The prerequisite for this course is Math 12003. Students without the proper prerequisite risk being deregistered from the course later in the semester.

**Learning Outcomes**

This course is a calculus-based introduction to the mathematics of finance, limited to deterministic analysis of interest rates, annuities, amortization, bonds, and yield rates. Both mathematical theory and problem-solving will be emphasized.

This course will cover a good portion of the material on the Society of Actuaries Exam FM. Students are encouraged to take that exam within a semester of completing this course.

**Text & Calculator**

The text for this course is *The Theory of Interest*, Third Edition, by Stephen G. Kellison. We will cover the following chapters in part or in full:

- Chapter 1: The measurement of interest
- Chapter 2: Solution of problems in interest
- Chapter 3: Basic annuities
- Chapter 4: More general annuities
- Chapter 5: Amortization schedules and sinking funds
- Chapter 6: Bonds and other securities
- Chapter 7: Yield rates

Time permitting, we may also cover some topics from Chapters 9, 10, and 11.

You will need a scientific or financial calculator. We recommend the Texas Instruments BA II Plus since it is allowed on the Society of Actuaries’ exams. Whichever calculator you choose, it is up to you to learn how to use it.

**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/mti/](http://www.math.kent.edu/~darci/forstudents/mti/).
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: Sign-up 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 Wednesday, May 6, 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 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/](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/](http://www.kent.edu/sas/) for more information and registration procedures.)

— Revised January 7, 2015 —