OPTIONS AND FUTURES MARKETS

I. Contact Information
Office: 304E David Kinley Hall
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II. Prerequisite
Finance 300 must have been completed before enrolling in this course.

III. Course Objective
The objective of this course is to introduce the theory and practice of pricing and hedging options and futures contracts. The goal is to give you a basic introduction to the science of derivatives in order to provide the foundation for you to become proficient at the art of derivatives. This idea is summed up in the concluding paragraphs of Sheldon Natenberg’s *Option Volatility & Pricing*, (McGraw Hill, 1994):

Because the use of a theoretical pricing model requires a trader to make so many different decisions, both with respect to the inputs into the model and the degree to which the assumptions on which the model is based are likely to be accurate, the new option trader may feel that making the right decisions is simply a matter of luck. While luck undoubtedly plays a role in the short run, in the long run those traders who are willing to put in the effort required to understand how models work always seem to come out ahead. Experienced traders know that using a model, with all its problems, is still the best way to evaluate options and manage risk.
This text, like many others on options, may have left the reader with the impression that option evaluation and trading can be reduced to a series of arithmetic calculations. The science of option evaluation is an important part of any trader's education, but mathematical models are only a tool to help the trader make decisions. Successful option trading is at least as much an art as a science, and a trader must know where science leaves off, and other intangible assets, whether intuition or market feel or experience, begin. This brings us to one final point, and perhaps the most important principle of option trading: there is no substitute for common sense. A trader who slavishly uses a model to make every trading decision is heading for disaster. Only a trader who fully understands what a model can and cannot do will be able to make the model his servant rather than his master.

IV. Required Text


This book is available for purchase at [http://www.in-the-money.com](http://www.in-the-money.com) (It is not available at the University of Illinois or any other bookstore.) You should wait until you have decided that you are going to stay enrolled in the course before you purchase the book. To order the book, first go to the above URL. Next, click on “Derivatives: A PowerPlus Picture Book” in the left hand frame. Finally, click on “Order the Book” at the bottom of the main frame and follow the instructions. Once you order the book, it should arrive in approximately three business days. Make sure that you pay the student price when you buy the book. All of section 1.1 of the book (about the first twenty pages) is available on the above web site. To get to these pages, first go to the above URL. Next, click on “Derivatives: A PowerPlus Picture Book” in the left hand frame. Finally, click on “Getting Started” at the bottom of the page. You can stay caught up until your book arrives by reading section 1.1 on this web site. The frame containing the text can be enlarged by dragging its top upward.

There is a large amount of excellent material in Rubinstein’s book. Although the entire book is well worth reading, we will not attempt to cover it all in this course. Reading assignments will be posted at:


The reading assignment for each class meeting will be posted by 5:00 PM on the day of the previous class meeting. The problem sets and exams will cover only the assigned readings and supplementary material presented in class.

A copy of the text is on reserve in the undergraduate library. The call number is: 332.640297 R825d.
V. Other Texts

There will be no need to refer to any book other than the required text. However, the following books are available at the Commerce Library if you would like to read another presentation of some idea.

**On Reserve:**

Call no.: 332.645 C36li1998

Call no.: 332.632 H877o2000

Call no.: 332.632 J2962D

**In the Reference Section:**

Call no.: 332.6452 C8390

VI. Course Requirements and Grading

The requirements for the course are class participation, six problem sets, two midterms, and a final exam.

You may work on problem sets in groups of up to four students. One problem set should be turned in for each group with the name of each participating student on it. I strongly encourage you to work in groups of three or four and will help you to form groups. You do not need to work with the same group on each problem set.

The problem set grade for each student will be the average of the five highest scores. Hence, if unforeseen circumstances prevent you or your group from turning in one problem set, the penalty will be minimal. It is important, however, that you understand how to solve all of the problems on all of the problem sets.

The problem sets will be posted at:

[http://www.cba.uiuc.edu/poteshma/Teaching/Finance362-2002/ProblemSets/ProblemSets.htm](http://www.cba.uiuc.edu/poteshma/Teaching/Finance362-2002/ProblemSets/ProblemSets.htm)

no later than 5:00 PM on the day indicated below and will be due in class on the day given in the table. Solutions will be posted on the due dates, and no late problem sets will be accepted.
The first midterm will be in class on Wednesday, February 20. It will include material covered through February 13. The second midterm will be in class on Wednesday, April 3. It will include material covered in class on February 18 through March 27. The midterms will be administered in our regular classroom at the regular class time. Please reserve these dates and times, because no make-up examinations will be provided without prior arrangement.

The final exam will be given at the time and place assigned by the university which is Friday, May 10, from 8:00AM-11:00AM in 113 DKH. Make-up final exams will be administered as required by university regulations. The final exam will cover material presented in class from April 1 through May 1.

The plus/minus system will be used when assigning final course grades. The course grade will be determined using the following weights:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Problem Sets</td>
<td>21%</td>
</tr>
<tr>
<td>Midterm Exam 1</td>
<td>23%</td>
</tr>
<tr>
<td>Midterm Exam 2</td>
<td>23%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>23%</td>
</tr>
</tbody>
</table>

A course average of 90 will earn at least an A-, a course average of 80 will earn at least a B-, and a course average of 70 will earn at least a C-. I expect a more generous distribution.

VII. Scheduling Conflicts

All scheduling conflicts must be reported to me by February 6, 2001. Alternative arrangements will be made for conflicts that arise as the result of religious observances, participation in scheduled activities of officially recognized groups, or as required by university rules for exams in other courses that were announced on the first day of class. No other make-up exams will be provided except in the case of documented emergencies such as an illness or a death in the family.
VII. Academic Integrity

You are responsible for knowing and abiding by the “Code of Policies and Regulations Applying to All Students.” The code is available at http://www.uiuc.edu/admin_manual/code/. In particular, any violation of academic integrity as spelled out in Rule 33 of the code (available at http://www.uiuc.edu/admin_manual/code/rule_33.html) will be pursued according to the specified procedures.

VIII. Problems Sets and Midterms from Previous Years

The problem sets with solutions and the midterms with solutions from previous years are available on my web site at:

http://www.cba.uiuc.edu/poteshma/Teaching/teaching_page.htm

IX. Syllabus

This syllabus is available at the following URL: