600. Pediatric Specialty Clerkship
Fall, Spring, Summer. 6 to 24 credits. A student may earn a maximum of 24 credits in all enrollments for this course.
R: Open only to graduate-professional students in College of Human Medicine. Completion of precursory CHM curriculum. Multidisciplinary approach to children and their families in a health care setting. Integrated biological, behavioral, and clinical sciences in assessing and planning children's health care needs.

601. Human Development and Pediatric Sub-specialties
Fall, Spring, Summer. 6 to 24 credits. A student may earn a maximum of 24 credits in all enrollments for this course.
P: PHD 600. R: Open only to graduate-professional students in College of Human Medicine. Experience in clinical, behavioral, and basic sciences related to pediatrics and human development.

602. Ambulatory Pediatrics
Fall, Spring, Summer. 6 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
P: PHD 600. R: Open only to graduate-professional students in College of Human Medicine. Clinical experience in outpatient and community settings involving ongoing child health care.

603. Pediatric Infectious Diseases Clerkship
Fall, Spring, Summer. 6 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
P: PHD 600. R: Open only to graduate-professional students in College of Human Medicine. Office, clinic, and inpatient experiences in evaluating and managing pediatric patients with infectious diseases.

604. Neonatology
Fall, Spring, Summer. 6 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
P: PHD 600. R: Open only to graduate-professional students in College of Human Medicine. Clinical experiences: modern neonatal techniques and care patterns for neonates including follow up.

605. Pediatric Cardiology Clerkship
Fall, Spring, Summer. 6 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
P: PHD 600. R: Open only to graduate-professional students in College of Human Medicine. Office, clinic, and hospital experience in diagnostic and therapeutic pediatric cardiology including special diagnostic procedures.

606. Pediatric Endocrinology and Metabolism Clerkship
Fall, Spring, Summer. 6 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
P: PHD 600. R: Open only to graduate-professional students in College of Human Medicine. Clinic and hospital experience in evaluating patients with endocrine and metabolic disorders.

607. Pediatric Hematology and Oncology
Fall, Spring, Summer. 6 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
P: PHD 600. R: Open only to graduate-professional students in College of Human Medicine. Clinical experience in evaluating and managing pediatric patients with common hematologic and oncologic disorders.

608. Pediatric Pulmonary Disease Clerkship
Fall, Spring, Summer. 6 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
P: PHD 600. R: Open only to graduate-professional students in College of Human Medicine. Patient and outpatient clinical experiences in evaluating and managing pediatric patients with pulmonary problems. Diagnostic procedures, clinically relevant physiology, current research.

625. Core Competencies I
Fall, Spring. 2 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
Interdepartmental with Human Medicine, Medicine, and Family Practice. Administered by Human Medicine.
P: FMP 602. R: Open only to graduate-professional students in College of Human Medicine. A weekly seminar addressing core knowledge and skills from an interdisciplinary perspective.

637. Core Competencies III
Spring, Summer. 2 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
Interdepartmental with Human Medicine, Medicine, Family Practice, Surgery, and Obstetrics, Gynecology and Reproductive Biology. Administered by Human Medicine.
P: FMP 602. R: Open only to graduate-professional students in College of Human Medicine. A weekly seminar addressing core knowledge and skills from an interdisciplinary perspective.

640. Advanced Comprehensive Care
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course. Interdepartmental with Human Medicine, Medicine, Family Practice, Surgery, and Obstetrics, Gynecology and Reproductive Biology. Administered by Human Medicine.
P: FMP 602. R: Open only to graduate-professional students in College of Human Medicine. Clinical experience in community-oriented primary care. Emphasis on urban and rural underserved populations.

PHARMACOLOGY AND TOXICOLOGY—PHM

Department of Pharmacology and Toxicology

College of Human Medicine
College of Osteopathic Medicine
College of Veterinary Medicine

350. Introductory Human Pharmacology
Fall, Spring. 3(3-0)
P: PSL 250. R: Not open to freshmen.

450. Introduction to Chemical Toxicology
Spring. 3(3-0)
P: BS 110, BS 111, CRM 251. R: Not open to freshmen and sophomores.
Mammalian toxicology. Disposition of chemicals in the body, detoxification, elimination, and mechanisms of toxicity in major organ systems. Selected toxic agents.

455. Veterinary Pharmacology
Fall. 3(3-0)
R: Completion of 2 semesters of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in PHM 554 or PHM 555. Drug absorption, disposition, biotransformation, excretion, pharmacokinetics. Pharmacologic agents of the autonomic nervous, cardiovascular, renal, central nervous, endocrine, and gastrointestinal systems.

557. Veterinary Toxicology
Spring. 3(2-0)
R: Completion of 3 semesters of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in PHM 594. Determinants of toxic response, analytical toxicology, genetic toxicology, and toxic management. Diagnosis, prevention, and treatment of common toxicoses.

563. Medical Pharmacology
Fall. 3(3-0)
R: Graduate-professional students in colleges of Human and Osteopathic Medicine. General principles of pharmacology and selected drugs. Rational drug therapy.

569. Research Problems in Pharmacology and Toxicology
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department. Selected research problems in pharmacology or toxicology.

810. Synaptic Transmission
Spring of odd-numbered years. 3(3-0)
R: Approval of department. Chemical and electrical aspects of nerve impulse transmission at synaptic and neuroeffector junctions. Influence of drugs.

813. Cardiovascular Pharmacology
Spring of even-numbered years. 3(3-0)
P: PHM 250. R: Open only to graduate students. Approval of department. Effects of drugs on normal physiological and biochemical processes in cardiac cells.

814. Advanced Principles of Toxicology
Spring of even-numbered years. 3(3-0)

815. Concepts in Tumorogenesis
Spring of odd-numbered years. 2(2-0)
P: BCH 462, PSL 432, PSL 460. R: Approval of department. Examination and discussion of literature in tumorogenesis.
PHILOSOPHY

Department of Philosophy
College of Arts and Letters

130. Logic and Reasoning
Fall, Spring, 3(3-0)
P: Not open to students with credit in PHL 330.
R: Open only to graduate students. Approval of department.

131. Formal Reasoning I
Fall, Spring, 3(3-0)
P: PHL course.
R: Open only to freshmen in Philosophy.

132. Formal Reasoning II
Fall, Spring, 3(3-0)
P: PHL course.

135. Philosophy of Law
Fall, Spring, 3(3-0)
P: One PHL course.

143. Philosophy of Technology
Spring, 4(4-0) Interdepartmental with Lyman Briggs School. Administered by Lyman Briggs School.
P: One LBS 153 or another Tier I writing course. R: Not open to freshmen. Open only to students in Lyman Briggs School and the Department of Philosophy.

144. Philosophy of Science
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

145. Philosophy of Economics
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

146. Philosophy of Psychology
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

147. Philosophy of Education
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

148. Philosophy of Biology
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

149. Philosophy of Geology
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

150. Philosophy of Anthropology
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

151. Philosophy of Linguistics
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

152. Philosophy of Art
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

153. Philosophy of Literature
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

154. Philosophy of History
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

155. Philosophy of Religion
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

156. Philosophy of Ethics
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

157. Philosophy of Politics
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

158. Philosophy of Mathematics
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

159. Philosophy of Statistics
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.

160. Philosophy of Computer Science
Fall, Spring, Summer. 3(3-0)
P: One PHL course. Approval of department.