

lifelong learning skills. Merriam (1991)¹ discusses Grow's four stages to becoming a self-directed learner:

- learners of low self-direction who need an authority figure (teacher) to tell them what to do
- learners of moderate self-direction who are motivated and confident but largely ignorant of the subject matter to be learned
- learners of intermediate self-direction who have both the skill and the basic knowledge and view themselves as being both ready and able to explore a specific subject area with a good guide
- learners of high self-direction who are both willing and able to plan, execute, and evaluate their own learning with or without the help of an expert.

Assignments that incorporate activities such as literature searches, self-evaluation, independent projects, learning contract development, and self-reflection are used to support the development of these skills.

Pharmaceutical Care Model

Heppler and Strand² described a model of pharmacy practice that provides an ideal framework for defining the domain of pharmacy practice and a focus for pharmacy education. Therefore, it will be an integral part of the program's mission and philosophy. The steps include:

- collecting patient information
- identifying drug-related problems
- describing therapeutic goals and alternatives
- tailoring individual patient treatment plans
- implementing decisions about drug use
- sketching out a plan to achieve the desired therapeutic goals.

A key element of success in this model is for health care workers to cooperate with each other while striving to preserve some autonomy. Students will be introduced to this model early in the curriculum in Introduction to Pharmacy 1 and 2. Following introduction to the model, students will utilize the concepts of pharmacy care to organize material and approach patient problems in the Pharmacology, Pathophysiology and Therapeutics sequence.

1 Merriam SB, Caffarella RS. *Learning in Adulthood*. San Francisco, CA: Jossey-Bass Publishers, 1991.

2 Heppler D, Strand L. *Am J. Hosp Pharm* 1990;47:533-43

PHAR 250 Professional Practice Development I

This course is the first of two courses for pharmacy professional development. This course is designed to introduce pre-professional pharmacy students to social behavioral aspects and selected topics related to pharmacy professional development, professionalism, standards of practice, and to prepare students for experiential pharmacy practice experiences.

PHAR 251 Professional Practice Development II

This course is designed to introduce pre-professional pharmacy students to selected topics related to professionalism and to prepare them for introductory pharmacy practiced experiences. This course focuses on professional communication and the social and behavioral aspects of pharmacy practice.

PHAR 350 Introduction to Pharmacy 1.

This course will introduce the student to modern pharmacy practice. Topics covered include pharmacy calculations, the role of the pharmacist in the American health care system, communication, and an introduction to over-the counter medications. The course will also help the student to develop a plan of study to guide the selection of electives and rotations in pharmacy. Students will be required to obtain 100 hours of pharmacy experience with a pharmacist health care provider to expand their knowledge of the existing health care system during their first professional year (50 hours during PHAR 350 and 50 hours during PHAR 351).

PHAR 351 Introduction to Pharmacy 2.

This is a continuation of PHAR 350, an introduction to modern pharmacy practice. Topics covered include pharmacy calculations, drug information, patient communication, ethics, drug abuse, and the top 200 drugs. Students will be expected to obtain 50 hours of experience with a pharmacist in a setting other than a community or hospital pharmacy to begin expanding the students' understanding of the breadth of pharmacy practice. The course will also help the student to develop a plan of study to guide the selection of electives and rotations in pharmacy.

PHAR 361 Pharmaceutics and Pharmacokinetics I

This course introduces the student to the basic principles of dosage form design and preparation. The course integrates pharmaceutic and biopharmaceutic principles as well as product design and preparation, and begins the study of the scientific portion of pharmacokinetics.

PHAR 362 Introduction to Pharmacokinetics and Pharmacodynamics

This course continues the study of the basic principles of dosage form design and preparation. The course integrates pharmaceutical and biopharmaceutical principles, product design and preparation, along with the scientific portion of pharmacokinetics.

PHAR 363 Pharmacy Practice Skills I

This course prepares the student for prescription compounding skills required in the general practice of pharmacy. It also prepares the pharmacy student to take the elective course in advanced compounding.

PHAR 370 Physical Assessment for Pharmacy.

This course prepares the first professional year student pharmacist to prepare and dispense compounded prescriptions. Students learn basic prescription compounding, dispensing and counseling skills required in the general practice of pharmacy including nonsterile and sterile techniques.

PHAR 380 Introductory Pharmacology and Medicinal Chemistry.

This course introduces the student to the basic principles of pharmacology and medicinal chemistry. The course integrates concepts of cell biology, genetics, organic chemistry and basic biochemistry principles as well as product design and preparation, and provides a scientific foundation for the more advanced topics of pharmacokinetics and pharmacodynamics.

PHAR 391 and PHAR 392 Introduction to Pharmacy Practice Experience I & II

Students involved in experiential education are engaged in structured, practice-related activities where knowledge gained from didactic education is coupled with a professional attitude and skills training resulting in the development of an entry-level pharmacist. PHAR 391 and PHAR 392 are designed to provide students with introductory experiences in community pharmacy settings. Students will be expected to observe and participate in the dispensing aspects of pharmacy. Students will be required to obtain 100 hours of pharmacy practice experience during their first professional year (50 hours during PHAR 391 and 50 hours during PHAR 392).

PHAR 400 & 500 Chemical Dependency and the Health Care Professional

This course is a study in chemical dependency as a disease. It integrates fundamental concepts from chemistry, biology, sociology, and medicine. The course will be used to increase awareness of the risk of chemical dependency in health care professionals, its consequences, and the process of recovery. The student is also expected to be able to describe ways to avoid the disease and help colleagues who may be in recovery.

It is necessary for you to obtain information regarding the immunizations you currently have received. If you do not already have some of this information, your parents/guardian may have some information that may be of help. However, you need to get the official information from a physician, hospital, medical clinic or other healthcare facility. Your health care provider (not you) should record the information on the form approved by the Cosiano Health Center (available through the College of Pharmacy) and submit it with the official documentation to the Cosiano Health Center. They will be collating the data and letting us know what students have not met the requirements.

Students not meeting immunization requirements are not eligible for progression to the P3 year without approval of the Student Affairs Committee. Deadlines are automatically extended by an appropriate length of time for transfer students admitted with insufficient time to complete these requirements prior to the P3 year, but this is overseen by the Assistant/Associate Dean of Internal Affairs, or his/her designee, who must be shown progress in this area. Also, it may be necessary to change experiential sites, depending on the site immunization requirements until immunizations are completed.

If you find that you need to have some immunizations, the Cosiano Health Center can provide them, which may result in substantial savings to the student. Also, please realize that you may be able to get immunizations for little or no cost through your physician (i.e., paid for by your insurance) or possibly health departments where you live. You certainly should investigate what will be best for you.

Intern License(s)/Permit(s)

Students are required to obtain pharmacy intern license as soon as possible in the State of Ohio (application must be within the first month of the P3 year) and any other states in which they may be active in a pharmacy practice situation. In the latter situation, some states may have other requirements for practice, such as having a technician certificate. Normally, this will be at the beginning of the first professional year, however, some states have other requirements, such as waiting until after the first professional year. Students will not be eligible to receive their Certificate of Enrollment for their Intern License until after they have completed all of the P2 requirements that must be fulfilled prior to the P3 year. It is important to complete these requirements by their assigned due dates at the end of the P2 semester, so that the Intern License may be obtained soon after the end of the semester. That will allow introductory experiences to be completed during the summer prior to the P3 year and avoid any delay in processing of the license during the P3 fall semester. The College of Pharmacy will provide information to the State of Ohio at appropriate times showing that you are a continuing student. The College will verify your Ohio permit via the Ohio State Board of Pharmacy website prior to you obtaining your experience. In addition, students obtaining experience outside of Ohio must submit to the College copies of intern license(s)/permit(s) from the appropriate government agencies. Please note, all students must have a State of Ohio intern license, even if they do not ever plan to practice in the state. Failure to obtain an Intern License prior to or within the first few weeks of classes can result in failure of PHAR 391.

