

Dr. Darci L. Kracht

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(330) 672-9093

347 MSB

MWF 11:00–11:50 and TR 9:40–10:10

and by appointment

Class Webpage: <http://www.math.kent.edu/~darci/forstudents/actmath1/>

Prerequisite

The prerequisite for this course is Math 30055 (Mathematical Theory of Interest) and Math 4/50011 (Introduction to Probability Theory and Applications). It will also be helpful to have had a course in ordinary differential equations.

Course Description

This course 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 II 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.

Attendance

Good attendance and participation in the class discussion are important for success in this course. Students are expected to arrive on time and remain for the entire 50 minutes. **Electronic devices, such as phones, iPods, Blackberries, etc., must be silenced and put away during class.** Attendance will be taken every class. 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.

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/actmath1/>.

Tentative Grading Scheme

Engagement/Presentations (Previews/Attendance)	100
Hand-in Homework	100
Quizzes	100
Exams (3)	300
TOTAL	600

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

Engagement/Presentations

The Engagement grade will be based on attendance, preview assignments, sign-up homework, in-class group work, and presentations. The preview assignments and sign-up/presentation homework will be posted on the class web page. Students who follow the attendance guidelines, complete the preview assignments, participate actively and respectfully with their classmates during group work, present solutions to the class regularly, and contribute frequently and meaningfully to whole class discussions should expect to earn a B for their Engagement/Presentation 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.

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. The assignments will be posted on the class web page.

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. At the end of the semester, hand-in homework total will be scaled to a score out of 100 points.

Quizzes

There will be short quizzes about once a week. These will be announced in class and posted on the class web page. At the end of the semester, a few of your low scores will be dropped. Therefore, make-ups on quizzes will not generally be given. At the end of the semester, your quiz average will be scaled to a score out of 100.

Exams

There will be three exams (including the final) and several quizzes. 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 Tuesday, December 9, 10:15–12:30.

Exam Make-up Policy

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 Deadline

The official registration deadline for this course is September 7, 2014. 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.

Withdrawal Deadline

The official withdrawal deadline for this course is November 2, 2014.

Cheating and Plagiarism

Cheating will not be tolerated—serious penalties will be 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.)