

**Mathematical Interest Theory**  
**Math 4453**  
**Spring 2012**

**Faculty:** Prof. D. Alspach, MS 529, 744-5784.

**Electronic Access:** If you need to reach me, one of the best ways is by electronic mail. For regular correspondence regarding the course use the mail facility built into the Online Classroom website software D2L. For other correspondence my address is [alspach@math.okstate.edu](mailto:alspach@math.okstate.edu). I will be providing some information on D2L. I will also use D2L to communicate with the class as a whole by posting announcements and discussion messages. You should log on to D2L at least every other day.

**Office Hours:** 2:30-3:20 MWF, other times by appointment.

**Text:** *Mathematical Interest Theory*, by James Daniel and Leslie Vaaler. The *Student Solutions Manual* is optional. We will cover the first few chapters fairly thoroughly and parts of the remaining chapters. A calculator with financial functions and access to a spreadsheet program such as MS Excel or OpenOffice Calc will be needed. The text provides instructions for the TI BA II Plus and TI BA II Plus Professional calculator. Much of this material is part of syllabus for the Society of Actuaries Exam FM and the Casualty Actuarial Society Exam 2 and the text is on the reading list for the exams. See <http://www.beanactuary.org/exams/> for details.

**Prerequisites:** The formal course prerequisite is Math 2153. The textbook assumes some familiarity with finance.

**Examinations:** There will be two in-class exams and a comprehensive final exam. If you must miss a scheduled exam, you must contact me **before** the exam. A make-up exam will be given only if missing the exam was unavoidable due to serious illness or injury or similar circumstances. (Travel plans, cheap airline tickets, etc, do not qualify.) The final exam will be Friday, May 4, at 2:00 p.m. Calculators will be permitted during exams.

**Homework:** Problems will be assigned from each section and solutions will be collected about once a week. Answers are given in the back of the book so grading will be based on clarity of presentation and correctness of the methods. Solutions to the odd-numbered problems are contained in the *Student Solutions Manual*.

**Grading:** When I grade a paper I am looking for more than just answers. Mathematics is about correct processes for solving problems and understanding of concepts. A correct answer with little or no supporting work may be given little credit. If a calculator is used to complete a step, clearly state what functionality was used. You should use sentences to define any unknowns and indicate units as appropriate. When I give an example in class, I will usually write such things on the board to give you a model to follow. (Remember though that sometimes because of time pressure I will only say the complete sentences.) If you get an answer which does not seem reasonable, you may receive some credit for explaining why the answer you computed seems wrong. On tests it is important to clearly indicate what is scratch work and what is to be graded.

|                     | Points | Grade | Points Needed |
|---------------------|--------|-------|---------------|
| 2 Exams (50 min.)   | 200    | A     | 450-500       |
| Comprehensive Final | 150    | B     | 400-449       |
| Homework            | 150    | C     | 350-399       |
|                     | —      | D     | 300-349       |
| Total points        | 500    | F     | 0-299         |

**Curving:** The only curving that will be done is that a linear adjustment (Adjusted Score = Scale Factor  $\times$  Raw Score + Offset) may be made to all scores on a particular exam. I reserve the right to decide borderline cases based on subjective impressions of effort, conscientiousness, etc.

**Drop Policy:** Before April 6 a student may drop with an automatic “W”. A student may drop the class between April 6 and April 20 with a “W” if he/she has accumulated 50% of the points available to date and there are certain extenuating circumstances. (This is a restrictive drop period requiring a petition approved by your advisor and college dean or withdrawal from all courses.)

Above are the specifics for this class. There are general guidelines for all classes which cover academic misconduct, students with disabilities, and so forth. See the University Syllabus Attachment, <http://academicaffairs.okstate.edu/images/documents/sylatspr.pdf> for additional rules and information.