Syllabus

MA 385-01 (Fall, 2012)
Introduction to Probability
Tuesday, Thursday 2:20pm – 3:40pm, Shelby Center 205

Instructor

- Dongsheng Wu
- 201J Shelby Center
- 256-824-6676
- Email: dongsheng.wu@uah.edu
- URL: http://webpages.uah.edu/~dw0001
- Office Hours: Tuesday, Thursday 9:00am – 12:00pm.

Textbook and Online Resource

- Elementary Probability for Applications, by Rick Durrett. Cambridge University Press. ISBN: 978-0-521-86756-6.
- Virtual Laboratories in Probability and Statistics, by Kyle Siegrist. http://www.math.uah.edu/stat/index.xhtml

Tentative Coverage

We plan to cover Chapters 1, 2, 3, 5, 6 from Durrett's book, with some supplemental materials from the Virtual Laboratories.

Course Description

This is an introductory course in probability. Topics include:

Descriptive statistics, probability spaces, discrete distributions (including the binomial, geometric, hyper-geometric, and Poisson), continuous distributions (including the uniform, exponential, and normal), joint distributions, mean, variance, and general expected value, independence and correlation, the law of large numbers, the central limit theorem.

Prerequisites and Restrictions

MA 120 (Calculus with Applications) or MA 172 (Calculus B), and one MA course at the 200-level or above. No credit given to students who have successfully completed MA 585 (Probability).

Course Goals

- A basic understanding of the special language, notation, and point of view of probability
- A basic understanding of the interplay between probability and inferential statistics
- The ability to solve standard computational problems in probability
- The ability to recognize special models, including Bernoulli trials, finite sampling models, and the Poisson model
- An intuitive understanding the two fundamental theorems of probability: the law of large numbers and the central limit theorem
- An improve ability to read, write, speak, and think in mathematical terms

Grade Determination

- Weekly Quizzes: 30%
- Mid-Term Exams: 40%
- Final Exam: 30%

Test Dates

- Quizzes: On Thursdays without an exam (starting from the second Thursday)
- Two Mid-Term Exams: On Thursdays, September 27 and November 01.
- **Final Exam**: 3:00pm-5:30pm on Thursday, December 6, 2012.

Grading Scale (%)

A. 90-100
B. 80-89
C. 70-79
D. 60-69

F. 0-59

Policies

No make-up quizzes will be given. Instead, I will drop the two lowest scores from your record. No make-up exams will be given except for documented cases of illness or emergency.

Accommodation for Students with Disabilities

Any student with a disability that will require special attention or accommodation should inform the instructor as soon as possible, preferably within the first week of class.

Student Behavior

Students are expected to behave in a courteous and respectful manner towards their fellow students. You should strive to be on time for class, and refrain from talking or doing any other activity that could be disruptive to the class. Turn off your cell phone! Ringing cell phones are always a distraction.

Grievance Procedure

Any problems that you encounter should be brought to the attention of your instructor. If you do not feel comfortable talking to me, or if you are not satisfied with my decision, you may appeal through the administrative chain given below: 1. Math Department Senior Staff Assistant: Ms. Tami Lang, 258 Shelby Center. 2. Math Department Chair: Dr. Jia Li, 258 Shelby Center. 3. Associate Dean of the College of Science: Dr. Daniel Rochowiak, 207 Materials Science Building.

See the Student Handbook for more information about the grievance procedure.

Academic Misconduct

All acts of dishonesty in any work constitute academic misconduct. This includes, but is not limited to cheating, plagiarism, fabrication of information, misrepresentation, and abetting any of the above. Academic misconduct will not be tolerated and may result in a failing grade in the course. Consult the Student Handbook for further description of Academic misconduct and penalties.

UAlert Emergency Notification System

UAHuntsville has implemented the **UAlert** emergency notification system. UAlert allows you to receive time-sensitive emergency messages in the form of e-mail, voice mail, and text messages.

Everyone who has a UAHuntsville e-mail address will receive emergency alerts to their campus e-mail address. In order to also receive text and voice message alerts, you are asked to provide up-to-date phone contact information. Participation in UAlert text and voice messaging is optional, but enrollment is strongly encouraged. **You can't be reached through UAlert unless you participate.** The information you supply is considered confidential and will not be shared or used for purposes other than emergency notification.

To review your UAlert account, add or update phone and alternate e-mail addresses, and set the priority for your contact methods, please visit the UAlert web site: http://ualert.uah.edu.