

STAT 2400: Introduction to Probability

Fall 2009

Course Outline

Instructor: Dr. Katherine Davies
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Class time and location: Monday, Wednesday and Friday 9:30-10:20am 527 Buller Building
Office hours: Monday, Wednesday and Friday 10:30-11:30am, or by appointment
Lab information: Wednesday 2:30-3:20pm in 315 Buller Building

Course description: This course will introduce students to probability and discrete and continuous random variables. General topics (with reference to textbook chapters) to be covered, time permitting, are:

1. Basic Concepts (Chapters 1 and 2)
2. Counting Principles (Chapter 3)
3. Conditional Probability and Independence (Chapter 4)
4. Discrete Random Variables (Chapter 5)
5. Jointly Discrete Random Variables (Chapter 6)
6. Expected Values of Discrete Random Variables (Chapter 7)
7. Introduction to Continuous Random Variables (Chapter 8)
8. Other Important Concepts

Prerequisites: STAT 1000 (or 1001) and one of MATH 1700 (or 1701) or MATH 1690. This course is not available to any student who has previously obtained credit for STAT 3500.

Textbook: *A Course in Probability*, by N.A. Weiss (Addison-Wesley, 2006)

Other resources (on reserve in library): *A First Course in Probability*, by S.M. Ross (2006), *Introduction to Probability*, by G. Roussas (2007)

Course announcements and postings: The JUMP portal will be used for this course. You are still responsible for announcements made in class.

Grading scheme: There will be assignments, tests and a final exam with the following weights:
Assignments - 15% (approximately 5 or 6 with equal weight)
Term tests - 45% (2 tests; 25% for best, 20% for worst)
Final Exam - 40%

Other important information:

1. Assignments are due at the beginning of class on their due date. Late assignments will not be accepted. Assignments must be written on 8.5x11in paper and answers to the questions must be written up in the proper order.

2. Attendance in the labs is mandatory. Practice problems will be done in the labs and this is where your assignments will be handed back to you.
3. The two tests will take place approximately mid-October and mid-November, with exact dates to be announced. There are NO makeup tests. The final exam will be 3 hours in length and take place during the December examination period. The final exam and tests are closed book and only non-programmable calculators are permitted.
4. It is your responsibility to be aware of the last day for voluntary withdrawal. For this term, the Registrar's office has this day as November 18, 2009. By this time you will have received grades on a few assignments and at the minimum, your grade on the first test.

Academic dishonesty: It is important that you understand what constitutes academic dishonesty and that you are familiar with the consequences. For descriptions of these terms and other issues, please see <http://webapps.cc.umanitoba.ca/calendar10/regulations/plagiarism.asp>. More information can be found at <http://www.umanitoba.ca/faculties/science/student/webdisciplinedocuments.html>

Important note from the Dean of Science: It is your responsibility to ensure that you are entitled to be registered in this course. This means that you have:

- the appropriate prerequisites, as noted in the calendar description, or have permission from the instructor to waive these prerequisites;
- not previously taken, or are concurrently registered in, this course and another that has been identified as "not to be held with" in the course description. For example, BIOL 1000 cannot be held for credit with BIOL 1020.

The registration system may have allowed you to register in this course, but it is your responsibility to check. If you are not entitled to be in this course, you will be withdrawn, or the course may not be used in your degree program. There will be no fee adjustment. This is not appealable. Please be sure to read the course description for this and every course in which you are registered.

Special announcement: Should major disruptions to university activities occur as a result of a pandemic, the course content, marks breakdown, and other provisions of this document may be adjusted as the circumstances warrant.