COURSE SYLLABUS

STAT 4100 (22S: 153)
Mathematical Statistics I
Meetings 9:30 a.m. – 10:20 a.m.
Mondays, Wednesdays, Fridays
22 SH Fall Semester 2014
O. Stramer

COURSE DESCRIPTION

This is a course in mathematical statistics intended for upper-level undergraduate students in the mathematical sciences as well as for graduate students in all disciplines. The goal is to provide a solid foundation in the theory of random variables, probability distributions, and some elementary statistical inferences.

PREREQUISITES

The course prerequisites are the mathematics courses 22M: 027 and 22M: 028, or equivalents: undergraduate calculus including linear algebra.

OFFICE HOURS

Scheduled office hours for the course are from 10:30 am to 12:00 pm, on Wednesdays and Fridays in 370 SH. Appointments at other times may be made via email, osnat-stramer@uiowa.edu.

EARNING CREDIT

The course grade will be based on:

Regular completion of problem sets (10%);
5-6 Quizzes will be announced in class (20%);
Midterm Exam 1: Monday, October 6 in class (10%)
Midterm Exam 2: Thursday, November 13, 6:30-8:30 p.m. (room to be announced) (25%).
Final exam: To be announced after a few weeks of the semester (35%).

Problem sets will generally be made available on ICON on Tuesday, answers will be due on Monday. Problem sets will not be assigned the weeks that midterm exams are scheduled or the last week of classes.

Exams: There will be two midterm exams and one two-hour cumulative final exam. The examination will be closed book and closed notes. Calculator may be used for exams, and any necessary statistical tables will be provided. One 8.5”x11” formula sheets (both sides) may be used for the first exam, two 8.5”x11” formula sheets (both sides) may be used for the second exam and three (both sides) for the final. If an exam is missed, a make-up exam will be permitted
only if the circumstances of missing the exam satisfy university policies.

**Quizzes:** There will be 5-6 closed-book 15-minutes quizzes at the end of class period (lowest score dropped). The quizzes will be closed book and closed notes. Calculator maybe used for quizzes and any necessary statistical tables will be provided. One 8.5”x11” formula sheets (one side) may be used. The dates of the quizzes will be announced only 2 days in advance (in class).

**Bonus points may be given at any time. The bonus points may be applied to any part of your grade.**

**COMMUNICATION**

In the event that I need to communicate with you by email, I will assume that you read your firstname-lastname@uiowa.edu email at least every 48 hours.

**READINGS**

The course will closely follow the first four chapters of the text *Introduction to Mathematical Statistics* by Robert V. Hogg, Joseph W. McKean and Allen T. Craig (Seventh Edition, Prentice Hall, 2). All students taking the course for credit are expected to purchase this text, which is available in the bookstore. The course topics are from Ch. 1 to 4.6 and other selected topics if time permits.

**COLLEGE OF LIBERAL ARTS AND SCIENCES POLICIES AND PROCEDURES**

This course is governed by the policies and procedures of the College of Liberal Arts. These policies address

* the administrative home of the course;
* electronic communications;
* electronic communications;
* academic fraud;
* students with disabilities;
* procedures for student complaints;
* sexual harassment policy;
* weather emergencies.

These policies can be found at http://www.clas.uiowa.edu/faculty/teaching/new_policytemplate.shtml.