

Texas Tech University Health Sciences Center

School of Pharmacy

Policy SOP OP 77.P02 ACADEMIC CREDIT AND COURSE WORKLOAD

Purpose: This policy establishes the expected contact, and faculty and student workload for professional courses in the Doctor of Pharmacy (Pharm.D.) curriculum.

Review: The Executive Committee shall review this policy bi-annually in the spring semester of odd numbered years.

POLICY

Courses in the Doctor of Pharmacy (Pharm.D.) curriculum shall be determined by the allocated number of semester credit hours (SCH) and type of instruction as approved by the Faculty of the School of Pharmacy. The expected student and faculty workload associated with each type of instruction shall be specified by the instructional pedagogy chosen to achieve the Faculty approved learning outcomes for each course.

The curriculum is generally based on a semester basis. Fall and spring semesters shall be 16 weeks of instruction plus an additional 5 days of final examination sessions. The summer semester shall be 12 weeks of instruction plus an additional 3 days of final examination sessions. Professional Practice Experiences may run outside the semester schedule to achieve the specified contact hours.

The following allocation of contact hours per semester credit hours (SCH) shall be assigned: (See Appendix A for a detailed description of each pedagogy and expected workload)

- Didactic Instruction – 16 sessions of 50 minutes each session plus final exam session of 2 hours = 1 SCH
- Laboratory/Simulation Instruction – 16 sessions of 150 minutes each session with imbedded assessment = 1 SCH
- Discussion Instruction – 16 sessions of 100 minutes each session with imbedded assessment = 1 SCH
- Problem Based Learning – 16 sessions of 50 minutes each session with imbedded assessment = 1 SCH
- Introductory Professional Practice Experiences (P1&P2 Years) – Contact and workload depends on pedagogy deployed (Didactic, Laboratory/Simulation, Service Learning, Discussion, or Professional Practice Experiences)
- Introductory Professional Practice Experiences (P3 Year) – 24 sessions of 96 contact hours with imbedded assessment = 2 SCH
- Advanced Professional Practice Experiences (P4 Year) – 30 sessions of 240 contact hours with imbedded assessment = 6 SCH

PROCEDURE

The Dean's Office shall be responsible for implementing the approved curriculum by designing a course schedule considering assigned credit hours, pre-requisite requirements, pedagogy, concurrent student course load, and overall academic calendar. Full semester courses may be scheduled for delivery in 6 week (experiential & didactic), 8 week (didactic) or 16 week (didactic, laboratory/simulation, problem based learning) schedules to meet the contact hours specified.

The Dean's office shall publish a fall and spring semester schedule by the first day of classes in January each year for the following fall and spring semesters. The schedule shall include core and elective courses.

Dean's Approval: _____ Date: _____

APPENDIX A

DISCRIPTION OF INSTRUCTIONAL PEDAGOGIES¹

Didactic instruction is instructional activities that may deploy lecture or active learning strategies to primarily deliver the *body of facts* and *principles of knowledge* pertaining to a specified content area with the intended *outcomes of acquaintance, awareness, and understanding of content knowledge*. Typically, within the SOP, didactic instruction is delivered to a large group of students, but may be given to a smaller number of students as part of another instructional assignment.

Laboratory/simulation instruction is instructional activities that are typically designed to *develop, test, analyze or demonstrate* theories, techniques, and methods directed towards the *development of psychomotor skills and abilities* associated with pharmacy practice or sciences - the intended outcome is to teach the application of knowledge to patient care or scientific activities. Generally laboratories/simulations are *not the most effective pedagogy to present new knowledge*, but rather develop the skills to use the knowledge presented in other pedagogic courses in practice or science. Laboratories/simulations are typically conducted with a small group of students where the teacher is actively instructing, observing and evaluating students one-on-one or in very small groups at a time. Instructors may be assisted by graduate assistants, residents, and staff (e.g. standardized patients).

Discussion instruction is instructional activities designed to *develop higher levels of learning* of *familiar content* through *reflective thinking and sharing of information, ideas, experiences, and opinions*. The intended outcome is to develop the students' abilities to identify, differentiate, construct, compare, contrast and synthesize their existing knowledge and attitudes of various areas or disciplines of knowledge important to the care of a patient. This pedagogy is not most efficient for building basic knowledge (didactic is more efficient), but is highly efficient for developing higher order learning. For learning to be optimally successful, *discussion instruction requires structured, active learning activities* that draw-out what the students know and shows them how to integrate knowledge and attitudes, rather than to present new content. The instructor guides the discussions to achieve these higher levels of learning. Journal clubs, and patient care rounds may be designed as forms of discussion instruction.

¹ Broadly based on "Types of Instructional Methods," Faculty Center for Teaching and Learning, North Carolina State University, and "Instructional Approaches," <http://www.sasked.gov.sk.ca/docs/physed/physed2030/instruction.html>

Problem Based Learning instruction (Case Studies) is instructional activities that are intended to *develop students' abilities in decision-making directed towards solving complex patient care or scientific problems*. The student is expected to develop her/his abilities to identify problems, formulate hypotheses as to the cause(s), select the most likely hypothesis founded on evidence-based analysis, identify alternative solutions, and select and explain the solution(s) and rationale through the differentiation, construction, comparison, contrasting and synthesizing incomplete information (ill-defined problems).² The goals are to develop the student's *abilities to solve clinically and scientifically relevant problems and hone their skills at self-directed learning*. It further includes the development of the students' ability to develop a plan for implementing strategies selected to solve the problem. It enhances the learner's abilities to work in small groups to achieve these ends. The instructional design fosters the *application of facts towards rational decision decision-making* while continuously assess the students' development of higher-level abilities to *integrate knowledge*. The faculty member serves as a tutor, rather than a teacher, with a small group of 6-7 students who work as a learning team. The tutor does **not** present new content, rather guides the learners, both as a group or individually, through the Socratic teaching method to identify knowledge deficiencies and "fill holes" in their knowledge. The students are made responsible for identifying their knowledge deficits and are responsible for correcting their individual deficiencies. The methods engage the whole student with minimal guidance, with the final desired outcome of mastery of the student's decision-making and self-directed learning abilities and relevant knowledge.

Professional Practice Experience instruction (Clerkships) is activities where the faculty member serves as a *role model and tutor* to a small group of 1-4 students. Various learning activities (e.g. team problem solving sessions, directed research/reading, discussions where the teacher (preceptor) is instructing, observing, evaluating, and encouraging the students one-on-one or in very small groups at the same time. This pedagogy typically involves all the various instructional strategies at some time during instruction (didactic through PBL). The intended outcome is to develop the student's abilities to engage in direct patient care as a pharmacist.

Research/Project instruction is instructional activities where the faculty member serves as a *mentor and tutor* to a student one-on-one in basic or applied research activities/projects. The pedagogy operates similar to Professional Experience, in that the instructor may use all of the instructional designs to accomplish the desired learning outcomes. The difference is a student is given a *defined project to successfully complete* to receive credit in the course; it is not determined by clock hours.

² The minimal essentials for Problem-Based Learning in Medical Education <http://www.pbli.org/pb/medical-pbl.htm>