

**COURSE SYLLABUS**

Course number: PubH 7200 Sec 124 #89151

Course title: Application of EpiInfo Software in Epidemiologic Investigations and Data Management

Credits: 0.5

Course meeting times:	May Term 2005
Instructor:	Jeffrey B. Bender, DVM, MS Associate Professor  Seranita Lewis Northrop Grumman Corporation Global AIDS Program (GAP) at the CDC
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**I. Course Description**

This course will provide an introduction to the use of EpiInfo software for epidemiological investigations including data management and basic data analysis. Exercises in outbreak investigation and the presentation of analysis and results are emphasized.

Participants must have Epi 1, Fundamentals of Epi, or an equivalent course. Class size is limited to 15 students.

**II. Learning Objectives**

At the end of this course, participants will be able to:

1. Develop a questionnaire in EpiInfo for data entry.
2. Analyze and present findings to peers using mock outbreak datasets.

**III. Methods of Instruction and Work Expectations**

Class will be held in a computer laboratory to facilitate a hands-on approach to learning. Students will work through exercises during class to become familiar with the software. Each student will be given a dataset to analyze and present to the class. Students will be required to "write up" the outbreak in summary form.

Course grading will be determined on the basis of class participation, outbreak presentation and a written assignment due within one week of the last day of class.

Class participation - 50 points  
Class presentation and summary - 100 points

#### IV. Grading

1. **Grading Criteria:** This course is offered A/F or S/N

- A/F letter grade will be determined by total effort as follows:

A = 90-100%	(4.0) Represents achievement that is outstanding relative to the level necessary to meet course requirements.
A- =	
B+ =	
B = 80-90%	(3.0) Represents achievement that is significantly above the level necessary to meet course requirements.
B- =	
C+ =	
C = 70-80%	(2.0) Represents achievement that meets the minimum course requirements.
C- =	
D+ =	
D = 60-70%	(1.0) Achievement below minimum course expectations but sufficient to be awarded credit.
D- =	
F = below 60%	Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.

- S/N option must complete all assignments to a C- level (70%):

S	Achievement that is satisfactory will be expected to complete all assignments and receive a minimum of 70% to receive a passing score (achievement required for an S is at the discretion of the instructor but may be no lower than a 70%).
F	Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.

2. **Grading Option** - Students may change grading options during the initial registration period or during the first two days of the term. **The grading option may not be changed after the second day of class.**
3. **Course Incomplete** - An incomplete grade is permitted only in cases of extraordinary circumstances and following consultation with the instructor. In such cases and "I" grade will require a specific written agreement between the instructor and the student specifying the time and manner in which the student will complete the course requirements. Extension for completion of the work will not exceed one year.
4. **Scholastic Dishonesty** - This course follows the University of Minnesota Board of Regents' policy on student conduct and scholastic dishonesty which can be found at: <http://www1.umn.edu/regents/policies/academic/StudentConductCode.pdf>

A grade of "F" or "N" for the entire course will be assigned for scholastic dishonesty as defined in the policy and will be reported to the Office of Student Judicial Affairs  
<http://www.sja.umn.edu/>

Plagiarism is an important element of this policy. It is defined as the presentation of another's writing or ideas as your own. Serious, intentional plagiarism will result in an "F" or "N" grade for this course. For more information on this policy and for a helpful discussion of preventing plagiarism, please consult University policies and procedures regarding academic integrity: <http://cisw.cla.umn.edu/plagiarism/uofmpolicies.html>

Students are urged to be careful that they properly attribute and cite others' work in their own writing. For guidelines for correctly citing sources, go to <http://tutorial.lib.umn.edu/>. In addition, original work is expected in this course. It is unacceptable to hand in assignments for this course for which you received credit in another course unless by prior agreement with the instructor. Building on a dissertation or final project is acceptable.

If you have any questions, consult the instructor.

## V. Course Withdrawal

School of Public Health Students may withdraw from a course **through the second** day of the course without permission. No "W" will appear on the transcript. After the second day, students are required to do the following:

- The student must contact and notify their advisor and course instructor informing them of the decision to withdraw from the course.
- The student must send an email to the SPH Student Services Center (SSC). The email must provide the student name, ID#, course number, section number, semester, and year with instructions to withdraw the student from the course, and acknowledgement that the instructor and advisor have been contacted.
- The advisor and instructor must email the SSC acknowledging the student is canceling the course. All parties must be notified of the student's intent.
- The SSC will complete the process by withdrawing the student from the course after receiving all emails (student, advisor and instructor). A "W" will be placed and remain on the student transcript for the course.
- After discussion with their advisor and notification to the instructor, students may withdraw until the end of the second day of class. There is no appeal process.

## VI. Disabilities

Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the instructor and Disability Services at the beginning of the term. All discussions remain confidential. For further information contact the University of Minnesota Disability Services website at <http://ds.umn.edu/> or call 612-626-1333 (V/TTY).

## VII. Course Materials and Readings

### Pre Course Reading:

Introduction to Colera in Rwenshama

(This document will be sent via US mail with confirmation of your registration.)

### Other Readings:

Cholera Outbreak in Rwenshama: Using Epi Info for Windows in an Outbreak Investigation. Centers for Disease Control and Prevention, Epidemiology Program Office.

(This manual will be provided in class.)

Oleckno, W. Essential Epidemiology, Principles and Applications. Chapter 14 Applications of Epidemiology; Disease outbreaks, disease clusters, and public health surveillance. Waveland Press, 2002. ISBN: 1577662164

(Copies of the referenced chapter will be provided in class.)

Hedberg, Osterholm, and Moore. Epidemiologic Principles in Mandel, Douglas and Bennett's, Principles and Practice of Infectious Diseases. Churchill Livingstone, 2000. 5<sup>th</sup> Edition. Pp 156-167. ISBN: 044307593X

(Copies of the referenced chapter will be provided in class.)

Epi Info version 3.3, Centers for Disease Control and Prevention, Atlanta, GA

(This is freeware and will be downloaded in class.)

## VIII. Course Outline

<i>Date</i>	<i>Time</i>	<i>Content/Activity</i>
Day one May 31	Four hours 1:00-5:00	<ul style="list-style-type: none"><li>▪ Outbreak investigations</li><li>▪ Introduction to questionnaire and data entry</li></ul>
Day two June 1	Four hours 1:00-5:00	<ul style="list-style-type: none"><li>▪ Importing data (from Excel or Access)</li><li>▪ Data quality</li></ul>
Day three June 2	Four hours 1:00-5:00	<ul style="list-style-type: none"><li>▪ Data analysis (Frequencies, Chi-square, means)</li></ul>
Day four June 3	Three hours 1:00-4:00	<ul style="list-style-type: none"><li>▪ Class presentations</li><li>▪ Exam</li></ul>

## IX. Class Project

Students will be divided into work groups. Paper copies of outbreak investigations will be given to students to enter, analyze and summarize. Students will provide a summary presentation of their findings and hand in a 1 to 2 page summary report.