Probability
MA 371, Section 1, Fall 2015
MWF 2:00 – 2:50 WS 2901

Professor: Dr. Linda Lawton
Office: Jamrich 2206
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Office Hours: 3:00 – 4:00 MW and 2:00 – 4:00 R, or by appointment

Text: *Probability for Risk Management* – second edition, Hassett & Stewart

Course Description: We will cover all of the topics on the most recent syllabus published for SOA Exam P / CAS Exam 1, as well as the hypothesis testing components of MA 171 (if time allows)

Course Outline:
> Counting and Elements of Probability (Chapters 1 - 4)
> Discrete Random Variables & Applications (Chapters 5 - 6)
>> (Distributions: Binomial, Hypergeometric, Poisson, Geometric, Negative Binomial, Uniform)
>
> Continuous Random Variables & Applications (Chapters 7 - 9)
>> (Distributions: Uniform, Exponential, Gamma, Normal, Lognormal, Pareto, Weibull, Beta)
>
> Multivariate Distributions & Applications (Chapters 10 - 11)
> Stochastic Processes (Chapter 12)
> Hypothesis Testing

Prerequisite: Calculus II or consent of Instructor

Course Requirements: Daily homework assignments (20%), three in-class exams (15% each), and a comprehensive final exam (35%)

Grade scale: 91 – 100% = A, 81 – 89% = B, 71 – 79% = C, 61 – 69% = D, < 60% = F

Learning Outcomes (primary focus of assignments and examinations)
- The student will demonstrate accurate use of basic probability concepts, including independent, mutually exclusive, and conditional events.
- The student will solve applied problems using the standard discrete and continuous univariate and multivariate distributions.
- The student will solve applied problems using multivariate techniques.
- The student will demonstrate accurate use and derivation of moment generating functions.

About me:

        Normally I am a rather informal, laid back person—i.e. easy to deal with. (Even my husband agrees with this.) But there are a few things which tend to make me grumpy—i.e. difficult to deal with. Here's a short list (keep in mind this was developed while teaching "Math for People Who Hate Math But Have to Have One to Graduate"):

        1. bad attitudes
(Please don't just sit in the back glaring at me—pretend you are enjoying yourself!!)

        2. homework (or other) questions right before class starts
(I want to provide you with clear, understandable lectures, but I am easily distracted. I need that time to focus before I start class.)

        3. repeatedly skipping class and expecting me to "lecture" during office hours
(I don't mind covering the material with you in my office, but there is only so much we can cover in one sitting.)

        4. point grubbing
(When I grade quizzes and tests I go through all the papers twice to ensure that equivalent credit is given to equivalent work. If you feel I have made an error, please submit a written request for me to review the matter.)

        5. cheating, etc.
Cheating will result in failure of not only the exam / assignment, but also the course.

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1700). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines.

This syllabus is subject to change with notice.