PHARMACOGENOMICS (PHRG)

**Explanation of Course Numbers**

- Courses in the 1000s are primarily introductory undergraduate courses
- Those in the 2000s to 4000s are upper-division undergraduate courses that can also be taken for graduate credit with permission and additional work
- Those in the 6000s and 8000s are for master’s, doctoral, and professional-level students
- The 6000s are open to advanced undergraduate students with approval of the instructor and the dean or advising office

**PHRG 1101. Introduction to Pharmacy Practice I. 2 Credits.**
Applications of interpersonal communication and teamwork, basic pharmacology, medication-related mathematics, pharmacy technologies and pharmaceutics, patient safety and quality, resource management, drug therapy-related legal and ethical standards, and principles of patient-centered care. Prerequisite: HSCI 1101. Recommended background: prior completion of a course in mathematics.

**PHRG 1102. Introduction to Pharmacy Practice II. 2 Credits.**
Continuation of topics introduced in PHRG 1101. Restricted to Students in SMHS. Prerequisite: PHRG 1101. Recommended background: Prior completion of a course in mathematics.

**PHRG 2141. Mol. Bio for Pharmacogenomics. 4 Credits.**

**PHRG 2142. Molecular Technology for Pharmacogenomics. 2 Credits.**

**PHRG 4151. Introduction to the Pharmacy Profession. 1.5 Credit.**
The evolving role of the pharmacist in the health care system. Attributes, attitudes, and ethical standards expected of the profession. Concepts of patient-centered care, collaborative care, and the pharmacist as an advocate, educator and health promoter. Pharmacy career paths.

**PHRG 4152. Pharmaceutics I. 2 Credits.**

**PHRG 4153. Pharmaceutics II. 4 Credits.**
The legal, practical, and scientific bases of drug products and pharmaceutical delivery systems. Physicochemical theories, terminology, pharmaceutical skills, and interpretation of the formulation and performance of pharmaceutical products. Laboratory component PHRG 4173.

**PHRG 4154. Biomedical Sciences I. 2 Credits.**
Advanced biomedical science topics, including biochemistry, molecular biology, and cell biology. Serves as a foundation for study of immunology, medical microbiology, pathophysiology, toxicology, pharmacogenomics, pharmacology, and pharmacotherapeutics.

**PHRG 4155. Biomedical Sciences II. 3 Credits.**
Advanced topics, including immunology, oncology, and medical microbiology. Serves as a foundation for the study of pathophysiology, toxicology, pharmacogenomics, pharmacology, and pharmacotherapeutics.

**PHRG 4156. Integrated Pathophysiology I. 3 Credits.**
Pathophysiology of the endocrine, nervous, GI, and musculoskeletal systems. Serves as a foundation for the study of pharmacology, therapeutics, and pharmacogenomics.

**PHRG 4157. Integrated Pathophysiology II. 3 Credits.**
The pathophysiology of the cardiovascular, renal, respiratory, and reproductive systems. Serves as a foundation for the study of pathophysiology, therapeutics, and pharmacogenomics.

**PHRG 4160. Introduction to Physical Assessment. 1 Credit.**
How pharmacists use physical assessment in the patient care process. The fundamentals of physical assessment necessary for the practice of pharmacy. Medical terminology, medical abbreviations, documentation of physical assessment findings, and wellness and preventive health. Taken as part of the sequence PHRG 4160-PHRG 4161.

**PHRG 4161. Physical Assessment Lab. 1 Credit.**
Practical experience in laboratory activities designed to introduce physical assessment and critical thinking skills necessary for the practice of pharmacy. Taken as part of the sequence PHRG 4160-PHRG 4161.

**PHRG 4163. Pharmacogenomics Essentials. 2 Credits.**

**PHRG 4165. Communication in Pharmacy Practice. 2.5 Credits.**
Students develop and apply the communication, interpersonal, and psychosocial skills needed to interact effectively in a changing health care environment. Communicating with patients and health care providers. Cultural issues, psychological and sociological challenges, and health care disparities that affect communication with patients.

**PHRG 4167. Intro. Pharm. Pract. Exp. I. 2 Credits.**

**PHRG 4168. Intro. Pharm. Pract. Exp. II. 2 Credits.**

**PHRG 4169. Nonprescription Products. 3 Credits.**

**PHRG 4170. Out. Pharm. Prac. Lab. 1 Credit.**

**PHRG 4171. Sterile Compounding Lab. 1 Credit.**

**PHRG 4172. Clin. Drug Info. Skils. 1 Credit.**

**PHRG 4173. Pharmaceutical Sciences II Laboratory. 1 Credit.**
Laboratory course to accompany PHRG 4153 Pharmaceutics II.