



**Division of Epidemiology and Biostatistics
Mel and Enid Zuckerman College of Public Health
University of Arizona**

SYLLABUS

**Basic Principles of Epidemiology (EPID 573A; CPH 573A)
Fall 2010**

Time: Monday, 2:00-3:15
Wednesday, 2:00-3:15

Location: Drachman Hall, A-114 (auditorium)

Instructor: Eyal Shahar, MD, MPH
Professor
Phone: 626-8025
Email: shahar@email.arizona.edu
Office: Drachman Hall, Room 236
Home page: <http://www.u.arizona.edu/~shahar/>

Office Hours: By appointment (send an email; suggest 3 dates/times).

Teaching Assistants: Andriene Grant
Email: granta@email.arizona.edu
Office: Drachman Hall, Room A-121
Office hours: Tuesdays, 3:00-5:00 p.m.
or by appointment

Catherine Luik
E-mail: celuik@email.arizona.edu
Office: Drachman Hall, Room A121
Office hours: Mondays, 10:00 am – 12:00 noon
or by appointment

Course Description: *“The course will introduce students to the basic concepts and principles of epidemiology and how these concepts are applicable for their own particular interests and career in epi related fields.”*

Course Prerequisites: EPI major or minor, MPH major, or consent of instructor.

Course Learning Objectives: Understand the basic ideas of epidemiological research

Course Notes: All course material will be posted on d2l

Recommended Texts/Readings: No textbook. Readings provided on the website.

Course Requirements: Prepare for class and study the material after class. Complete homework assignments. Take a mid-term exam and a final exam.

Grading/Student Evaluation: Regular grades are awarded for this course (A, B, C, D, E.)

A: $\geq 90\%$

B: $\geq 80\%$

C: $\geq 70\%$

D: $\geq 60\%$

E: $< 60\%$

Homework assignments (6) 25% [HW1,2,3,4,5, 4.5% each. HW6, 2.5%]

Should be turned in to the TA on the due date, before class starts!

Mid-term exam 35%

Final exam (cumulative) 40%

If you think we have made an error in grading an assignment or an exam, please tell us shortly thereafter (and not at the end of the course.) There are no extra-credit tasks and no “make-up” for a higher grade. Exam grading is fairly “liberal”.

In the interest of equity, keep the following rule in mind: challenging the grading of “unfavorable” points might lead to re-grading of “favorable points” as well. Grades are not a matter of negotiation.

Class Attendance/Participation: Regular attendance is expected. If you miss a class, you should find a way to learn the material I taught. All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion. Absences pre-approved by the UA Dean of Students (or Dean’s designee will be honored.)

Course Schedule: shown below

Required Statements:

Communications: You are responsible for reading emails sent to your UA account from your professor and the announcements that are placed on the course web site. Information about readings, news events, your grades, assignments and other course related topics will be communicated to you with these electronic methods. The official policy can be found at: <http://www.registrar.arizona.edu/emailpolicy.htm>

Disability Accommodation: If you anticipate issues related to the format or requirements of this course, please meet with me. I would like us to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Resources (621-3268; drc.arizona.edu) and notify me of your eligibility for reasonable accommodations.

We can then plan how best to coordinate your accommodations. The official policy can be found at: <http://catalog.arizona.edu/2008%2D09/policies/disability.htm>

Academic Integrity: All UA students are responsible for upholding the University of Arizona Code of Academic Integrity, available through the office of the Dean of Students and online: The official policy found at: <http://dos.web.arizona.edu/uapolicies/scc5308abcd.html> and <http://dos.web.arizona.edu/uapolicies/cai1.html>.

Classroom Behavior: (Statement of expected behavior and respectful exchange of ideas) Students are expected to be familiar with the UA Policy on Disruptive Behavior in an Instructional Setting found at <http://web.arizona.edu/~policy/disruptive.pdf> and the Policy on Threatening Behavior by Students found at <http://web.arizona.edu/~policy/threatening.pdf>

Grievance Policy: Should a student feel he or she has been treated unfairly, there are a number of resources available. With few exceptions, students should first attempt to resolve difficulties informally by bringing those concerns directly to the person responsible for the action, or with the student's graduate advisor, Assistant Dean for Student and Alumni Affairs, department head, or the immediate supervisor of the person responsible for the action. If the problem cannot be resolved informally, the student may file a formal grievance using the [Graduate College Grievance Policy](http://grad.arizona.edu/catalog/policies/academic-policies/grievance-policy) found at <http://grad.arizona.edu/catalog/policies/academic-policies/grievance-policy>

Grade Appeal Policy: <http://catalog.arizona.edu/2008%2D09/policies/gradappeal.htm>

Syllabus Changes: Information contained in the course syllabus, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate.

Course Schedule: **Fall 2010**

Date	Week #	Topics	In-class exercise (Read before class)	Homework assignment	Homework due
Aug 23 Aug 25	# 1	Historical perspective; “Descriptive epi”: person, place, time Measures of freq (measures of “risk”)	Snow on cholera	HW #1: Computation of probability, odds, rate	
Aug 30 Sep 1	# 2	Incidence and prevalence Causes Study design and data layout (overview)			HW #1 (9/1)
Sep 6 Sep 8	# 3	Labor Day Measures of association	Study tables (from articles); Create 2x2 tables; Compute measures of frequency and association		
Sep 13 Sep 15	# 4	Association vs. effect Randomized trials	Review an article (a randomized trial): “Prevention of stroke by antihypertensive drug treatment in older persons with isolated systolic hypertension”	HW #2: Identify the study design; Compute measures of association	
Sep 20 Sep 22	# 5	Cohort studies	Review an article (a cohort study): “Stroke incidence and survival among middle- aged adults”		HW #2 (9/22)

Sep 27 Sep 29	# 6	The idea of bias Causal diagrams (directed acyclic graphs)	Draw causal diagrams		
Oct 4 Oct 6	# 7	Confounding bias	Illustrate confounding in causal diagrams		
Oct 11 Oct 13	# 8	Methods to handle confounders (I)	Standardization	HW #3: Standardization	
Oct 18 Oct 20 (away, meeting)	# 9	Cross-sectional studies Mid-term exam (proctored by the TA)	Pre-exam Q&A		HW #3 (10/20)
Oct 25 Oct 27	# 10	Ecological studies Screening	Calculations of various screening-related measures		
Nov 1 Nov 3	# 11	Case-control studies (I) Case-control studies (II)		HW #4: Select a good control group	
Nov 8 Nov 10	# 12	Article review Information bias	Review an article (a case control study): "The association between head trauma and Alzheimer's disease"		HW #4 (11/8)

Nov 15 Nov 17	# 13	Methods to handle confounders (II)	Computation of Mantel-Haenszel estimates	HW #5: Compute Mantel-Haenszel estimates	
Nov 22 Nov 24 (pre-Thanksgiving)	# 14	Colliding ("selection") bias	Information bias; colliding bias		HW #5 (11/24)
Nov 29 Dec 1	# 15	Effect (measure) modification	Detection by stratification	HW #6: Abstracts on effect modification	
Dec 6 Dec 8	# 16	Measures of "disease impact" Infectious disease epidemiology	Outbreak investigation Pre-exam Q&A		HW #6 (12/8)
Dec 10 (Friday)		Final Exam: 2:00-4:00 PM			