

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

**Title of Course – Probability and Statistics**  
**(22S:120:SCA)**  
3:30 PM - 5:20 PM MW  
22SH

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

**Instructor: Subhashish Chakravarty**

Office location and hours: 219 SH [1:00 PM - 3:00 PM T,Th] and by appointment

Phone: 335 - 0824

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DEO: Dr. Luke Tierney, 241 Schaeffer Hall

**Description of Course:**

**Objectives and Goals of the Course:**

This is a first course in probability and mathematical statistics that can follow two semesters of calculus. Material covered includes probability models, discrete and continuous random variables, expectations, estimation of parameters, hypothesis testing, and regression. We will use the software package R. R is available for download from <http://www.r-project.org/>. At the end of the course, the students are expected to acquire a basic understanding of the methods and applications of mathematical statistics.

**Text(s):** A brief course in Mathematical Statistics by Tanis and Hogg.

**Grading System and the Use of +/-:**

+/- grading will be used. The grading scheme is as follows: 95-100% = A+, 90-95% = A, 85-90% = B+ and so on...

**Assignments:**

**HW will be assigned every day.** Number of HW questions assigned on Monday (to be turned in on Wednesday) will be substantially less than the number of questions assigned on Wednesday and due the following Monday. HW will be worth 20% of the final grade.

**Quizzes and Exams:**

There will be weekly quizzes at the end of class on Wednesdays. Students are expected to complete them in 10-15 minutes. 2 lowest quiz scores will be dropped. Quizzes are worth 20% of the final grade.

There will be an in class midterm on **MARCH 12**. It is worth 25% of the final grade.

The final exam is scheduled for **TUESDAY, MAY 13 12:00 NOON**. It is worth 35% of your final grade.

**Course Policies:**

Class attendance is expected. The quizzes will be based primarily on what is covered in class. Questions are welcome and strongly encouraged. Late HW will not be accepted unless prior approval has been obtained. There will be no makeup quizzes. All quizzes, midterm and final are open-book and open-notes. Students are strongly encouraged to make their own study/crib sheets for the exams.

**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](http://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](http://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](http://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](http://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/](http://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/](http://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 (i) 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).

## University Examination Policies

### **Missed Exam Policy**

University policy requires that students be permitted to make up examinations missed because of illness, mandatory religious obligations, certain University activities, or unavoidable circumstances. Excused absence forms are required and are available on the Registrar web site.

[www.registrar.uiowa.edu/forms/absence.pdf](http://www.registrar.uiowa.edu/forms/absence.pdf)

### **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).