PEDIATRICS

(Established effective January 1, 1979.)

College of Osteopathic Medicine

590. Special Problems in Pediatrics
Fall, Winter, Spring, Summer. 1 to 8 credits. Approval of department.
Each student will work under direction of a faculty member on an experimental, theoretical or applied problem.

600. Pediatrics Clerkship
(O M 652.) Fall, Winter, Spring, Summer. 8 credits. Grade P in all courses offered in terms 1 through 8 or approval of department.
Practical clinical exposure in the area of pediatrics. Program developed to achieve proficiency in motor skills and attitudes, comprehension of concepts and principles, patient evaluation, diagnosis, management and therapy.

620. Directed Studies
Fall, Winter, Spring, Summer. 2 to 24 credits. PED 600 or approval of department.
Study in general or specialty pediatrics.

PEDIATRICS AND HUMAN
DEVELOPMENT

(Effective July 1, 1978. Formerly Department of Human Development.)

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
Spring. 1(1-0) ANT 544 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. 2(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.

608. Pediatric Specialty Clerkship
Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 43 credits. H M 602; primary clerkship.
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 54 credits. H M 602.
Selected experiences in selected clinical and basic sciences related to pediatrics and human development.

PHARMACOLOGY AND
TOXICOLOGY

(Effective July 1, 1978. Formerly Department of Pharmacology)

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

350. Introductory Human Pharmacology
Spring. 3(3-0) 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.

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.

520A. Principles of Pharmacology
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.

520B. Principles of Pharmacology
Winter. 4(4-0) PSL 500A; BCH 501.
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.

521A. Pharmacodynamics
Winter. 5(4-2) PSL 502A. Primarily for students of Veterinary Medicine. Endocrine, autonomic and central nervous system pharmacology; chemotherapy; antimicrobials, antihelminthics, antineoplastics.

521B. Pharmacodynamics
Spring. 4(4-0) PSL 520B or PSL 520A.
Pharmacology of the central and peripheral nervous systems. Cardiovascular, renal and gastrointestinal drugs. Endocrine and autonomic pharmacology.

810. Synaptic Transmission
Winter 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; tetanic formation; thalamus; neocortex; cerebellum.

811. Advanced Renal and Autocoid Pharmacology
Spring. 4(4-0) PSL 521A or PSL 521B and approval of department.
Advanced concepts and current topics in renal and autacoid pharmacology.

812. Advanced Principles of
Pharmacology
Fall. 3(2-0) PSL 521A or PSL 521B and approval of department.
Pharmacodynamics, drug-receptor interactions, computer modeling, drug metabolism.

813. Cardiovascular Pharmacology
Winter of even-numbered years. 4(4-0) PSL 520A, PSL 520B or PSL 520A, PSL 520B, PSL 520C, and 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. 4(4-0) PSL 812.
Current biochemical and physiological mechanisms of toxicity on major organ systems. Mechanisms of mutagenicity, carcinogenicity and teratology.

870. Problems
Fall, Winter, Spring, Summer. 2 to 4 credits. May reenroll for a maximum of 12 credits. Approval of department.
Limited amounts of individual work on selected research problems for first year graduate students in the Department of Pharmacology and Toxicology.

899. Master's Thesis Research
Fall, Winter, Spring. Variable credit. Approval of department.
Individual work on research problems for the master's degree in pharmacology.

910. Seminar
Fall, Winter, Spring. 1(1-0) May reenroll for a maximum of 3 credits. Approval of department.
Discussion of recent topics on pharmacology by departmental or outside speakers, or reporting of research efforts by graduate students of the Department of Pharmacology and Toxicology.