

Descriptions - PATHOLOGY

of

Courses

990. **Advanced Correlative Pathology**
Fall, Winter, Spring, Summer. 5(0-15)
May reenroll for a maximum of 15 credits.
Approval of department.
Experience in morphologic and clinical pathology and correlation of these with the clinical aspects of disease.

999. **Doctoral Dissertation Research**
Fall, Winter, Spring, Summer.
Variable credit. Approval of department.

PEDIATRICS PED

(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. 6 or 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 aptitudes;
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 PHD

(Name changed July 1, 1979. Formerly
Department of Human Development.)

College of Human Medicine

520. **Genetics Clinic**
Fall, Winter, Spring, Summer. 1 to 3
credits. My 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. 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.

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 34
credits. H M 602.
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

(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.

503. **Cell 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 cell biology for medical 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) PHM 520A. Primarily
for students of Veterinary Medicine.
Endocrine, autocrine and central nervous system
pharmacology; chemotherapy; antimicrobials,
anthelmintics, antineoplastics.

521B. Pharmacodynamics
Spring. 4(4-0) PHM 520B or PHM 520A.
Pharmacology of the central and peripheral nervous systems. Cardiovascular, renal and gastrointestinal drugs. Endocrine and autocooid 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; reticular formation; thalamus; neocortex; cerebellum.

811. Advanced Renal and Autocoid Pharmacology
Spring of even-numbered years. 4(4-0)
PHM 521A or PHM 521B and approval of department.
Advanced concepts and current topics in renal and autocoid pharmacology.

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

813. Cardiac Pharmacology
Winter of even-numbered years. 4(4-0)
PHM 520A, PHM 521A or PHM 520B, PHM 521B; PSL 801, PSL 802, PSL 803; 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 of even-numbered years. 4(4-0)
PHM 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, Summer. 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.

980. Problems
Fall, Winter, Spring, Summer. 2 to 5 credits. May reenroll for a maximum of 20 credits. Approval of department.
Limited work on selected research problems.

999. Doctoral Dissertation Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.
Individual work on research problems for the doctoral degree in pharmacology.

PHILOSOPHY PHL

College of Arts and Letters

Each of the courses PHL 101, PHI 102, PHL 103 is an independent gateway to a major area of philosophy. Together they provide a comprehensive introduction to philosophical inquiry.
The courses may be taken independently and in any order.

101. Introduction to Philosophy: Ethics and Value (A)
Fall, Winter, Spring, Summer. 3(3-0)
Students may not receive credit for both PHL 101 and PHL 330.

An inquiry into the nature of the right and the good, addressed to such fundamental problems as the objectivity of moral judgments, the criteria of right and wrong, and the grounds of moral responsibility.

102. Introduction to Philosophy: Knowledge and Reality (A)
Fall, Winter, Spring, Summer. 3(3-0)

An examination of such basic philosophical problems as free will and determinism, the existence of God, the relation of mind and body, and the scope and limits of human knowledge.

103. Introduction to Philosophy: Logic
Fall, Winter, Spring, Summer. 3(3-0)

An examination of deductive and inductive reasoning and of such topics as rational argumentation, fallacies, definition, meaning, truth, and evidence. Designed to improve students' capacities to read and think critically.

120. Classics of Philosophical Literature (A)
Fall, Winter, Spring. 4(4-0)

An introduction to contrasting classics of literary and philosophical importance. Primary texts from such philosophers as Plato, Lucretius, Descartes, Hume, Nietzsche, James, Russell and Sartre will be read and discussed.

200H. Honors Work
Fall, Winter, Spring. 1 to 16 credits. Approval of department.

Taken together, PHL 211, PHI 212 and PHL 213 provide a comprehensive introduction to the history of western philosophy. It is recommended that these courses be taken in sequence. However, if only one course is taken it may be any one of these, since each course is self-contained and may be taken independently of the others.

211. Ancient Philosophy (A)
Fall, Winter, Spring. 3(3-0)

An introduction to the history of philosophy: the Greek and Roman periods, with emphasis on Plato and Aristotle.

212. Medieval and Early Modern Philosophy (A)
Winter, Spring. 3(3-0) PHL 211 recommended.

An introduction to the history of philosophy: the Middle Ages to the rise of modern science, with emphasis on Aquinas, Descartes, Spinoza and Leibniz.

213. Modern Philosophy (A)
Fall, Spring. 3(3-0) PHL 212 recommended.

An introduction to the history of philosophy: the Enlightenment to the nineteenth century, with emphasis on Hume and Kant and such other philosophers as Locke, Berkeley, Hegel, Kierkegaard and Neitzsche.

294. Special Topics
Fall, Winter, Spring, Summer. 2(2-0) to 6(6-0) Approval of department.

Intensive study of some particular problem or author in philosophy.

311. Indian Philosophy
Fall, Winter. 3(3-0)

Metaphysical, ethical and social theories developed within major Indian philosophical systems; e.g., philosophical Buddhism, Vedantist transcendentalism, Samkya dualism, and the Realist schools.

312. Chinese Philosophy
Spring. 3(3-0)

Major cosmological and ethical doctrines of such Chinese authors and movements as Confucius, Mo Tzu, Lao Tzu, Taoism, Yin-Yang dualism, Buddhism, responses to Western influences, the new China.

315. American Philosophy
Spring, Summer. 3(3-0) Three credits in philosophy or approval of department.

Examination of such thinkers as Royce, Pierce, James, Dewey, Whitehead and Santayana, illustrating classic American contributions to philosophy.

323. Existentialism
Fall, Winter, Spring. 3(3-0) Three credits in philosophy or approval of department.

Such authors as Husserl, Jaspers, Kierkegaard, Marcel, Nietzsche, Sartre and such topics as hope, anxiety, bad faith, subjectivity, freedom, social being, and phenomenological method.

330. Elements of Ethics
Fall, Winter, Spring, Summer. 3(3-0) Juniors. Students may not receive credit for both PHL 101 and PHL 330.

An inquiry into the nature of the right and the good, addressed to such fundamental problems as the objectivity of moral judgments, the criterion of right and wrong, and the grounds of moral responsibility.

337. Logic I
Fall, Winter, Spring. 4(4-0)

Modern symbolic methods in deductive reasoning. The logic of connectives and quantifiers.

338. Logic II
Fall, Winter, Spring. 4(4-0) PHL 337 or approval of department.

The logic of identity, functions, and descriptions. Theory-building: axioms, definitions, theorems.