

# Technical Standards

## Admission and Fulfillment of Requirements of the Doctor of Pharmacy Degree

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### Mission of the PharmD Program

The School's PharmD program prepares student pharmacists to be health care practitioners who optimize the health of patients and society through effective use of medicines and other interventions. The PharmD program inspires students to advance the profession by fostering collaboration, lifelong learning, leadership, professionalism, and civic engagement.

The goal of the curriculum is to achieve the mission of the PharmD program.

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In addition to academic qualifications, students must possess the broad range of abilities and attributes enumerated in the School of Pharmacy's technical standards. These abilities attributes facilitate mastery of all elements of the PharmD curriculum.

The School's technical standards include categories of intellectual abilities, communication abilities, motor and sensory abilities, behavioral and social attributes, and observation abilities necessary to build a knowledge base, acquire skills, and develop professional behaviors, attitudes, and values to practice pharmacy and advance the profession of pharmacy. Ensuring optimal medication therapy outcomes and patient safety are pivotal forces that underlie the establishment of technical standards required for all students entering, progressing, and graduating with a doctor of pharmacy degree. Applicants should also be familiar with the requirements and licensure application processes outlined by the [Pennsylvania State Board of Pharmacy](#) and/or any other state board of pharmacy where the student intends to become licensed.

The University of Pittsburgh fosters a culture of inclusiveness and is committed to providing an accessible environment for its faculty, staff, and students. Applicants or students who would like to request reasonable accommodations to meet these technical standards should contact the [Office of Disability Resources and Services](#) (140 William Pitt Union, 412-648-7890, drsrecep@pitt.edu, or 412-228-5347 for P3 ASL users). The process for requesting accommodations is voluntary and confidential. The School of Pharmacy is committed to providing reasonable accommodations for those otherwise qualified individuals with a disability and adheres to the policies set forth by the University of Pittsburgh. A reasonable academic accommodation is a modification or adjustment that allows an individual to gain equal access and have equal opportunity to participate in the School's and the University's courses, services, activities, and use of facilities.

All students entering, progressing and graduating with a doctor of pharmacy degree must meet or exceed the following technical standards, components of which are not mutually exclusive. A delineation of related competencies for each standard is included in the APPENDIX.

1. **INTELLECTUAL:** Students must have intellectual (cognitive) abilities that include, but are not limited to, critical thinking and problem-solving skills to function independently as a medication expert or in collaboration with a health care team to provide and advance patient-centered care and population health.
2. **COMMUNICATION:** Students will utilize their special senses, somatic sensations, fine motor skills and intellect to communicate accurately, effectively and professionally with patients and family members, caregivers, members of the health care team, faculty, staff and fellow students.

3. **MOTOR AND SENSORY FUNCTION:** students must have sufficient gross and fine motor function, equilibrium and functional use of vision and touch to perform all movements required for delivery of pharmaceutical care.
4. **BEHAVIORAL AND SOCIAL ATTRIBUTES:** Students must possess personal qualities that include integrity, maturity, compassion, sensitivity, patience, interpersonal skills, initiative and motivation to develop the professional behaviors, attitudes and values to effectively practice pharmacy.
5. **OBSERVATION:** Students must have the functional use of auditory, visual, and tactile senses for observation and performance of experiments and demonstrations, participation in didactic course requirements and practice-based activities.

## APPENDIX

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1. **INTELLECTUAL:** Students must have intellectual (cognitive) abilities that include, but are not limited to, critical thinking and problem-solving skills to function independently as a medication expert or in collaboration with a health care team to provide and advance patient-centered care and population health: The student will:
  - acquire, develop, integrate, conceptualize and apply foundational knowledge and skills<sup>1</sup> and have fundamental ability to measure and calculate.
  - retrieve, critically analyze and evaluate appropriate scientific literature and integrate this information with foundational knowledge and skills and pertinent patient information to make appropriate clinical decisions.
  - formulate and implement evidenced based comprehensive patient-centered care plans<sup>2</sup> that prioritize the patient's needs, maximize therapeutic benefits and health goals, minimize toxicity and cost, document and monitor the patient's response, evaluate the care plan's outcomes and effectiveness, and modify the care plan when necessary.
  - take responsibility for the outcomes of medication therapy and identify, solve, and manage therapeutic and drug-related problems
  - use continuous quality improvement techniques, standards, guidelines, best practices and all varieties of resources<sup>3</sup> to manage and optimize the medication use system<sup>4</sup> while assuring safety, efficacy and efficiency.
  - be committed to self-improvement and develop life-long learning skills, recognize knowledge and skill deficits and formulate a learning plan to address and improve professional knowledge and skills to ensure optimal patient-centered care.
  - identify and critically analyze emerging issues and population-specific data to assess the health needs of a community, population or individual
  - develop and implement evidence-based wellness, disease prevention, treatment initiatives, and educational strategies for individuals, targeted patient populations and communities to prevent disease, manage chronic disease, resolve public health problems including health disparities to improve health and wellness and advance public health.
  - apply principles and processes for budgeting and finance, program marketing, and management policy to consider cost, care, access and satisfaction needs of patients or a targeted population.

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1. Foundational knowledge and skills are inclusive of the foundational sciences (biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences), skills, abilities, beliefs, biases, motivation, experiences, values and emotions that impact professional behavior.
  2. Care plan: includes but is not limited to patient specific use of appropriate prescription and non-prescription drugs, alternative and complementary therapies, and non-drug therapies
  3. Resources: Human, physical, economic, informational and technological resources.
  4. Medication use system: procurement, storage, prescribing, transcription, identifying, dispensing, administration, monitoring, and documentation

2. **COMMUNICATION:** Students will utilize their special senses, somatic sensations, fine motor skills and intellect to communicate accurately, effectively and professionally with patients and family members, caregivers, members of the health care team, faculty, staff and fellow students. The student will:
- collect and interpret information from direct patient assessment utilizing organized interview skills, patient appropriate language, active listening skills, and physical assessment of the patient
  - collect and interpret patient specific information from medical records, pharmacist records, caregivers and other health care professionals.
  - take responsibility to formulate a drug-related problem list and therapeutic care plan and effectively communicate and justify this plan to the patient, caregivers and health care professionals.
  - interact verbally and non-verbally to counsel and educate patients, caregivers, health professionals and the community about drug therapy, lifestyle changes and health issues.
  - work collaboratively with patients; health care professionals; teams; organizations; and administrative, supportive, and technical personnel to integrate all factors that influence health, public health priorities, and population-specific data to create and achieve shared goals for patient care and strategies for effective public health management.
  - communicate effectively, orally and in writing, by articulating knowledge and recommendations with empathy, confidence, clarity and respect and assess the understanding of oral and written communication and adjust the messages when necessary to assure effectiveness of communication.
3. **MOTOR AND SENSORY FUNCTION:** students must have sufficient gross and fine motor function, equilibrium and functional use of vision and touch to perform all movements required for delivery of pharmaceutical care. Students will:
- accurately interpret prescriptions/orders and select appropriate dosage forms, routes and methods of administration and administer medication when appropriate.
  - perform the basic tasks in the practice of pharmacy that include: identifying medications, preparing, compounding and dispensing medications consistent with patient needs and in compliance with local policy, state and federal pharmacy laws, recommendations of regulatory agencies and best practices to assure product quality, optimize medication efficacy and patient safety.
  - use appropriate calculations and techniques to prepare, compound, package, label, and dispense prescriptions to assure product quality and patient safety.

4. **BEHAVIORAL AND SOCIAL ATTRIBUTES:** Students must possess personal qualities that include integrity, maturity, compassion, sensitivity, patience, interpersonal skills, initiative and motivation to develop the professional behaviors, attitudes and values to effectively practice pharmacy. Students will:

- exhibit behaviors and values consistent with the trust given to the profession by patients, health care providers and society and act with the highest level of integrity and ethics while complying with all local policies, and state and federal pharmacy laws.
- have the emotional and mental health required to fully utilize their intellectual abilities, exercise sound judgment and decision-making skills to complete the curriculum and execute patient care responsibilities.
- empower patients to take responsibility for and control of their health care and assist them to navigate the complex health care system.
- exercise accountability consistent with a commitment to excellence, seek help when necessary and accept and respond appropriately to constructive feedback by modifying their behavior.
- work collaboratively and contribute as a productive member of an interprofessional team. develop effective relationships with patients, caregivers, family members of patients, other health care professionals, faculty, staff, and fellow students while showing respect and sensitivity to cultural and societal diversity, exercising compassion and maintaining the privacy and confidentiality of health information.
- demonstrate a commitment to professional involvement and community service, contribute to the advancement of the profession, and promote a culture of professionalism.
- adhere to the School of Pharmacy's professional code of conduct.

5. **OBSERVATION:** Students must have the functional use of auditory, visual, and tactile senses for observation and performance of experiments and demonstrations, participation in didactic course requirements and practice-based activities. Students will:

- observe and evaluate a patient's activity and behavior, perform basic physical assessments and conduct patient interviews.
- accurately conduct all steps related to medication order processing.
- read, comprehend, and interpret all written, presented, and illustrated information from diverse learning environments including diagnostic and tests monitoring therapy.