed on clinical participation with exposure to department and division lectures, clinics, surgical procedures and in-vitro fertilization. Each student will be asked to present a paper in an area of special interest within the sub-specialty. Note: Two-week notice is required for withdrawal from the program. Note: This elective not offered for the 2019-2020 academic year. **Note:** Method of Evaluation is observation of clinical performance, attendance and participation, and paper presentation of an area of special interest within the specialty.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 915. Pediatric Adolescent Gynecology**1-16 Units**

Prerequisite(s): Fourth-year standing.

Description: In this four-week elective the student will be caring for adolescents and pediatric patients from a gynecologic perspective. The student will participate in several clinics, divisional conferences and the private practice of the faculty. Although 95% of the rotation is ambulatory, occasional surgeries may be attended if desired. Most surgeries are outpatient.

Note: Method of Evaluation is subjective observation of performance and evaluation of paper presentation, if required.

Note: This elective is no longer available.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 916. Research in Women's Health**1-4 Units**

Prerequisite(s): Fourth-year standing.

Description: In this four-week elective, the student will participate with ongoing research occurring in the department. It is up to the student to discuss with the particular faculty member which research opportunities exist. The goal of this elective is to obtain experience in clinical or basic research as it relates to obstetrics and gynecology and to work closely with faculty to gain experience in clinical study design, epidemiology, biostatistics or in gaining laboratory experience. The anticipated output would be participating in the development of a scientific study for publication.

Note: Method of Evaluation will be a subjective observation of involvement; the student will be expected to make a thirty minute oral presentation at the end of the rotation concerning the design of the experience, the hypothesis to be tested and other relevant factors involved in the research study design.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 917. Acting Internship in Obstetrics 1-4 Units

Prerequisite(s): Fourth-year standing In this two- or four-week elective the student will be an active member of the resident team caring for patients in labor or admitted to hospital with OB complications.

Description: Experience with delivery, extensive labor management and postpartum care are included. Students will learn to manage labor, normal and dysfunctional; evaluate and identify high risk pregnant women in labor; perfect technical skills in delivery and operating room; and gain expertise in communicating with pregnant women in labor.

Note: Method of Evaluation is observation of performance and presentation of thesis to faculty at morning report.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 918. Obstetrics and Gynecology Milestone I 3 Units

Prerequisite(s): Fourth-year standing.

Description: this elective is only offered 4/3-4/21/23. This three-week elective is required for all students planning to enter into an OB/GYN residency. All students will be certified as meeting the competencies of Milestone I at the end of this elective. Students will review the medical knowledge competencies for Milestone I and assess mastery of this content with a web-based multiple choice exam written by the APGO/CREOG Milestone Task Force. The elective will teach the procedural and competencies of Milestone I, such as suturing, IUD placement, basic laparoscopy skills, and assess them with OSGF & NALS certification.

Note: Method of Evaluation includes medical knowledge competencies; web-based multiple choice exam, and OSCE procedural competencies.

Note: This elective will only be offered 3/29-4/16/2021.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OB&G 919. Minimally Invasive Gynecologic Surgery 4 Units

Prerequisite(s): Fourth-year standing; this elective must be scheduled through the clinical coordinator for the OB/GYN department.

Description: This four-week elective is designed to give the student a unique experience in minimally invasive gynecologic surgery (MIGS). The curriculum is designed to broaden the student's understanding of the fundamentals of MIGS as they pertain to gynecologic surgery. The main focus will be on laparoscopy, hysteroscopy, and the pre-/post-operative evaluation and management of the GYN patient. The student will have the opportunity to participate in the inpatient and outpatient evaluation and management of the GYN patient. Inanimate models, including laparoscopic box trainers and Virtual Reality Simulators will be utilized to improve fundamental laparoscopic skills. The student will also have the opportunity to work with the MIGS fellows in the cadaver lab utilizing fresh, un-embalmed cadavers and to attend all of the department lectures, including grand rounds and GYN conferences. The student will give a presentation on a MIGS topic during the last week of the rotation and will be required to give citations to support their presentation. A pre- and post-test will be given during the rotation.

Note: Method of Evaluation includes each student will meet with the clerkship director/coordinator at mid-rotation for a discussion of performance and a plan will be made for a needs based improvement for the last two weeks of the rotation.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Ophthalmology (OPHT)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

OPHT 816. Special Project-Ophthalmology 1-16 Units

Description: This course is to be arranged to fit the individual needs to cover topics of current interest, to participate in research projects or to receive some advanced training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OPHT 825. Common Diseases of the Eye Description: Second-year elective. A seminar format involving the pathobiology of eye disease will be presented for 16 weeks (1 hour per week). The pathogenesis, diagnosis, treatment of various common eye diseases will be discussed- for example, diabetic retinopathy, glaucoma, age-related macular degeneration. Selective readings will be assigned and class discussions of those readings will occur. Note: Method of Evaluation includes observation of performance and practical exam at the conclusion of the elective. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1 Unit	OPHT 909. Research/Independent Study Prerequisite(s): Fourth-year standing. Description: In this four-week elective, the student will be provided an in-depth learning opportunity in the details of ophthalmology by working with a faculty member to develop objectives and a plan of study in the field of the student's interest. Note: Method of Observation is observation of performance. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units
OPHT 905. Area Health Education Center (AHEC) Rotation-Ophthalmology Prerequisite(s): Fourth-year standing. Description: In this four-week elective, clinical experience will be obtained in various ophthalmology practices in rural Kentucky. The student will be encouraged to participate in the community to gain an understanding of how community characteristics affect medical care delivery. Note: Method of Performance is observation of performance. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units	OPHT 910. Ambulatory Rotation-Ophthalmology Prerequisite(s): Fourth-year standing. Description: AR Selective. In this two- or four-week elective or four-week selective, the student will evaluate new patients in conjunction with residents and attendings at KLEC-PCC, or VAMC Eye Clinics. Students will have assigned readings in a specified ophthalmology basic text; participate in rounds and conferences, including grand rounds. Refraction and minor lid procedures may be included in the rotation. The student will develop basic eye examination skills including pupil examination, evaluation of eye movements, direct ophthalmology, and basic slit lamp techniques. Emphasis will be placed on the emergency evaluation of the eye and ocular manifestations of systemic diseases. Note: Method of Evaluation includes direct observation of interaction with patients as well as the development of basic skills in eye examination; assessment of knowledge will be made through an oral examination. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units
OPHT 906. Clinical Elective/Urban Prerequisite(s): Fourth-year standing. Description: This elective will allow the student to obtain experience in general patient care, both office and hospital, in the private practice of ophthalmology. The student must complete the Off-Campus Request Form and have it approved by the departmental course director. Note: Method of Evaluation is observation of performance. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units	OPHT 911. Clinical Ophthalmology Prerequisite(s): Fourth-year standing; this elective must be scheduled with the clinical coordinator of Ophthalmology department. Description: This is four-week clinical experience in Ophthalmology and its different sub-specialties, such as cornea and external disease, pediatric ophthalmology, retinal disease, glaucoma and oculoplastics disease. The student will attend all conferences in the department as well as those of related interest in other departments. Special arrangements maybe made to take formal courses in related fields or gain additional experience in our own laboratories. Students will acquire the skills of the basic eye examination, utilizing commonly available instruments such as flashlight and the direct ophthalmoscope and acquire the acquaintance with the indirect ophthalmoscope, slit lamp and fundus contact lens; understand the ophthalmologists role in eye care, referral utilizations and expertise, approaches to emergency eye care and appreciation of ocular manifestations in systemic diseases. Note: Method of Evaluation includes observation of performance to demonstrate an interest and ability in basic ophthalmology skills; assigned readings; and that the student displays the talents of a competent physician while on service. Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.	1-4 Units
OPHT 907. Clinical Elective/Off-Campus Prerequisite(s): Fourth-year standing. Description: A clinical experience maybe obtained in an approved program in ophthalmology under the supervision of a full-time member of a duly recognized educational or research institution. The student must complete the Off-Campus Request Form and have it approved by the departmental course director. Note: Method of Evaluation is observation of performance. Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units	OPHT 912. Clinical Ophthalmology Prerequisite(s): Fourth-year standing; this elective must be scheduled with the clinical coordinator of Ophthalmology department. Description: This is four-week clinical experience in Ophthalmology and its different sub-specialties, such as cornea and external disease, pediatric ophthalmology, retinal disease, glaucoma and oculoplastics disease. The student will attend all conferences in the department as well as those of related interest in other departments. Special arrangements maybe made to take formal courses in related fields or gain additional experience in our own laboratories. Students will acquire the skills of the basic eye examination, utilizing commonly available instruments such as flashlight and the direct ophthalmoscope and acquire the acquaintance with the indirect ophthalmoscope, slit lamp and fundus contact lens; understand the ophthalmologists role in eye care, referral utilizations and expertise, approaches to emergency eye care and appreciation of ocular manifestations in systemic diseases. Note: Method of Evaluation includes observation of performance to demonstrate an interest and ability in basic ophthalmology skills; assigned readings; and that the student displays the talents of a competent physician while on service. Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)	1-4 Units

OPHT 914. Surgical Ophthalmology**1-4 Units**

Prerequisite(s): Fourth-year standing; this elective must be scheduled with the clinical coordinator for the Ophthalmology department.

Description: The four-week elective is designed to introduce the fourth-year medical student into the evaluation, diagnosis and management of patients with surgical ocular diseases. The student will be involved in the preoperative evaluation, surgical care and postoperative care of patients. The student will rotate on the Cornea, Glaucoma, Pediatric Ophthalmology, Oculoplastic and Retina Services to gain a broad experience into the field of surgical ophthalmology. The student will also be involved in the trauma call and the surgical care of patients with ocular and periocular trauma. The student will be required to give a patient presentation at the departmental Grand Rounds at the conclusion of the rotation. Course Goals: To understand the indications for and techniques of common ocular surgeries—i.e., cataract, corneal transplants, glaucoma, strabismus, retinal detachment, facial and ocular and trauma (facial ocular and periocular) surgeries; understand the principles of pre- and post-operative evaluation and care of ophthalmic surgical patients; increase clinical skills by examining patients in the clinic and assisting in surgery; students will learn about the informed consent process for surgical procedures and increase skills in information management and critical thinking by giving a formal case presentation.

Note: Method of Evaluation includes observation of performance, quality of case presentation, participation, and a multiple-choice examination.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Orthopaedic Surgery (ORPD)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

ORPD 905. Area Health Education Center (AHEC)-Orthopedic Surgery**1-16 Units**

Prerequisite(s): Fourth-year standing; arrangements must be made a minimum of six weeks prior to starting the rotation.

Description: In the four-week elective, clinical experience will be obtained in various orthopedic surgery practices in rural Kentucky. The student will be encouraged to participate in the community to gain an understanding of how the community characteristic affects medical care delivery. The preceptors will be board-certified orthopedists.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ORPD 906. Clinical Elective/Urban**1-16 Units**

Prerequisite(s): Fourth-year standing; ORPD 932 or ORPD 936; arrangements must be made a minimum of four weeks prior to starting the rotation.

Description: This elective will allow the student to obtain experience in a community private practice of an orthopedic surgeon. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ORPD 907. Clinical Elective/Off-Campus**1-16 Units**

Prerequisite(s): Fourth-year standing; ORPD 932 or ORPD 933; arrangements must be made a minimum of four weeks prior to starting rotation.

Description: A clinical experience may be obtained in an approved program in Orthopedics under the supervision of a full-time member of the faculty of a duly recognized educational or research institution. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ORPD 911. Research in Orthopedics**1-16 Units**

Prerequisite(s): Fourth-year standing; arrangements must be made a minimum of four weeks prior to starting rotation.

Description: This four-week elective will allow the student to obtain experience in research by participating in existing research projects of the department. Specific research projects can be arranged with full-time faculty or with a clinical faculty member with departmental approval.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ORPD 931. Pediatric Orthopedics

1-16 Units

Prerequisite(s): Fourth-year standing; arrangements must be made a minimum of four weeks prior to starting the rotation.

Description: This elective is available for two or four weeks. Care of multiple musculoskeletal conditions in children and adolescents. Age range of patients is newborn to age 18. Congenital, traumatic, metabolic, neurologic, and sports conditions are treated and evaluated by the pediatric ortho service. Surgical experiences, as well as outpatient office orthopedics and fracture care, are available to students. Weekly conferences - Monday, 5:00 PM - and Tuesday morning fracture conferences are to be part of student rotation. Students will understand basic pediatric orthopedic fundamental of immediate stabilization, diagnosis and treatment in addition to generating appropriate referrals and understanding the timing of those referrals.

Note: Method of Evaluation is observation of performance by residents and attendings.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ORPD 932. Orthopedics

1-16 Units

Prerequisite(s): Fourth-year standing; arrangements must be made a minimum of four week prior to starting rotation.

Description: In this four-week elective, the student, acting as a student intern on one of the two orthopedic services at University of Louisville Hospital, will have primary patient contact, be present at surgery, in clinic, and at faculty offices for follow-up. The outpatient activities include follow-up of patients who have been in the hospital and treatment of outpatients who have fractures. The program also encompasses evaluating and treating the type of problems common to family practice or internal medicine office practices. Students will learn about fundamental orthopedic problems as related to trauma, arthritis, metabolic bone disease, and sports medicine; correlation of orthopedic disease with other aspects of medicine as they would relate to surgery, primary care, (especially ER), rehabilitative medicine, neurosciences and radiology; learn the basic science foundation for orthopedic treatment; develop a diagnostic hypotheses and be able to make therapeutic decisions; and explore orthoped

Note: Method of Evaluation includes evaluation of the student's performance by residents and attendings.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ORPD 934. Out-Patient Reconstructive Orthopedics

1-16 Units

Prerequisite(s): Fourth-year standing; arrangements must be made a minimum of four weeks prior to starting rotation.

Description: This is a four-week elective. Reconstructive Orthopedics covers a vast array of elective services for relief of degenerative conditions of the musculoskeletal system. These include procedures for shoulder disorders, joint replacement surgery particularly of the hip and knee, foot surgery, procedures for realignment of long bones for relief of pressure on joints and joint fusions. The purpose of the rotation is to offer an ambulatory experience to introduce students to the scope of conditions amenable to orthopedic repair and in the out-patient setting to learn about patient selection, pre-operative teaching, post-operative rehabilitation and non-operative ongoing treatment. This is in the offices and clinics of three experienced reconstructive orthopedists. Students will be introduced to orthopedic medicine as it related to the management of degenerative disorders of the extremities; correlation of specialties in primary care, rheumatology, radiology and rehabilitation medicine; learn fundamental physical diagnosis techniques and interpretation of x-rays of the extremities; and explore an outpatient setting of modern orthopedic medicine.

Note: Method of Evaluation is observation of performance by the attending.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ORPD 936. Spine Surgery Service

1-16 Units

Prerequisite(s): Fourth-year standing; arrangements must be made a minimum of four weeks prior to starting rotation.

Description: In this four-week elective, the medical student will have a hands-on experience in the evaluation and treatment of adult and pediatric patients with degenerative conditions of the spine, spinal deformities or spine fractures. The student will attend clinics, surgery, ward rounds and conferences. The student will have the opportunity to take patient histories, perform physical examinations, read spine x-ray, myelograms, CT-scans and MRIs. The student will be allowed to scrub-in surgical cases. The student will be required to attend the Monday morning indications conferences and Thursday morning spine conference.

Note: Method of Evaluation is observation of performance by fellows and attendings.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ORPD 937. Sport Injuries**1-16 Units**

Prerequisite(s): Fourth-year standing; arrangements must be made a minimum of four weeks prior to starting rotation.

Description: This two- or four-week elective is intended as an exposure to the practice of orthopedics actively involved in the care of patients with athletic injuries. The course will emphasize the evaluation of the shoulder, elbow, knee and ankle as they affect sports and sports performance. Students will learn about physical examination, when to take x-rays and methods of non-operative care. This course is especially suited for primary care physicians interested in covering sporting events as well as students interested in sports medicine and diagnostic radiology.

Note: Method of Evaluation includes observation of performance by attendings, specific reading assignments, and performance of physical examination skills.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

ORPD 940. Orthopedic Trauma.**1-4 Units**

Prerequisite(s): Fourth-year standing.

Description: AI Selective. This is a four-week course designed to introduce the fourth-year medical student to orthopedic trauma. The course will cover both adult and pediatric patients. Students will be expected to make rounds with the resident on service, evaluate patients in an outpatient setting, and assist with surgeries on a daily basis. Students will also be involved in assessing orthopedic trauma patients in an emergency setting. They will be involved in interpreting diagnostic information including plain X-rays, CT scans, and MRIs. They will be asked to individually perform a history and physical examination and then formulate a diagnosis and treatment strategy for the patients they evaluate. Students will be given a topic to review and discuss with the Fracture Service that is relevant to a specific patient whose care they participated in. Opportunity will be provided for fresh tissue dissection pertinent to current clinical anatomy. They will attend the Department of Orthopedics Grand Rounds, orthopedic resident block conference, and fracture conference. The course will benefit students interested in a career that includes Orthopedics, Emergency Medicine, General Surgery, Plastic Surgery, Radiology, Pediatrics, and Internal Medicine.

Note: Method of Evaluation includes observation of performance, conference attendance, and topic presentation.

Note: This rotation is not available to UofL students in August or September.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Otolaryngology (OTOL)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific

fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

OTOL 816. Special Project-Otolaryngology**1-16 Units**

Grading Basis: Pass/Fail

Description: This course is to be arranged to fit individual needs to cover topics of current interest, to participate in research projects or to receive some advanced training. Student must complete the Special Project form, have it signed by your mentor and return to Student Affairs in order to receive credit.

Note: Method of Evaluation to be determined by faculty mentor based on the specific project.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OTOL 906. Clinical Elective/Urban**1-4 Units**

Grading Basis: Pass/Fail

Prerequisite(s): Fourth-year standing.

Description: This elective is designed to offer the student an opportunity to obtain clinical experience in the private practice of a community surgeon in the Louisville Metropolitan Area. The student will participate in both office and hospital settings and learn both the clinical as well as the organizational aspects of surgical practice. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OTOL 907. Clinical Elective/Off-Campus**1-4 Units**

Grading Basis: Pass/Fail

Prerequisite(s): Fourth-year standing.

Description: The purpose of this course is to offer a clinical experience in an approved program in Surgery, usually under the supervision of a full time member of the faculty of a duly recognized educational or research institution. This experience will provide the student an opportunity to further develop clinical surgical knowledge and to assume responsibility for all aspects of patient care as a member of the surgical resident team. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OTOL 911. Otolaryngology**1-4 Units****Grading Basis:** Pass/Fail**Prerequisite(s):** Fourth-year standing.

Description: In this two- or four-week rotation, students will attend various conferences including pre and post-op conference where indications and outcomes of upcoming and prior cases are discussed. The student will be part of a residency team at the VAMC, Norton, Kosair or UofL Hospitals and will actively participate in clinic patient evaluation after a "shadowing period", and perform complete head and neck examinations with faculty and resident instruction. There will be opportunities to observe and assist in operative procedures such as tonsillectomies, endoscopic sinus surgery, otologic surgery, head and neck cancer surgery and facial trauma. A list of objectives will be distributed at the beginning of the course to guide the student in self-instruction, and regular discussions of the course objectives will be scheduled with the faculty.

Note: Method of Evaluation includes observation of performance, paper presentation of chosen topic to faculty and residents, and oral examination.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

OTOL 912. Acting Internship in Otolaryngology**4 Units****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring, Summer

Description: This 4th year AI provides students with an interest in Otolaryngology the opportunity to participate in an advanced surgical rotation. The rotation consists of a 1-month rotation on the Otolaryngology service with responsibilities similar to that of an intern. Students will be expected to rotate through several clinical settings to gain a complete experience of the field. Prior to completion, students will prepare and give an oral presentation over an approved topic and will demonstrate their knowledge and understanding with an oral examination.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Pathology (PATH)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

PATH 816. Special Projects-Pathology**1-16 Units**

Description: This course is to be arranged to fit individual needs to cover topics of current interest, to participate in research projects or to receive some advanced training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PATH 869. Immunology of Cancer**1 Unit****Grading Basis:** Pass/Fail

Description: Second-year elective. This course is intended to help the student to understand the relationships between immunology and cancer, focusing on utilization of cancer markers in diagnosis, prognosis and treatment. Topics include: new perspectives in cancer treatment, immunologically related disorders, tumor antigens and effector mechanisms in cancer immunity.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PATH 905. Area Health Education Center (AHEC) Rotation-Pathology**1-16 Units**

Prerequisite(s): Fourth-year standing; this elective must be scheduled through the clinical coordinator in Pathology and the AHEC Office.

Description: This four-week elective clinical experience will be obtained in various pathologist practices or programs in rural Kentucky. The student will be encouraged to participate in the community to gain an understanding of how the community characteristics affect medical care delivery. The program educates the student in both anatomic pathology and laboratory medicine. The anatomic pathology section focuses on the skills and methodologies associated with surgical pathology, cytopathology, and autopsy pathology. The laboratory medicine section focuses on skills and methodologies associated with chemistry, microbiology, immunology, hematology/coagulation, and transfusion medicine.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PATH 908. Clinical Elective, Off-Campus**1-16 Units**

Prerequisite(s): Fourth-year standing; the student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Description: This clinical experience may be obtained in a private practice or an approved program of a duly recognized educational or research institution.

Note: Method of Evaluation includes observation of performance, attendance at conferences, acceptance of responsibilities, and improvement in diagnostic capabilities.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PATH 912. Pediatric Pathology 1-16 Units

Prerequisite(s): Fourth-year standing; this elective must be scheduled through the clinical coordinator for the Pathology department.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PATH 913. Forensic and Autopsy Pathology 1-16 Units

Prerequisite(s): Third-year standing.

Description: This elective is available for two or four weeks and will include assistance in the postmortem of the many forensic autopsies, which are conducted at the Office of the Chief Medical Examiner. The course objectives are to gain greater knowledge in gross human anatomy; become familiar with common causes of sudden unexpected death (both natural and traumatic), and observe the various pathologic changes associated with these causes; expand descriptive medical terminology; become familiar with pattern injuries and the pathophysiology of sudden and unexpected human death; recognize potential human toxins; understand cause, manner, and mechanism of death, and further understand the interplay of these on properly completed death certificates; and recognize trace evidence, and learn procedures for proper collection, handling, and chain-of-custody thereof.

Note: Method of Evaluation includes mandatory attendance and daily discussion between staff and students concerning pathophysiology as seen at autopsy; a paper is required.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PATH 920. Advanced Pathology 1-16 Units

Prerequisite(s): Third-year standing.

Description: This is a two- or four-week elective. In the two-week elective, students will experience anatomic pathology only. The four-week elective will offer an opportunity to see and experience first-hand the entire spectrum of diagnostic activities in anatomic and clinical pathology. A general pathology rotation in routine surgical, autopsy, and clinical pathology experiences are included in this elective. There will be contact with general faculty. This elective is beneficial not only for students considering a career in pathology, but also for students planning careers in Internal Medicine, Surgery, Obstetrics-Gynecology, Pediatrics, Radiology, Radiation Oncology and Dermatology. Rotations may include subspecialty areas in pathology such as: GYN pathology, neuropathology, dermatopathology, cytopathology/fine needle aspiration, hematology, coagulation, clinical chemistry, immunopathology, Transfusion Medicine, etc. The preceptor of the pathology subspecialties are the faculty member responsi

Note: Method of Evaluation includes personal observation of the student's interest, attendance at departmental conferences and staff meetings, attendance at surgical/autopsy sign-out, beeper call conference, acceptance of responsibility, and improvement of diagnostic capabilities.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Pediatrics (PEDI)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

PEDI 816. Special Projects-Pediatrics 1-16 Units

Description: This course is to be arranged to fit individual needs to cover topics of current interest or to participate in research projects or to receive some advanced training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 817. Pediatric Externship**Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring**Prerequisite(s):** Completion of first year of medical school.

Description: Student's participating in this program will have the opportunity to immerse themselves into the world of pediatrics and gain exposure earlier than is traditionally experienced in the medical student career. Selected students will spend four weeks rotating with one of our participating divisions. Students will be expected to complete an individualized learning plan and a self-reflection piece at the completion of the course. Students will receive a stipend if they successfully complete all requirements.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

2 Units**PEDI 901. Pediatric Clerkship****7.5 Units**

Description: Required third-year clerkship. Sites: Norton Children's Hospital, University Hospital, UofL Pediatrics Downtown, UofL Pediatrics Stonestreet, UofL Pediatrics Kosair Charities Center, Home of the Innocents. The six-week pediatric clerkship experience introduces the student to a unique, complex, and challenging field of medicine. It emphasizes those aspects of general pediatrics important for all medical students and will provide a foundation for those students who elect to further study the health care of infants, children and adolescents. Students have the opportunity to participate in the clinical activities of both general and sub-specialty pediatric services, but the emphasis in all services is placed on basic issues and common illnesses. Sub-specialists have the opportunity to emphasize aspects of their particular area of focus that are important for the education of the general physician. Our curriculum is designed as a six-week core clerkship in the third year of medical school and

Note: Method of Evaluation includes 57% clinical performance (outpatient, inpatient and newborn nursery); 25% pediatric exam of the National Board of Medical Examiners; 10% Pediatric Interactive Case Series quiz questions; 5% Administrative Responsibilities; and 3% Standardized/Simulated Patient encounters.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 905. Area Health Education Center (AHEC) Rotation-Pediatrics**1-4 Units**

Prerequisite(s): Fourth-year standing; this rotation must be scheduled with the clinical coordinator for Pediatrics and the AHEC Office.

Description: Clinical experience will be obtained in various pediatrician practices or programs in rural Kentucky. The student will be encouraged to participate in the community to gain an understanding of how the community characteristics affect medical care delivery. The goal of the selective is for the student to be a participant in all the activities involved in the private practice of a pediatrician.

Note: Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 906. Clinical Elective/Urban**1-4 Units**

Prerequisite(s): Third-year standing; the student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Description: This elective will allow students to obtain a clinical experience in the private practice of a community pediatrician.

Note: Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 907. Clinical Elective/Off-Campus**1-4 Units**

Prerequisite(s): Fourth-year standing; the student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Description: A clinical experience may be obtained in an approved program in Pediatrics under the supervision of a full-time member of the faculty of a duly recognized educational or research institution.

Note: Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 910. Ambulatory Pediatric Emergency Medicine 1-4 Units**Prerequisite(s):** Fourth-year standing.**Description:** AR Selective. The fourth-year student will spend two or four weeks in the Norton Children's Hospital Emergency Room and is expected to participate in all of the activities related to the care of patients in a Pediatric Emergency Room. The student is expected to provide family-centered patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health; demonstrate knowledge of common pediatric problems seen in an emergency room setting and be able to apply this knowledge to patient care; demonstrate interpersonal and communication skills with patients' families and other members of the healthcare team; and demonstrate commitment to carry out professional responsibilities, adherence to ethical principles and sensitivity to diversity.**Note:** Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 911. Infectious Disease-Child 1-4 Units**Prerequisite(s):** Third-year standing.**Description:** Third-/fourth-year elective. Students participating in the ID elective will have the opportunity to independently evaluate patients on the ID service (including in-patient consults, direct admissions, out-patient consults and out-patient follow-ups), present them to the attending physician and team for discussion and disposition, and follow patients longitudinally until their infectious disease issues are resolved. Students will be required to present a short seminar on a pediatric infectious disease topic of their choice. Students will attend Infectious Disease Clinic, weekly morning clinical case conference and other scheduled subspecialty conferences. The goals of this elective is to provide family centered patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health; students must demonstrate knowledge of evaluation and therapy for common and unusual infectious diseases in children; student must be able to demonstra**Note:** Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 912. Home of the Innocents 1-4 Units**Prerequisite(s):** Fourth-year standing.**Description:** This rotation will not be available during the 2021-22 academic year. AR Selective. This is a two-week elective or a four-week ambulatory rotation at the Home of the Innocents and offers ample opportunities for the student to learn preventive pediatrics, growth and development, diagnosis and treatment of pediatric problems commonly encountered in office-type practice, as well as the special problems of premature and other high risk infants and children. During the AR, the student will spend time treating the patients, following the therapists, and participating in a procedure week to get a holistic view of the care that is required for this unique patient population. The student will be expected to provide family centered patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health; demonstrate knowledge of common pediatric problems and be able to apply this knowledge to patient care; demonstrate interpersonal and communication skills with patients' families and other members of the healthcare team; and demonstrate commitment to carry out professional responsibilities, adherence to ethical principles and sensitivity to diversity.**Note:** Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 914. Acting Internship-Hospitalist Medicine 1-16 Units**Prerequisite(s):** Fourth-year standing.**Description:** AI Selective or elective. A four-week advanced clinical (sub-internship) in general pediatrics with emphasis on pathophysiology commonly seen on pediatric inpatient wards. Students will be assigned to the JFK inpatient team staffing the Norton Children's Hospital Service which generally consists of a broad spectrum of general pediatric patients in addition to subspecialty patients. Responsibilities will be those of a junior house officer and will consist of daily rounds, conferences and patient care activities. The student is expected to provide family-centered patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health; demonstrate knowledge of evaluation and therapy for common and unusual diagnosis seen on the hospital service; demonstrate interpersonal and communication skills with patients' families and other members of the health care team; and demonstrate commitment to carry out professional responsibilities, adh**Note:** Method of Evaluation includes observation of performance, evaluation of clinical skills, case presentation, and personal assessment.**Course Attribute(s):** CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 916. Pediatric Hematology/Oncology**1-4 Units****Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** Third-year standing.

Description: Third-/fourth-year elective. Two-week elective inpatient or two-week outpatient. Students participating in the inpatient rotation will participate in morning and afternoon rounds with the Hematology/Oncology attending and see consultation patients with the resident and attending. Emphasis will be on disease presentation and differential diagnosis of Hematology/Oncology and immunosuppression principles. Weekly peripheral smear and bone marrow slide reviews will be conducted. Students participating in the outpatient rotation will attend clinic daily with Hematology/Oncology clinic, hemophilia clinic, and sickle cell clinic. The student will provide family-centered patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health; must demonstrate knowledge of common pediatric hematology/oncology problems and be able to apply this knowledge to patient care: must demonstrate commitment to carry out professional responsibilities

Note: Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 918. Genetics**1-4 Units****Prerequisite(s):** Third-year standing.

Description: Third-/fourth-year elective. AR Selective. The focus of the rotation is to achieve clinical experience dealing with structural abnormalities and genetic disorders in children and adults. The program will focus on various aspects of clinical genetics including congenital malformations, chromosome abnormalities, inborn errors of metabolism, abnormal development in utero and resultant consequences, and advances in diagnosis and treatment of genetic diseases. The student will play an active role in participating in individual, multidisciplinary and integrated evaluations of patients with aforementioned conditions; will learn various aspects of clinical genetics; must demonstrate interpersonal and communication skills with the patients' families and other members of the healthcare team; must demonstrate commitment to carry out professional responsibilities; adherence to ethical principles, and sensitivity to diversity.

Note: Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 921. Pediatric Endocrinology**1-4 Units****Prerequisite(s):** Third-year standing.

Description: Third-/fourth-year elective. Students participating in this four-week elective will provide family-centered patient care that is compassionate, appropriate and effective for the treatment of health problems and the promotion of health. Students will participate in patient interviews and examinations; review laboratory data and reformulate treatment plan with attending; review charts for endocrine clinic; provide attendings with an organized oral presentation for each patient encounter; be able to interpret screening labs and test used routinely in evaluation of endocrine problems; formulate a reasonable differential diagnosis for the common pediatric problems in endocrinology; and formulate a reasonable management plan. Student must demonstrate knowledge of common pediatric endocrine problems and be able to apply this knowledge to patient care. Students are expected to learn the normal range of variation in linear growth, weight gain and sexual development in children and the use of observed variations as indicators of potential endocrine and non-endocrine disease; learn the clinical approach to diagnosis of various problems of growth, sexual development, thyroid function, adrenal function, and blood glucose regulations in children; learn the use of clinical and laboratory tools in monitoring treatment of endocrine disorders; learn the education and treatment of newly diagnosed diabetic patients in-hospital, and long-term management on an out-patient basis; and review reference material on assigned topics and present to attending weekly.

Note: Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 922. Comprehensive Pediatric Ambulatory Care (UCHS & UCHS-South)**1-4 Units****Prerequisite(s):** Third-year standing.

Description: Third-/fourth-year elective. AR Selective. Pediatric Ambulatory Care offers ample opportunities for the student to learn preventive pediatrics, growth and development, diagnosis and treatment of pediatric problems commonly encountered in office-type practice. The student will be expected to conduct his/her own interview, physical examination and plan for treatment and care of each patient contact. Appropriate outpatient record keeping, screening, monitoring, and health maintenance activities will be stressed. The student will be required to prepare an oral and written presentation on an ambulatory topic.

Note: Method of Evaluation is observation of performance, evaluation of clinical skills, problem solving, patient management and presentation on a topic of student's choice (with handout).

Note: This rotation no longer available.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 923. Pediatric Cardiology**1-4 Units****Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** Third-year standing.

Description: Fourth-year elective or fourth-year AR Selective with NCMG Pediatric Cardiology. Students participating in this two or 4 week rotation will have an introduction to pediatric cardiology. The primary setting is Norton Children's Hospital managing pediatric patients with congenital and acquired heart disease admitted to the inpatient wards, TCU, and PICU. There will also be exposure to the catheterization lab, echocardiography lab, and outpatient clinic in the academic practice. The student will provide family-centered patient care that is compassionate, appropriate, an effective for the treatment of health problems and the promotion of health; must demonstrate knowledge of common pediatric cardiology problems and be able to apply knowledge to patient care; interpersonal & communication skills with patients' families and other members of the healthcare team, and commitment to carry out professional responsibilities, adherence to ethical principles & sensitivity to diversity.

Note: Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment using the individualized learning plan evaluation form.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 924. Pediatric Nephrology**1-4 Units****Prerequisite(s):** Third-year standing.

Description: Third-/fourth-year elective. Two-week elective inpatient or two-week outpatient. Students participating in the inpatient rotation will follow up to three patients on the inpatient renal service and actively participate in their care in conjunction with an upper-level general pediatric resident and nephrology attending. Students participating in the outpatient rotation will work with a nephrology attending in nephrology clinic to gain exposure to common outpatient medical problems and become familiar with appropriate evaluations in the outpatient setting. All students on both inpatient and outpatient will be discussed in detail prior to completion of the elective. The student will provide family-centered patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health; must demonstrate knowledge of common pediatric nephrology problems and be able to apply this directly to patient care; must demonstrate interpersonal and communication skills with patients' families and other members of the healthcare team; and must demonstrate commitment to carry out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

Note: Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 925. Pediatric Pulmonology**1-4 Units****Prerequisite(s):** Third-year standing.

Description: Third-/fourth-year elective. Two-week AR standard elective or two-week AR outpatient elective. Students participating in the standard elective will perform history and physical examinations, attend daily pulmonary inpatient rounds, outpatient clinics and observe various pulmonary procedures. Students participating in the outpatient rotation will work with a pulmonology attending in clinic at multiple locations as well as observe various pulmonary procedures. The goal for all participants is to increase the student's knowledge of pathophysiology and treatment of pulmonary disease during infancy and childhood. Students must demonstrate knowledge of evaluation and therapy for common pulmonary diseases in children and apply this knowledge to patient care, must demonstrate interpersonal and communication skills with patients' families and other members of the healthcare team; and must demonstrate commitment to carry out professional responsibilities, adherence to ethical principles, and sen

Note: Method of Evaluation includes observation of clinical skills, problem solving, patient management, and an educational presentation on a pediatric pulmonary topic of the student's choice.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 927. Pediatric Gastroenterology**1-4 Units****Prerequisite(s):** Third-year standing.

Description: Third-/fourth-year elective. Two- or four-week elective. Students will perform history and physical exams, attend daily GI inpatient rounds, outpatient clinics, observe various GI procedures and participate in weekly GI conferences to increase their knowledge of pathophysiology and treatment of gastrointestinal diseases during infancy and childhood. The student must demonstrate knowledge of evaluation and therapy for common GI diseases in children and apply this knowledge to patient care; must demonstrate interpersonal and communication skills with patients' families and other members of the health-care team; and must demonstrate commitment to carry out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

Note: Method of Evaluation includes observation of clinical skills, problem solving, patient management, and an educational presentation on a pediatric GI disease topic of the student's choice.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 928. Acting Internship-Pediatric Critical Care 1-16 Units

Prerequisite(s): Fourth-year standing; this advanced elective must be preceded by a primary care pediatric elective, a general ambulatory pediatric elective, a pediatric AHEC, or a general pediatric elective.

Description: AI Selective, ICU selective, or elective. In this four-week AI or elective or two-week ICU experience, the senior student will act as an integral member of the Pediatric Critical Care team. The student will admit patients to the Critical Care Center under the direct supervision of senior pediatric residents and the Critical Care faculty. The student will be expected to actively participate in morning and afternoon rounds/conferences, take eight (8) night calls/month with a pediatric resident, observe and participate in procedures performed in the Critical Care Center and become familiar with common pediatric critical care problems. In addition, the student will be required to research and present a critical care topic of their choosing during the rotation and complete four (4) web-based learning modules. The student will provide family-centered patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health; must demonstrate knowledge of common pediatric ICU problems and be able to apply this directly to patient care; must demonstrate interpersonal and communication skills with patients' families and other members of the health-care team; and must demonstrate commitment to carry out professional responsibilities, adherence to ethical principles and sensitivity to diversity.

Note: Method of Evaluation includes observation of performance, evaluation of clinical skills, case presentation, and personal assessment.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 929. Acting Internship, Neonatology-Norton's Children 1-16 Units

Prerequisite(s): Fourth-year standing.

Description: AI Selective, ICU selective, or elective. This is a four-week AI or elective or a two-week ICU clinical experience in newborn intensive care that is designed so that students may become more familiar with many of the diseases that afflict the newborn. The student will be assigned three to four intensive care patients to manage and follow under the direct supervision of the neonatology fellow and attending physician. The student will have an opportunity to attend high-risk deliveries and perform procedures such as neonatal resuscitation, endotracheal intubation, umbilical artery catheterization and thoracotomy tube placement. The student will participate in an every fourth night call rotation alongside a pediatric house officer. The student will be evaluated on work habits; interpersonal skills with faculty, residents, nurses and parents; knowledge; record keeping; and patient management.

Note: Method of Evaluation is observation of performance, evaluation of clinical skills, case presentation, and personal assessment.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 930. Acting Internship, Neonatology-UofL 1-16 Units

Prerequisite(s): Fourth-year standing.

Description: AI Selective, ICU selective, or elective. This is a four-week AI selective/elective, or a two-week ICU clinical experience in newborn intensive care, designed so that students may become more familiar with many of the diseases that afflict the newborn. The student will be assigned three to four intensive care patients to manage and follow under the direct supervision of the neonatology fellow and attending physician. The student will have an opportunity to attend high-risk deliveries and perform procedures such as neonatal resuscitation, endotracheal intubation, umbilical artery catheterization and thoracotomy tube placement. The student will participate in an every fourth night call rotation alongside a pediatric house officer.

Note: Method of Evaluation includes observation of performance, evaluation of clinical skills, case presentation, and personal assessment.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 934. Practical Pediatrics 4 Units

Prerequisite(s): Fourth-year standing.

Description: This elective is only offered in the block of 2/13-3/10/23.

This four-week course is a practical approach in preparing students interested in a pediatric career for residency. Participants will become trained in resuscitation of neonates and children. Multiple procedure techniques are taught and practiced. Didactic lectures focus on skills to become a well-trained resident as well as residency match preparation. Field trips will help with awareness of community resources necessary for a full spectrum of pediatric care. At the end of this experience, students will be able to understand basic pathophysiology of children and the influences of their social environments to prepare them for accurate patient care orders in the outpatient and hospital setting; will review basic medical principles as well as exposure to critical care specifics not taught in the core curriculum; will develop skills in interpersonal and communication specific to pediatrics; will use scientific methods and evidence to investigate, evaluate and improve patient care practices; must demonstrate commitment to learning, understanding professional responsibilities and sensitivity to diversity; and must understand the importance of advocacy and quality improvement in the health care system.

Note: Method of Evaluation is Pass/Fail grade based on attendance and preparation.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 935. Pediatric Allergy and Immunology**2-4 Units****Grading Basis:** Pass/Fail**Prerequisite(s):** Fourth-year standing.

Description: This rotation will not be available during the 2021-22 academic year. AR Selective. This elective emphasizes experience in the evaluation and management of common clinical problems in allergy and immunology. The learner will assist in the diagnosis and management of asthma, rhinitis/conjunctivitis/rhinosinusitis, atopic dermatitis, urticaria, angioedema, anaphylaxis and adverse reactions to foods, drugs and stinging insects. Additional experience in immunodeficiency disorders, as well as experience in allergy skin testing, administration of allergen immunotherapy, performance and interpretation of pulmonary function tests, and performance of food challenges and/or drug challenges/desensitizations may also be provided. Outpatients will be evaluated by the student/resident under supervision of the faculty physician. In addition, it is expected that the learner will complete recommended readings, participate in selected on-line learning activities and complete both pre-test and post-test assessments. The student will be prepared to recognize, evaluate, diagnose and treat common allergic and immunologic disorders; will become familiar with common diagnostic tests and procedures used in the field of Allergy and Immunology; and will learn when it is appropriate to seek further evaluation by an Allergy/Immunology specialist.

Note: Method of Evaluation is the standard competency-based evaluation provided by the Undergraduate Medical Education Office.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 936. Advanced Pediatric Cardiology**2 Units****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** PEDI 923; fourth-year standing.

Description: The student participating in this two-week elective will have the opportunity to immerse themselves further into the field of pediatric cardiology including the disciplines of interventional cardiology, electrophysiology, heart failure/transplant, advanced imaging, and/or adult congenital heart disease. The setting is various locations where pediatric cardiologists practice including the catheterization lab, echocardiography lab, outpatient clinic, and inpatient settings where the evaluation and management of patients with congenital and acquired heart disease occurs. The student is expected to provide family-centered patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health; demonstrate knowledge of common pediatric problems and be able to apply this knowledge of patient care; demonstrate interpersonal and communication skills with patients' families and other members of the healthcare team; and demonstrate commitment to carry out professional responsibilities, adherence to ethical principles and sensitivity to diversity.

Note: The student should review specific learning goals with the Director of Student Rotations in Pediatric Cardiology at least one week prior to the start of the rotation.

Note: Method of Evaluation includes observation of performance, evaluation of clinical skills, and personal assessment using the individualized learning plan evaluation form.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 937. Pediatric Advocacy & Social Determinants of Health**2 Units****Grading Basis:** Pass/Fail**Term Typically Offered:** Fall, Spring, Summer

Description: Students participating in this elective will have the opportunity to develop their skills and knowledge regarding advocacy and social determinants on health, as relevant to the world of pediatrics. Learning will consist of interactive in-person didactic sessions, on-line modules, and advocacy work in the community. This elective will culminate with the practicing the skills and knowledge gained by attending the annual Advocacy Day event, "Children's Day", at the state capitol in Frankfort Kentucky.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PEDI 938. Food Insecurity Healthcare Series**2 Units****Term Typically Offered:** Fall, Spring, Summer

Description: Food insecurity is the lack of consistent access to affordable, nutritious food. More than 800 million people live with food insecurity and its negative health outcomes as their constant companion. The series is an assortment of interactive training opportunities that aim to provide education and skills needed to advocate, address healthcare disparities, and improve health outcomes for individuals and families facing food insecurity. This series is specifically designed for healthcare students and professionals. Skills learned during this series are useful not only for screening for food insecurity, but also for discussing other sensitive issues. Participants will receive a certificate upon completion of the program.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Pharmacology and Toxicology (PHTX)

Courses numbered 500-799 are considered Graduate-level coursework. Courses numbered 800+ are considered professional/first-professional-level courses.

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

PHTX 816. Special Project-Pharmacology**1-16 Units**

Description: This course is to be arranged to fit individual needs to cover topics of current interest, to participate in research project or to receive some advance training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Physiology (PHZB)

Courses numbered 500-799 are considered Graduate-level coursework. Courses numbered 800+ are considered professional/first-professional-level courses.

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

PHZB 816. Special Project-Physiology 1-16 Units

Prerequisite(s): Consent of Department Chair.

Description: A special course arrangement to provide an in-depth exposure to a specific area of physiology (such as circulatory mechanisms in shock) that involves the interaction of basic science research and clinically relevant problems.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Psychiatry and Behavioral Sciences (PSY)

Courses numbered 500-799 are considered Graduate-level coursework. Courses numbered 800+ are considered professional/first-professional-level courses.

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

PSY 816. Special Project-Psychiatry 1-16 Units

Prerequisite(s): Permission of instructor.

Description: This course allows students to pursue special interest in clinical psychiatry, research or psychiatric education. Off-campus sites depend upon special project.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 830. Behavioral Science and the Law 1 Unit

Description: Second-year elective. This course provides students with an introduction to the legal issues encountered in psychiatric practice.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 901. Clinical Clerkship in Psychiatry 7.5 Units

Description: Required Third-year clerkship. The six-week clerkship is designed to introduce the students to basic psychiatry through intensive clinical experiences, didactic lectures and self-instructional materials. Students learn to recognize and treat patients with psychiatric disorders and to assist in the treatment of psychiatric emergencies. The major emphasis in this competency-based curriculum is on development of psychiatric skills for the primary care physician. Students serve a six-week rotation on one of the following services: Child Psychiatric Services, Norton Psychiatric Clinic, Emergency Psychiatry, University Hospital Inpatient Service, Psychiatry Outpatient Clinic, Adult Consultation/Liaison Psychiatry, VA Medical Center or the Trover Clinic in Madisonville, KY. Students are expected to participate in case conferences, attend seminars, attend weekly departmental grand rounds and participate in the daily schedule of the clinical services to which they are assigned. Each student i

Note: Objectives for the course are outlined at the beginning of each rotation.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 905. Area Health Education Center (AHEC) Rotation 1-16 Units

Prerequisite(s): Fourth-standing; this rotation must be scheduled with the clinical coordinator in Psychiatry and the AHEC Office.

Description: This four-week clinical experience will be obtained in various psychiatric practices or programs in rural Kentucky. The student will be encouraged to participate in the community to gain an understanding of how the community characteristics affect medical care delivery.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 906. Clinical Elective/Urban 1-16 Units

Prerequisite(s): Fourth-year standing.

Description: This elective allows the student to obtain clinical experience in the private practice of a local psychiatrist. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 907. Clinical Elective/Off-Campus
1-16 Units
Prerequisite(s): Fourth-year standing.

Description: A clinical experience may be obtained in an approved program in psychiatry under the supervision of a full-time member of the faculty of a duly recognized educational or research institution. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 908. Special Project-Psychiatry
1-4 Units
Prerequisite(s): Third-year standing.

Description: This is a two-, three-, or four-week research elective for clinical students. Each student will be assigned to a faculty member to work on a mutually agreed upon research activity pertaining to clinical psychiatry. At the end of the elective the student will be required to write a paper describing their work.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 910. Ambulatory Rotation-Psychiatry
1-4 Units
Prerequisite(s): Fourth-year standing; this rotation must be scheduled through the clinical coordinator in Psychiatry.

Description: AR Selective. In this four-week experience, students will function as acting interns with faculty supervision. During the rotation, students will conduct diagnostic evaluations on new and established patients. Students will participate in medication management and provide supportive psychotherapy. Students also may participate in specialty clinics (e.g., mood disorder and anxiety disorder). All cases will have 1:1 student/preceptor supervision.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 911. Adult Consultation/Liaison
1-16 Units
Prerequisite(s): Fourth-year standing; this rotation must be scheduled through the clinical coordinator in Psychiatry.

Description: This four-week elective will be offered on the Adult Psychiatry Consultation/Liaison Service. The student will have supervised, direct clinical responsibility for working with medical and surgical patients at University of Louisville Hospital and Norton Hospital for whom psychiatric consultation is requested and will be a full-time member of the consultation team. The team approach will be emphasized, which will prepare the student to coordinate their knowledge and skills with those in other medical disciplines. The student will learn to organize their clinical findings and recommendations in a manner that will increase effectiveness as a consultant. The student will be required to participate in a weekly didactic seminar covering issues relevant to the field of psychiatric consultation-liaison, a literature seminar and case conferences. More intensive work in special areas of psychiatric liaison is available for students who request it.

Note: Method of Evaluation includes observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 913. Child Psychiatry
1-16 Units
Prerequisite(s): Fourth-year standing; this rotation must be scheduled through the clinical coordinator in Psychiatry.

Description: This four-week elective offers the opportunity to gain experience with acute inpatients, outpatients and emergencies. There will be opportunities to learn about the use of psychotropic drugs in children, as well as other areas of common interest to Pediatrics and Child Psychiatry. The student will be expected to attend and participate in all clinical case conferences and rounds. This elective should be useful to those interested in working with children and families in future practice.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 914. In-Patient Psychiatry**1-16 Units**

Prerequisite(s): Fourth-year standing; this rotation must be scheduled through the clinical coordinator in Psychiatry.

Description: This four-week elective, UL 5 East, offers a comprehensive clinical psychiatry experience including inpatient, outpatient and emergency work with patients involving examination, diagnosis and treatment. The student will be given clinical supervision in acute, general psychiatry, psychopharmacology and in general medicine. The exposure is to an active general hospital acute service, with emphasis on psychotic, encephalopathic, depressed and substance abuse patients. The student will work with the various mental health specialties, including psychiatric social work, clinical psychology, psychiatric nursing and pastoral counseling. Students will be able to attend and participate in all clinical conferences, case presentations, departmental lectures, seminars and Grand Rounds.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 916. Adult Psychiatry-Norton's**1-4 Units**

Prerequisite(s): Fourth-year standing; this rotation must be scheduled through the clinical coordinator in Psychiatry.

Description: This four-week elective offers clinical experience at the Norton Psychiatric Clinic, primarily on the adult inpatient unit. The student will have an opportunity to observe and participate in the evaluation and treatment of a variety of psychiatric disorders. The student will work as part of the psychiatric team that includes psychiatrists, nurses, social workers and psychologists. The student will have an opportunity to observe individual and group psychotherapeutic techniques as well as become acquainted with the various drug and somatic treatment modes used on the service.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 919. Emergency Psychiatry**1-16 Units**

Prerequisite(s): Fourth-year standing; this rotation must be scheduled through the clinical coordinator in Psychiatry.

Description: This two- or four-week elective in the Emergency Psychiatry Division at University of Louisville Hospital provides students with an opportunity, unavailable elsewhere in the University, to evaluate a large number of psychiatric patients, thereby developing diagnostic skills to a very high degree. Supervision is provided by senior residents in psychiatry and preceptor. There is an opportunity for crisis intervention and some focus on brief psychotherapeutic techniques in selected patients to interested students. Also, there may be opportunity for research projects focused on the mental health care delivery system in appropriate situations.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 924. Clinical Forensic Psychiatry**1-4 Units**

Prerequisite(s): Third-year standing; PSY 901; and this rotation must be scheduled through the clinical coordinator in Psychiatry.

Description: This four-week elective at the Kentucky Correctional Psychiatric Center will provide clinical experience for students in the field of forensic psychiatry. Students will function as active members of the treatment team and will participate in the evaluation and treatment of patients referred by the courts or correctional facilities. Areas of clinical activity will include evaluations of competency to stand trial and criminal responsibility. Psychiatric consultation to the Kentucky State Reformatory will also be available. Students will participate in the preparation of comprehensive reports to the court and also have the opportunity to observe court testimony by the attending psychiatrist. All student activities will be supervised by the attending psychiatrist.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

PSY 926. Geriatric Inpatient Psychiatry**2-4 Units****Term Typically Offered:** Fall, Spring, Summer**Prerequisite(s):** 4th year standing.

Description: This elective can be 2 or 4 weeks and will be offered on the Geriatric Inpatient Psychiatry unit at Frazier Rehab/Jewish hospital in conjunction with the UL Peace staff. Students will have supervised direct clinical responsibility for working with geriatric patients involving exams, diagnosis and treatment. The clinical focus will be on the c=various psychopathologies that are seen in a unit dedicated to acute geriatric psychiatric treatment including mood, anxiety, psychotic and cognitive disorders. Students will work with team members from various mental health specialties, including psychiatric social work, clinical psychology and psychiatric nursing. Students will attend and participate in all clinical conferences, case presentations, lectures, seminars and Grand Rounds. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Surgery (SURG)

Courses numbered 500-799 are considered Graduate-level coursework. Courses numbered 800+ are considered professional/first-professional-level courses.

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

SURG 816. Special Project-Surgery**1-16 Units**

Description: This course is to be arranged to fit individual needs to cover topics of current interest, to participate in research projects or to receive some advanced training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 901. Basic Surgery Clerkship**10 Units**

Description: Required third-year clerkship. The eight-week junior clerkship in general surgery enables students to work as clinical clerks in the operating rooms and outpatient clinics of University affiliated hospitals. Opportunities are provided for the history and physical exam and workup of surgical patients and for participation in their daily care in the hospital. Students receive orientation in the operating room and assist in operations performed on their patients. Students also attend clinics with their team and frequently see their patients again after discharge from the hospital. Lectures, seminars and hands-on demonstrations are especially emphasized. The last week of the clerkship is spent with multi-specialty surgeons in private group practice.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 902. Inpatient General Surgery-UofL**2-4 Units****Prerequisite(s):** Fourth-year standing.

Description: The student will join a teaching team consisting of at least one resident and supervising faculty member and will function as an acting intern under their direct supervision. As an acting intern, the student will participate in the pre-operative and post-operative care of surgical patients, as well as participate in the operating room. Specific duties will vary slightly between services and hospitals, though in general students are expected to round specifically on ICU patients first before rounding on ward patients. Hours will vary according to the rotation, but will average eight to twelve hours a day, occasionally longer. Students are expected to take in-house call no more frequently than every fourth night.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 903. Acting Internship-Honors Surgery**4 Units****Prerequisite(s):** SURG 901.

Description: This fourth-year elective provides students with an interest in surgery the opportunity to participate in an advanced surgical clerkship rotation. The elective consists of two one-month rotations or surgical services with responsibilities of that of an intern [SOM Objective 6.3,6.4, 6.8, 7.6]. All students will complete required reading assignments prior to participation in the two hour hands-on skills lab and tissue dissection on Fridays, 9-11 AM. Students also have required weekly skills modules in the virtual reality laparoscopic simulator. Finally, students will take an advanced surgery clerkship exam and oral examination.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 905. Area Health Education Center (AHEC) Rotation-Surgery **1-16 Units**

Prerequisite(s): Fourth-year standing; this elective must be scheduled through the Surgery's Clinical Coordinator and the AHEC Office.

Description: Under the supervision of a practicing community surgeon, students will have the opportunity to participate in a four-week surgical practice in rural Kentucky. Clinical experience will be obtained in both private offices and in-patient settings. The student will develop knowledge of community characteristics and an understanding of how medical care delivery is affected.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 906. Clinical Elective/Urban **1-16 Units**

Prerequisite(s): Fourth-year standing.

Description: This elective is designed to offer the student an opportunity to obtain clinical experience in the private practice of a community surgeon in the Louisville Metropolitan Area. The student will participate in both office and hospital settings and learn both the clinical as well as the organizational aspects of surgical practice. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 907. Clinical Elective, Off-Campus **1-16 Units**

Prerequisite(s): Fourth-year standing.

Description: The purpose of this course is to offer a clinical experience in an approved program in Surgery, usually under the supervision of a full time member of the faculty of a duly recognized educational or research institution. This experience will provide the student an opportunity to further develop clinical surgical knowledge and to assume responsibility for all aspects of patient care as a member of the surgical resident team. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 910. Ambulatory Rotation-Surgery **1-4 Units**

Prerequisite(s): Fourth-year standing.

Description: AR Selective. Students will spend four weeks in a General Surgery ambulatory setting. Students will accompany General Surgery faculty in their private clinics and observe office practice. The student will participate in the care of patients and the study of a wide spectrum of General Surgical practice including Colorectal, Gastro-intestinal, Oncology, and Vascular Surgery. The student may also be required to follow selected patients in the hospital and will have the opportunity to scrub in and assist on some operations. Course goals include allowing the student to experience the busy private office practice in General Surgery and establishing a one-on-one professional relationship with any one of a number of General Surgery faculty.

Note: Method of Evaluation includes 100% observation and performance in the private office, plus operative case and activity reports filed by the student.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 911. Research-Surgical Problems **1-16 Units**

Prerequisite(s): Fourth-year standing.

Description: The purpose of this course is to acquaint the interested medical student with laboratory environment and basic skills.

Opportunities to engage in significant research are available to students who elect to work with faculty on research assignments. The goal will be to assign a project already started or designed to be brief so that a defined end point can be reached in four weeks. Goals include specific goals to be determined with the faculty mentor. Available opportunities are in General Surgery, Oncology, Pediatric Surgery, Otolaryngology, Thoracic & Cardiovascular and Plastic Surgery. **Note:** Method of Evaluation is as arranged with the instructor

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 923. General Surgery **1-16 Units**

Prerequisite(s): Fourth-year standing.

Description: Surgical/Perioperative Selective. In this four-week elective, the student will participate in surgical activities with full-time General Surgery faculty as an Acting Intern at Jewish Hospital. The student will be directly supervised by the resident and attending staff. This will provide the student an opportunity for close personal contact with the full time faculty in General Surgery.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 924. Transplantation Surgery**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: Surgical/Perioperative selective. The student will rotate on the liver, pancreas and kidney transplant services at Jewish Hospital with daily rounds and patient contact. The student will assist on all operative procedures and be intimately involved in the postoperative care. A weekly conference will be attended with the topic discussed by the student and selected by the preceptor. Weekly transplant clinic will be attended by the student.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 925. Trauma Service**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: ICU Selective or elective. In this two-week rotation, the student will serve in an acting intern-type capacity on the Trauma Service and will attend ward rounds with residents and faculty and participate in all surgical conferences and operating room experiences. The student will be assigned to selected ICU patients after approval by the resident and faculty on the basis of the educational value of the patient to the student. The student will be responsible for following and participating in that patient's care from admission to discharge. Because of the popularity of this rotation, first choice will be given to fourth-year students who have not participated on Trauma Service as a third-year student. This is an excellent rotation for students interested in gaining extensive training and exposure in critical care.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 926. General Surgery-Norton's**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: Surgical/Perioperative Selective. In this four-week elective, the student will participate in surgical activities with full-time general surgery faculty as an acting intern at Norton Hospital. The student will be directly supervised by the resident and attending staff. This will provide to the student an opportunity for close personal contact with the full time faculty in General Surgery. The student will participate in Journal Club discussions.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 927. Surgery-VA Medical Center**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: Surgical/Perioperative Selective. In this four-week experience, the student will serve in an acting intern-type capacity on the Surgical service, will attend ward rounds with residents and faculty and will participate in all Surgical conferences and operating room experiences. The student will be assigned to selected ICU and ward patients after approval by the resident and faculty on the basis of the educational value of the patient to the student. The student will be responsible for following and participating in the patient's care from admission to discharge.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 931. Surgical Oncology**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: This is a four-week elective. Medical students are often intimidated by cancer patients. It is important for physicians of all specialties to understand the basic principles of cancer diagnosis, staging, surgical treatment and adjuvant therapy. The complexities of understanding the management of breast, thyroid, rectal, head and neck cancers, melanoma, etc., can only be understood by repeated exposure to patients with these diseases. This Surgical Oncology elective allows regular structured exposure to cancer patients and their preoperative evaluation, as well as surgical techniques and postoperative care and follow-up. A significant amount of time will be spent in the clinics. Students will have the opportunity to see patients as they rotate through melanoma clinic, surgical oncology clinic at the Brown Cancer Center and attending the Brown Cancer Center Tumor Board at noon. The remainder of the time would be spent in the operating room and there will be significant amount of time.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 934. Pediatric Surgery**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: Surgical/Perioperative Selective. This four-week elective consists of working with the House Officers and attendings in the Division of Pediatric Surgery. Learning on the ward will be under the direction of the attending surgeons and the senior and junior house officers. The student will be responsible for doing history and physical examinations, writing progress notes, formulating a care plan on patients assigned and attending Surgical procedures. Attendance at the Monday and Thursday afternoon clinic is highly recommended. There is also opportunity to attend office hours in the private office. The student will be expected to make daily rounds with the house staff and will be on several night rotations with a house officer. The student will attend regular scheduled surgical teaching conferences with the house staff and attending staff. During the rotation, the students will prepare and present a case presentation to the pediatric surgeons and house staff.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 936. Plastic and Reconstructive Surgery**1-16 Units****Prerequisite(s):** Fourth-year selective.

Description: AR Selective. The purpose of this four-week course is to provide opportunity for clinical problem solving in Plastic and Reconstructive Surgery. Students will serve as precept of attending surgeons in cases involving wound healing biology, acute trauma, microsurgery, reconstructive surgery, craniofacial, cleft lip and palate, aesthetic and head and neck surgery. New innovations in Plastic and Reconstructive Surgery such as myocutaneous flap coverage of difficult wounds and microsurgical transfer of free tissue flaps will be available for student participation and clinical problem solving. Fundamental principles of Plastic and Reconstructive Surgery and their relationship to other disciplines will be stressed. Students will be part of the Plastic Surgery team of fellows and residents.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 937. Surgical GI Endoscopy and Laparoscopy**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: Surgical/Perioperative Selective. This is a four-week selective. Endoscopy is performed at UofL and at VAMC under the supervision of attendings and residents. The student will be expected to work closely with the resident and the attending staff in the preoperative assessment of these patients as well as participate in the endoscopy procedure and post-procedure care. In addition, the student will be expected to attend certain regularly scheduled surgical conferences as well as the combined Med-Surg GI Conference at UofL Hospital. The student will also have the opportunity to participate in ongoing research projects or may choose to initiate a new clinical project as time allows.

Note: Method of Evaluation includes observation of performance.

Note: This elective is no longer available.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 944. Subinternship in Vascular and Endovascular Surgery**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: This four-week course is designed to introduce the fourth-year medical student to the evaluation and care of patients with atherosclerotic vascular disease, degenerative arterial disease and venous disease through the specialty practice of vascular/endovascular surgery. The student will be expected to make rounds and write notes on patients, perform history and physical exams, perform basic ward work, participate in open & endovascular procedures, evaluate patients in clinics, review & interpret axial & ultrasonographic images and experience work in the vascular diagnostic laboratory and interventional suite.

Note: Method of Evaluation includes observation of performance, interpretation skills, participation in procedures, clinics and conferences and performance on oral examination

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

SURG 946. Internship Boot Camp**4 Units****Prerequisite(s):** Fourth-year standing.

Description: this is only offered 3/13-4/7/23. This elective will offer the fourth-year student an intensive training in the clinical skills needed during the first-year of residency. Using simulation-based medical education and supervised patient care, the elective teaches the medical knowledge and clinical skills necessary to successfully assess and manage an airway, peripheral and central venous access, suturing and pre-operative evaluation. At the completion, the student will be able to demonstrate the knowledge of the normal structure and function of the human body at the level of the molecule, cell, organ/organ system, and patient as a whole; ability to recognize and manage life-threatening situations and carry out or direct ACLS/CPR; ability to perform common medical procedures such as the placement/care of sutures for small incisions/wounds or the application of splints/bandages; demonstrate the knowledge of the appropriate use of common medical devices, vascular catheters, endotracheal tubes, NG tubes; and demonstrate sterile techniques and universal precautions.

Note: Method of Evaluation includes that students will carry evaluation cards listing the objective skills they are expected to demonstrate; practicum faculty will initial the skill once demonstrated and will conclude with course faculty observing the student perform all skills in a simulated setting.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Therapeutic Radiology (TRAD)

Courses numbered 500-799 are considered Graduate-level coursework. Courses numbered 800+ are considered professional/first-professional-level courses.

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

TRAD 816. Special Project-Radiation Oncology**1-16 Units**

Description: This course is to be arranged to fit individual needs to cover topics of current interest or to participate in research projects or to receive some advanced training.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

TRAD 906. Clinical Elective/Urban**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: This elective allows the student to obtain clinical experience in the private practice of a local radiation oncologist. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

TRAD 907. Clinical Elective, Off-Campus**1-16 Units****Prerequisite(s):** Fourth-year standing.

Description: A clinical experience may be obtained in an approved program in Radiation Oncology under the supervision of a full time member of the faculty of a duly recognized educational or research institution. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

TRAD 911. Brown Cancer Center**1-4 Units**

Prerequisite(s): Fourth-year standing; this elective must be scheduled through the clinical coordinator for the Radiation Oncology department.

Description: AR Selective. This two- or four-week clinical experience is designed to give the medical student a practical elective in cancer and its management. The malignancies seen are of the head and neck, respiratory tract, genital-urinary, gastrointestinal, pediatrics, solid tumors and soft tissue sarcomas, etc. The student will be under the direct supervision of a full-time radiotherapist and will function at the level of the junior house officer and participate in all activities of the service. The student should attend the various clinics, all departmental morning conferences, radiobiology lectures, residents seminars, journal discussions, visiting guest lectures as well as the various tumor board conferences held at UofL, Jewish, Kosair Children's, Norton Hospitals and VA Medical Center.

Note: Method of Evaluation is observation of performance, attendance at various clinics, conferences, seminars, and discussions.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

Urology (UROL)

Courses numbered 500-799 are considered Graduate-level coursework. Courses numbered 800+ are considered professional/first-professional-level courses.

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, please contact the School of Medicine student records coordinator (natalie.harper@louisville.edu).

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific

fee information can be found on the Office of the Bursar website (<http://louisville.edu/bursar/tuitionfee/>).

UROL 816. Special Project in Urology 1-16 Units

Term Typically Offered: Fall, Spring, Summer

Description: This course is to be arranged to fit individual needs to cover topics of current interest, to participate in research projects or to receive some advanced training. Student must complete the Special Project form, have it signed by your mentor and return to Student Affairs in order to receive credit.

Note: Method of Evaluation to be determined by faculty mentor based on the specific project.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

UROL 905. Area Health Education Center (AHEC) Rotation-Urology 1-16 Units

Prerequisite(s): Fourth-year standing.

Description: AHEC Selective. This four-week experience will be obtained in various Urology practices in rural Kentucky. The student will be encouraged to participate in the community to gain an understanding of how the community characteristics affect medical care delivery.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

UROL 906. Clinical Elective-Urban 1-16 Units

Prerequisite(s): Fourth-year standing.

Description: Experience will be obtained in various Urology private practices in the local area. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

UROL 907. Clinical Elective, Off-Campus 1-16 Units

Prerequisite(s): Fourth-year standing.

Description: A clinical experience may be obtained in an approved program in Urology under the supervision of the faculty of a duly recognized educational or research institution. This rotation would be especially useful for those students planning a career in urology and wishing to experience another institution first hand. The student must complete the Off-Campus Request Form and have it approved by the departmental course director.

Note: Method of Evaluation is observation of performance.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

UROL 911. Urology**1-16 Units**

Prerequisite(s): Fourth-year standing.

Description: In this four-week elective, the student will participate as a member of the urology team in the clinic, wards, and operating rooms. The student will learn how to evaluate and work up all common urological conditions and diseases. They will learn basic urologic clinical skills such as a physical exam and urinary catheter placement. They will observe urologic surgery and participate at the appropriate level in the operating room. A 30-minute oral presentation on an urology topic of the students' choice will be required.

Note: Method of Evaluation includes observation of performance in daily rounds, operating room, clinics, and the oral presentation.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

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