Dr. Darci L. Kracht

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Office Hours: 9:55-10:45 MTWRF and by appointment

Class Webpage: http://www.math.kent.edu/~darci/forstudents/actmath2/

Prerequisite & Course Description

The prerequisite for this course is Math 4/50055 (Actuarial Mathematics I). It will also be helpful to have had a course in ordinary differential equations.

This sequence is an introduction to actuarial mathematics. It is based on probability and the mathematics of finance. While the material will be developed primarily in the context of life contingencies, the ideas and methods are more widely applicable. Both mathematical theory and problem-solving will be emphasized.

This course along with Actuarial Mathematics I will cover a good portion of the material on the Society of Actuaries Exam MLC (Models for Life Contingencies). Students are encouraged to take that exam within a semester of completing these courses.

Text & Calculator

The text for this course is **Actuarial Mathematics for Life Contingent Risks**, Second Edition, by Dickson, Hardy, and Waters. Our goal is to cover Chapters 1–9 in the two-course sequence. Time permitting, we may also cover some topics from Chapters 10–13.

You will need a scientific calculator.

Email and Class Webpage

Students are required to monitor their @kent.edu email account. I will email the class through Flashline. Course materials will be posted at http://www.math.kent.edu/~darci/forstudents/actmath2/.

Tentative Grading Scheme

Attendance and Engagement	10
Previews	20
Sign-up Homework	20
Hand-in Homework	50-100
Quizzes	50-100
Exams	300
TOTAL	450-550

A: 93% A-: 90% B+: 87% B: 83% B-: 80% C+: 77% C: 73% C-: 70% D+: 67% D: 60%

Attendance and Engagement

Good attendance and participation in the class discussion are important for success in this course. You are required to arrive on time and remain for the full 50 minutes. You must silence and put away all electronic devices, such as phones, iPods, laptops, etc.

If you miss a class, you are responsible for making up the work you missed. If you anticipate a lengthy illness or hospital stay, please contact your instructor or your college dean as soon as possible.

Students who follow the attendance guidelines, participate actively and respectfully with their classmates during group work, and contribute frequently and meaningfully to whole class discussions should expect to earn a B for their Engagement grade. Students who also demonstrate frequent insights and original thinking will earn an A. Students with lapses in attendance and/or passivity in class can expect a C or lower. Students will be given an opportunity to self-assess their engagement and these assessments will be taken into consideration by the instructor.

Preview Assignments

Before each section is discussed in class, students should read the section and complete the preview assignment for that section. The previews will be posted on the class web page. Print out and complete, based on your reading of the text. If there are multiple sheets, staple together the top left corners (in the correct order). Turn in at the start of class on the date due. Do not submit answers on notebook paper or via email. *No credit for late or incomplete preview assignments*. Assignments may be turned in, in advance, to my mailbox in 233 MSB. At the end of the semester, a few of your low preview scores will be dropped and the remaining total will be scaled to a score out of 20 points.

Homework

There are two types of homework assignments: Signup Homework Assignments and Hand-In Homework Assignments. All assignments will be posted on the class webpage.

Sign-up Homework: After the section has been discussed in class, related exercises will be assigned for the next class. During the next class, a sign-up sheet will be passed around where students will indicate which exercises they are able to do. I will select a few students to put one of their solutions on the board. Students will receive credit for all exercises they sign-up for, not just those they actually present on the board. Students missing a class may get credit for that day's sign-up homework by coming in to my office and putting some problems (of my choosing) on the board. At the end of the semester, sign-up homework total will be scaled to a score out of 20 points.

Hand-in Homework: There will be a hand-in homework assigned for each chapter. These problems will be graded carefully. Solutions must be written up carefully, showing all work, for full credit. Proofs should be written in complete English sentences.

Students are expected to turn in hand-in homework assignments at the beginning of class on the due date. Students with an excused absence on the due date may turn in the assignment for full credit at the beginning of the next class attended. Unexcused late homework will be accepted only until the start of the class in which the graded assignments are to be returned (usually the next class after the due date). In this case, there will be a penalty of 10% of the total value per school day, including the due date. For example, homework due on Wednesday and turned in after the start of class on Wednesday will be accepted with a 10% penalty, homework turned in on Thursday will receive a 20% penalty, etc., until graded assignments are returned.

Quizzes

Short written quizzes will be given in class approximately once per week. All students must take the quiz in class. Make-up quizzes will **not** generally be given, even for excused absences. Instead, a couple of your lowest scores will be dropped at the end of the semester.

Exams

There will be two-three exams (including the final). The exact dates will be announced in class one week in

advance. Students are responsible for ascertaining the dates of the exams. The final exam will be given during finals week on Friday, May 8, 10:15–12:30.

Make-up exams will be given only to those students with a valid, documented excuse who make an explicit agreement with the instructor in advance for a make-up. Leaving early for break is not an acceptable excuse. Please do not make travel plans that conflict with exams. Last-minute voicemail or email messages will be accepted as a rescheduling arrangement only in case of a sudden and serious emergency.

Registration & Withdrawal Deadlines

The official registration deadline for this course is January 25, 2015. University policy requires all students to be officially registered in each class they are attending. Students who are not officially registered for a course by the published deadlines should not be attending classes and will not receive credit or a grade for the course. Each student must confirm enrollment by checking his/her class schedule (using Student Tools in Flashline) prior to the deadline indicated. Registration errors must be corrected prior to the deadline.

The official withdrawal deadline for this course is March 22, 2015.

Cheating and Plagiarism

Cheating will not be tolerated— serious penalties will imposed. In addition, all cases will be reported to the Office of Student Conduct. University policy 3342-3-01.8 deals with the problem of academic dishonesty, cheating, and plagiarism. If you have any questions, please read the policy and/or ask. (See http://www.kent.edu/policyreg/.)

Students with Disabilities

University policy 3342-3-18 requires that students with disabilities be provided with reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact your instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through Student Accessibility Services. (Contact 330-672-3391 or visit http://www.kent.edu/sas/ for more information and registration procedures.)