General Information

Prerequisites: Multivariable Calculus (MATH 261, MATH 176 or equivalent), as well as some familiarity with reasoning and proofs.

Course Objectives: This course is meant to impart the basic concepts of probability expected of an undergraduate in statistics, mathematics, or actuarial sciences. This includes

- Technical proficiency with standard distributions: Bernoulli Binomial, multinomial, geometric, Poisson, Uniform, normal, exponential, gamma and beta
- Technical proficiency with bivariate and multivariate distributions
- Intuitive understanding of what these distributions model
- Theoretical understanding of probability, conditional probability, random variables, independence of events and random variables, expected value, standard deviation, variance, moments and moment generating functions
- Theoretical and intuitive understanding of important theorems such as Bayes Rule, the Law of Large Numbers, and the Central Limit Theorem

Final Grades will be calculated as follows:
Handwritten Homework: 25%
Midterm Exams (60 Minutes): 15% × 3
Final Exam (120 Minutes): 30%

Homework: About every week there will be a handwritten homework assignment. These will focus not only on your ability to perform calculations, but also to display theoretical knowledge and explain your reasoning. These will be due most Wednesdays.

Midterm Exams: There will be 3 60 minute midterm exams, each held in the evening. The dates are
(1) 24 Sept 2015 at 6:30 PM in MATH 175
(2) 22 Oct 2015 at 8:00 PM in WTHR 172
(3) 19 Nov 2015 at 8:00 PM in WTHR 104.
There will be a 120 minute final exam, time and date to be determined,
Policies

Contact Announcements will be made on the course website, there is also a calendar there which will be updated regularly. Emergency announcements will be made through email (your email address which is associated to BlackBoard).

Material You are expected to read assigned sections in addition to attend lectures. It is preferable if you read the sections in advance of when they will be covered in lecture, as the lectures are designed to complement the text and indicate key principles.

Emergencies In the event of a major campus emergency, course requirements, deadlines, and grading percentages (points) are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor’s control. The information about the changes in this course will be announced on the course’s webpage, in class (whenever possible), and through messages on Blackboard Vista.

Academic Dishonesty Cheating will not be tolerated. If caught, the punishment may range from a score of zero on an assignment to a failing grade in the course with a referral to the University disciplinary committee. (See regulations for student conduct, http://www.purdue.edu/univregs/studentconduct/index.html) Please don’t resort to cheating; if you are having trouble in the course, please talk to the instructor, and I may be able to direct you to additional resources.