The University of Iowa  
College of Liberal Arts and Sciences  
Department of Statistics and Actuarial Science  

Title of Course – 22S:101:001  
Summer 2008  
114 MLH  

Policies relating to this course are governed by the College of Liberal Arts and Sciences.

Instructor: Subhashish Chakravarty  
Office location and hours: 219 SH 10:00AM-11:00AM MTW and by appointment  
Phone: 5-0824  
Email address: subhashish-chakravarty-1@uiowa.edu  
DEO: Dr. Luke Tierney, 241 Schaeffer Hall  

Description of Course:  
This is an introductory course on statistical reasoning in biology, health sciences, and related fields. The course is entirely Bayesian. Topics covered include basic concepts of probability, statistical inference, and decision theory. Applications covered in this course include diagnostic testing; inference on rates, relative risks, and odds ratios; inference on means; basic experimental design; linear, logistic and proportional-hazards regression; survival analysis; and statistical adjustment of means, odds ratios, and hazard ratios.

The course provides an introduction to the statistical packages WinBUGS and SAS. Upon completion of the course, students are expected to execute basic statistical analyses using SAS and WinBUGS and to be able to interpret statistical reports in the biomedical literature that employ methods covered in the course.

Text(s): Biostatistics: A Bayesian introduction by G.G. Woodworth  

Grading System and the Use of +/-: Grades are not curved. A+ = 95-100%, A=90-95%, ..., F=0-49%  

Assignments: Due every Wednesday and Friday. Worth 20% of final grade.  

Exams and Percentage of Final Grade:  
Quizzes: Every Friday. 10mins at end of class. Worth 25% of final grade.  
Midterms: One midterm. 25th June 2008. 5-7 PM. Worth 25% of final grade.  
Final Exam: Worth 30% of final grade.  

Course Policies:  
Course attendance is expected.  
Participation in class discussions is strongly encouraged.  
Timely completion of assignments is expected. Late HWs will not be accepted.  

Extra Help: The Statistics Tutorial Lab, located in 202 CC, gives free tutorial assistance to students in 22S:2, 8, 25, and 39. In addition, several graduate students have volunteered to independently tutor students in various 22S: courses at mutually-arranged times and fees. Please check the web site www.stat.uiowa.edu/courses/tutoring.html for tutoring details.
Administrative Home of the Course
The administrative home of this course is the College of Liberal Arts and Sciences, which governs academic matters relating to the course such as the add/drop deadlines, the second-grade-only option, issues concerning academic fraud or academic probation, and how credits are applied for various graduation requirements. Different colleges might have different policies. If you have questions about these or other CLAS policies, visit your academic advisor or 120 Schaeffer Hall and speak with the staff. The CLAS Academic Handbook also contains important CLAS academic policies:
www.clas.uiowa.edu/students/academic_handbook/index.shtml

Academic Fraud
Plagiarism and any other activities that result in a student presenting work that is not his or her own are academic fraud. Academic fraud is reported to the departmental DEO and then to the Associate Dean for Academic Programs and Services in the College of Liberal Arts and Sciences who deals with academic fraud according to these guidelines:
www.clas.uiowa.edu/students/academic_handbook/ix.shtml

Making a Suggestion or a Complaint
Students have the right to make suggestions or complaints and should first visit with the instructor, then with the course supervisor if appropriate, and next with the departmental DEO. All complaints must be made within six months of the incident.
www.clas.uiowa.edu/students/academic_handbook/ix.shtml#5

Accommodations for Disabilities
A student seeking academic accommodations first must register with Student Disability Services and then meet with an SDS counselor who determines eligibility for services. A student approved for accommodations should meet privately with the course instructor to arrange particular accommodations.
www.uiowa.edu/~sds/

Understanding Sexual Harassment
Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. Visit www.sexualharassment.uiowa.edu/ for definitions, assistance, and the full policy.

Reacting Safely to Severe Weather
The University of Iowa Operations Manual section 16.14 outlines appropriate responses to a tornado (t) or to a similar crisis. If a tornado or other severe weather is indicated by the UI outdoor warning system, members of the class should seek shelter in rooms and corridors in the innermost part of a building at the lowest level, staying clear of windows, corridors with windows, or large free-standing expanses such as auditoriums and cafeterias. The class will resume, if possible, after the UI outdoor warning system announces that the severe weather threat has ended.

Student Classroom Behavior
The ability to learn is lessened when students engage in inappropriate classroom behavior, distracting others; such behaviors are a violation of the Code of Student Life. When disruptive activity occurs, a University instructor has the authority to determine classroom seating patterns and to request that a student exit the classroom, laboratory, or other area used for instruction immediately for the remainder of the period. One-day suspensions are reported to appropriate departmental, collegiate, and Student Services personnel (Office of the Vice President for Student Services and Dean of Students).
Final Examinations
An undergraduate student who has two final examinations scheduled for the same period or more than three examinations scheduled for the same day may file a request for a change of schedule before the published deadline at the Registrar’s Service Center, 17 Calvin Hall, 8-4 M-F, (384-4300).