920 Translation of Research and Scientific Knowledge to a Community Setting Spring. 3(2-3) R: Open only to doctoral stu-

dents in the College of Nursing or approval of college.

The systematic application of scientific knowledge to inform dinical practice, policy and delivery system changes to enhance the health status and health outcomes of community populations. Translation strategies include dissemination, networking, program development and evaluation. Opportunities for translation will occur in primary health care, organizational and governmental systems.

Methods In Clinical Research

Spring. 3(2-3) R: Open to all doctoral students or approval of college.

Advanced research designs, measurement and data collection strategies. Draws on a broad range of behavioral and health disciplines relevant to nursing. Logic of statistical models used in the evaluation of research designs and measures.

940 Research Practicum

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open only to doctoral students in the College of Nursing or approval of college.

Practical experiences as a researcher through participation in ongoing research of nursing faculty and as a member of an interdisciplinary research team.

990 Special Problems

Fall, Spring, Summer. 1 to 4 credits. R: Open only to doctoral students in Nursing or approval of college.

Individual or group in-depth study of specific areas in nursing research.

Doctoral Dissertation Research

Fall, Spring, Summer. 1 to 24 credits. R: Open only to doctoral students in the College of Nursing or approval of college.

Original research of student under supervision of major advisor.

OBSTETRICS, **GYNECOLOGY** AND REPRODUCTIVE **BIOLOGY** OGR

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

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 his course. P:NM: (FMP 602) R: Open only to graduateprofessional 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:NM: (OGR 608) R: Open only to graduateprofessional 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

Perinatology Clerkship

Fall, Spring, Summer. 4 to 6 credits. P:NM: (OGR 608) R: Open only to graduateprofessional students in College of Human

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.

Reproductive Endocrinology and Infertility Clerkship

Fall, Spring, Summer. 4 to 6 credits. P:NM: (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 technolo-

Gynecologic Oncology Clerkship Fall, Spring, Summer. 4 to 6 credits. P:NM: (OGR 608) R: Open only to graduateprofessional 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.

Extended Clinical Experience

Fall, Spring, Summer. 6(6-0) P:M: (OGR 608)

Based in community hospitals and ambulatory sites, this is a 4 week clinical experience emphasizing interviewing skills, history, physical exam, problem solving and therapy.

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; Family Practice; Medicine; Pediatrics and Human Development; Surgery. Administered by Human Medicine. P:NM: (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.

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 Family Practice; Human Medicine; Medicine; Pediatrics and Human Development. Administered by Department of Family Practice. P:NM: (FMP 608 and PHD 600 and MED 608) R: Open only to graduateprofessional students in College of Human

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

Student Osteopathic Manipulative Medicine Practical Laboratory Fall, Spring, Summer. 1 credit. A student

may earn a maximum of 4 credits in all enrollments for this course. P:M: (OST 501 and OST 502 and OST 504 and OST 505)

Elective course of didactic and clinical sessions which apply osteopathic principles and techniques on patients.

501 Osteopathic Manipulative Medicine I

Fall. 1(0-2) Interdepartmental with Physical Medicine and Rehabilitation. R: Open only to students in the College of Osteopathic Medicine.

Basic osteopathic palpatory skills. Building on their basic palpatory skills, students will learn skills in the osteopathic manipulative treatment areas of counterstrain and muscle energy.

Osteopathic Manipulative Medicine - II

Spring. 1(0-2) Interdepartmental with Physical Medicine and Rehabilitation. P:M: (OMM 501) R: Open only to students in the College of Osteopathic Medicine.

Students will continue to learn skills in the osteopathic manipulative treatment area of muscle energy as well as high velocity low amplitude (mobilization with impulse)

Osteopathic Manipulative Medicine - III Summer. 1(0-2) Interdepartmental with 503

Physical Medicine and Rehabilitation. P:M: (OMM 502) R: Open only to students in the College of Osteopathic Medicine.

Students will use their palpatory skills as they learn the principles of functional (indirect) and myofascial release osteopathic manipulative treatment.

Osteopathic Manipulative Medicine - IV 504

Fall. 1(0-2) Interdepartmental with Physical Medicine and Rehabilitation. P:M: (OMM 503) R: Open only to students in the College of Osteopathic Medicine.

Basic cranio-sacral osteopathic manipulative medicine. Exposure to various osteopathic approaches to the extremities.

Osteopathic Manipulative Medicine - V

1(0-2) Interdepartmental Physical Medicine and Rehabilitation. P:M: (OMM 504) R: Open only to students in the College of Osteopathic Medicine.

Use of patient complaints/conditions to integrate material presented in OMM 501, 502, 503, 504 while preparing the student for OMM 506.

Osteopathic Manipulative Medicine - VI Summer. 1(0-2) Interdepartmental with Physical Medicine and Rehabilitation. P:M: (OMM 505) R: Open only to students in the College of Osteopathic Medicine.

The osteopathic component in the context of total patient care in disorders of various systems.

Special Problems in Biomechanics 590

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 48 credits in all enrollments for this course. R: Open only to graduate and graduate-professional students in the College of Osteopathic Medicine. Approval of department. SA: BIM

Each student works under faculty direction on an experimental, theoretical, or applied problem.

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. SA: BIM 601, BIM

Advanced training in the diagnosis of musculoskeletal dysfunction and application of osteopathic manipulative techniques.

Directed Studies

Fall, Spring, Summer. 1 to 30 credits. A student may earn a maximum of 30 credits in all enrollments for this course. SA: BIM 620, BIM 620

Individual or group work on special problems related primarily to the biomechanics of the musculoskeletal

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. SA: BIM 800

Directed study in topics of biomechanics.

Biomechanical Analysis of Physical 830

Activity
Fall. 3(2-2) Interdepartmental with Kinesiology; Medicine; Obstetrics, Gynecology and Reproductive Biology; Pediatrics and Human Development; Surgery. Administered by Department of Kinesiology. SA: BIM 830, PES 830

Kinematic analysis of mechanical and anatomical characteristics in physical activity and sport skills.

Advanced Biomechanics of Physical 831 Activity

Spring of even years. 3(2-2) Interdepartmental with Kinesiology; Medicine; Obstetrics, Gynecology and Reproductive Biology; Pediatrics and Human Development; Surgery. Administered by Department of Kinesiology. P:NM: (KIN 830) SA: BIM 831, KIN

Kinetic analyses of the performance of physical activity and sport.

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. SA: BIM 890

Individual or group work related to biomechanics and/or neuromuscular system.

Master's Thesis Research

Fall, Spring, Summer. 0(2-2) A student may earn a maximum of 25 credits in all enrollments for this course. SA: BIM 899

Master's thesis research.

930 **Current Issues in Biomechanical Aspects** of Physical Activity Spring. 3(3-0) A student may earn a maxi-

mum of 9 credits in all enrollments for this course. Interdepartmental with Kinesiology; Medicine; Obstetrics, Gynecology and Reproductive Biology; Pediatrics and Human Development; Romance Languages. Administered by Department of Kinesiology. P:NM: (KIN 830) SA: BIM 930, PES 930

Selected issues of biomechanical analyses of sport and physical activity.

OSTEOPATHIC MEDICINE OST

College of Osteopathic Medicine

Selected Topics in Osteopathic Medicine Fall, Spring. 1(1-0) RB: Student with academic interest and career focus toward medicine and the health sciences.

Classical, current and innovative osteopathic medical trends in patient treatment and care.

Clinical Skills I 501

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:NM: (OST 501) R: Graduate-professional students in College of Osteopathic Medicine.

Continuation of OST 501.

Doctor/Patient Relationship I

Fall. 1(0-2) R: Graduate-professional students in College of Osteopathic Medicine. Basics of interpersonal communication related to physician interaction with patients.

Doctor/Patient Relationship II

Spring. 1(0-2) P:NM: (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.

Systems Biology:

Neuromusculoskeletal I

Summer. 7(5-4) P:NM: (ANT 551 and ANT 552 and OST 501 and OST 502 and 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.

Systems Biology:

Neuromusculoskeletal II

Fall. 6(4-4) P:NM: (OST 511) R: Open only to graduate-professional students in College of Osteopathic Medicine. Approval of colleae.

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:NM: (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.

Systems Biology: Behavior II Spring. 2(2-0) P:NM: (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.

Ethics, Policy and Jurisprudence 519

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 @partment.

Key issues in ethics, policy and law encountered in the practice of medicine.

Behavioral Medicine System

Fall, Spring. 4(4-0) R: Open only to graduate professional students in the College of Osteopathic Medicine. SA: OST 516 Not open to students with credit in OST 517.

Health promotion models, health behavior, stress and coping, models of substance abuse, substance abuse screening and interventions, human sexuality, psychosocial aspects of chronic illness, understanding and treating pain.

Systems Biology: Hematopoietic Fall. 2(2-0) P:NM: (ANT 551 and ANT 563 and BMB 521 and MIC 522 and PHM 563 and PTH 542) R: Open only to graduateprofessional 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.

Systems Biology: Gastrointestinal

Fall. 6(6-0) P:NM: (ANT 551 and ANT 562 and BMB 521 and MIC 522 and PHM 563 and PSL 501 and 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:NM: (ANT 551 and ANT 562 and MIC 522 and PHM 563 and PSL 501 and 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