

# University of Kentucky College of Medicine

## Technical Standards

Committee	Curriculum Committee
Approval	October 16, 2017
Purpose	To delineate the technical standards necessary for admission, promotion and graduation in the College of Medicine
LCME Standard	10.5 Technical Standards
Policy	<p>The College of Medicine's goal is the broad preparation of students to practice medicine. Regardless of eventual specialty selection, students must demonstrate competence in those intellectual, physical, and social tasks that together represent the fundamentals of medical practice.</p> <p>The Liaison Committee on Medical Education, which accredits the medical school, requires the delineation of technical standards, which are the necessary physical and mental abilities of all candidates and graduates. The following abilities, in conjunction with academic standards, are requirements for admission, promotion, and graduation.</p> <p><b>Observation</b></p> <p>Students must be able to actively participate in all demonstrations and laboratory exercises in the foundational and clinical sciences. Students must be able to assess patients, obtaining a medical history and performing a complete physical examination, which require the functional use of visual, auditory and somatic sensation. They must be able to integrate their findings to develop an appropriate diagnostic and treatment plan.</p> <p><b>Communication</b></p> <p>Students must be able to communicate clearly, efficiently and effectively with patients, their families and members of the healthcare team. They must be able to obtain a medical history in a timely fashion, interpreting changes in affect and non-verbal aspects of communication. Students must be able to record information accurately and clearly, and communicate effectively in English with other health care professionals in a variety of patient settings.</p> <p><b>Motor Function</b></p> <p>Students must possess the capacity to perform a physical examination, diagnostic maneuvers, diagnostic procedures and basic laboratory testing. They must be able to respond to emergency situations in a timely manner and provide both general and emergency care. They must have the capacity to follow universal precaution measures and safety standards applicable to clinical activities.</p> <p><b>Intellectual-Conceptual, Integrative and Quantitative Abilities</b></p> <p>Students must have sufficient cognitive abilities and effective learning techniques to assimilate detailed and complex information. They must be able to learn through a variety of modalities including, but not limited to, classroom instruction, small group, team and collaborative activities, and individual study. Students must be able to memorize, measure, calculate, reason,</p>

	<p>analyze, synthesize and transmit information across multiple modalities. They must recognize and draw conclusions about three-dimensional spatial relationships and logical sequential relationships among events. They must be able to formulate and test hypotheses that enable effective and timely problem-solving in diagnosis and treatment of patients.</p> <p><b>Behavioral and Social Attributes</b></p> <p>Students 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 the diagnosis and care of patients. Candidates must be able to work effectively, respectfully, and professionally as part of the healthcare team, and to interact with patients, their families, and health care personnel in a courteous, professional, and respectful manner. They must be able to tolerate demanding workloads and long work hours, to function effectively under stress, and to display flexibility and adaptability to changing environments. They must be capable of regular, reliable, and punctual attendance at classes and in regard to their clinical responsibilities. Students must be able to contribute to collaborative, constructive learning environments; accept constructive feedback from others; and take personal responsibility for making appropriate positive changes.</p>
<p>Procedure</p>	<p>The Curriculum Committee reviews and updates technical standards every three years and as necessary to meet the requirements of the curriculum. If a recommendation for a change is proposed, the new prerequisite proposal will be presented to Admissions Committee for review and comment.</p> <p>The University of Kentucky College of Medicine is committed to provide equal educational opportunities for qualified students with disabilities. A “qualified person with a disability” is an individual with a disability who meets the academic and technical standards requisite to admission or participation in the College of Medicine’s educational programs, with or without accommodations. The College of Medicine carefully reviews any candidate or enrolled student with a disability to determine whether a reasonable accommodation would permit the candidate or student to satisfy the technical standards. An accommodation is not reasonable if it poses a direct threat to the health or safety of self and/or others, if making it requires a substantial modification in an essential element of the curriculum, if it lowers academic standards, or poses an undue administrative or financial burden.</p>

## Technical Standards

(Original)

The College of Medicine's goal is the broad preparation of students to practice medicine. Regardless of eventual specialty selection, students must demonstrate competence in those intellectual, physical, and social tasks that together represent the fundamentals of medical practice. Applicants and students will be judged not only on their scholastic achievement and ability, but also on their intellectual, physical, and emotional capacities to meet the full requirements of the school's curriculum. The Admissions Committee is instructed to exercise judgment on behalf of the faculty members to recommend the entering class, and to consider character, extracurricular achievement, and overall suitability for the medical profession on the basis of information in the application, letters of recommendation, and personal interviews.

The Liaison Committee on Medical Education, which accredits the medical school, requires that the curriculum provide a general professional education that will enable each student to pursue graduate training in a variety of disciplines. Meeting this requirement necessitates that the curriculum assists students in developing broad knowledge, skills, and behaviors; enabling ongoing self-directed learning and further training; and preparing them to deliver competent medical care. The basic sciences curriculum includes the study of anatomy, biochemistry, histology, pathology, and pharmacology and is designed to establish a core of knowledge necessary for clinical training. The clinical curriculum includes diverse experiences in primary care, family medicine, internal medicine, obstetrics and gynecology, pediatrics, psychiatry, surgery, diagnostic imaging, pathology, emergency medicine, and geriatrics, in both ambulatory and inpatient settings. These rotations develop the ability to practice medicine independently, regardless of the future choice of specialty. To graduate, each student is required to pass each required course and clinical rotation.

The following technical standards specify those attributes that the faculty members consider necessary for completing medical school training; successful completion of these requirements will enable each graduate to subsequently enter residency and clinical practice. These standards describe the essential functions that students must demonstrate if they are to fulfill the requirements of a general medical education. Thus, these standards constitute prerequisites for entrance into, continuation in, and graduation from medical school. The University of Kentucky College of Medicine will consider for admission to the medical school any applicant who demonstrates the ability to perform or to learn to perform the skills listed in this document. Applicants are not required to disclose the nature of any disability to the Admissions Committee; however, any applicant with questions about these technical requirements is strongly encouraged to discuss the issue with the Associate Dean for Admissions and Institutional Advancement before beginning the interview process. If appropriate, and upon the request of the applicant or student, reasonable accommodations may be provided. Certain chronic or recurring illnesses and problems that interfere with patient care or safety may be incompatible with medical training or practice. Deficiencies in knowledge base, judgment, integrity, character, or professional attitude or demeanor that may jeopardize patient care may be grounds for failure of a course or a rotation and possibly for dismissal. A student must possess aptitude, abilities, and skills in five areas: Observation, Communication, Sensory and Motor Coordination or Function, Intellectual-Conceptual Integrative and Quantitative Abilities and Behavioral Attributes.

### Observation

Students must be able to observe demonstrations and to conduct experiments in the basic sciences, including but not limited to physiologic and pharmacologic demonstrations in animals, microbiologic cultures, and microscopic studies of microorganisms and tissues in normal and pathologic states. A student must be able to observe a patient accurately at a distance and close at hand, noting nonverbal and verbal signals. Specific vision-related requirements include but are not limited to the following abilities: skin, culture media, and dipstick tests; visualizing and discriminating findings on x-rays and other imaging tests; reading written and illustrated material; observing demonstrations in the classroom, including projected slides and overheads; observing and

differentiating changes in body movement; observing anatomic structures; discriminating numbers and patterns associated with diagnostic instruments and tests, such as sphygmomanometers and electrocardiograms; and using instruments competently, such as stethoscope, otoscope, ophthalmoscope, and microscope.

#### Communication

Students must be able to relate effectively and sensitively to patients, conveying a sense of compassion and empathy. A student must be able to communicate clearly with and observe patients for the purposes of eliciting information; accurately describing changes in mood, activity, and posture; and perceiving verbal and nonverbal communication. Communication includes not only speech but also listening, reading, and writing. Medical education presents exceptional challenges in the volume and breadth of required reading and the necessity of imparting information to others. Students must be able to communicate quickly, effectively, and efficiently in oral and written English with all members of the health care team. Specific requirements include but are not limited to the following abilities: communicating rapidly and clearly with the medical team on rounds; eliciting a thorough history from patients; and communicating complex findings in appropriate terms to patients and to various members of the health care team (fellow students, physicians, nurses, aides, therapists, social workers, and others). Students must learn to recognize and promptly respond to emotional communications such as sadness, worry, agitation, and lack of comprehension of physician communication. Each student must be able to read and to record observations and plans legibly, efficiently, and accurately in documents such as the patient's record. Students must be able to prepare and communicate concise but complete summaries of individual encounters and complex, prolonged encounters, including hospitalizations. Students must be able to complete forms according to directions in a complete and timely fashion.

#### Sensory and Motor Coordination or Function

Students must have sufficient sensory and motor function to perform a physical examination using palpation, auscultation, percussion, and other diagnostic maneuvers. In general, performing such an examination requires sufficient exteroceptive sense (touch, pain, and temperature), proprioceptive sense (position, pressure, movement, stereognosis, and vibration), and motor function. Students should be able to execute motor skills that are reasonably required to provide general care and emergency treatment to patients. They must be able to respond promptly to urgencies within the hospital and must not hinder the ability of their co-workers to provide prompt care. They must be able to measure angles and diameters of various body structures by using tape measure and goniometer and to measure blood pressure and pulse. Students should be able to learn to perform basic laboratory tests (urinalysis, complete blood count, etc.) and diagnostic and therapeutic procedures (phlebotomy, drawing arterial blood, lumbar puncture, arthrocentesis, etc.). Examples of activities reasonably required of physicians in emergency situations include arriving quickly when called, initiating appropriate therapeutic procedures, administering intravenous medication, applying pressure to stop bleeding, opening obstructed airways, suturing uncomplicated wounds, and performing uncomplicated obstetrical maneuvers.

#### Intellectual-Conceptual Integrative and Quantitative Abilities

Other abilities required of students include measurement, calculation, reasoning, analysis, judgment, numerical recognition, and synthesis. Problem solving, a critical skill demanded of physicians, requires all of these intellectual abilities and must be performed quickly, especially in emergency situations. Students must be able to identify significant findings from history, physical examination, and laboratory data, to provide a reasoned explanation for likely diagnoses, and to prescribe medications and therapy, recalling and retaining information in an efficient and timely manner. The ability to incorporate new information from peers, teachers, and the medical literature in formulating diagnoses and plans is essential. Good judgment in assessing patients and in developing diagnostic and therapeutic plans is essential; students must be able to identify and communicate the limits of their knowledge to others when appropriate. Students must be able to interpret graphs describing biologic relationships and to work with other similar presentations of data.

## Behavioral Attributes

The personal qualities of empathy, integrity, honesty, concern for others, good interpersonal skills, interest, and motivation are required. Students must possess the emotional health required for full use of their intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities related to the diagnosis and care of patients, and the development of mature, sensitive and effective relationships with patients. At times, students will be required to be aware of and to react appropriately to their own biases and immediate emotional responses. For example, students must maintain a professional demeanor and organization in the face of long hours and personal fatigue, dissatisfied patients, and tired colleagues. Students must be able to develop professional relationships with patients, providing comfort and reassurance when appropriate while protecting patients' confidentiality. Students must be able to work collaboratively with other members of the health care team. Students must possess adequate endurance to tolerate physically taxing workloads and to function effectively under stress. All students are at times required to work for extended periods, occasionally with rotating shifts. Students must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Students are expected to accept appropriate suggestions and criticisms and, if necessary, to respond by modifying their behavior.