

Jefferson School of Pharmacy Technical Standards

Students enrolling in the Jefferson School of Pharmacy will receive training to prepare them to practice pharmacy in a variety of practice setting, e.g., community, health care systems, clinics, etc. Regardless of the specific area of practice selected by the student, all students must demonstrate competence in the areas of intellectual, physical and social tasks that together represent the fundamentals of being able to provide contemporary pharmaceutical care. Throughout the curriculum students will be evaluated on their scholastic achievement and ability. In addition, students will be evaluated on their intellectual, physical and emotional capacities to meet the full requirements of the school's curriculum.

The following technical standards specify those attributes the faculty considers necessary for completing pharmacy training, enabling each graduate to subsequently enter clinical practice, residency or fellowship training. These standards describe the essential functions students must demonstrate in order to fulfill the requirements of a general pharmacy education, and thus, are prerequisites for *entrance, continuation, and graduation* from the School of Pharmacy.

The Jefferson School of Pharmacy will consider for admission 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 their disability(ies), if any, to the Admissions Committee. However, any applicant with questions about these technical standards is strongly encouraged to discuss the issue with the Associate Dean for Student Affairs prior to the interview process. If appropriate, and upon the request of the applicant/student, reasonable accommodations will be provided.

Certain chronic or recurrent illnesses and problems that interfere with patient care or safety may be incompatible with pharmacy training or practice. Other conditions that may lead to a high likelihood of student illness should be carefully considered. Deficiencies in knowledge base, judgment, integrity, character, or professional attitude or demeanor, which may jeopardize patient care, may be grounds for course/rotation failure and possible dismissal.

A student must possess aptitude, abilities, and skills in five areas: 1) observation; 2) communication; 3) sensory and motor coordination and function; 4) conceptualization, integration and quantitative evaluation; and 5) behavioral and social skills, abilities and aptitude. These are described in detail below. The program faculty will monitor maintenance of these standards. Students must be able to independently perform the described functions.

1. OBSERVATION

Students must be able to observe demonstrations and conduct exercises in a variety of areas related to contemporary pharmacy practice, including but not limited to, monitoring of drug response and preparation of specialty dosage forms. A student must be able to observe a patient accurately at a distance and close at hand, noting nonverbal as well as verbal signals. Specific vision-related requirements include, but are not limited to the following abilities: visualizing and discriminating findings on drug or fluid monitoring tests; reading written and illustrated material; observing demonstrations in the classroom or laboratory, including projected slides and video presentations; observing and differentiating changes in body movement; observing anatomic structures; discriminating numbers and patterns associated with diagnostic and monitoring instruments and tests, and competently using instruments for monitoring drug response.

2. COMMUNICATION

Students must be able to relate effectively and sensitively with patients and their caregivers and or partners, and convey a sense of compassion and empathy. A student must be able to communicate clearly with, and observe patients in order to elicit information, accurately describe

changes in mood, activity and posture, and perceive verbal as well as nonverbal communication. Communication includes not only speech but also reading and writing. Students must be able to communicate quickly, effectively and efficiently in oral and written English with all members of the health care team and to patients or their care provider. Specific requirements include but are not limited to the following abilities; communicating rapidly and clearly with the health care team on rounds; eliciting a thorough history from patients; and communicating complex findings in appropriate terms to patients and their caregivers, partners and 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 communication such as sadness, worry, agitation, and lack of comprehension of communication. Each student must be able to read and record observations and care plans legibly, efficiently and accurately. Students must be able to prepare and communicate concise but complete summaries of individual encounters and complex, prolonged encounters with patients. Students must be able to complete forms or appropriately document activities according to directions in a complete and timely fashion.

3. SENSORY AND MOTOR COORDINATION OR FUNCTION

Students must have sufficient sensory and motor function to monitor drug response and to prepare and or dispense pharmaceuticals. A student should be able to execute motor movements reasonably required to participate in the general care and emergency treatment of patients. They must be able to respond promptly to urgencies within the practice setting and must not hinder the ability of their co-workers to provide prompt care. Examples of such emergency treatment reasonably required of pharmacists include arriving quickly when called, participating in the initiation of appropriate procedures, and rapidly and accurately preparing appropriate emergency medication.

4. INTELLECTUAL-CONCEPTUAL INTEGRATIVE AND QUANTITATIVE ABILITIES

These abilities include measurement, calculation, reasoning, analysis, judgment, numerical recognition and synthesis. Especially important is the appropriate and rapid calculation of dosages in a variety of conditions such as renal or hepatic failure, obesity, cardiac or respiratory arrest, etc. Additionally, calculations involving appropriate dilution or reconstitution of drug products, electrolytes, etc. must be made accurately and quickly. Problem solving, a critical skill demanded of all pharmacists, 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 assessment, and laboratory data; provide a reasonable explanation and analysis of the problem; determine when additional information is required; suggest appropriate medications and therapy; develop appropriate treatment plans to improve patient outcomes; develop patient counseling information at a complexity level appropriate to a particular situation; and retain and recall information in an efficient and timely manner. The ability to incorporate new information from peers or teachers, and to locate and evaluate new information from the literature to be used appropriately in formulating assessments and pharmaceutical care plans is essential, as is good judgment in patient assessment and therapeutic planning for disease management. Students must be able to identify and communicate the limits of their knowledge to others when appropriate and be able to recognize when the limits of their knowledge indicate further study or investigation is essential before participating in decision making. Students must be able to interpret graphs or charts describing biologic, economic or outcome relationships.

5. BEHAVIORAL ATTRIBUTES

Empathy, integrity, honesty, concern for others, good interpersonal skills, interest and motivation are all personal qualities that 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 attendant to the care of patients; and the development of mature, sensitive and effective relationships with patients and their caregivers and partners. At times this requires the ability to

be aware of and appropriately react to one's own immediate emotional responses and environment. 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 and their caregivers and partners, providing comfort and reassurance when appropriate while protecting patient confidentiality. Students must possess adequate endurance to tolerate physically taxing workloads and to function effectively under stress or with distractions. 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 must also develop the skills necessary to instruct and supervise technical personnel assisting with the delivery of pharmaceutical services. Students are expected to accept appropriate suggestions and criticism and if necessary, respond quickly, appropriately and cooperatively by modification of behavior.

Reference: Technical Standards, taken from the UK College of Pharmacy Bulletin 2012-13.
<http://pharmacy.mc.uky.edu/programs/pharmd/files/bulletin.pdf>. Accessed May 2013.