

dysfunctions that mimic neuro-musculoskeletal dysfunction. Determination of need for referral to another member of the health care team will be emphasized.

**PHYT645 Teaching and Learning II**

Summer

Credit Hours: G 1

Prerequisites: Completion of Year 5 Spring courses

Continued exploration of the principles of patient education, group differences, and development of appropriate educational materials. An emphasis will be placed on health promotion, in-service education and instruction of client and families.

**PHYT689 Clinical Internship**

Fall

Credit Hours: G 8 Graded S/U.

Prerequisites: Completion of all didactic courses, required electives, and permission of faculty  
Orientation to physical therapy practices including supervised examination, evaluation, assessment and treatment procedures. Development of entry-level physical therapy skills and competency will be emphasized. 640 hours/16 weeks.

**PHYT690 Graduate Symposium**

Fall

Credit Hours: G 2 Graded S/U.

Prerequisites: PHYT689

Addresses current professional issues in the practice of physical therapy. Students will be responsible for presenting the pros and cons of each issue and facilitating discussion of these issues. Will serve as Capstone experience.



**PUBH411 Introduction to Spanish for Healthcare Professionals**

Fall

Credit Hours: G 3 Graded S/U.

This course introduces the Spanish language in a medical context. Through development of oral and aural skills, enables more effective communication with Spanish speaking patients.

**PUBH412 Advanced Medical Spanish for Healthcare Professionals**

Spring

Credit Hours: G 3 Graded S/U.

Prerequisites: Previous experience in Spanish language and/or completion of PUBH411  
Builds upon previous Spanish in a medical context and development of oral and aural skills for more effective communication, improving interaction with Spanish speaking patients.

**PUBH502 Occupational Health Science, Regulations and Management**

Fall

Credit Hours: G 3

Scientific, regulatory and management principles applicable to the anticipation, recognition, evaluation and control of physical, chemical, and biological agents and ergonomic and psychological factors associated with illnesses in occupational environments.

**PUBH506 Occupational Safety Science, Regulations and Management**

Fall

Credit Hours: G 3

Scientific, regulatory and management principles applicable to anticipation, identification, investigation and control of mechanical hazards, unsafe work practices, and ergonomic and behavioral factors associated with accidents and injuries in occupational environments.

**PUBH516 Environmental Health Science, Regulations and Management**

Spring

Credit Hours: G 3

Scientific, regulatory and management principles applicable to human disease associated with food, water, air and soil contamination. Focuses on biology and chemistry of contamination and transformation, exposure monitoring and contaminant control.

**PUBH526 Hazardous Materials and Emergency Response**

Fall

Credit Hours: G 3

Scientific, regulatory and managerial principles applicable to characteristics, exposure control, storage, transport and disposal of chemical, biological and radiological agents; accidental and intentional (terrorism) disaster preparedness and emergency response; and, personnel protective equipment and site assessment/monitoring.

**PUBH531 Chemical Agent Toxicity, Evaluation and Control**

Fall

Credit Hours: G 3

Scientific principles and practices applicable to the toxicology, evaluation, and control of chemical agents associated with human diseases resulting from various environmental exposures. Content includes normal/abnormal human physiology, exposure assessment, and exposure control.

**PUBH550 Public Health Microbiology**  
Variable

Credit Hours: G 3

Prerequisite: College-level biology and chemistry  
The course is designed so students can achieve a broad knowledge and understanding of microorganisms, especially those involved in human disease. Topics include the body's defenses, the organism's capabilities for spreading and for virulence; important sources of infection and modes of transmission from such sources, and methods of detecting, preventing and controlling infections.

**PUBH552 Biological Agents - Pathogenicity, Evaluation and Control**

Spring

Credit Hours: G 3

Scientific principles and practices applicable to the pathogenicity, evaluation and control of microbiological agents, parasitic agents, and some biological vectors associated with human diseases resulting from various environmental exposures. Content includes normal/abnormal human physiology relative to exposure, exposure assessment, and exposure control.

**PUBH600 Public Health Statistics**

Fall

Credit Hours: G 3

An introduction to descriptive statistics including measurement of central tendency, dispersion, relative position, correlation, and regression. Inferential statistical theory, selected nonparametric methods, application of computers, and also occupational exposure assessment will be discussed.

**PUBH601 Public Health Epidemiology**

Spring

Credit Hours: G 3

Prerequisite: College statistics

The course will present principles of the epidemiology method including problem solving. Various study designs will be discussed, including prospective and retrospective studies, analytic, and experimental methods.

**PUBH603 Advanced Epidemiology**

Summer

Credit Hours: G 3

This course covers principles and methods of epidemiology in depth. The topics include causal inference, risk and effect, confounding, interaction, randomization, and matching. Special emphasis is given to design and interpretation of epidemiological studies.

**PUBH606 Advanced Public Health Statistics**

Spring

Credit Hours: G 3

Prerequisite: Approval of Instructor or PUBH600  
Advanced statistical techniques with particular emphasis on problems in public health. Multiple regression, methods of analysis of variance, categorical data analysis including logistic regression, non parametric and survival analysis. Problems whose solution involves using a statistical program (e.g., SPSS).

**PUBH610 Environmental and Occupational Epidemiology**

Variable

Credit Hours: G 3

Prerequisite: OCCH601 or PUBH601

The course focuses on the application of epidemiological techniques to the study of effects of occupational and environmental exposures.

**PUBH611 Categorical Data Analysis**

Fall

Credit Hours: G 3

Prerequisite: PUBH600

This course introduces the theory and application of methods for categorical data, with emphasis on biomedical and public health applications. Topics include contingency tables, log-linear, logistic regression and Raush models, multivariate methods for matched pairs and longitudinal data. The methods are illustrated with SAS and/or SPSS, R.

**PUBH613 Molecular Epidemiology**

Variable

Credit Hours: G 3

Prerequisites: PUBH600, PUBH601

Presents concepts and methods of molecular and genetic epidemiology relevant to the study of prevalent diseases in the population. Topics include biomarkers, polymorphism and gene-environment interaction. The evolution and function of the genomics and a synopsis of epidemiological design and analysis are included.

**PUBH615 Clinical Epidemiology**

Variable

Credit Hours: G 3

This course focuses on epidemiologic concepts and methods in clinical medicine. Topics include clinical measurements and outcomes, risk, prognostic factors, clinical diagnosis, study design, decision analysis, clinical research and meta-analysis.

**PUBH620 Principles of Toxicology**

Fall

Credit Hours: G 3

An overview of toxic or "poisonous" chemical elements, molecules and compounds generated and present in workplace and non-workplace environments. Lectures focus on introductory and some intermediate principles including exposure and dose; the fate of toxic substances in the human body; major classes of toxic substances; potential interactions of toxic substances with various human cells/organs/systems and biological monitoring.

**PUBH640 Independent Study in Epidemiology**

Variable

Credit Hours: G 1-3

This course is intended to address a particular area of epidemiology not covered by a regular course offering and provides students knowledge and experience in that area. Course content, assignments, meeting times and grade requirements are arranged with epidemiology faculty. May be repeated for credit.

**PUBH673 Research in Environmental Health**

Variable

Credit Hours: G 1-6

Students will participate in selected ongoing research programs of members of the faculty. May be repeated for credit.

**PUBH679/879 Independent Study in Biostatistics**

Variable

Credit Hours: G 1-3

This courses addresses areas of biostatistics not covered by a regular course offering. It is intended to provide students the knowledge and experience needed in that area. This course is designed for public health students and could be beneficial to Ph.D. students, specifically those who need advanced statistical techniques for their dissertation. Topics include survival analysis, statistical models in carcinogenesis, statistical genetics, nonparametric statistics and multivariate techniques. May be repeated for credit.

**PUBH689 Independent Study in Environmental Health**

Variable

Credit Hours: G 1-6

The student and instructor will agree on a program of study that will enable the student to achieve specific learning objectives in environmental health. May be repeated for credit.

**PUBH696 Internship in Public Health**

Variable

Credit Hours: G 1-3 Graded S/U.

Prerequisite: Completion of 24 scr. MPH courses or consent of Program Director

Comprehensive or focused practical training in environmental and occupational health at a designated agency, organization, or company.

**PUBH697 Project in Public Health**

Variable

Credit Hours: G 1-3 Graded S/U.

Prerequisite: Completion of 24 scr. MPH courses or consent of Program Director

Independent development by a student with approval and guidance by a Major Advisor, of a paper, manual, software, etc. applicable to a specific area of environmental and occupational health.

**PUBH698 Seminar in Public Health**

Variable

Credit Hours: G 1-3 Graded S/U.

Prerequisite: PUBH696 or PUBH697 (or equivalent)

A systematic study of selected topics in public health. Course meets for three consecutive semesters. Students may begin any semester, but must complete in sequence. Students register for one credit each term for a cumulative total of three consecutive semesters. May be repeated for credit.