

Addendum to Catalog 10/21/2011

Course Descriptions

School of Graduate Studies

SGSI 600 DEVELOPMENT & COMMERCIALIZATION OF A HUMAN THERAPEUTIC / 2 credit hours. This course will cover the fundamentals of the commercialization of human therapeutics from research and discovery through clinical development. In the course, student will gain an understanding of the process of the development and commercialization of a human therapeutic from early discovery through regulatory and product development to early clinical trials. Additionally, practical exercises in the business of building and sustaining a biotechnology company will be explored.

College of Nursing

NURS 314 HEALTH ASSESSMENT / Credit 4. Concepts and principles underlying assessment of the health status of individuals are presented. Emphasis is placed on medical terminology, interviewing skills, health histories, and the physical and psychosocial findings in the well person. Development of communication in the nurse-client relationship and assessment skills are included. Students implement the nursing process by obtaining health histories, performing physical and psychosocial assessments, establishing a database, and formulating initial nursing plans. Prerequisite: Admission to the TAMHSC-CON or approval from the associate dean of academic affairs.

NURS 322 NURSING INFORMATICS / Credit 2. This course teaches the use of information technology (IT) to access, retrieve, organize and evaluate information related to evidence-based nursing practice. Using a problem-based approach, students will use IT resources to examine health-related problems, obtain and organize pertinent information, and professionally communicate findings as appropriate for hospital settings. Prerequisite: Admission to the TAMHSC-CON or approval from the associate dean of academic affairs.

NURS 411 EVIDENCE-BASED PRACTICE FOR NURSES / Credit 3. A study of the principles and methodology of research in nursing practice, with emphasis on evidence based practice research. Students will be expected to interpret research, identify its methods and significance, and analyze findings in order to be a consumer of nursing research and practitioner of evidence based practice. Prerequisites: NURS 310, 311, 312, 313, 314, 316, 322.

School of Rural Public Health

SRPH 640 PUBLIC HEALTH INFORMATICS / Credit 3. Provides an overview of the field of public health informatics, and focuses on PHI competencies for public health practitioners. Key informatics challenges and current topics, such as evidence-based public health data and vocabulary standards, privacy and security, interoperability and health information exchange, electronic health records and data integration, are explored. Students will learn techniques for search in public health literature and will practice informatics evaluation skills by assessing a health information system.

SRPH 680 PUBLIC HEALTH CAPSTONE/ Credit 3. In this course, students integrate the knowledge and skills gained through other courses and experiences at SRPH, allowing them to understand both the overall public health problem-solving approach and contributions of each discipline

to that approach. Students work in groups to analyze public health problems and develop interventions. Prerequisites: PHEB 600, PHEO 600, PHPM 601, PHPM 605, PHSB 603 and PHEB 602, one of which may be taken as a co-requisite. Instructor approval is also required.

~~PHEO 678~~ ~~ERGONOMICS I: PREVENTION AND CONTROL OF LOW BACK PAIN /~~
ERGONOMICS OF THE LOWER BACK. Credit 3. Fundamental topics upon which models for the prevention and control of low back pain are constructed. Focus is on ergonomic assessment, design and improvement, including biomechanics, anthropometry, strength assessment and implementation of controls. Prerequisite: approval of instructor.

~~PHEO 679~~ ~~ERGONOMICS II: PREVENTION AND CONTROL OF DISTAL UPPER EXTREMITY~~
~~DISORDERS~~ ERGONOMICS OF THE UPPER EXTREMITIES/ Credit 3. Fundamental topics upon which models for the prevention and control of distal upper extremity disorders are constructed. Focus is on topics including human anatomy, neurophysiology, electrophysiology and worker capacity evaluation. Prerequisite: approval of instructor.

PHEB 610 EPIDEMIOLOGIC METHODS II / Credit 3. An intensive introduction to epidemiological concepts and methods for students in the epidemiology concentration and others who will collaborate in, or be required to, interpret the results of epidemiological studies. Emphasis is placed on calculation and interpretation of crude and adjusted data, measures of association, and study design. Prerequisites: **PHEB 602 and PHEB 605 or concurrent enrollment in PHEB 603**. Course restricted to PHEB students only or instructor approval required.

~~PHEB 600, PHEB 602, PHEB 603~~ PHEB 611 EPIDEMIOLOGIC METHODS III / Credit 3. In-depth treatment of key methodological and analytic topics in epidemiology. Emphasis on study design and implications for data analysis, such as confounding, model selection and effect modification. Analytic techniques using logistic regression and stratified analysis will be emphasized. Prerequisites: PHEB 610 and PHEB 603.

PHEB 612 DATA MANAGEMENT/COMPUTING / Credit 3. An introduction to the principles of data management, techniques in designing and implementing databases for large data systems, techniques for communicating between computing environments and introduction to statistical software. Prerequisites: PHEB 600 **or PHEB 605**.

~~PHEB 608~~ PHEB 618 SPATIAL EPIDEMIOLOGY I / Credit 3. This course provides a broad introduction to the principles and methods of spatial epidemiology, with particular emphasis on the use and applications of Geographical Information Systems (GIS), and spatial analysis methods in health research and public health practice.

PHEB 619 INFECTIOUS DISEASE EPIDEMIOLOGY / Credit 3. Principles and practices of epidemiology appropriate for the study of communicable diseases. Course focuses on methodology, public health concerns, patterns of transmission and newly discovered infectious diseases. Prerequisite: ~~Either~~ PHEB 600 **or PHEB 605** or permission of the instructor.

PHEB 620 CANCER EPIDEMIOLOGY / Credit 3. A review of the principles and methods used in cancer epidemiology. The course focuses on cancer etiology and control, with emphasis on race/ethnicity and urban/rural differences in cancer incidence and mortality. Prerequisite: PHEB 600 **or PHEB 605** or permission of the instructor.

PHEB 622 REPRODUCTIVE AND PERINATAL EPIDEMIOLOGY / Credit 3. Epidemiology of major reproductive health outcomes, including infertility, fetal loss, birth weight, congenital malformations and infant mortality. Review of current knowledge of determinants of these outcomes. Prerequisite: PHEB 600 or PHEB 605 or permission of the instructor.

PHEB 624 SOCIAL EPIDEMIOLOGY / Credit 3. This course entails an exploration and examination of the social determinants and distribution of physical and mental health outcomes. These determinants include socioeconomic inequalities, stress and social organization. The course focuses on the development and evaluation of testable hypotheses concerning the relationship between social conditions and health. Prerequisite: PHEB 600 or PHEB 600.

PHEB 626 OCCUPATIONAL AND ENVIRONMENTAL EPIDEMIOLOGY / (3-0). This course involves the examination of occupational and environmental exposures related to disease and injury. Topics covered include general methods used in occupational and environmental epidemiology, exposure assessment, surveillance, and the relation of occupational and environmental exposure to adverse reproductive outcomes, cancer, diseases and the ergonomic-related outcomes. Prerequisite: PHEB 600 or PHEB 605 or equivalent.

PHEB 627 CHRONIC DISEASE EPIDEMIOLOGY / Credit 3. This course will provide insight into the epidemiologic concepts and research needed in the study of chronic disease and its associated risk factors. This course is intended to provide students with an appreciation of the major trends in the incidence and prevalence of specific chronic diseases. The focus will be from a U.S. and international perspective. Methodological challenges relevant to chronic disease epidemiologic research will be addressed in lectures, readings, student discussions, presentation and assignments. Prerequisite: PHEB 605.

PHPM 673 MANAGERIAL STATISTICS FOR HEALTH SERVICES ADMINISTRATION / Credit 3. This course will cover analytical techniques to support managerial decision making in health care. The course will cover descriptive statistical techniques for the presentation of health care data and applicability of the descriptive statistical techniques, a survey commonly used inferential statistical techniques for data analysis is presented. Throughout the course material, emphasis is on the sources and uses of health care data and information for decision-making, and on the interpretation and evaluation of health care research.

College of Medicine

PG. 227

Humanities Medicine (MHUM)

Professors: Berry, Dickey, Gastel, Howard, McDermott, McMurray, Rohack, Russell, Sadoski, Sanders, Self

Associate Professors: Bramson, Herring, Wiprud

Assistant Professors: Borchardt, Caylor, Gore, Halterman-Cox, Lobb, Maldonado, Shiroma-Bender, West, Nicowala, Sicilio, Tyler, Wick

Instructor: Diaz

Courses are required in Humanities in Medicine during the first and second years and in medical jurisprudence in the fourth year. Electives are also offered during the first, second and fourth years including opportunities for directed research with an opportunity for publication and self-directed research with an opportunity to travel to London. Educational symposia, workshops and seminars with visiting speakers are available to students and faculty in the College of Medicine and are often open to the public.

Humanities in Medicine periodically invite outstanding medical humanists with national/international reputations to the College of Medicine to speak with the public as part of the Consultation Series and are often incorporated into the medical student curriculum.

Students are encouraged to visit with faculty members as members of the Department view their mission as one of helping and colleagues in various disciplines are invited to initiate collaborations as the Department highly values an interdisciplinary approach to education.

Essentially, the mission of the Department of Humanities in Medicine is to help students become better doctors. We believe that professionalism is not a goal, but an expectation, and that it can best be achieved and perhaps only be achieved through teaching the traditional disciplines (history, ethics and values, art, literature, law, spirituality and moral reasoning) as we integrate the art and science of medicine throughout the four-year curriculum.

Ultimately, we believe that our mission may be summed up in one essential message: the patient comes first.

We believe that the vision of the "Good Doctor" can only be achieved by exposing students to the humanities through case-based learning and adequate student reflection. We also posit that to be a "good doctor" requires a student to have reflected upon their personal and community values, the history and ethics of the profession and that a student understands the importance of maintaining balance in their life.