

**Applied Epidemiology
PHC 4024 Section 088C
Fall, 2015
Thursday: 11:45am-2:45pm (Room G-103)**

Course: <http://iss.at.ufl.edu>

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Office hours: By appointment**

Course Overview

This course is an introduction to Applied Epidemiology for students in the pre-public health track in the Bachelor of Health Science program. This course will cover basic epidemiological concepts and will demonstrate how these concepts can be applied to problems encountered in everyday life, e.g. outbreak investigations, risks associated with lifestyles choices, water safety, rural health, school health, and mental health. The student will gain knowledge through lectures, case based studies, epidemiology software training (Epi Info™ 7), GIS training, readings, **field trips** and exercises. The student will get to experience firsthand how Epidemiology is applied every day; in order to accomplish this the class will be visiting different agencies throughout the community as well as having guest lecturers.

Course Objectives

- Understand epidemiological measurements used to describe disease occurrences
- Understand descriptive and analytic epidemiology
- Understand association and causality
- Understand social and behavioral epidemiology
- Understand infectious diseases and outbreak investigations
- Understand special epidemiological applications (Molecular and Genetic Epi, Environmental Epi, Occupational Health, Unintentional Injuries, and Cancer Epi)
- Apply basic skills and knowledge in Epi Info™ 7
- Be able to design, implement and analyze surveys
- Understand basic skills of Global Information System (GIS)

Teaching Methods

- 1. Lectures:** provide a general overview of each topic. Power point slides will be available on the class website under the Modules tab.
- 2. Required Readings:** Supplemental readings will be assigned for lectures and are posted by topic under the Modules tab. There is not an assigned textbook for this course.
- 3. Examinations:** Students are expected to take the examinations on the scheduled date and time. There are three exams in this class. The final exam will be accumulative. Supplemental Materials for exams will include a calculator with square root and logarithmic functions.
- 4. Class Participation:** There are a lot of opportunities for discussion in this course. Attendance will be taken each class by means of a quiz and by role during fieldtrips. This will comprise 15% of your course grade. The exact worth of each day will be determined at the end of the semester. It will be calculated based on how many days the class meets during the semester ($100/\text{number of class days} = \text{number of points each day is worth}$).
- 5. Class Project:** Survey design. You will design, implement, analyze, and report the results of a survey. Please see the project description for more details.
- 6. Homework:** Various homework assignments will be scheduled throughout the semester (Learning Epi Info 7 and GIS). Please see the Assignment tool for more information.

Grading Method:

Exam 1	15%
Exam 2	15%
Final exam	15%
Class participation	15%
Homework (x4)	20%
Class project	20%

Grading: The grading scale for this course consists of the standard PPHP scale below:

Percentage or points earned in class	93%-100%	90%-92%	87%-89%	83%-86%	80%-82%	77%-79%	70%-76%	67%-69%	63%-66%	60%-62%	Below 60%
Letter Grade Equivalent	A	A-	B+	B	B-	C+	C	D+	D	D-	E

Letter Grade	A	A-	B+	B	B-	C+	C	D+	D	D-	E	WF	I	NG	S-U
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

Class website:

Lectures, lecture notes, readings, instructor contacts, and course schedule are available on the website.

This course will utilize the UF eLearning system, which is accessible at <http://lss.at.ufl.edu> or through my.ufl.edu. You must have a valid Gatorlink ID and password. Components of the site require Java and pop-up windows (you will have to allow these when using Vista). For assistance, call the UF Help Desk at 352-392-HELP or email them at helpdesk@ufl.edu

Requirements: Students are responsible for all course material, including reading all required materials prior to each lecture.

You will be required to bring a laptop to class on designated days.

You will be required to have access to a computer that uses the Microsoft Operating system to run Epi Info. This can be found in the campus computer labs (you must bring your own flashdrive to save your work).

Readings and Discussions: Students should read the assigned readings prior to viewing course lectures and be prepared to discuss the material in class.

Attendance Policy: Per the University of Florida, students are responsible for satisfying all academic objectives as defined by the instructor. Acceptable reasons for absence include illness, serious family emergencies, special curricular requirements (e.g., judging trips, field trips, and professional conferences), military obligation, severe weather conditions, religious holidays and participation in official University activities such as music performances, athletic competition or debate. Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) must be excused. Remember that, when possible (i.e. extracurricular activities, official University activities, and religious holidays), **prior notification** of absence is required if the student plans to be given an extension on assignments.

Classroom Etiquette: Students are expected to arrive on time to class and remain throughout the scheduled class time. If you need to arrive late or leave early for any

reason, please inform the instructor prior to class. The use of cell phones is prohibited in the classroom unless otherwise specified. Cheating and plagiarism will not be tolerated and will result in a grade of zero for the assignment.

Make-up Exams and Work: If you are unable to meet a deadline in this course for a reason approved above and have given prior notification to the instructor when possible, you will be given adequate time to make up any coursework missed. All other missed or late work will receive a grade of zero. Make-up exams will be provided only in cases of excused absences or conflict during final exams per University policy and MUST be discussed with the instructor in advance. Make-up exams will differ from the regularly scheduled exam.

University Honor Code: *We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.* On all work submitted for credit by students at the University, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."* Plagiarism and cheating are serious offenses and will be dealt with as such; any student found cheating on coursework or exams will receive a failing grade on the assignment and potentially in the course, and be routed through the appropriate judicial process.

Accommodations for Students with Disabilities: Support services for students with disabilities are coordinated by the [Disability Resource Center](#) in the Dean of Students Office. All support services provided for University of Florida students are individualized to meet the needs of students with disabilities. To obtain individual support services, each student must meet with one of the support coordinators in the Disability Resources Program and collaboratively develop appropriate support strategies. Appropriate documentation regarding the student's disability is necessary to obtain any reasonable accommodation or support service.

University Counseling and Mental Health Services:

University Counseling Services: P301 Peabody Hall, 392-1575

<http://www.counsel.ufl.edu/services.asp>

Student Mental Health Services: Student Health Care Center Room 245, 392-1171

<http://www.health.ufl.edu/shcc>

Schedule

8/27 Course Introduction and Syllabus Review
History, Philosophy, and Uses of Epidemiology

9/3 Epidemiologic Measurements Used to Describe Disease Occurrence
Data and Additional Measures of Disease Occurrence

9/10 FIELD TRIP to Health Street

Explore what Health Street does at <http://epidemiology.phhp.ufl.edu/healthstreet/>

9/17 Descriptive Epidemiology: Patterns of Disease— Person, Place, Time
Association and Causality

9/24 Exam 1

10/1 Analytic Epidemiology: Types of Study Designs, Challenges to Validity, and
Environmental Epidemiology

10/8 Developing a Questionnaire, Administration and Analysis,
Infectious Diseases and Outbreak Investigations

10/15 Class exercise: Outbreak exercise

10/22 Global Information System (GIS) Training with Parker Hinson. We will have a
group introduction to GIS in our regular classroom and then move to HSCL C2-3
computer classroom. Due to size constraints we will divide into two groups for the
computer training.

10/29 Exam 2

11/5 Social Behavioral

Special Epidemiology: Molecular and Genetic Epidemiology, Unintentional
Injuries, and Occupational Health

11/12 Administer your survey in class!

11:45am Guest Lecturer: Epidemiology of Space Flight, Brian Smallwood, MPH

11/19 Catch up day and other fun activities

11/26 Thanksgiving Holiday

12/3 FIELD TRIP: Alachua County Health Department: Summary of Services and
Programs

Learn more about ACHD at: <http://www.doh.state.fl.us/chdalachua/>

12/16 Final Exam December 16 at 9:30 in Room G101