

**532. Gerontological Clinical Nurse Specialist Practicum I**  
Fall. 4(2-8)  
P: NUR 500, NUR 503, NUR 505, NUR 511, NUR 513, NUR 531. R: Open only to graduate students in College of Nursing Gerontological Clinical Nurse Specialist program.  
Care of aged clients with stable health and function. Collaborative practice model in primary care.

**534. Gerontological Clinical Nurse Specialist Practicum II**  
Spring. 4(2-8)  
P: NUR 532. R: Open only to graduate students in College of Nursing Gerontological Clinical Nurse Specialist program.  
Care of aged clients with complex health problems and functional losses. Collaborative practice model in primary care.

**541. Women and Health in the United States: A Sociological and Nursing Perspective**  
Spring. 3(3-0)  
R: Open only to seniors and graduate students.  
Health status of contemporary women. Role of women as consumers and providers of health care. Health care delivery in the U.S.

**543. Human Sexuality and Health**  
Spring. 3(3-0)  
R: Open only to seniors and graduate students.  
Physiological and psychosocial components of sexual function. Clinical assessment and interventions for sexual problems common in primary care.

**551. Impact of Chronic Illness on Young Children**  
Fall. 3(3-0)  
R: Open only to seniors and graduate students.  
Impact of chronic illness on growth and development of children from infancy through early childhood. Family and individual intervention strategies.

**590. Special Problems**  
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 24 credits in all enrollments for this course.  
R: Open only to graduate students in College of Nursing. Approval of college.  
Individual or group in-depth study of specific areas in nursing. Independent study.

**591. Selected Topics**  
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course.  
R: Open only to graduate students in College of Nursing. Approval of college.  
Selected issues, trends, programs, or theories in nursing.

**898. Master's Scholarly Project**  
Fall, Spring. 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course.  
P: NUR 507. R: Approval of college.  
A planning, implementing, and evaluating project that addresses a significant clinical nursing problem relevant to primary care and advanced practice.

**899. Master's Thesis Research**  
Fall, Spring. 1 to 6 credits. A student may earn a maximum of 24 credits in all enrollments for this course.  
P: NUR 507. R: Open only to graduate students in College of Nursing. Approval of college.

## OBSTETRICS, GYNECOLOGY AND REPRODUCTIVE BIOLOGY OGR

Department of Obstetrics, Gynecology and Reproductive Biology  
College of Human Medicine

**608. Obstetrics and Gynecology Required Clerkship**  
Fall, Spring, Summer. 6 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.  
P: FMP 602. R: Open only to graduate-professional students in College of Human Medicine.  
Obstetrics and gynecology in inpatient and ambulatory settings. Clinical experiences, didactic sessions, hospital rounds discussions. Case writeups and presentations.

**609. Advanced Obstetrics and Gynecology Clerkship**  
Fall, Spring, Summer. 4 to 6 credits.  
P: OGR 608. R: Open only to graduate-professional students in College of Human Medicine.  
Additional exposure to obstetrics or gynecology in the preceptor mode. Participation in ambulatory and inpatient care including surgery. May include maternal and fetal medicine

**610. Perinatology Clerkship**  
Fall, Spring, Summer. 4 to 6 credits.  
P: OGR 608. R: Open only to graduate-professional students in College of Human Medicine.  
Additional exposure to high risk obstetrics including prenatal diagnosis and counseling, antepartum evaluation, and care of the high risk patient. Management of the intrapartum high risk patient.

**611. Reproductive Endocrinology and Infertility Clerkship**  
Fall, Spring, Summer. 4 to 6 credits.  
P: OGR 608. R: Open only to graduate-professional students in College of Human Medicine.  
Added exposure to clinical problems in reproductive endocrinology and female infertility primarily in ambulatory setting. Occasional participation in inpatient experiences. Assisted reproductive technologies.

**612. Gynecologic Oncology Clerkship**  
Fall, Spring, Summer. 4 to 6 credits.  
P: OGR 608. R: Open only to graduate-professional students in College of Human Medicine.  
Added clinical experience in inpatient and ambulatory gynecologic oncology, breast disease, and complicated benign gynecology in the preceptor mode. Pre-treatment evaluation and cancer management, including surgery.

**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, Pediatrics and Human Development, Family Practice, and Surgery. 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, Pediatrics and Human Development, Medicine, and Family Practice. Administered by Human Medicine.  
P: FMP 608, PHD 600, MED 608. 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.

## OSTEOPATHIC MANIPULATIVE MEDICINE OMM

Department of Osteopathic Manipulative Medicine  
College of Osteopathic Medicine

**590. Special Problems in Biomechanics**  
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 48 credits in all enrollments for this course.  
R: Approval of department.  
Each student works under faculty direction on an experimental, theoretical, or applied problem.

**601. Osteopathic Manipulative Medicine Clerkship**  
Fall, Spring, Summer. 1 to 20 credits. A student may earn a maximum of 30 credits in all enrollments for this course.  
R: Open only to graduate-professional students in the College of Osteopathic Medicine upon completion of Units I and II.  
Advanced training in the diagnosis of musculoskeletal dysfunction and application of osteopathic manipulative techniques.

**620. Directed Studies**  
Fall, Spring, Summer. 1 to 30 credits. A student may earn a maximum of 30 credits in all enrollments for this course.  
Individual or group work on special problems related primarily to the biomechanics of the musculoskeletal system.

**800. Special Topics**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course.  
Directed study in topics of biomechanics.

**830. Biomechanical Analysis of Physical Activity**  
Fall. 3(2-2) Interdepartmental with Physical Education and Exercise Science. Administered by Physical Education and Exercise Science.  
Kinematic analysis of mechanical and anatomical characteristics in physical activity and sport skills.

**831. Advanced Biomechanics of Physical Activity**  
Spring of even-numbered years. 3(2-2) Interdepartmental with Physical Education and Exercise Science. Administered by Physical Education and Exercise Science.  
P: PES 830.  
Kinetic analyses of the performance of physical activity and sport.

**841. Theory of Neuromuscular Mechanics**  
Fall of even-numbered years. 2(2-0)  
Neurological control of joint mechanics.

**861. Clinical Biomechanics**  
Spring of odd-numbered years. 3(3-0)  
Application of biomechanics to medicine.

## Descriptions —Osteopathic Manipulative Medicine of Courses

**890. Independent Study**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 22 credits in all enrollments for this course.  
R: Approval of department.  
Individual or group work related to biomechanics and/or neuromuscular system.

**899. Master's Thesis Research**  
Fall, Spring, Summer. 1 to 25 credits. A student may earn a maximum of 25 credits in all enrollments for this course.

**930. Current Issues in Biomechanical Aspects of Physical Activity**  
Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. Interdepartmental with Physical Education and Exercise Science. Administered by Physical Education and Exercise Science.  
P: PES 830.  
Selected issues of biomechanical analyses of sport and physical activity.

## OSTEOPATHIC MEDICINE OST

### College of Osteopathic Medicine

**501. Clinical Skills I**  
Fall. 3(1-4)  
R: Graduate-professional students in College of Osteopathic Medicine.  
Introduction to osteopathic physical examination.

**502. Clinical Skills II**  
Spring. 3(1-4)  
P: OST 501. R: Graduate-professional students in College of Osteopathic Medicine.  
Continuation of OST 501.

**504. Doctor/Patient Relationship I**  
Fall. 1 credit.  
R: Graduate-professional students in College of Osteopathic Medicine.  
Basics of interpersonal communication related to physician interaction with patients.

**505. Doctor/Patient Relationship II**  
Spring. 1 credit.  
P: OST 504. R: Graduate-professional students in College of Osteopathic Medicine.  
Skills of interviewing patients for the purposes of gathering information, giving information, and patient motivation.

**511. Systems Biology: Neuromusculoskeletal I**  
Summer. 7(5-4)  
P: ANT 551, ANT 552, OST 501, OST 502, PSL 501. R: Open only to graduate-professional students in College of Osteopathic Medicine. Approval of college.  
A multidisciplinary approach to the peripheral neuromusculoskeletal system. Integration of basic science and clinical information with osteopathic manual medicine.

**512. Systems Biology: Neuromusculoskeletal II**  
Fall. 6(4-4)  
P: OST 511. R: Open only to graduate-professional students in College of Osteopathic Medicine. Approval of college.  
A multidisciplinary approach to the neuromusculoskeletal system. Emphasis on the central nervous system. Integration of basic science and clinical information with osteopathic manual medicine.

**513. Systems Biology: Neuromusculoskeletal III**  
Spring. 5(3-4)  
P: OST 512. R: Open only to graduate-professional students in College of Osteopathic Medicine. Approval of college.  
Multidisciplinary approach to the neuromusculoskeletal system. Emphasis on ophthalmology, rheumatology, and orthopedics. Integration of basic science and clinical information with osteopathic manual medicine.

**516. Systems Biology: Behavior I**  
Fall. 3(3-0)  
P: OST 511, PHM 563. R: Open only to graduate-professional students in College of Osteopathic Medicine.  
A multidisciplinary approach to behavior. Focus on normal human development, behavioral and cultural medicine, and medical ethics.

**517. Systems Biology: Behavior II**  
Spring. 2(2-0)  
P: OST 516. R: Open only to graduate-professional students in College of Osteopathic Medicine.  
A multidisciplinary approach to behavior. Focus on psychopathology, chronic illness and disability, health policy and terminal care.

**518. Systems Biology: Behavior III**  
Summer. 2(2-0)  
P: OST 517. R: Open only to graduate-professional students in College of Osteopathic Medicine.  
A multidisciplinary approach to behavior. Focus on substance abuse and child abuse.

**519. Ethics, Policy and Jurisprudence**  
Spring. 2(2-0)  
R: Open only to graduate and graduate-professional students in the colleges of Osteopathic Medicine, Human Medicine and Nursing or approval of department.  
Key issues in ethics, policy and law encountered in the practice of medicine.

**521. Systems Biology: Hematopoietic**  
Fall. 2(2-0)  
P: ANT 551, ANT 563; BCH 521, MIC 522, PHM 563, PTH 542. R: Open only to graduate-professional students in College of Osteopathic Medicine. Approval of college.  
A multidisciplinary approach to the hematopoietic system. Emphasis on hematopoiesis, clotting, and hematopoietic pathologies. Integration of clinical and basic science information.

**522. Systems Biology: Gastrointestinal**  
Fall. 6(6-0)  
P: ANT 551, ANT 562, BCH 521, MIC 522, PHM 563, PSL 501, PTH 542. R: Open only to graduate-professional students in College of Osteopathic Medicine. Approval of college.  
A multidisciplinary approach to the gastrointestinal system emphasizing normal structure and function, and pathologies. Integration of basic science and clinical information.

**523. Systems Biology: Genitourinary**  
Summer. 5(5-0)  
P: ANT 551, ANT 562, MIC 522, PHM 563, PSL 501, PTH 542. R: Open only to graduate-professional students in College of Osteopathic Medicine. Approval of college.  
A multidisciplinary approach to the urinary system. Emphasis on normal structure and function, and pathologies, of the urinary and male reproductive systems. Integration of basic science and clinical information.

**524. Systems Biology: Cardiovascular**  
Spring. 7(6-2)  
P: ANT 551, ANT 553, BCH 551; MIC 522, PHM 563, PSL 551, PTH 542. R: Open only to graduate-professional students in College of Osteopathic Medicine. Approval of college.  
A multidisciplinary approach to the cardiovascular system emphasizing normal structure and function, and pathologies. Integration of basic science and clinical information.

**525. Systems Biology: Respiratory**  
Spring. 5(4-2)  
P: ANT 551, BCH 521, MIC 522, PHM 563, PSL 501. R: Open only to graduate-professional students in College of Osteopathic Medicine. Approval of college.  
A multidisciplinary approach to the respiratory system emphasizing normal structure and function, and pathologies. Integration of basic science and clinical information.

**526. Systems Biology: Integumentary**  
Summer. 2(2-0)  
P: ANT 551, ANT 562, MIC 522, PHM 563, PTH 542. R: Open only to graduate-professional students in College of Osteopathic Medicine. Approval of college.  
A multidisciplinary approach to the integumentary system. Emphasis on diagnosis and treatment of integumentary pathologies. Integration of basic science and clinical information.

**527. Systems Biology: Female Reproductive**  
Summer. 5(5-0)  
P: ANT 551, ANT 562, BCH 521, MIC 522, PHM 563, PSL 501. R: Open only to graduate-professional students in College of Osteopathic Medicine. Approval of college.  
A multidisciplinary approach to the female reproductive system emphasizing normal structure and function, and pathologies. Integration of basic science and clinical information in obstetrics and gynecology.

**528. Systems Biology: Growth and Development**  
Summer. 3(3-0)  
P: ANT 551, ANT 562, BCH 521, MIC 522, PHM 563, PSL 501; C: OST 546 concurrently. R: Open only to graduate-professional students in College of Osteopathic Medicine.  
A multidisciplinary approach to growth and development. Emphasis on normal structure and function, and pathologies. Integration of basic science and clinical information.

**529. Systems Biology: Endocrinology**  
Fall. 2(2-0)  
P: PSL 501; ANT 553; BCH 551. R: Open only to graduate professional students in College of Osteopathic Medicine. Approval of college.  
A multidisciplinary approach to endocrinology. Emphasis on normal endocrine function and the principles of diagnosis and treatment of endocrine disorders. Integration of basic science and clinical information.

**535. Principles of Gerontology for Medical Practice**  
Spring. 3(3-0)  
R: Open only to graduate-professional students in the Colleges of Osteopathic and Human Medicine or approval of department.  
Lectures, readings, tapes, small group seminars, and home visits related to normal aging epidemiology. Major chronic diseases and other issues of geriatric care.  
SA: CMS 522

**541. Integrative Clinical Correlations I**  
Fall. 1 credit.  
R: Graduate-professional students in College of Osteopathic Medicine.  
Application of basic science information, problem-solving, and clinical skills in an integrated clinical case format. Case presentations by students and faculty.