

GSPH Course Descriptions

November 13, 2009

EPIDEM 2004 PATHPHYLG ACROSS LIFE SPAN**Credit(s): 04.0**

THIS COURSE IS DESIGNED TO PROVIDE THE STUDENT WITH A COMPREHENSIVE THEORETICAL FOUNDATION OF THE PHENOMENA THAT PRODUCE ALTERATIONS IN HUMAN PHYSIOLOGIC FUNCTION ACROSS THE LIFESPAN. INFORMATION GAINED IN THIS COURSE WILL PREPARE THE STUDENT FOR SUBSEQUENT COURSES RELATED TO THE DIAGNOSIS AND MANAGEMENT OF DISEASE PROCESSES ASSOCIATED WITH PATHOPHYSIOLOGIC DYSFUNCTION ALTERATIONS.

EPIDEM 2023 PARTCPTRY MODLNG & SIMUL IN PH**Credit(s): 03.0****Prerequisite(s): BIOST 2041**

COMPUTATIONAL MODELING AND SIMULATION HAS BECOME CENTRAL TO PUBLIC HEALTH POLICY DESIGN AND DECISION-MAKING AT ALL LEVELS, FROM LOCAL TO INTERNATIONAL. OVERWHELMINGLY, MODEL-BUILDING HAS BECOME AN INTERDISCIPLINARY TEAM EFFORT, IN WHICH DOMAIN EXPERTS (E.G., PHYSICIANS, PUBLIC HEALTH PROFESSIONALS, EPIDEMIOLOGISTS, INFECTIOUS DISEASE MODELERS, POLICY MAKERS, AND COMPUTER PROGRAMMERS) ALL PARTICIPATE IN CONSTRUCTING MODELS. UNLIKE COURSES IN MODELING PROPER--WHERE MATHEMATICAL OR PROGRAMMING TECHNIQUES ARE TAUGHT--THIS COURSE EQUIPS STUDENTS TO BE "PARTICIPATORY" MODELERS (WORKING WITH PROGRAMMERS AND OTHER MODELERS), AND OFFERS HANDS-ON EXPERIENCE IN WORKING WITH PROGRAMMERS, AND IN EVALUATING ONE'S COLLABORATIVE MODEL, THROUGH SENSITIVITY ANALYSES AND APPROPRIATE VISUALIZATION. OTHER TOPICS WILL INCLUDE HOW TO PRESENT MODEL RESULTS, HOW TO CONSUME THEM, AND HOW TO MATCH THE TECHNIQUE TO THE PROBLEM IN PUBLIC HEALTH.

EPIDEM 2110 PRINCIPLES OF EPIDEMIOLOGY**Credit(s): 03.0**

REVIEWS THE BASIC CONCEPTS OF EPIDEMIOLOGY INCLUDING COMMUNITY DIAGNOSIS, ANALYTICAL TECHNIQUES, AND EVALUATION OF PREVENTIVE METHODS. EXAMPLES OF BOTH ACUTE AND CHRONIC DISEASES WILL BE COVERED. COURSE INCLUDES LECTURES, READINGS, HOMEWORK ASSIGNMENTS, AND SEVERAL MULTIPLE CHOICE EXAMINATIONS. COURSE WEB IS UTILIZED. (Two sections are offered, one is web based & attend first lecture.)

EPIDEM 2141 LIFESTYLE INTERVENTION: THEORY**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110**

TRANSLATING THE FINDINGS OF CLINICAL TRIALS IN DISEASE PREVENTION TO COMMUNITY SETTINGS IS INCREASINGLY IMPORTANT IN PUBLIC HEALTH. IT IS THUS IMPERATIVE THAT INDIVIDUALS BEING TRAINED IN PUBLIC HEALTH UNDERSTAND THE BASICS OF CHRONIC DISEASE PREVENTION AND SPECIFICALLY THAT OF BEHAVIORAL LIFESTYLE INTERVENTION EFFORTS. THE PURPOSE OF THIS COURSE IS TO PROVIDE THE CONCEPTUAL FOUNDATION NEEDED FOR SUCH PUBLIC HEALTH INITIATIVES. BY ATTENDING THIS COURSE, STUDENTS WILL RECEIVE BEHAVIORAL LIFESTYLE INTERVENTION TRAINING BASED UPON A MODIFIED VERSION OF THE DIABETES PREVENTION PROGRAM INTERVENTION PROTOCOL, CALLED THE GROUP LIFESTYLE BALANCE (GLB) PROGRAM. THE BACKGROUND AND RATIONALE FOR BEHAVIORAL LIFESTYLE INTERVENTION WILL BE COVERED IN THIS COURSE, AS WELL AS THE RELATIONSHIP OF LIFESTYLE BEHAVIORS TO CHRONIC DISEASE, WITH A FOCUS ON DIABETES AND CARDIOVASCULAR DISEASE. IN ADDITION, THE GLB PROGRAM AND MATERIALS WILL BE REVIEWED IN THEIR ENTIRETY, WITH AN EMPHASIS ON INTEGRATING THE LIFESTYLE INTERVENTION PROGRAM WITHIN DIVERSE POPULATIONS.

(Instructor Consent required.)

EPIDEM 2150 EPID CARDIOVASCULAR DISEASES**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110 and BIOST 2011 or BIOST 2041**

THIS COURSE WILL REVIEW CURRENT CONCEPTS OF THE ETIOLOGY OF CARDIOVASCULAR DISEASES, INCLUDING HEART DISEASE, STROKE, AND PERIPHERAL VASCULAR DISEASES. THE EMPHASIS IS ON THE INTERRELATIONSHIP BETWEEN EPIDEMIOLOGY AND CURRENT CONCEPTS OF PATHOPHYSIOLOGY. CRITIQUING OF ARTICLES WILL BE INCLUDED IN MOST SESSIONS.

EPIDEM 2151 PHYSICAL ACTIVITY EPIDEMIOLOGY**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110 and BIOST 2011 or BIOST 2041**

PHYSICAL INACTIVITY IS A MAJOR RISK FACTOR FOR MANY CHRONIC DISEASES AS IDENTIFIED IN THE SURGEON GENERAL'S REPORT. THIS COURSE WILL PROVIDE AN UP-TO-DATE OVERVIEW OF THE AREA, FROM THE EVIDENCE OF THESE RELATIONSHIPS BETWEEN PHYSICAL ACTIVITY AND VARIOUS DISEASES, TO METHODOLOGY ISSUES PERTAINING TO THE ASSESSMENT OF PHYSICAL ACTIVITY AND PHYSICAL INTERVENTION IN POPULATION STUDIES, ESPECIALLY INVOLVING MINORITY GROUPS.

EPIDEM 2152 STUDENT WORKSHOP IN EPIDEMLOGY**Credit(s): 01.0**

THIS COURSE IS DESIGNED TO BE A SUPPLEMENT TO THE STANDARD EPIDEMIOLOGY COURSEWORK. IT IS A "HANDS ON" WORKSHOP THAT WILL PROVIDE THE OPPORTUNITY FOR STUDENTS TO PRACTICE MANY OF THE CONCEPTS THAT THEY LEARN IN CLASS. IT WILL ALSO COVER SOME AREAS WHICH ARE NOT COVERED BY THE CURRENT CURRICULUM INCLUDING ABSTRACT WRITING AND FORMAL PRESENTATIONS OF ANALYSIS RESULTS. (Instructor Permission required.)

EPIDEM 2160 EPIDEMIOLOGY INFECTIOUS DISEASES**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110**

PRESENTS THE PRINCIPLES, CONCEPTS, METHODS FOR EPIDEMIOLOGIC INVESTIGATION, AND MEASURES FOR PREVENTION AND CONTROL OF SELECTED CURRENT INFECTIOUS DISEASE PROBLEMS. EPI INFO, A MICROCOMPUTER PROGRAM DEVELOPED BY THE CENTERS FOR DISEASE CONTROL, IS UTILIZED BY THE STUDENTS FOR THE WRITE-UP OF AT LEAST ONE EPIDEMIC INVESTIGATION. COURSE INCLUDES LECTURES, READINGS AND DISCUSSIONS.

EPIDEM 2161 METHODS INFECTIOUS DISEASES EPID**Credit(s): 01.0****Prerequisite(s): EPIDEM 2110 and EPIDEM 2160**

COVERS IMPORTANT TOPICS IN INFECTIOUS DISEASES EPIDEMIOLOGY, INCLUDING PUBLIC HEALTH SURVEILLANCE, EMERGING INFECTIOUS DISEASES, THE ROLE OF INFECTIOUS DISEASES IN THE ETIOLOGY OF CHRONIC DISEASES, AND EPIDEMIOLOGIC STUDY DESIGNS AND LABORATORY METHODS USED IN INFECTIOUS DISEASES RESEARCH.

EPIDEM 2165 INTDIS APPRCH EMERGNG INFEC DS**Credit(s): 02.0**

THIS COURSE WILL PROVIDE GRADUATE STUDENTS AND PUBLIC HEALTH PROFESSIONALS WITH A "STATE OF THE ART" DETAILED, INTENSIVE, INTERACTIVE AND MULTIDISCIPLINARY EXPLORATION OF CURRENT EMERGING INFECTIOUS DISEASES VIEWED THROUGH THE LENS OF PUBLIC HEALTH PRACTICE. A BROAD RANGE OF TOPICS, RANGING FROM ZOO NOTIC INFECTIONS TO VACCINE DEVELOPMENT TO GENETIC TESTING AND LABORATORY ANALYSIS WILL BE EXAMINED. THE COURSE WILL EXPLORE THE ROLE OF POPULATION INCREASE, CHANGES IN LAND USE, AND GLOBAL CLIMATE CHANGE TO BETTER UNDERSTAND THE INTERACTION OF HUMAN, ANIMAL, AND MICROBIAL POPULATIONS AND TO HELP DETERMINE THE MOST SIGNIFICANT MICROBIAL THREATS OVER THE NEXT 20 - 50 YEARS. EACH STUDENT WILL BRING SPECIFIC PERSONAL AND PROFESSIONAL EXPERIENCE WHICH WILL ENHANCE THE PRACTICE-BASED FOCUS OF THE COURSE. THIS COURSE IS APPROVED AS AN ELECTIVE FOR THE CERTIFICATE IN PUBLIC HEALTH PREPAREDNESS.

EPIDEM 2170 CHRONIC DISEASE EPIDEMIOLOGY, THE INTERNET AND NIH GRANT WRITING**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110 and BIOST 2011 or BIOST 2041**

APPLICATION OF TELECOMMUNICATION TECHNOLOGY TO UNDERSTANDING THE ETIOLOGY AND PREVENTION OF CHRONIC DISEASES. MUCH OF THE COURSE IS ON THE INTERNET. COURSE INCLUDES LECTURES, SEMINARS, AND DISCUSSIONS.

EPIDEM 2171 CANCER EPIDEMIOLOGY**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110**

THE COURSE REVIEWS BASIC CANCER BIOLOGY, REVIEWS CLASSIC DESCRIPTIVE CANCER EPIDEMIOLOGY, CONSIDERS THE ROLE FOR MODERN BIOMEDICAL TECHNIQUES IN STUDIES OF CANCER ETIOLOGY, AND REVIEWS THE ACTIVE HYPOTHESES REGARDING THE ETIOLOGY OF COMMON AND UNCOMMON HUMAN CANCERS. SPECIFIC TOPICS INCLUDE CANCER BIOMARKERS AND INTERMEDIATE ENDPOINTS, TOBACCO AND ALCOHOL ASSOCIATED CANCER, VIRAL ASSOCIATED CANCER, ENDOCRINE RELATED CANCER, AND NUTRITION RELATED CANCER.

EPIDEM 2173 CULTURE DIVERSITY EPIDEMIOLOGICAL RESEARCH**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110**

DISCUSSES CULTURAL AND DIVERSITY ISSUES IN THE PLANNING AND IMPLEMENTATION OF DISEASE EPIDEMIOLOGICAL STUDIES AND INTERVENTION PROGRAMS IN U.S. MINORITIES AND DEVELOPING COUNTRIES. FOCUS IS ON UNDERSTANDING THE INFLUENCE OF CULTURE ON RATES OF DISEASE, STUDY DESIGN, DATA COLLECTION, IMPLEMENTING INTERVENTIONS, AND DISSEMINATION OF INFORMATION.

EPIDEM 2180 EPIDEMIOLOGICAL METHODS 1**Credit(s): 02.0****Corequisite(s): BIOST 2042****Prerequisite(s): EPIDEM 2110 and BIOST 2041**

THIS COURSE WILL FOCUS ON METHODS USED IN EPIDEMIOLOGICAL RESEARCH. TOPICS TO BE COVERED INCLUDE STUDY DESIGN, SELECTION OF STUDY SUBJECTS, DATA COLLECTION AND MANAGEMENT, IDENTIFICATION OF BIAS, CONFOUNDING AND INTERACTION, AND BASIC STATISTICAL METHODS USED TO ANALYZE EPIDEMIOLOGICAL STUDIES.

EPIDEM 2181 DESIGN OF CLINICAL TRIALS**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110**

THE COURSE SURVEYS METHODS IN DESIGN AND CONDUCT OF CLINICAL TRIALS. CLINICAL TRIALS REQUIRE A SUCCESSFUL COLLABORATION OF CLINICAL, ORGANIZATIONAL AND STATISTICAL SKILLS. THIS COURSE WILL FOCUS ON CLINICAL AND ORGANIZATIONAL ISSUES; PATIENT SELECTION, RECRUITMENT, ENDPOINT DEFINITION AND PROTOCOL DEVELOPMENT WILL BE EMPHASIZED. SIMULATION EXPERIMENTS WILL BE CARRIED OUT BY THE STUDENTS TO INVESTIGATE VARIOUS ASPECTS OF CLINICAL TRIALS. THE COURSE WILL COMPLEMENT COURSES IN BIostatISTICS ON THE STATISTICAL ANALYSIS OF CLINICAL TRIALS.

EPIDEM 2182 DESGN CLNCL TRIALS 2 CNTMPRY ISS**Credit(s): 02.0****Prerequisite(s): EPIDEM 2181**

IN DEPTH EXPLORATION OF CURRENT ISSUES AND CONTROVERSIES IN DESIGN, ANALYSIS, AND INTERPRETATION OF CLINICAL TRIALS INCLUDING SURROGATE ENDPOINTS, META-ANALYSIS, SUBGROUPS, BAYESIAN METHODS, AND TRANSLATING CLINICAL TRIALS INTO MEDICAL PRACTICE AND PUBLIC POLICY.

EPIDEM 2183 RDNG ANLZNG INTRPTG PH MEDL LIT**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110 and EPIDEM 2180 and BIOST 2042**

THIS COURSE PROVIDES THE OPPORTUNITY TO ANALYZE, INTERPRET AND CRITIQUE ORIGINAL RESEARCH ARTICLES. ASSIGNMENTS CONSIST OF ORAL AND WRITTEN REVIEWS OF RECENTLY PUBLISHED PAPERS. A LITERATURE REVIEW PAPER ON A TOPIC CHOSEN BY THE STUDENT IS ALSO REQUIRED. LECTURE TOPICS INCLUDE ASSESSING STUDY VALIDITY, SUBJECT SELECTION, BIAS, CONFOUNDING, LABORATORY METHODS, RESULTS PRESENTATION, QUALITY CONTROL, STATISTICAL ANALYSES, LIBRARY SEARCHES, AND BIBLIOGRAPHIC DATABASE DEVELOPMENT.

(Permission of the instructor required.)

EPIDEM 2184 SEM EPDMLGC & PUBLIC HLTH PRSNTN**Credit(s): 01.0**

THIS COURSE PROVIDES AN INTRODUCTION TO EPIDEMIOLOGIC AND PUBLIC HEALTH PRESENTATION FOR SCIENTIFIC AND LAY AUDIENCES. STUDENTS HAVE THE OPPORTUNITY TO PRESENT RESEARCH FROM THEIR COMPREHENSIVE EXAMINATIONS, DISSERTATION DEFENSES, AND SCIENTIFIC MEETINGS. STUDENTS MAY ALSO DEVELOP COMMUNITY HEALTH LECTURES FOR THE GSPH COMMUNITY HEALTH SPEAKERS BUREAU. STUDENTS WILL RECEIVE FEEDBACK FROM PEERS AND FACULTY. PRESENTATION IS NOT REQUIRED. ALL STUDENTS WILL PROVIDE IN-CLASS PRESENTER EVALUATION. UPON REGISTRATION, CONTACT DR. CATHERINE HAGGERTY, 412-624-7377, TO SCHEDULE YOUR PRESENTATION.

EPIDEM 2185 INTRODUCTION TO SAS**Credit(s): 02.0**

THIS COURSE IS AN INTRODUCTION TO SAS, A STATISTICAL SOFTWARE PACKAGE COMMONLY USED TO PERFORM DATA PREPARATION, STATISTICAL ANALYSIS, AND GRAPHICAL PRESENTATION OF RESULTS. STUDENTS WILL LEARN TO WRITE BASIC SAS PROGRAMS IN ORDER TO PERFORM DATA PREPARATION, STATISTICAL ANALYSIS, AND PRODUCE GRAPHICS. STUDENTS ALSO WILL LEARN TO MAKE INFORMED DECISIONS REGARDING THE APPROPRIATE SAS COMMANDS AND OPTIONS TO USE FOR THESE TASKS. STUDENTS WILL USE SAS FOR SOLVING A SET OF SIMPLE SPECIFIC RESEARCH QUESTIONS. AT THE END OF THE COURSE STUDENTS WILL FEEL COMFORTABLE USING SAS AS A TOOL FOR DEALING WITH DATA MANIPULATION, PREPARATION OF DATA FOR ANALYSIS AND CONDUCTING SIMPLE STATISTICAL ANALYSIS WITH RESEARCH DATA.

EPIDEM 2190 ENVIRONMENTAL EPIDEMIOLOGY**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110**

MAIN EMPHASIS IS ON USES OF EPIDEMIOLOGICAL METHODS IN THE STUDY OF ENVIRONMENTAL HAZARDS AFFECTING COMMUNITY HEALTH AND THE HEALTH OF WORKERS. BASIC CONCEPTS AND APPROACHES ARE EXPLAINED THROUGH CRITICAL DISCUSSIONS OF CASE STUDIES.

EPIDEM 2200 EPIDEMIOLOGY AND HEALTH SERVICES**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110 and BIOST 2011 or BIOST 2041**

THE COURSE SURVEYS EPIDEMIOLOGIC METHODS AND APPROACHES, AS APPLIED TO THE STUDY OF HEALTH SERVICES AND MEDICAL TECHNOLOGIES. THE COURSE PLACES PARTICULAR EMPHASIS ON MEASUREMENT AND DESIGN ISSUES WHICH IMPACT ON THE VALIDITY OF HEALTH SERVICES RESEARCH STUDIES. THE COURSE DEVELOPS A SYSTEMATIC APPROACH TO THE ASSESSMENT OF MEDICAL TECHNOLOGIES AND TO THE APPLICATION OF EPIDEMIOLOGIC AND OTHER SCIENTIFIC INFORMATION TO THE FORMULATION OF HEALTH POLICY.

EPIDEM 2210 SPECIAL STUDIES - ESSAY**Credit(s): 01.0 TO 15.0**

RESEARCH CREDITS FOR MASTER'S ESSAY. ALSO APPLIES TO CREDITS FOR DOCTORAL RESEARCH PRIOR TO PASSING THE DOCTORAL COMPREHENSIVE EXAM.

EPIDEM 2213 INDEPENDENT STUDY**Credit(s): 01.0 to 12.0**

PROPERLY QUALIFIED STUDENTS MAY UNDERTAKE SPECIAL STUDY OR RESEARCH WHICH DOES NOT APPLY TO THE MASTER'S ESSAY OR DOCTORAL DISSERTATION. THIS STUDY MUST BE DONE WITH PERMISSION OF THE SPECIFIC FACULTY MEMBER WHO WILL SUPERVISE THE WORK.

EPIDEM 2214 PUBLIC HEALTH INTERNSHIP**Credit(s): 04.0****Prerequisite(s): EPIDEM 2210 and PUBHLT 2014 and BIOST 2092 and BIOST 2041 BIOST 2093 or PSYED 2422**

THIS INTERNSHIP PROVIDES AN OPPORTUNITY TO GAIN VALUABLE KNOWLEDGE AND EXPERIENCE THAT WOULD NOT NORMALLY BE AVAILABLE THROUGH COURSEWORK. PLACEMENTS MAY BE OUTSIDE OF THE UNIVERSITY OF PITTSBURGH (E.G., IN HEALTH SERVICES ORGANIZATIONS, CLINICS, HEALTH DEPARTMENTS, COMMUNITY BASED ORGANIZATIONS WORKING WITH "AT RISK" POPULATIONS) OR WITHIN THE UNIVERSITY. EACH SPECIFIC PLACEMENT IS TO BE AGREED UPON BY EACH STUDENT AND HIS/HER FACULTY ADVISOR, BASED ON THE STRENGTHS, NEEDS AND CAREER/ACADEMIC GOALS OF STUDENTS. INTERNSHIP SITES SHOULD PROVIDE A MINIMUM OF 160 HOURS OF PUBLIC HEALTH ORIENTED WORK (GENERALLY 20 HOURS/WEEK FOR 8 WEEKS). STUDENTS ARE ENCOURAGED TO PURSUE PLACEMENTS BEYOND THE ONLINE LIST AND TO THINK CREATIVELY ABOUT THE DOMESTIC AND INTERNATIONAL POSSIBILITIES. STUDENTS ARE ENCOURAGED, BUT NOT REQUIRED, TO DEVELOP THEIR MASTER'S ESSAY BASED ON THEIR INTERNSHIP EXPERIENCE.

Prerequisites: EPIDEM 2210 and PUBHLT 2014 and BIOST 2092 and BIOST 2041 and BIOST 2093 or PSYED 2422

EPIDEM 2215 TEACHING PRACTICUM**Credit(s): 02.0**

THIS COURSE IS DESIGNED TO PROVIDE DOCTORAL STUDENTS WITH OPPORTUNITIES TO DEVELOP PRACTICAL SKILLS IN TEACHING AND MENTORING STUDENTS TAKING EPIDEMIOLOGY COURSES. AS TEACHING ASSISTANTS, STUDENTS MAY LECTURE, GRADE HOMEWORK AND EXAMS, LEAD REVIEW SESSIONS, HOLD OFFICE HOURS OR MAINTAIN COURSE BLACKBOARD SITES. THEY MAY ALSO HELP PLAN, UPDATE OR EXPAND COURSE SYLLABI OR TEACHING MATERIALS. COURSE GOALS INCLUDE IMPROVEMENT IN ORAL AND WRITTEN COMMUNICATION SKILLS AND EXPOSURE TO THE PROCESS OF PLANNING AND IMPLEMENTING A COURSE.

EPIDEM 2220 ENVIRONMENTAL EPIDEMIOLOGY**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110 and BIOST 2011 or BIOST 2041**

COURSE DISCUSSES IN DETAIL STATISTICAL AND EPIDEMIOLOGICAL METHODS OF STUDYING HEALTH EFFECTS OF ENVIRONMENTAL AGENTS, MECHANISMS OF ACTION OF SELECTED AGENTS AND THE EPIDEMIOLOGICAL HYPOTHESES ARISING FROM THESE, AND CASE STUDIES OF EPIDEMIOLOGICAL INVESTIGATIONS OF ENVIRONMENTAL EFFECTS. APPROACHES TO EXPOSURE ASSESSMENT WITHIN ENVIRONMENTAL EPIDEMIOLOGICAL STUDIES ARE ALSO DISCUSSED.

EPIDEM 2230 EPIDEMIOLOGICAL METHODS 2**Credit(s): 02.0****Prerequisite(s): EPIDEM 2180**

COURSE COVERS METHODS FOR OBTAINING AND PRESENTING DATA FROM EXISTING SOURCES INCLUDING: U.S. CENSUS AND SURVEYS BY THE NATIONAL CENTER FOR HEALTH STATISTICS. THE LABORATORY SECTION WILL INCLUDE COMPUTER METHODS FOR ABSTRACTING, ANALYZING, AND PRESENTING DATA. MICROCOMPUTER GRAPHICS AND STATISTICAL PACKAGES WILL ALSO BE UTILIZED.

(Permission of the instructor required.)

EPIDEM 2250 SEMINAR IN EPIDEMIOLOGY**Credit(s): 01.0**

AREAS OF CURRENT EPIDEMIOLOGY INTEREST IN RESEARCH ARE PRESENTED. OFTEN A GENERAL THEME SUCH AS EPIDEMIOLOGY OF AGING, WOMEN'S HEALTH ISSUES, DISORDERS OF IMMUNITY, IS CHOSEN. ALL DEPARTMENTAL MAJORS ARE EXPECTED TO TAKE THIS COURSE.

EPIDEM 2260 EPIDEMIOLOGICAL BASIS DISEASE CTRL**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110 and BIOST 2011 or BIOST 2041**

THIS COURSE PROVIDES THE STUDENT WITH AN INTRODUCTION TO THE EPIDEMIOLOGICAL BASIS FOR DESIGNING AND EVALUATING PREVENTION PROGRAMS IN THE COMMUNITY, THE EPIDEMIOLOGICAL BASIS OF EVALUATING HEALTH SERVICES AND ANALYSIS OF HEALTH CARE AND DESIGN OF COMMUNITY PROGRAMS.

EPIDEM 2271 ADV TOPC CANCER EPID PREVN - 1**Credit(s): 02.0****Prerequisite(s): EPIDEM 2171 and EPIDEM 2180**

THE OBJECTIVES OF THIS COURSE ARE TO FAMILIARIZE STUDENTS WITH CENTRAL TOPICS IN CANCER EPIDEMIOLOGY AND PREVENTION, INCLUDING CANCER BIOLOGY, RESEARCH METHODS, AND APPLIED CANCER CONTROL; PROVIDE STUDENTS WITH AN OPPORTUNITY TO DEVELOP AN IN-DEPTH UNDERSTANDING OF AN ETIOLOGY-SPECIFIC CANCER PROCESS; PROVIDES STUDENTS WITH HANDS-ON EXPERIENCE IN CONDUCTING CANCER EPIDEMIOLOGY AND PREVENTION RESEARCH; FAMILIARIZE STUDENTS WITH VARIOUS FACETS OF FUNDING, INCLUDING GRANT WRITING AND REVIEWING. NUTRITIONAL ETIOLOGY IS COVERED.

EPIDEM 2272 ADV TOPC CANCER EPID PREVN - 2**Credit(s): 02.0****Prerequisite(s): EPIDEM 2171 and EPIDEM 2180**

THE OBJECTIVES OF THIS COURSE ARE TO FAMILIARIZE STUDENTS WITH CENTRAL TOPICS IN CANCER EPIDEMIOLOGY AND PREVENTION, INCLUDING CANCER BIOLOGY, RESEARCH METHODS, AND APPLIED CANCER CONTROL; PROVIDE STUDENTS WITH AN OPPORTUNITY TO DEVELOP AN IN-DEPTH UNDERSTANDING OF AN ETIOLOGY-SPECIFIC CANCER PROCESS; PROVIDE STUDENTS WITH HANDS-ON EXPERIENCE IN CONDUCTING CANCER EPIDEMIOLOGY AND PREVENTION RESEARCH; FAMILIARIZE STUDENTS WITH VARIOUS FACETS OF FUNDING, INCLUDING GRANT WRITING AND REVIEWING. HORMONAL ETIOLOGY IS COVERED.

EPIDEM 2273 ADV TOPC CANCER EPID PREVN - 3**Credit(s): 02.0****Prerequisite(s): EPIDEM 2171 and EPIDEM 2180**

THE OBJECTIVES OF THIS COURSE ARE TO FAMILIARIZE STUDENTS WITH CENTRAL TOPICS IN CANCER EPIDEMIOLOGY AND PREVENTION, INCLUDING CANCER BIOLOGY, RESEARCH METHODS, AND APPLIED CANCER CONTROL, PROVIDE STUDENTS WITH AN OPPORTUNITY TO DEVELOP AN IN-DEPTH UNDERSTANDING OF AN ETIOLOGY-SPECIFIC CANCER PROCESS; PROVIDE STUDENTS WITH HANDS-ON EXPERIENCE IN CONDUCTING CANCER EPIDEMIOLOGY AND PREVENTION RESEARCH; FAMILIARIZE STUDENTS WITH VARIOUS FACETS OF FUNDING, INCLUDING GRANT WRITING AND REVIEWING. INFECTIOUS AND INFLAMMATORY ETIOLOGIES ARE COVERED.

EPIDEM 2295 BIOCHEMICAL EPIDEMIOLOGICAL ASPECT NUTRN**Credit(s): 02.0**

REVIEWS THE METABOLISM OF NUTRIENTS. SURVEYS OBSERVATIONAL STUDIES AND CLINICAL TRIAL DATA INVOLVING NUTRIENTS. DISCUSSES PUBLIC HEALTH UTILITY.

EPIDEM 2310 PSYCHIATRIC EPIDEMIOLOGY 1**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110**

COURSE REVIEWS THE METHODOLOGICAL APPROACHES IN PSYCHIATRIC EPIDEMIOLOGY, THE DISTRIBUTION OF SPECIFIC PSYCHIATRIC DISORDERS, AND THE RESEARCH METHODOLOGIES USED.

EPIDEM 2330 ASSMNT TECHNQ IN PSYCHTRC EPIDEM

Credit(s): 02.0

Prerequisite(s): EPIDEM 2110

REVIEWS DIFFERENT TECHNIQUES FOR MEASURING PSYCHOLOGICAL AND SOCIAL FUNCTIONING IN THE COMMUNITY AS WELL AS RESEARCH CRITERIA FOR PSYCHIATRIC DIAGNOSIS AND THEIR ASSOCIATED RELIABILITY AND VALIDITY.

EPIDEM 2340 EPID ETLGY CHILD PSYCHTRC DISORD

Credit(s): 02.0

Prerequisite(s): EPIDEM 2110

THIS COURSE WILL ENCOMPASS AN EPIDEMIOLOGIC APPROACH TO THE UNDERSTANDING OF THE ETIOLOGY OF CHILDREN'S AND ADOLESCENTS' PSYCHIATRIC DISORDERS. THE RISK AND CAUSAL FACTORS INVOLVED IN VARIOUS PSYCHIATRIC DISORDERS WILL BE CONSIDERED. THE EPIDEMIOLOGY AND EVALUATION OF TREATMENT AND PREVENTION OF DISORDERS WILL BE REVIEWED.

EPIDEM 2380 RES SEM ALCHOL AND PSYCHTRC EPID

Credit(s): 01.0

THIS SEMINAR FOCUSES ON AREAS OF CURRENT RESEARCH IN PSYCHIATRIC EPIDEMIOLOGY AND ALCOHOL EPIDEMIOLOGY. FELLOWS IN THE PSYCHIATRIC EPIDEMIOLOGY TRAINING PROGRAM (DIRECTOR: GALE RICHARDSON, PH.D) AND ALCOHOL RESEARCH TRAINING PROGRAM (DIRECTOR: MARIE CORNELIUS, PH.D) ARE REQUIRED TO TAKE THIS COURSE.

EPIDEM 2400 PSYCHOSOCIAL FACTRS IN DISEASE

Credit(s): 02.0

Prerequisite(s): Epidem 2110

THIS COURSE FOCUSES ON PSYCHOSOCIAL, AND BEHAVIORAL FACTORS, SUCH AS SOCIOECONOMIC STATUS, STRESS, SOCIAL SUPPORT, AND DEPRESSION, THAT INFLUENCE THE DEVELOPMENT AND COURSE OF PHYSICAL DISEASES. DISEASES INCLUDE CARDIOVASCULAR DISEASE, STROKE, DIABETES, ARTHRITIS, AND OBESITY. COURSE INCLUDES LECTURES, READINGS, AND DISCUSSIONS.

EPIDEM 2525 NUTRITION ASSESSMENT LABORATORY

Credit(s): 03.0

STUDENTS WILL DEVELOP EXPERTISE IN BIOCHEMICAL ANALYSES OF RELEVANCE TO NUTRITION; ANTHROPOMETRIC MEASUREMENTS; DIETARY ASSESSMENT PROTOCOLS.

EPIDEM 2560 NUTRITIONAL EPIDEMIOLOGY

Credit(s): 02.0

Prerequisite(s): EPIDEM 2110 and BIOST 2011 or BIOST 2041

THIS INTERACTIVE COURSE, INVOLVING LECTURES AND IN-CLASS LEARNING ACTIVITIES, PROVIDES STUDENTS WITH THE SKILLS AND KNOWLEDGE NECESSARY TO UNDERSTAND AND CRITICALLY EVALUATE THE NUTRITIONAL EPIDEMIOLOGY LITERATURE AND DESIGN STUDIES IN NUTRITIONAL EPIDEMIOLOGY. THE COURSE REVIEWS CURRENT METHODS OF ASSESSING NUTRITIONAL STATUS, WITH A FOCUS ON DIETARY ASSESSMENT, AS WELL AS BIOLOGICAL MARKERS, SUPPLEMENT USE, ANTHROPOMETRY, AND OBESITY. THE COURSE ADDRESSES THE APPLICATION OF EPIDEMIOLOGIC METHODS TO STUDIES OF NUTRITION AND DISEASE, HIGHLIGHTING METHODOLOGICAL ISSUES AND INTERPRETATION OF FINDINGS.

EPIDEM 2600 INTRO TO MOLECULAR EPIDEMIOLOGY

Credit(s): 03.0

Prerequisite(s): EPIDEM 2110

REVIEWS BASIC GENETIC PRINCIPLES AND MOLECULAR BIOLOGY TECHNIQUES. TEACHES EPIDEMIOLOGIC METHODS EMPLOYED IN THE INVESTIGATION OF THE GENETIC SUSCEPTIBILITY TO CHRONIC DISEASE, AS WELL AS MOLECULAR ASSESSMENTS OF INFECTIOUS AGENTS AND BIOMARKERS, AND THEIR INCORPORATION INTO EPIDEMIOLOGIC RESEARCH.

EPIDEM 2601 MOLECULAR EPIDEMIOLOGY LABORATORY

Credit(s): 02.0

THIS COURSE IS DESIGNED FOR STUDENTS WHO HAVE A BASIC UNDERSTANDING OF HUMAN AND MOLECULAR GENETICS BUT NO PRIOR EXPERIENCE WITH MOLECULAR BIOLOGY. IN ADDITION TO GAINING EXPERIENCE WITH THE MOST COMMONLY USED LABORATORY METHODS, THE STUDENTS WILL PROCESS MOLECULAR DATA TO EVALUATE ASSOCIATIONS AND INTERACTIONS BETWEEN GENETIC/ENVIRONMENTAL RISK FACTORS FOR CHRONIC DISEASE.

EPIDEM 2640 INJURY PREVENTION AND CONTROL**Credit(s): 02.0**

THE PURPOSE OF THIS INTRODUCTORY LEVEL COURSE IS TO PROVIDE AN OVERVIEW OF THE BASIC PRINCIPLES & PRACTICE UNDERLYING INJURY & VIOLENCE PREVENTION & CONTROL. THE COURSE IS BASED LARGELY ON LECTURES, SUPPLEMENTED WITH CASE STUDIES AND PROBLEM SOLVING EXERCISES TO ENHANCE UNDERSTANDING OF APPROACHES TO INJURY AND VIOLENCE PREVENTION. COURSE CONTENT WILL REINFORCE SKILLS IN DESCRIPTIVE EPIDEMIOLOGY AND DISCUSS EXAMPLES OF INTERVENTIONS INVOLVING BEHAVIOR CHANGE, ENVIRONMENTAL CHANGE, POLICY, AND PROGRAM EVALUATION. ALL GSPH STUDENTS CAN ENROLL. (No Prerequisites)

EPIDEM 2650 FORENSIC PATHPHYSIOLOGY/EPIDEMIOLOGY**Credit(s): 02.0**

THIS COURSE WILL FOCUS ON BASIC PATHOPHYSIOLOGY AND EPIDEMIOLOGY OF DISEASE. SPECIFICALLY, COURSE CONTENT WILL ENCOMPASS THE DIFFERENT TYPES OF NATURAL (E.G., HEART DISEASE, LIVER DISEASE) AND UNNATURAL DEATHS (E.G., HOMICIDE, SUICIDE). EMPHASIS WILL BE GIVEN TO READING AND WRITING ABSTRACTS RELATING TO FORENSIC ISSUES BY UTILIZING PUBLISHED ARTICLES AND REAL RAW DATA SETS.

EPIDEM 2670 INJURY EPIDEMIOLOGY**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110**

IDENTIFIES EXISTING DATA SOURCES AND SURVEILLANCE SYSTEMS FOR INJURIES AND THEIR USES AND LIMITATIONS. STUDENTS WILL ACQUIRE AN INTRODUCTORY UNDERSTANDING OF THE DESCRIPTIVE FACTORS BEHIND INJURIES FROM MOTOR VEHICLE ACCIDENTS, VIOLENCE, SPORTS, AND OCCUPATIONS. THEY WILL ALSO DEVELOP SKILLS IN WORKING WITH COLLEAGUES ON IDENTIFYING DATA AND DESCRIBING ITS IMPORTANCE.

EPIDEM 2710 EPIDEMIOLOGY OF WOMEN'S HEALTH**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110 and EPIDEM 2712 or PUBHLT 2015**

THIS COURSE PRESENTS AN INTRODUCTION TO STUDIES OF THE INFLUENCES ON HEALTH AND DISEASE AMONG WOMEN. IT DISCUSSES EPIDEMIOLOGIC APPROACHES TO UNDERSTANDING THE BASIC ETIOLOGY AND PRIMARY PREVENTION OF DISEASES UNIQUE TO OR MORE COMMON AMONG WOMEN. COURSE INCLUDES LECTURES, SEMINARS, AND DISCUSSION.

EPIDEM 2712 PHYSIOLOGY**Credit(s): 02.0**

THIS COURSE PROVIDES A BASIC UNDERSTANDING OF HUMAN PHYSIOLOGY. IT WILL INCREASE SCIENTIFIC LITERACY THROUGH REVIEW OF CELL FUNCTION AND ORGAN SYSTEMS BIOLOGY OVER THE LIFESPAN. COURSE INCLUDES LECTURES AND DISCUSSION. A PREREQUISITE FOR THE COURSE IS INTRODUCTORY BIOLOGY. PERMISSION IS REQUIRED FOR NON-GSPH STUDENTS.

EPIDEM 2720 REPRODUCTIVE EPIDEMIOLOGY**Credit(s): 02.0****Prerequisite(s): EPIDEM 2110 and BIOST 2011 or BIOST 2041**

THIS COURSE PRESENTS MALE AND FEMALE REPRODUCTIVE ANATOMY AND PHYSIOLOGY, AND FETAL DEVELOPMENT, AS EACH IS SUSCEPTIBLE TO ADVERSE ENVIRONMENTAL CONSEQUENCES. IT DISCUSSES IN DETAIL A CRITICAL APPROACH TO EPIDEMIOLOGIC INVESTIGATION OF POTENTIAL REPRODUCTIVE TOXICANTS. CASE STUDIES OF SPECIFIC TOXICANTS ARE DISCUSSED.

EPIDEM 2721 RESEARCH SEMINAR REPRODUCTIVE EPIDEMIOLOGY**Credit(s): 01.0**

THIS SEMINAR FOCUSES ON AREAS OF CURRENT RESEARCH IN REPRODUCTIVE, PERINATAL, AND PEDIATRIC EPIDEMIOLOGY. FELLOWS IN THE REPRODUCTIVE, PERINATAL, AND PEDIATRIC TRAINING PROGRAM ARE REQUIRED TO TAKE THIS COURSE, ALTHOUGH IT IS OPEN TO ANY INTERESTED STUDENTS.

EPIDEM 2850 INTRO TO PHARMACOEPIDEMIOLOGY**Credit(s): 02.0**

THIS COURSE IS AN INTRODUCTION TO THE FIELD OF PHARMACO-EPIDEMIOLOGY WHICH USES EPIDEMIOLOGIC METHODS TO EXAMINE THE BENEFITS OR RISKS OF MEDICATIONS IN THE POPULATION. IN ADDITION TO FORMAL LECTURES, STUDENTS WILL BE GIVEN THE OPPORTUNITY TO EXAMINE AND CRITIQUE THE LITERATURE IN THIS AREA.

EPIDEM 2900 ADVANCED EPIDEMIOLOGY OF AGING Credit(s): 02.0

Prerequisite(s): EPIDEM 2110 and EPIDEM 2981 and BIOST 2011 or BIOST 2041

TEACHES EPIDEMIOLOGIC METHODS PERTINENT TO RESEARCH ON AGING INDIVIDUALS AND THE CURRENT STATE OF THE ART KNOWLEDGE OF EPIDEMIOLOGY OF DISEASES THAT PRIMARILY AFFECT AGING INDIVIDUALS.

EPIDEM 2980 BIOLOGY AND PHYSIOLOGY OF AGING Credit(s): 01.0

Prerequisite(s): EPIDEM 2004 or EPIDEM 2712 or equivalent coursework

COURSE OBJECTIVE IS TO LEARN CURRENT CONCEPTS AND THEORIES OF THE BIOLOGY AND PHYSIOLOGY OF NORMAL HUMAN AGING, CONTRASTED WITH DISEASE AND DISABILITY. COMPLEMENTS EPIDEM 2900, EPIDEMIOLOGY OF AGING.

EPIDEM 2981 EPIDEMIOLOGY OF AGING - METHODS Credit(s): 02.0

Prerequisite(s): EPIDEM 2110

THE PURPOSE OF THIS COURSE IS TO INTRODUCE STUDENTS TO THE METHODOLOGICAL ASPECTS OF EPIDEMIOLOGIC RESEARCH IN THE FIELD OF AGING AND GERIATRICS. THE COURSE WILL EXAMINE MAJOR EPIDEMIOLOGIC COHORT STUDIES OF AGING, CLINICAL TRIALS AND NURSING HOME RESEARCH. THE FOCUS OF THIS COURSE WILL BE DEOMOGRAPHY, STUDY DESIGN, SAMPLING, RECRUITMENT, PHYSICAL AND COGNITIVE ASSESSMENT. DURING THIS COURSE, STUDENTS WILL BE ASKED TO FORMULATE A RESEARCH QUESTION AND DEVELOP AN ANAYLYSIS PLAN. PART OF THE CREDIT HOURS WILL INCLUDE A FIELD EXPERIENCE WITH ONE OF THE MAJOR STUDIES. PART OF THIS MATERIAL WAS PREVIOUSLY INCLUDED IN THE FIRST PART OF EPIDEM 2900. Prerequisite: EPIDEM 2110. THE PREREQUISITE MAY BE TAKEN AT THE SAME TIME AS THIS COURSE.

EPIDEM 3100 RESEARCH AND DISSERTATION PHD Credit(s): 01.0 TO 15.0

RESEARCH AND DISSERTATION FOR THE DOCTORAL DEGREE.

FTDR 3999 FULL-TIME DISSERTATION RESEARCH Credit(s): 00.0

DOCTORAL CANDIDATES WHO HAVE COMPLETED ALL CREDIT REQUIREMENTS FOR THE DEGREE, INCLUDING ANY MINIMUM DISSERTATION REQUIREMENTS, AND ARE WORKING FULL-TIME ON THEIR DISSERTATIONS MAY REGISTER FOR THIS COURSE. WHILE THE COURSE CARRIES NO CREDITS AND NO GRADE, STUDENTS WHO ENROLL IN "FULL-TIME DISSERTATION STUDY" ARE CONSIDERED BY THE UNIVERSITY TO HAVE FULL-TIME REGISTRATION STATUS.
