

## Math 423: Mathematics of Finance

Section 002, T TH 8:30-10:00 AM, 1372 East Hall

Dr. Ahmet Duran

3826 East Hall, (734) 7631184

[durana@umich.edu](mailto:durana@umich.edu), [www.umich.edu/~durana](http://www.umich.edu/~durana)

### Text

*Mathematics for Finance: An introduction to financial engineering*, Capinski and Zastawniak, Published by Springer, ISBN: 1-85233-330-8

### Additional References

- Baxter, Rennie: *Financial Calculus: An Introduction to Derivative Pricing*
- Bodie, Kane and Marcus: *Investments*
- Hull: *Options, Futures and Other Derivatives*
- Lamberton, Lapeyre: *Stochastic Calculus Applied to Finance*
- Luenberger: *Investment Science*
- Roman: *Introduction to the Mathematics of Finance*
- Shreve's Lecture Notes: [www.cs.cmu.edu/~chal/Shreve/shreve.pdf](http://www.cs.cmu.edu/~chal/Shreve/shreve.pdf)
- Wilmott, Howison and Dewynne: *The Mathematics of Financial Derivatives*

### Office Hours

T TH 11:30-1:00 and by appointment

### Prerequisites

Math 217 and Math 425; EECS 183

### Grading Policy and Important Dates

- You will be expected to read each section before it is discussed in class.
- I will assign homework problems in class (and on the course webpage) regularly; I will collect homework at the beginning of class meeting. I will drop your lowest homework grade.
- I will collect one computer assignment.
- We will have 5 quizzes. I do not give make up quizzes, but I will drop your lowest quiz grade. **The quiz dates are 9/14/06, 9/28/06, 11/2/06, 11/16/06, and 11/30/06.**
- **We will have one midterm exam on Thursday, 10/19/06.** I do not give makeup exams.
- Our final exam is cumulative.
- All exams are closed-book, proctored tests.
- Your final grade will be determined according to the following weights:

Quiz + Homework + Computer Assignment	30%
Midterm Exam	30%
Final Exam	40%

## Syllabus

I plan to cover Chapters 1-10 of the text; if time permits, we may also cover Chapter 11 or other additional topics. A **tentative** course schedule appears below. If you miss a lecture, you should be sure to get the notes from a classmate.

## Course Website

You can visit the course website via [www.umich.edu/~durana](http://www.umich.edu/~durana) and <https://ctools.umich.edu>. I will post announcements, homework assignments, messages, and other course resources on the course webpage regularly. You may access to answer files for homework, quiz and exam via only <https://ctools.umich.edu>.

## Tentative Schedule for Math 423-002

T	TH
Ch. 1 9/5/06	Ch. 2 9/7/06
Ch. 2. 9/12/06	Ch. 3 <b>Quiz 1</b> 9/14/06
Ch. 3 <b>HW 1</b> 9/19/06	Ch. 3 9/21/06
Ch. 4 9/26/06	Ch. 4 <b>Quiz 2, HW 2</b> 9/28/06
Ch. 5 10/3/06	Ch. 5 10/5/06
Ch. 5 10/10/06	Review, Q&A 10/12/06
Fall Study Break 10/17/06	<b>EXAM 1</b> 10/19/06
Ch. 6 <b>HW 3</b> 10/24/06	Ch. 6 10/26/06
Ch. 7 10/31/06	Ch. 7 <b>Quiz 3</b> 11/2/06
Ch. 7 <b>Computer Assignment</b> 11/7/06	Ch. 8 11/9/06
Ch. 8 11/14/06	Ch. 8 <b>Quiz 4, HW 4</b> 11/16/06

Ch. 9	11/21/06	Thanksgiving recess	11/23/06
Ch. 9	11/28/06	Ch. 10 <b>Quiz 5</b>	11/30/06
Ch. 10	12/5/06	Ch. 11?	12/7/06
Review, Q&A	12/12/06	<b>FINAL EXAM</b>	

**FINAL EXAM: Friday, December 15      4:00pm – 6:00pm**  
**EH 1360**