

# Principles of Epidemiology (HS261)

Fall 2007 DISTANCE MPH VERSION

San Jose State University  
Health Science Department

**Description:** Introduction to epidemiologic concepts and methods with applications to public health practice for students intending to engage in, collaborate in, and interpret epidemiologic studies in the appraisal of public health.

**Pre-requisite:** HS 167 (Biostatistics) or equivalent

**Website:** This syllabus is for the distance MPH version of HS 261. The course is run primarily through the WebCT site

**Class:** This course runs from 10/29/07 to 12/21/07 and is held on the WebCT and Elluminate platforms.

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**Office hours:** Tu 10:30 – 11:45 and Th 10:30 – 1:00 (campus hours: 408 924-2978)  
Elluminate office hours to be determined

**Required text:** Gerstman, B.B. (2003). *Epidemiology Kept Simple* (2nd ed.) New York: Wiley-Liss.

**Calculator:** Texas Instrument 30XIIS or 80-series calculator

**Optional text:** Last, J. M. (Ed.) (2001). *A Dictionary of Epidemiology* (3rd ed.). New York: Oxford. (ISBN: 0195141695)

The calendar and assignments are posted on WebCT website.

## Objectives

The following essential objectives meet CEPH accreditation expectations:

1. Explain the importance of epidemiology for informing scientific, ethical, economic and political discussion of health problems (e.g., defines fundamental epidemiologic terms, list uses of epidemiology, describe demographic and epidemiologic transitions and trends).
2. To apply epidemiologic concepts of disease (e.g., iceberg, induction, agent, host, and environmental, causal-web, sufficient cause) in the prevention of morbidity and mortality.
3. To apply epidemiologic principles of screening for disease and risk factors in the routine and special collection of population-based morbidity and mortality data and community diagnosis.
4. To calculate and interpret incidences and prevalence in open- and closed-populations, applying direct and indirect adjustments for age and other factors as necessary.
5. To compare rates and risks in population and subgroups using absolute and relative measures of association and measures of potential impact.
6. To interpret and analyze trials, ecological and cross-sectional studies, cohort studies, and case-control studies, including the comprehension of basic ethical principals involved in the study of human subjects.
7. To identify and assess systematic errors in epidemiologic research.
8. Communicate epidemiologic information to lay and professional audiences.

## Grades

Your course grade is based on a weighted average of:

- **Quizzes** – See WebCT postings.
- **Exams** – As of writing this syllabus, I am uncertain whether the course will have any full fledged exams. This is the first time I'm teaching this course fully online and therefore request the input of the students on what is acceptable practice in terms of expectations during exams.
- **Lab assignments and HW Exercises** – see WebCT postings.
- **The Studying-A-Study Paper** – This assignment provides a step-by-step approach for reading and analyzing a published epidemiologic study. The assignment is described in detail in a separate handout.

### **Weights of course components and an example of a grade calculation.**

Component	% Earned	×	Weight	=	Points earned
Quizzes	95	×	¼	=	23.75
Exams (if any)	90	×	¼	=	22.5
Assignments	100		¼	=	25.0
Studying-a-Study paper	90	×	¼	=	22.5
$\Sigma$		×	1.00		93.75 (A)

### **Grade cutoffs:**

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-		

**Academic integrity.** Academic integrity is essential to the mission of San José State University. As such, students are expected to perform their own work (except when collaboration is expressly permitted by the course instructor). Students are not permitted to use consult with students who have already taken an. When practiced, academic integrity ensures that all students are fairly graded. Violations to the academic integrity policy undermine the educational process and will not be tolerated. It also demonstrates a lack of respect for oneself, fellow students and the course instructor and can ruin 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).

**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.

**The content schedule is posted on a Google Spread that is linked to the WebCT Home Page**  
 (Direct URL: <http://spreadsheets.google.com/pub?key=pbdLnXh7MZxnZggAG8Np6fg>)

## Rules for collaborating (Internet Edition, Fall 2007) – based in part on rules established in UNC course EPID600 by Prof. Vic Schoenbach

These are the basic rules for collaborating in HS 261:

1. **Exams and quizzes:** You may NOT use published (print or web) materials when working on examinations and quizzes. You may NOT communicate about the examination materials, even indirectly, with anyone other than an instructor.
2. **Odd-numbered exercises and lab reports:** You may use published (print or web) materials when working on odd-numbered exercises and lab reports. You may work with anyone so long as: (a) you work on every question rather than “divide and copy” and (b) none of the persons involved has access to the instructor answers.
3. **Even-numbered exercises:** You may use published (print or web) materials when working on even-numbered exercises. You may communicate about even-numbered exercises BUT ONLY via public discussion boards under instructor supervision.
4. **Reports:** You may use published (print or web) materials when working on reports. You may consult with experts on specific issues but you must “write your report for you.” Information received from any one expert must be properly cited and must constitute *no more* the 25% of the paper’s content.

### Why does HS261 devote so much attention to the rules and ethics for collaborating on course work?

Cheating, plagiarism, and other forms of academic dishonesty are widespread in schools and universities. For example, a recent article (“Fuqua students may face expulsion”, Durham *Herald-Sun*, 4/28/2007, A1,A4) reported on 37 Duke business students accused of cheating on a take-home exam. The article also mentioned a Center for Academic Integrity 2002-2004 survey of American MBA students in which 56% reported having cheated.

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HS 261 uses at-home testing and encourages collaboration and group work on selected items. In some of my courses in the past, students have gone beyond permissible collaboration and suffered serious consequences. 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. Having to investigate possible cheating incidents takes instructor time away from helping students learn the material.

Do you have a question? Please ask Dr. G.