# Syllabus for FM 5011 (Mathematical Background for Finance)
## Fall 2011

**Instructor:** Scot Adams  
**Office:** Vincent Hall 354  
**Phone:** 612-625-5507  
**Homepage:** [www.math.umn.edu/~adams](http://www.math.umn.edu/~adams)  
**Email:** adams@math.umn.edu  
**Office Hours:** Mondays, Wednesdays and Thursdays 4:30pm-5:20pm; Vincent 354  

NOTE: I do not hold office hours on University Holidays. I do not hold office hours after the final exam.  

NOTE: No office hours on W on Th of exam weeks (Weeks 7 and 11).

**TA:** Teng Wang  
**Office:** Vincent Hall 526, Desk 3  
**Phone:** 612-624-1824  
**FM webpage:** [http://www.math.umn.edu/~wangx794/](http://www.math.umn.edu/~wangx794/)  
**Email:** wangx794@umn.edu  
**Office Hours:** Tuesdays and Thursdays 4:30pm-5:30pm (except 11 Oct and 13 Oct)

**Class meets:** Thursdays 5:30pm-8:50pm (with break usually 7:00pm-7:15pm),  
with Thanksgiving (Thursday 24 November) off.  
Break time moves to 7:35pm-7:50pm on exam days.  
from Thursday 8 September to Thursday 8 December  
with final exam on Thursday 15 December

**Course webpage:** [http://www.math.umn.edu/~adams/FM5011/](http://www.math.umn.edu/~adams/FM5011/)  
**FAQ file:** [http://www.math.umn.edu/~adams/FM5011/faq5011.html](http://www.math.umn.edu/~adams/FM5011/faq5011.html)

## Strongly recommended Texts:
- *Stochastic Calculus for Finance I: The Binomial Asset Pricing Model*, by Steven E. Shreve  
- *Stochastic Calculus for Finance II: Continuous-Time Models*, by Steven E. Shreve

## Recommended Texts:
- *The Concepts and Practice of Mathematical Finance*, by Mark Joshi  
- *Financial Calculus / An introduction to derivative pricing*, by Martin Baxter and Andrew Rennie  
- *Measure Theory: A First Course*, by Carlos S. Kubrusly
**First Midterm Test:** last hour of class, Class 7, Thursday 20 October

**Second Midterm Test:** last hour of class, Class 11, Thursday 17 November

**Thanksgiving day off:** Thursday 24 November

**Final Exam:** 7:20pm-8:50pm, Thursday of finals week, Thursday 15 December

**Assignments:**
Assignments are tied to topics, and are automatically assigned the moment a topic is completed. Assignments are due at the beginning of class, one week after they are assigned, and should be graded one week after they are due.

**Grading:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>First Midterm</td>
<td>25%</td>
</tr>
<tr>
<td>Second Midterm</td>
<td>25%</td>
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<tr>
<td>Final Exam</td>
<td>35%</td>
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</tbody>
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**Miscellaneous:**

I either do “curve” or do not “curve” depending on how you define it. I do not preassign the number of students who will receive a specific grade. On the other hand, neither do I preassign the gradelines before seeing the distribution of grades. Gradelines will be announced on the web, as soon as possible after the quiz or exam.

Incompletes will be given only in cases where the student has completed all but a small fraction of the course with a grade of C or better and a severe unexpected event prevents completion of the course. In particular, if you get behind, you cannot “bail out” by taking an incomplete. The last day to cancel, without permission from your College office, is the last day of the sixth week.

No extra credit work will be accepted.

All quizzes and tests are closed book, with no calculators allowed, unless otherwise specified. You may discuss homework with your classmates, even working on solutions, but the final writeup should be done individually.