

Principles of Epidemiology (HS 261)
Fall 2011 Distance MPH Program
San Jose State University
Health Science Department

Course Description

Introduction to epidemiologic concepts and methods with applications to public health practice for students intending to engage in, collaborate in, or interpret the results of epidemiologic studies in the scientific appraisal of community health.

Homepage: www.sjsu.edu/faculty/gerstman/hs261 > [Distance curriculum and calendar](#)

Period of study: Oct 31, 2011 – Dec 18, 2011

Class meetings: Tuesdays from 1800 – 2100 (PST) on Elluminate

Final exam: Dec 18, 2011

Professor: Bud Gerstman

Email: Please contact me through D2L e-mail during the class session. When this is not possible, please feel free to send e-mail to B.B.Gerstman@sjsu.edu.

Phone: (408) 924-2978

Office: MacQuarrie Hall 514

Office hours: T/R 1030 – 1200; Saturday Elluminate hours on request

Text: Chapters from the 3rd edition of my text will be distributed via D2L

Calculator: Texas Instrument 30XIIS of TI-81

Optional reference: Porta, M. (Ed.) (2008). *A Dictionary of Epidemiology* (5th ed.). New York: Oxford.

Class Structure

Assignments are posted on the course calendar. Complete these assignments *before* the next class session. Elluminate sessions will include brief lectures, Q & A sessions about reading and other assignments, quizzes, and case studies (“labs”).

“Power down” policy

Even though we are an online class, I kindly request that you turn off all extraneous electronic communication devices and close all extraneous windows during the weekly Elluminate sessions.

American Schools of Public Health Education Committee MPH Epidemiology Competencies¹

Epidemiology is the study of patterns of disease and injury in human populations and the application of this study to the control of health problems. Upon graduation a student with an MPH should be able to:

1. Explain the importance of epidemiology for informing scientific, ethical, economic and political discussions of health issues.
2. Describe a public health problem in terms of magnitude, person, time, and place.
3. Apply the basic terminology and definitions of epidemiology.
4. Identify key sources of data for epidemiologic purposes.
5. Calculate basic epidemiology measures.
6. Evaluate the strengths and limitations of epidemiologic reports.
7. Draw appropriate inferences from epidemiologic data.
8. Communicate epidemiologic information to lay and professional audiences.
9. Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data.
10. Identify the principles and limitations of public health screening programs.

CEPH Accreditation Objectives

The following essential objectives meet CEPH accreditation expectations:

1. To explain the importance of epidemiology for informing scientific, ethical, economic and political discussion of health problems; to define basic epidemiologic terms and methods for describe disease and risk factor occurrence.
2. To understand and apply epidemiologic concepts about the cause and prevention of disease and injury.
3. To apply epidemiologic principles of screening for disease.
4. To calculate and interpret basic epidemiologic measures of occurrence, association, and impact.
6. To draw appropriate inferences from various types of epidemiologic studies, and to comprehend ethical principals involved in the study of human subjects.
7. To identify and assess systematic errors in public health research.
8. To communicate epidemiologic information to lay and professional audiences.

Grades – Grades will be based on a weighted average of HW assignments and quizzes (40%), participation (10%), and exams (50%). Letter grade assignments are based on these thresholds:

100-97%	A+	89-87%	B+	79-77%	C+	69-67%	D+	Below 60%	F
96-93%	A	86-83%	B	76-73%	C	66-63%	D		
92-90%	A-	82-80%	B-	72-70%	C-	62-60%	D-		

¹ Calhoun, J. G., Ramiah, K., Weist, E. M., & Shortell, S. M. (2008). Development of a core competency model for the master of public health degree. *American Journal of Public Health*, 98(9), 1598-1607.

Academic integrity

Academic and intellectual integrity is essential to the mission of San José State University. Students are expected to perform their own work except when collaboration is expressly permitted by the course instructor. *Students are not permitted to consult with students who have already taken the course or with individual outside the course on graded assignments.* Academic integrity ensures that all students are graded fairly. Violations to academic integrity policy undermine the educational process and demonstrate a lack of respect for oneself, fellow students, the course instructor, and the disciplines of epidemiology and public health. Cheating and plagiarism ruins the university's reputation and the value of the degrees it offers. We share the obligation to maintain an environment which practices academic integrity. Violators of the Academic Integrity Policy will be subject to failing this course and being reported to the Office of Judicial Affairs for disciplinary action which could result in suspension or expulsion from San José State University. Faculty are required to report all infractions to the Office of Student Conduct & Ethical Development (S04-12).

In some of my courses in the past, students have gone beyond permissible collaboration and suffered serious consequences. It is my opinion that when anyone breaks these rules, the entire class suffers. The belief that others are not obeying the rules erodes confidence in the ability to trust and introduces anxieties that those who do follow the rules will be disadvantaged. Investigating possible cheating incidents takes instructor time away from helping students learn the material.

Rules for collaboration

Labs may be discussed openly. It is a violation for any student to have access to lab keys distributed in prior semesters.

Exercises will be dealt with on a case-by-case basis. Some exercises will permit collaboration, while others must be completed independently. I will make this distinction clear upon assignment. If you are unclear whether collaboration is permitted on a specific assignment, *please ask* for clarification.

Exams and quizzes must be completed independently. You may not use print or web materials other than what is specified on the exam. You may not communicate with anyone except the instructor during exams and quizzes.

Disability

If you need course adaptations or accommodations because of disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible or see me during office hours. Presidential Directive 97-03 requires that students with disabilities register with DRC to establish a record of their disability.

Library support – When library support is needed, please contact the Health Science reference librarian, Tina Peterson: <http://www.sjsu.edu/people/tina.peterson/>.