

PEDIATRICS AND HUMAN DEVELOPMENT PHD

College of Human Medicine

520. Genetics Clinic

Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 9 credits. Students will interview and examine patients with inheritable disorders, perform related laboratory diagnostic procedures, and participate in genetic counseling conferences and discussions.

531. Medical Genetics

Fall. 1(1-0) Admission to a college of medicine or approval of department.

Basic genetic principles and their application to clinical medicine, prenatal genetic diagnosis, exercises in genetic counseling and the importance of relevant laboratory tests.

532. Phenomena of Development

Fall. 5(5-0) PHD 531 or approval of department.

Normal psychological and physical development of the human including intellectual, social, emotional and endocrinological growth from infancy through adolescence. Clinical examples highlight deviations from the normal course of development.

590. Special Problems in Human Development

Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 12 credits. Human Medicine students or approval of department.

Each student will work under direction of a staff member on an experimental, theoretical or applied problem.

607. Ambulatory Care Clerkship

Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 9 credits. FMP 602. Interdepartmental with the departments of Family Practice, and Medicine. Administered by the Department of Family Practice.

Outpatient experience, lasting an equivalent of 34 half-days and extending over a minimum of 26 weeks. Continuous and comprehensive patient care under supervision of appropriate physicians.

608. Pediatric Specialty Clerkship

Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 43 credits. FMP 602.

Clinical experience with pediatric patients under the direction of members of the faculty of the Department of Human Development and community pediatricians. Fall, Saginaw. Winter, Lansing. Spring, Grand Rapids. Summer, Flint.

609. Human Development and Pediatric Sub-Specialties

Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. PHD 608.

Elected experiences in selected clinical and basic sciences related to pediatrics and human development.

610. Ambulatory Pediatrics

Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 12 credits. PHD 608.

Clinical experience in outpatient and community settings involving ongoing child health care including chronic medical illnesses and common behavioral problems.

611. Infectious Diseases

Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 12 credits. PHD 608.

Combined office or clinic and inpatient experience in evaluating and managing pediatric patients with infectious diseases.

612. Neonatology

Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 12 credits. PHD 608.

Clinical experience involving modern neonatal techniques and care patterns for the sick neonate.

613. Pediatric Cardiology

Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 12 credits. PHD 608.

Office, clinic and hospital experience in diagnostic and therapeutic pediatric cardiology including special diagnostic procedures.

614. Pediatric Endocrinology and Metabolism

Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 12 credits. PHD 608.

Clinic and hospital experience in evaluating patients with endocrine and metabolic disorders.

615. Pediatric Hematology and Oncology

Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 12 credits. PHD 608.

Clinical experience in evaluating and managing pediatric patients with common hematologic and oncologic disorders.

PHARMACOLOGY AND TOXICOLOGY PHM

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

350. Introductory Human Pharmacology

Winter, Spring. 4(4-0) PSL 432 or PSL 241 or concurrently; or approval of department.

General principles; central nervous system, autonomic nervous system, cardiovascular and renal drugs; chemotherapy; and other selected basic topics.

430. Drug Abuse

Fall of odd-numbered years. 4(4-0) Juniors or approval of department. Biology and chemistry recommended.

Actions, mechanism of action, toxicity and uses of drugs of abuse. Sociological and psychological aspects of drug abuse and the legal aspects of the sale and distribution of drugs are considered.

450. Introduction to Chemical Toxicology

Spring. 3(3-0) B S 210, B S 211, B S 212, CEM 242.

Potential risk of environmental chemicals to animal and human health.

480. Special Problems

Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 9 credits. Approval of department.

Limited amounts of individual work on selected research problems for undergraduate students.

503. Introduction to Medical Biology

Fall. 5(5-0) Admission to the College of Human Medicine. Interdepartmental with the departments of Biochemistry, Microbiology and Public Health, and Physiology. Administered by the Department of Microbiology and Public Health.

Principles of medical biology for medical students.

520. Medical Pharmacology I

(520B.) Fall. 4(4-0) PSL 500A or PSL 500E; BCH 501 or BCH 512.

Drug absorption, distribution, biotransformation, elimination, antagonism; receptor theory and pharmacogenetics. Chemotherapy: antineoplastic, antiviral and antimicrobial agents. Toxicology and emergency therapies. Pharmacology related to the autonomic nervous system.

521. Medical Pharmacology II

(521B.) Winter. 4(4-0) PHM 520.

Pharmacology of the central and peripheral nervous systems. Cardiovascular, renal and gastrointestinal drugs. Endocrine and autacid pharmacology.

554. Veterinary Pharmacology and Toxicology I

(520A.) Fall. 4(4-0) PSL 500B, PSL 500C.

Drug absorption, distribution, biotransformation, elimination, receptor theory and pharmacogenetics; chemical toxicity; autonomic nervous system, cardiovascular and renal pharmacology.

555. Veterinary Pharmacology and Toxicology II

(521A.) Winter. 5(4-2) PHM 554.

Endocrine, autacid and central nervous system pharmacology; chemotherapy: antimicrobials, antihelminthics, antineoplastics.

810. Synaptic Transmission

Spring of odd-numbered years. 4(4-0) Approval of department.

Chemical and electrical aspects of nervous impulse transmission at synaptic and neuroeffector junctions and influences of drugs upon these processes. Intrinsic neuronal circuitry; reticular formation; thalamus; neocortex; cerebellum.

813. Cardiac Pharmacology

Winter of even-numbered years. 4(4-0) PHM 555 or PHM 521; PSL 801, approval of department.

Effects of drugs on normal physiological and biochemical processes in cardiac cells are studied. Emphasis is placed on mechanisms of drug action.

814. Advanced Principles of Toxicology

Spring of even-numbered years. 4(4-0) PHM 521 or PHM 555.

Current biochemical and physiological mechanisms of toxicity on major organ systems. Mechanisms of mutagenicity, carcinogenicity and teratology.