

San Diego State University
Graduate School of Public Health
PH 302
Epidemiology of Communicable and Chronic Diseases
Fall 2006

Day: Tuesday, Thursday

Time: 2:00 PM-3:15 PM

Location: HH 214

Instructors: Jared Reis, Andrew MacGregor,
Susan Eskridge

Office Hours: Tuesday, Thursday
1:00 PM-2:00 PM

Office location: TBA

E-mail:

Jared Reis: Reis@nhrc.navy.mil

Andrew MacGregor: ajmac28@san.rr.com

Susan Eskridge: seskridge@mindspring.com

Required reading:

Blackboard course notes

Supplemental reading will be available on Blackboard

Optional text:

Gordis, Leon. Epidemiology. 3rd Edition. Philadelphia, W.B. Saunders Co., 2004

Prerequisites:

Credit or concurrent registration in Public Health 301.

Course Description:

Impact of infectious and chronic diseases on health of the population. Epidemiologic methods, behavioral and biologic determinants, modes of transmission, and risk factors. (Formerly numbered Community Health Education 470.)

Course Objectives:

Upon the completion of this course, the student will be able to:

1. Discuss common and emerging diseases and the impact of these diseases on the health of the population.
2. Identify the distribution of these diseases in the population and across sub-populations.
3. Describe causes and risk factors, both behavioral and biological, of diseases and health states discussed in class.
4. Discuss the distribution of behavioral determinants of disease in the population and across sub-populations and factors that influence that distribution.
5. Identify modes of disease transmission and their relationship to the pattern of occurrence of disease in a population.
6. Identify the sources of public information for current data on distribution and determinants of diseases and health states in the population.

7. Distinguish the three most common epidemiological study designs in terms of characteristics, advantages and disadvantages of each design.
8. Analyze published research article to identify the disease and risk factors studied, the type of study design utilized and the results of the article.
9. Carry out an outbreak investigation within the scope of the class assignment.

Basis of grading:

Attendance: 5%

Project 1: 10%

Project 2: 10%

Midterm I: 20%

Midterm II: 20%

Final exam: 35%

Project 1 will be a brief review of a research project and Project 2 will be an outbreak investigation. Information on these projects will be provided on separate handouts.

Grading Standards:

A = 93-100

A- = 90-92

B+ = 88-89

B = 83-87

B- = 80-82

C+ = 78-79

C = 73-77

C- = 70-72

D = 60-69

F = <60

Class Schedule

August 29	Introduction
August 31	Epidemiology in daily life – what epidemiologists do
SECTION I – Introduction to epidemiology and its methods	
September 5	A History of Epidemiology
September 7	Measuring disease frequency – incidence, prevalence, rates
September 12	Public Health in the US: Health of the nation
September 14	Public Health in the US: II
September 19	Study Design I – different types
September 21	Study Design II – go over a research article Project I assigned – research article
September 26	Dynamics of disease transmission – Infectious vs. Chronic
September 28	Child Health
October 3	EXAM I (Covering lectures through September 28 th)
SECTION II – Chronic Disease Epidemiology	
October 5	An introduction to chronic disease epidemiology
October 10	Cardiovascular disease
October 12	Cancer
October 17	Diabetes
October 19	Obesity
October 24	Physical activity and public health
October 26	Musculoskeletal injury epidemiology (Dr. Mitch Rauh)
October 31	Alzheimer’s disease and other cognitive disorders
November 2	Outbreak Investigation I – history and famous outbreaks

SECTION III – Infectious Diseases

November 7	EXAM II (Covering lectures through October 31 st)
November 9	Outbreak Investigation II – conducting an investigation Project II assigned – Outbreak Investigation
November 14	Influenza
November 16	Emerging Diseases
November 21	Sexually transmitted disease
November 23	THANKSGIVING NO CLASS
November 28	HIV (Guest speaker)
November 30	Vector borne diseases
December 5	Bioterrorism
December 7	Epidemiology of Violence (Guest speaker)
December 9-16	EXAM III