

OSTEOPATHIC MEDICINE O M

College of Osteopathic Medicine

501. Medical Biology I

Fall. 4(4-0)

Integrated aspects of biology providing a foundation and vocabulary preparatory to studies in osteopathic medicine.

502. Medical Biology II

Winter. 3 to 8 credits. Admission to a college of medicine.

Continuation of 501 emphasizing pathology and pharmacology.

530. Clinical Science I

Fall. 2(1-3) Admission to a college of medicine.

Fundamental concepts and skills essential to the performance of a clinical history and physical examination.

531. Clinical Science II

Fall. 2(2-0)

Techniques, concepts and skills required for competent history taking and physical examination utilizing lectures, laboratory and films for instructional purposes.

532. Clinical Science III

Winter. 1(0-3) Admission to a college of medicine.

A clinical study program providing an opportunity to learn the skills of history taking and physical examination by actual performance of the involved techniques on patients under physician supervision.

533. Clinical Science IV

Spring. 1(0-3) Admission to a college of medicine or approval of department.

Continuation of 532.

534. Clinical Science V

Summer. 1(0-3) Admission to a college of medicine.

A clinic-based program providing additional emphasis on history taking and physical examination as well as developing fundamental abilities in diagnosis and problem solving in the clinic setting.

535. Clinical Science VI

Fall. 1(0-3) Admission to a college of medicine.

A continuation of 534.

536. Clinical Science VII

Winter. 1(0-3) Admission to a college of medicine.

Continuation of 535.

537. Clinical Science VIII

Spring. 1(0-3) Admission to a college of medicine.

Continuation of 536.

590. Special Problems in Osteopathic Medicine

Fall, Winter, Spring, Summer. 1 to 8 credits. May re-enroll for a maximum of 32 credits. Approval of department.

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

600. Clinical Science Practicum

Fall, Winter, Spring, Summer. 2 to 12 credits. May re-enroll for a maximum of 60 credits. Grade P in all courses offered in terms 1 through 8 or approval of department.

A clinic oriented course covering the major areas of medical practice including involvement in Family Practice and Community Health Services.

620. Directed Studies

Fall, Winter, Spring, Summer. 2 to 24 credits. May re-enroll for a maximum of 48 credits. Admission to a college of medicine or approval of department.

Individual or group work on special problems in medicine.

650. Medicine Clerkship

Fall, Winter, Spring, Summer. 2 to 16 credits. Grade P in all courses offered in terms 1 through 8 or approval of department.

Clinical exposure in osteopathic medicine. Program developed to achieve proficiency in motor skills and aptitudes; comprehension of concepts and principles; patient evaluation, diagnosis, management, and therapy.

651. Obstetrics—Gynecology Clerkship

Fall, Winter, Spring, Summer. 8 credits. Grade P in all courses offered in terms 1 through 8 or approval of department.

Clinical exposure in obstetrics and gynecology. Program developed to achieve efficiency in obstetrical patient evaluation, management; motor skills, aptitudes; care of newborn; evaluation of postpartum patient; management of gynecologic problems.

652. Pediatrics Clerkship

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 aptitudes; comprehension of concepts and principles; patient evaluation, diagnosis, management and therapy.

653. Surgery Clerkship

Fall, Winter, Spring, Summer. 8 credits. Grade P in all courses offered in terms 1 through 8 or approval of department.

Clinical exposure in area of surgical diagnosis, management, treatment. Program structure developed to achieve proficiency in motor skills, aptitudes; comprehension of concepts and principles; patient evaluation, diagnosis, management, and therapy.

654. Anesthesiology Clerkship

Fall, Winter, Spring, Summer. 4 credits. Grade P in all courses offered in terms 1 through 8 or approval of department.

Clinical exposure in area of anesthesiology. Program structure developed to achieve proficiency in motor skills, aptitudes; comprehension of concepts and principles; patient evaluation, diagnosis, management, and therapy.

655. Emergency Medicine Clerkship

Fall, Winter, Spring, Summer. 4 credits. Grade P in all courses offered in terms 1 through 8 or approval of department.

A clerkship organized to develop skills in the acute evaluation and management of patients in the hospital emergency room and other locations.

656. Orthopedics Clerkship

Fall, Winter, Spring, Summer. 4 credits. Grade P in all courses offered in terms 1 through 8 or approval of department.

Clinical exposure in area of orthopedics. Program structure developed to achieve proficiency in motor skills, aptitudes; comprehension of concepts and principles; patient evaluation, diagnosis, management, and therapy.

657. Neurology Clerkship

Fall, Winter, Spring, Summer. 4 credits. Grade P in all courses offered in terms 1 through 8 or approval of department.

Clinical exposure in area of neurology. Program structure developed to achieve proficiency in motor skills, aptitudes; comprehension of concepts and principles; patient evaluation, diagnosis, management, and therapy.

658. Otorhinolaryngology Clerkship

Fall, Winter, Spring, Summer. 4 credits. Grade P in all courses offered in terms 1 through 8 or approval of department.

Clinical exposure in area of otorhinolaryngology. Program structure developed to achieve proficiency in motor skills, aptitudes; comprehension of concepts and principles; patient evaluation, diagnosis, management, and therapy.

OSTEOPATHIC MEDICINE OST (COLLEGE OF)

500. Historical and Biological Foundations of Osteopathic Medicine

Summer. 2(3-0) Admission to a professional medical program.

Historical development of the osteopathic profession. Integration of biological and osteopathic principles in the consideration of health and disease.

520. Normal Endocrine Structure and Function

Winter. 2(2-0) Admission to a college of medicine or approval of instructor.

An integrated basic science course presenting a series of lectures and laboratories related to the normal structure and function of the endocrine organs. Prerequisite for studying endocrine diseases in systems biology.

530. Comprehensive Patient Evaluation I

Summer. 2 to 6 credits. Admission to a college of medicine.

Interdepartmental course in physical examination skills. Stresses comprehensive, osteopathic evaluation of the patient.

531. Comprehensive Patient Evaluation II

Fall. 2 to 6 credits. 530.

Continuation of 530.

532. Comprehensive Patient Evaluation III

Winter. 2 to 6 credits. 531.

Interdepartmental course in physical examination skills. Stresses application of comprehensive, osteopathic evaluation of the patient. Introduction to office procedures and physical diagnosis.

- 533. Comprehensive Patient Evaluation IV**
Spring. 2 to 6 credits. 532.
Interdepartmental course in physical examination skills. Stresses comprehensive, osteopathic evaluation of the patient. Includes preceptorship and appropriate systems biology clinical experiences.
- 534. Comprehensive Patient Evaluation and Management I**
Summer. 2 to 6 credits. 533.
Interdepartmental course in physical examination skills, diagnosis and patient management. Stresses comprehensive, osteopathic evaluation and management of the patient. Includes preceptor assignment and appropriate systems biology clinical experiences.
- 535. Comprehensive Patient Evaluation and Management II**
Fall. 2 to 6 credits. 533.
Continuation of 534.
- 536. Comprehensive Patient Evaluation and Management III**
Winter. 2 to 6 credits. 533.
Continuation of 535.
- 537. Comprehensive Patient Evaluation and Management IV**
Spring. 2 to 6 credits. 533.
Continuation of 536.
- 551. Systems Biology**
(O M 550.) Fall. 3 to 12 credits. Admission to a college of medicine or approval of instructor.
A multidisciplinary approach to the hemopoietic systems providing a functional integration of basic science and clinical information.
- 552. Systems Biology II**
Spring. 3 to 6 credits. Admission to a professional medical program.
A multidisciplinary approach to the integumentary system providing a functional integration of basic science and clinical information.
- 553. Systems Biology III**
(O M 551.) Spring. 5 to 15 credits. Admission to a college of medicine or approval of college.
A multidisciplinary approach to the nervous system providing a functional integration of basic science and clinical information.
- 554. Systems Biology IV**
(O M 552.) Fall. 5 to 15 credits. Admission to a professional medical program.
Continuation of 553 with emphasis on multidisciplinary approach to the cardiovascular system.
- 555. Systems Biology V**
(O M 553.) Winter. 5 to 10 credits. Admission to a professional medical program.
Continuation of 554 with emphasis on multidisciplinary approach to the respiratory system.
- 556. Systems Biology VI**
(O M 553.) Winter. 5 to 10 credits. Admission to a professional medical program.
Continuation of 555. This system will represent a multidisciplinary approach to the urinary system.

- 557. Systems Biology VII**
(O M 554.) Spring. 5 to 15 credits. Admission to a professional medical program.
Continuation of 556 with emphasis on multidisciplinary approach to the gastrointestinal system and metabolism.
- 558. Systems Biology VIII**
(O M 555.) Summer. 5 to 15 credits. Admission to a professional medical program.
Continuation of 557 with emphasis on multidisciplinary approach of the growth and development within (but not limited to) the field of pediatrics, obstetrics and gynecology.
- 590. Special Problems**
Fall, Winter, Spring, Summer. 1 to 8 credits. May re-enroll for a maximum of 32 credits. Approval of department.
Each student will work under direction of a faculty member on an experimental, theoretical or applied problem.
- 610. The Osteopathic Examination I**
(F M 630.) Fall. 1(0-4) Admission to a college of medicine or approval of instructor.
Instruction in the osteopathic examination.
- 611. The Osteopathic Examination II**
(F M 640.) Winter. 1(0-4) 610 or approval of instructor.
Continuation of 610.
- 612. The Osteopathic Examination III**
(F M 650.) Spring. 1(0-4) 611 or approval of instructor.
Continuation of 611.
- 613. The Osteopathic Examination IV**
(F M 660.) Summer. 1(0-4) 612 or approval of instructor.
Continuation of 612.
- 614. The Osteopathic Examination V**
(F M 670.) Winter. 1(0-4) 612 or approval of instructor.
Continuation of 613.
- 615. The Osteopathic Examination VI**
(F M 680.) Winter. 1(0-4) 612 or approval of instructor.
Continuation of 614.
- 616. The Osteopathic Examination VII**
(F M 690.) Spring. 1(0-4) 613, 614, 615 or approval of instructor.
Continuation of 615.
- 620. Systems Biology — Directed Studies**
Fall, Winter, Spring, Summer. 1 to 15 credits. Admission to a professional medical program or approval of coordinator.
A directed study in systems biology for the continuing advanced student or remediation of any systems biology: hemopoietic, integumentary, nervous, cardiovascular, respiratory, urinary, gastrointestinal, growth and development.

PACKAGING **PKG**

College of Agriculture and Natural Resources

- 210. Principles of Packaging**
Fall, Winter, Spring, Summer. 3(3-0)
A general course in packaging principles covering the growth and development of the field, and the technological and motivational problems involved in present day packaging. Consideration will be given to the basic functions of the package and their relation to the needs and wants of our society.
- 320. Packaging Materials**
Fall, Spring. 4(4-0)
Common packaging materials including wood, paper, paperboard, plastics, metal foils and sheets, glass, adhesives, cushioning media; their basic properties in relation to performance of package.
- 330. Package Printing**
Winter. 3(3-0) 320 or approval of school.
Basic printing processes used for packaging materials. Advantages, disadvantages and identification of these printing methods.
- 340. Packaging and the Environment**
Winter. 4(4-0)
Broad study of the effects of packaging on environmental quality, including solid waste, air and water quality, laws, economics, energy considerations and resources conservation.
- 422. Packaging Systems**
Fall, Winter. 4(4-0) 320 or approval of school.
Design, use and evaluation of packages and packaging systems. A one-day field trip is required.
- 423. Dynamics of Packaging**
Spring. 4(3-3) 422 or approval of school.
A study of the protective function of the packaging systems in relation to their environment and shock and vibration isolation methods. A one-day field trip is required.
- 424. Packaging Problems**
Fall, Winter, Spring, Summer. 1 to 3 credits. May re-enroll for a maximum of 9 credits. 422, 2.5 grade-point average and approval of school.
Development of solutions to specific packaging problems.
- 425. Packaging Process Analysis**
Winter, Spring. 4(4-0) CPS 110.
The integrated study of the operation structure and control of the packaging and package-making process. A one-day field trip is required.
- 427. Packaging Materials and Systems Laboratory**
Fall, Winter, Spring. 3(1-6) 320, 422 or approval of department.
Methods of measuring properties of packaging materials. Design, manufacture and performance testing of complete packages. Techniques for evaluating test results. Value of various test methods.