## University of Houston College of Pharmacy Technical Standards

As an accredited pharmacy program, the University of Houston College of Pharmacy is responsible for student selection and matriculation, curriculum design, implementation and evaluation, and determination of who should be awarded a degree in fulfillment of specific academic and technical requirements. As an advisory committee to the Dean, the Admissions and Progression Committee is instructed to exercise judgment on behalf of the faculty to recommend the entering class, and to consider character, extracurricular achievement, and overall suitability for the pharmacy profession based upon information in the application, letters of recommendation, and personal interviews. Regardless of the type of practice i.e., community, clinic, health care system, students must demonstrate competence in those technical standards that together represent the fundamentals of being able to provide contemporary pharmaceutical care.

The University of Houston College 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 disabilities, if any, to the Admissions and Progression Committee. However, any applicant with questions about these technical standards is strongly encouraged to discuss the issue with the Assistant Dean for Student and Professional Affairs prior to the application process.

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.

The University of Houston College of Pharmacy adheres to technical standards by which it assesses all students, with or without accommodation. A student must possess aptitude, abilities, and skills in five areas: 1) observation; 2) communication; 3) sensory and motor coordination and function; 4) intellectual and conceptual, integrative and quantitative abilities; and 5) behavioral and social skills, abilities and aptitude.

The following technical standards describe the essential functions students must possess and demonstrate in order to fulfill the requirements of a general pharmacy education, and thus, are prerequisites for *entrance, continuation, and graduation* from the College of Pharmacy.

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**Technical Standard 1- Observation-** The ability to critically observe demonstrations, experiments, and patients utilizing visual, auditory, and somatic senses. Thus, acuity in these senses is vital.

A PharmD student must possess sufficient visual, auditory, tactile and motor abilities to allow him or her to gather data from written reference material, from oral presentations, by observing demonstrations and experiments, by studying various types of medical illustrations, by observing a patient and his or her environment, by observing clinical procedures performed by others, by reading digital or analog representations of physiologic phenomena, and by performing a basic physical examination of a patient.

A PharmD student 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 overheads; 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.

**Technical Standard 2- Communication-** The ability to communicate effectively, efficiently and with sensitivity in verbal, non-verbal and written forms with peers, faculty, staff, patients, and the practice community.

A PharmD student must be able to ask questions, to receive answers perceptively, to record information about patients, and to advise patients and other health-care professionals. He or she must be able to communicate effectively and efficiently with patients, their families, and with other members of the health care team. This must include spoken communications and nonverbal communications such as interpretation of facial expressions, affects, and body language. Proficiency in both written and spoken English is required

A PharmD student must be able to relate effectively and display appropriate sensitively with patients and their caregivers and or partners, conveying a sense of compassion and empathy. A student must be able to communicate clearly, 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.

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. 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.

**Technical Standard 3- Sensory and Motor Coordination and Function-** The physical stamina to maintain a high level of functioning in the face of taxing workloads and stressful working conditions.

A PharmD student 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. A PharmD student may experience long hours of standing on some practice sites during their academic career.

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.

**Technical Standard 4- Intellectual and Conceptual, Integrative and Quantitative Abilities-** Competent demonstration of a range of intellectual skills that allow mastery of the large and complex body of knowledge that comprises the pharmacy curriculum.

A PharmD student must possess a range of intellectual skills that allows him or her to master the broad and complex body of knowledge that comprises a pharmacy education. The student's learning style must be effective and efficient. The ultimate goal will be to solve difficult problems and make recommendations for therapeutic decisions.

A PharmD student must be able to memorize, perform scientific measurement and calculation, and ultimately evaluate the biomedical literature. Reasoning abilities must be sophisticated enough to analyze and synthesize information from a wide variety of sources. It is expected that a PharmD student be able to learn effectively through a variety of modalities including, but not limited to classroom instruction, small group discussion, individual study of materials, preparation and presentation of written and oral reports, and use of computer-based technology.

Specific requirements include but are not limited to the following abilities: 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. Students must be able to interpret graphs or charts describing biologic, economic or outcome relationships. 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.

**Technical Standard 5- Behavioral and Social Skills, Abilities and Aptitude-** The stability and stamina sufficient mental and emotional health to utilize intellectual abilities, exercise good judgment and promptly complete all assignments and responsibilities.

A PharmD student must be of sufficient emotional health to utilize fully his or her intellectual ability, to exercise good judgment, to complete patient care responsibilities promptly, and to relate to patients, families, and colleagues with courtesy, compassion, maturity, and respect for their dignity. Students must display this emotional health while practicing under the stress of physically and emotionally demanding workloads. Students must be able to modify behavior in response to constructive criticism. He or

she must be open to examining personal attitudes, perceptions, and stereotypes (which may negatively affect patient care and professional relationships).

An individual with a diagnosed psychiatric disorder may function as a pharmacy student as long as the condition is under sufficient control to allow accomplishment of the above goals with or without reasonable accommodation. He or she must exhibit behavior and intellectual functioning that does not differ from acceptable standards. In the event of deteriorating emotional function, it is essential that a pharmacy student be willing to acknowledge the disability and accept professional help before the condition poses danger to self, patients, and colleagues.

Specific requirements include but are not limited to the following abilities: the ability to participate collaboratively and flexibly as a professional team member is essential, ability 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. Additionally, the student should demonstrate the capacity to examine and deliberate effectively about the social and ethical questions that define pharmacy and the pharmacist's role and to reason critically about these questions. He or she must be able to identify personal reactions and responses, recognize multiple points of view, and integrate these appropriately into clinical decision making. Students are expected to accept appropriate suggestions and criticism and if necessary, respond quickly, appropriately and cooperatively by modification of behavior. Students must also develop the skills necessary to instruct and supervise technical personnel assisting with the delivery of pharmaceutical services.

Students are required to certify that they have received and read these technical standards prior to matriculation. Individuals with questions or concerns about their ability to meet these standards should contact The University of Houston College of Pharmacy Assistant Dean for Student and Professional Affairs.

Signature

Date

Print Name

Adopted by UHCOP faculty on September 14, 2012