

Global Learning Semesters

Course Syllabus

Course: BIOL-486 Public Health II: Epidemiology

Department: Health and Life Sciences

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
BIOL-486	Public Health II: Epidemiology	3
Semester Offered	Contact Hours	Prerequisites
Please contact us	42-45	BIOL-270, BIOL-290, Math-220
Department	Level of Course	Language of Instruction
Health and Life Sciences	Upper Division	English

Course Description

This course provides a comprehensive introduction to principles applied in the practice of epidemiology in public health. It introduces the student to causal thinking and causal inference and then the elements of epidemiology, focusing on the measures of disease occurrence and causal effects. The course incorporates theory and practice in presenting traditional and new epidemiological concepts with emphasis on analytic study design: experimental, cohort and case-control studies. The student will become familiar with terminology and key concepts in the design, analysis, and interpretation of epidemiological research including confounding, the role of chance and the exploration of interactions to be able to critically evaluate scientific literature. The format of the course will be 3h/week lectures and assigned reading.

Prerequisites

BIOL-270, BIOL-290, Math-220

Topic Areas

1. The history and scope of epidemiology
2. Practical applications of epidemiology
3. Measures of morbidity and mortality used in epidemiology
4. Descriptive epidemiology: person, place, time
5. Sources of data for use in epidemiology
6. Study designs; experimental study design
7. Measures of effect
8. Data interpretation issues
9. Screening for diseases in the community
10. Epidemiology of infectious diseases
11. Molecular and genetic epidemiology
12. Psychological behavior epidemiology
13. Social epidemiology

Readings and Resources

Required Textbook

- Essentials of Epidemiology in Public Health by Ann Aschengrau, George R. Seage Publisher: Jones & Bartlett Publishers (April 1, 2003) ISBN: 0763725374

Recommended Textbooks

1. Epidemiology: An Introduction by Kenneth J. Rothman Publisher: Oxford Press; 1st edition (March 1, 2002) ISBN: 0195135547
2. A Dictionary of Epidemiology by John M. Last, Robert A. Spasoff, Susan S. Harris, Michel C. Thuriaux, International Epidemiological Association Publisher: Oxford University Press; 4th edition (December 15, 2000) ISBN: 0195141695
3. Epidemiology in Medicine by Charles H. Hennekens, Julie E. Buring, Sherry L. Mayrent Publisher: Lippincott Williams & Wilkins; 1st ed edition (January 15, 1987) ISBN: 0316356360
4. Modern Epidemiology by Kenneth J. Rothman (Editor), Sander Greenland (Editor) Publisher: Lippincott Williams & Wilkins; 2nd edition (January 15, 1998) ISBN: 0316757802