

University of Colorado Skaggs School of Pharmacy & Pharmaceutical Sciences

Distance Degrees and Programs Technical Standards for Admission, Advancement and Graduation

Introduction

In 2012, the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences Distance Degrees and Programs adopted technical standards for admission, advancement and graduation for its professional degree programs in order to meet its primary objective of preparing students to enter the profession. The practice of pharmacy has changed dramatically since the advent of the PharmD as the entry level degree and continues to evolve at a rapid pace to meet the many healthcare needs of society and individual patients.

In addition to the traditional responsibilities associated with dispensing medications, pharmacists' roles have expanded to include engagement in therapeutic decision-making, assessment of drug efficacy, monitoring of adverse effects, counseling of patients and other health care professionals, and direct contact with patients including physical assessment and administration of parenteral medications. Therefore, pharmacy is an intellectually and psychologically demanding profession that also requires some specific physical skills. During the NTPD and ITPD programs, each student must develop and apply the knowledge, skills and attributes that form the necessary foundation for the contemporary practice and are outlined in the most current version of the American Council on Pharmacy Education (ACPE) standards (www.acpe-accredit.org/standards/default.asp). This is achieved through student participation in the curriculum which employs a variety of teaching and learning techniques. These techniques are designed to impart knowledge and, importantly, to engage each individual student in application of knowledge through active, hands-on simulated and direct patient care learning experiences throughout the curriculum in a developmental manner. Mastery of this highly sophisticated blend of knowledge, skills and attributes is assessed via a variety of traditional and nontraditional testing techniques and situations, many of which are designed to mimic authentic pharmacy practice settings.

As a result, technical standards are necessary to describe the requisite non-academic and academic qualifications and performance standards that are essential to admission, advancement and graduation. Each degree candidate must meet these minimum standards, with or without reasonable accommodation, to achieve successful completion of the PharmD degree.

Standards

Observation skills: Observation necessitates the functional use of vision to read, see and participate in lectures, demonstrations, experiments and practice-based activities that include, but are not limited to, reading and writing patient data and prescription orders using paper or computer/technology-based media; evaluating a patient's physical condition including signs and symptoms of disease states and drug actions; accessing and reading hard copy and technology-based medical literature; interpreting clinical parameters for the purpose of assessing a patient and monitoring drug therapy; and conducting and reading results of tests using a variety of point-of-care instruments. A student must be able to accurately and effectively:

- distinguish various medication dosage forms and strengths and accurately select the correct drug product using either the packaging or the actual, physical drug entity
- observe and assess the technical quality of manufactured or compounded medications.
- note and accurately interpret signs and symptoms present on a patient's body

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- discern very fine incremental gradations, e.g., those associated with equipment used for compounding and/or administering of intravenous medication
- observe the activities of technical support staff operating under his/her supervision in accordance with workplace policies and state law
- read and process written information in written and digital formats

Hearing skills: Students must be able to engage in conversations with patients, care givers and other health care professional in noisy and complex environments. They must be able to accurately hear and evaluate discrete, soft sounds, including but not limited to, sounds via stethoscope during various physical assessment techniques.

Communication skills: Communication includes speaking, listening, reading, writing and computer literacy (appropriate to the profession of pharmacy) with fluency in the English language.* A student must be able to accurately, effectively and sensitively communicate with instructors, patients, caregivers and other health care practitioners. These skills also include, but are not limited to, perception of nonverbal cues and eliciting pertinent information regarding patient symptoms, needs, mood, activity, and drug reactions, and responses. A student must be able to accurately and effectively (in academic and simulated situations with instructors and actual patient care situations):

- communicate with other health care practitioners in all other aspects of safe and effective patient care, including but not limited to, reviewing and recommending verbal and written drug therapy orders
- speak in formal and informal presentation settings before large and small groups in a clear, articulate and confident manner
- interpret verbal and non-verbal communication cues displayed by a patient, caregiver or health professional colleague
- communicate in multiple formats including face-to-face, electronic, written or through verbal means, e.g., telephone, email
- communicate in writing using descriptive narrative, analytical interpretation, hypothesis generation and speculation
- interpret and deliver complex or technical information in an understandable manner to individuals who have physical, cognitive, language or other barriers or do not have a background in or knowledge of pharmacy or the health sciences
- elicit a medical and medication history, including, but not limited to, being able to clarify and condense the patient's primary problems, and interpret the information obtained to engage/consult appropriately with the patient and develop an accurate patient care plan
- reconcile provider and patient medication lists
- read and document medical and, more specifically, drug therapy consultations and pharmacist interventions, in an appropriate professionally-written format that meets commonly accepted standards for exchange of information among health care professionals, e.g., SOAP note
- complete professional communication activities in an efficient manner and in a response time that optimizes delivery of pharmacy services and patient care
- communicate with and supervise technical support staff
- possess awareness of his/her own, as well as others', demeanor and nonverbal communication and be able to adjust his/her own behaviors as dictated by the situation

***Entry-Level Students:** For purposes of admission, advancement and graduation in the University of Colorado School of Pharmacy, the minimum level of oral proficiency in English required is "Advanced

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Low,” per the ACTFL (American Council on the Teaching of Foreign Languages), Oral Proficiency Guidelines for Speaking. Oral proficiency levels are assessed by participating in a telephone based Oral Proficiency Interview (approximately 30 minutes), conducted by an ACTFL-certified language assessor, designated by the School.

***Distance Degrees and Programs (DDP): For purposes of advancement and graduation** in the University of Colorado School of Pharmacy Distance Degrees and Programs, the minimum level of oral proficiency in English required is 1) “Advanced Low,” per the ACTFL (American Council on the Teaching of Foreign Languages), Oral Proficiency Guidelines for Speaking. Oral proficiency levels are assessed by participating in 1) a telephone based Oral Proficiency Interview (OPI) (approximately 30 minutes), conducted by an ACTFL-certified language assessor, designated by the School, or 2) an internet-based Test of English as a Foreign Language (TOEFL) exam composite score of 89.

DDP requires all students enrolled in a program of the Distance Degrees and Programs to participate in or take an ACTFL OPI and/or TOEFL exam should the Distance and Degrees Programs Committee, DDP faculty or staff, identify the need to assess the student’s communication skill level. The student will complete the recommendation(s) identified by the testing process.

For purposes of admission in the University of Colorado School of Pharmacy Distance Degrees and Programs, refer to the ITPD and NTPD program admission criteria for each program’s specific criteria.

Motor skills: A student must have sufficient motor function to perform basic tasks involved in the training for and practice of pharmacy, including, but not limited to, executing all aspects of processing drug orders such as operating a keyboard, dispensing all types of dosage forms and safe and aseptic handling and accurate dosing of sterile preparations. A student must be able to accurately and effectively:

- demonstrate appropriate use and operate equipment, including, but not limited to, peak flow meters, glucose monitors and other point-of-care testing systems
- use diagnostic equipment for basic patient assessment activities, including, but not limited to, stethoscope and sphygmomanometer
- document information in a legible form in any required setting, e.g., paper medical record
- use computer-based systems to retrieve and enter patient and non-patient specific health care-related data
- use fine motor skills, e.g., to handle various small dosage forms, formulate and compound sterile products, manipulate a needle and syringe, prepare and administer parenteral drugs including, but not limited to, immunizations
- use gross motor skills, e.g., to perform patient assessment techniques, including, but not limited to, palpation, auscultation, percussion, foot examination; provide emergency treatment to patients such as, cardiopulmonary resuscitation and first aid

Intellectual, conceptual, integrative and quantitative abilities: The student must have the cognitive ability to be able to learn and process large volumes of information through a variety of modalities, including, but not limited to, classroom instruction, small group activities, individual study/preparation, small and large group presentations. The student must be able to perform successfully in a variety of real and simulated assessment situations. A student must be able to memorize and recall information and solve problems in a timely and consistent manner. This includes, but is not limited to, measurement, calculation, critical reasoning, literature search and review, analysis and interpretation. It includes being

able to synthesize information and integrate the aspects of drug and medical knowledge and medical literature that are relevant to a given individual patient or population based situation. These skills can be applied in terms of population health evidence generation (e.g. drug monographs), population management guidelines, and population decision making (e.g. formulary design) or for an individual patient via a patient's history, medical record, physical findings and monitoring studies. These skills must be accurately and effectively deployed in settings that require multi-tasking and that may involve concomitant, multiple interruptions and visual, audible and/or olfactory distractions. A student must be able to accurately and efficiently read, process and interpret written and verbal information and use this information to prioritize and complete tasks (e.g., developing and implementing a drug therapy and monitoring plan, answering a drug information question, processing and dispensing a drug order or preparing a compounded dosage form) in an amount of time appropriate to standards of the profession, the specific situation and safety of the patient. Appropriate for each stage of his/her education, as defined by the profession's accreditation standards and the school's developmental, sequential curriculum and ability based outcomes, a student must demonstrate a fundamental and continuing ability to use patient-specific and general information in combination with medical literature, good judgment and analytical reasoning to independently and, when appropriate, in collaboration with other health care professionals, solve clinical problems and explain health care situations. A student must have the intellect and cognitive function to integrate the aforementioned skills and confidently and accurately perform the duties expected of a practicing pharmacist, as appropriate for the student's current level in the educational process.

Professional, behavioral and social attributes: A student must possess the psychological ability to engage appropriately, sensitively, empathetically, courteously and professionally in all environments, interpret the demeanor of others and adjust his/her engagement appropriately. This includes, but is not limited to, exercising good judgment, engaging in mature, professional and effective relationships with instructors, patients, caregivers and other healthcare professionals, all while respecting their dignity. A student must be able to accurately and effectively:

- remain alert and fully engaged in all learning and professional environments
- tolerate physically (such as standing or sitting for extended periods of time, reaching, bending) and mentally taxing workloads associated with the practice of pharmacy
- function in a competent, confident and caring manner in situations where the student and others are experiencing emotional and/or psychological stress
- adapt to changing environments, display flexibility and function well in settings and with information that involve ambiguity and uncertainty inherent in learning, workplace and clinical environments
- engage, through words and touch, with various different people existing in a variety of physical, emotional, illness and health states, including, but not limited to, the spectrum of bodily fluids, contaminants, microorganisms, sights, smells and sounds that sometimes accompany these situations
- understand belief systems of self and others and be present, professional and caring in health care environments where beliefs or practices may be in conflict with his/her own

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- function in a competent, confident and caring manner both independently and as part of a team to achieve desired goals
- demonstrate appropriate time management skills, e.g., be punctual and respectful of time and schedules of others; complete responsibilities within appropriate timeframes; engage in appropriate project management; prioritize tasks appropriately
- positively receive feedback and willingly modify behavior in response to constructive criticism
- adhere to strict and unwavering standards of confidentiality, respect for diversity and high ethical integrity
- demonstrate ethical behavior and function within institutional limits of the educational environment and pharmacy law (i.e., abide by the rules and regulations of the university and laws that govern the practice of pharmacy)
- self-assess various aspects of his/her demeanor, attributes and performance and continuously strive for personal growth and improvement

Reasonable Accommodation

The University of Colorado Anschutz Medical Campus strives to maintain a barrier free environment so students with disabilities can full access classes, programs, services, etc. It is the policy of the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences to accommodate qualified students with a disability who can perform the essential functions as outlined in these technical standards with or without a reasonable accommodation. Reasonable accommodations, that do not alter the fundamental nature of the curriculum, may be made when documented and requested by a student, in advance, in accord with standards and requirements of the Americans with Disabilities Act. Whether or not a requested accommodation is reasonable will be determined on a case-by-case basis. Final determination of a reasonable accommodation is an interactive process that involves input from the school's faculty and administration in conjunction with the Office of Disability Resources and Services (<http://www.ucdenver.edu/student-services/resources/disability-resources-services/Pages/disability-resources-services.aspx>) prior to and/or during the pharmacy education program.