TECHNICAL STANDARDS FOR ADMISSION, PROMOTION, AND GRADUATION

Introduction

Pharmacy education requires that the accumulation of scientific knowledge be accompanied by the simultaneous acquisition of skills and professional attitudes and behavior. Pharmacy school faculty have a responsibility to society to matriculate and graduate the best possible pharmacists. Thus, admission to the School of Pharmacy is only offered to those who present the highest qualifications for the study and practice of Pharmacy. Technical standards presented in this document are requirements for admission to, promotion within, and graduation from the Loma Linda University School of Pharmacy.

It is the policy of the Loma Linda University School of Pharmacy that no person shall be denied admission, promotion, or graduation on the basis of any disability, provided that the individual demonstrates ability to meet the minimum technical standards set forth herein. Standards are developed as criteria to achieve the Doctor of Pharmacy degree in preparation for licensure as a practicing pharmacist and for postgraduate professional training and education in any of the varied fields of pharmacy. Further, the safety of the patient must be guarded as the final and ultimate consideration. Therefore, it is not only reasonable, but also essential, for competent patient care to require minimum technical standards for the education of pharmacists.

Graduates of schools of pharmacy must have the knowledge and skills to function in a broad variety of clinical, administrative and leadership situations and to render a wide spectrum of pharmaceutical care. The Loma Linda University School of Pharmacy acknowledges Section 504 of the 1973 Vocational Rehabilitation Act and PL 11-336, the Americans with Disabilities Act (ADA) 1993, but ascertains that certain minimum technical standards must be present in the prospective candidates.

The Accreditation Council for Pharmacy Education requires that the curriculum provide a general professional education, enabling each student to eventually practice as a pharmacist generalist. This requires the development of broad knowledge, skills, behaviors, ongoing self-directed learning, and the eventual ability to deliver competent pharmaceutical care within a reasonable timeframe and within the context of legal and ethical framework of the profession.

Technical Standards

Technical standards specify those attributes the faculty consider necessary for initiating, continuing, or completing a high quality pharmacy education program, thus enabling each graduate to enter practice, residency, or fellowship training. The faculty have responsibility to monitor the maintenance of these standards. Students must be able to perform independently all of the described functions. A candidate for the Doctor of Pharmacy degree must have aptitude, abilities, and skills in the following areas:

- Observation;
- Communication
- Motor Coordination and Function;
- Conceptual, Integrative and Quantitative Abilities;
- Behavioral and Social Attributes; and
- Ethical Values.
The 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 his / her specific issue(s) with the Director of Student Services prior to the interview process. If appropriate, and upon the request of the applicant, reasonable accommodations will be provided. This commitment also holds for current students whose health or abilities change while enrolled in the program.

The School of Pharmacy recognizes that certain student disabilities can be accommodated without compromising the standards required by the college and the integrity of the curriculum. Technological compensation can be made for some handicaps in these areas, but a candidate should be able to perform in a reasonably independent manner. The School is committed to the development of innovative and creative ways of opening the curriculum to competitive and qualified disabled candidates, while protecting the care of patients. The use of a trained intermediary means that a candidate's judgment must be mediated by someone else's power of selection and observation. Therefore, third parties cannot be used to assist students in accomplishing curricular requirements in the skill areas specified above.

**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 and experiments in the basic sciences. A student must be able to observe a patient accurately at a distance and close at hand, noting nonverbal as well as verbal signals. The student must be able to observe and interpret presented information. Specific vision-related requirements include, but are not limited to the following abilities: visualizing and discriminating findings on monitoring tests; reading written and illustrated material; observing demonstrations in the classroom or laboratory, including projected images; observing and differentiating changes in body movement; observing anatomic structures; discriminating numbers and patterns associated with diagnostic and monitoring instruments and tests; observing a patient’s environment; and competently using instruments for monitoring drug response.

**Communication**

A student should be able to speak to, hear, and listen to patients in order to elicit information; describe changes in mood, activity, and posture; and perceive verbal as well as nonverbal communications. 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. Students must be able to communicate effectively and sensitively with patients and faculty and staff in the School of Pharmacy. Communication includes not only speech, but also reading, writing, hearing, and computer literacy. Students must be able to communicate quickly, effectively and efficiently in oral and written English with all members of the healthcare team. Specific requirements include but are not limited to the following abilities; communicating rapidly and clearly with members of the health care team individually and collectively; eliciting a thorough medication and medical history; and communicating complex findings in appropriate terms that are understood by patients and their caregivers, partners, and various members of the healthcare team (fellow students,
pharmacists, faculty and staff members, physicians, nurses, aides, therapists, social workers, and others). Students must be able to prepare and communicate concise but complete summaries of individual activities and decisions 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.

**Motor Coordination and Function**

Students should have sufficient motor function and skills necessary to perform basic tasks in the practice of pharmacy and to elicit information from patients by various screening maneuvers. 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, administration of cardiopulmonary resuscitation, application of pressure to stop bleeding, participating in the initiation of appropriate procedures, rapidly and accurately preparing appropriate emergency medication, and the preparation of sterile intravenous medications. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision. Students must have sufficient sensory and motor function to monitor drug responses and to prepare and or dispense pharmaceuticals. A candidate should be able to perform basic laboratory tests (e.g., blood glucose and lipid levels), administer immunizations (intramuscular and subcutaneous), compound sterile and non-sterile dosage forms, use current technology for drug information evaluation, read EKGs, drug blood levels, and other laboratory results. It is also necessary for the student to be able access drug and disease information sources (both paper and electronic) within a reasonable timeframe and record data correctly so that it is clearly understood by other health professionals.

**Intellectual - Conceptual, Integrative and Quantitative Abilities**

A student should possess sufficient intellectual, conceptual, integrative and quantitative abilities to complete a rigorous and intense didactic and experiential curriculum. These abilities include measurement, calculation, rational reasoning, problem analysis and solving, decision making, judgment, numerical recognition, information integration, and solution synthesis. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relations of structures. Especially important is the appropriate and rapid calculation of dosages for a variety of patient-specific 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 and critical skills demanded of all pharmacists, requires all of the above-mentioned intellectual abilities and must be performed quickly, especially in emergency situations. 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 acknowledge 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. A student must be fully alert and attentive at all times in clinical settings.
Behavioral and Social Attributes

Empathy, integrity, honesty, concern for others, kindness, patience, good interpersonal skills, interest and motivation are all personal qualities that are required. Students must possess the emotional and mental health required for full use of their intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the screening and care of patients, and the development of mature, sensitive, and effective relationships with patients of differing cultures and backgrounds. Students must also be able to develop mature, sensitive and effective relationships with patients and their caregivers and partners, providing comfort and reassurance when appropriate.

Students must possess adequate endurance to be able to tolerate physically, intellectually, and emotionally taxing workloads and to function effectively under stress or with distractions. 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 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. Empathy, patience, integrity, concern for others, interpersonal skills, interest, and motivation are all personal qualities that should be assessed during the admission and education processes.

Ethical Values

A student must demonstrate the highest level of professional demeanor and behavior, and must perform in an ethical manner in all dealings with peers, faculty, staff, and patients. Students must also be able to develop professional relationships with patients and their caregivers and partners while protecting patient confidentiality. Students must also meet the expected ethical standards set forth by the pharmacy profession. Good moral character, decent values and principled judgment are paramount attributes for being a professional. In order to participate in key components of the curriculum, a student must be able to obtain and maintain a valid Intern Pharmacist License from the California Board of Pharmacy and pass requisite criminal background checks and random illegal drug screens required by the Board or affiliated clinical institutions.

Applicable Technical Standards Requirements

1. The candidate/student observes demonstrations and participates in experiments in the basic pharmaceutical sciences.
2. The candidate/student analyzes, synthesizes, extrapolates, solves problems, and reaches therapeutic judgments and monitoring parameters.
3. The candidate/student sufficiently uses the senses of vision and hearing and the somatic sensation necessary to perform a physical assessment. (For example, the candidate/student performs palpation, auscultation, and percussion.)
4. The candidate/student relates to patients of all cultures and backgrounds and establishes sensitive, professional relationships with them.
5. The candidate/student communicates therapeutics options and decisions to the patient and to colleagues with accuracy, clarity, and efficiency.
6. The candidate/student learns and performs routine laboratory tests and screening procedures.
7. The candidate/student performs with precise, quick, and appropriate actions in emergency situations.
8. The candidate/student displays good judgment in the assessment and treatment of patients.
9. The candidate/student possesses the perseverance, diligence, and consistency to complete the Pharmacy school curriculum and to enter the practice of Pharmacy.
10. The candidate/student accepts criticism and responds with the appropriate modification of behavior.

**In Summary**

Candidates for the Doctor of Pharmacy degree must have somatic sensation and the functional use of the senses of vision and hearing. Candidates must have sufficient use of senses (touch, pain, temperature, position, pressure, movement, and vibratory), and motor function to permit them to carry out the activities described above. Students must be able to consistently, quickly and accurately integrate all information received by whatever sense(s) employed, and they must have the intellectual ability to learn, integrate, analyze, and synthesize data. Finally, students must have good moral character, decent values and principled judgment and are expected to meet the ethical standards set forth by the pharmacy profession.

Any faculty or administrative team member may question any enrolled student’s or candidate’s (for admission) ability to meet any technical standard. A request for such an investigation of a specific individual must be made in writing to the Associate Dean of Academic Affairs (for currently enrolled students) or the Director of Student Services (for applicants), detailing the reasons why such an evaluation is deemed necessary. The Dean will be notified if such a request is granted.