COURSE AND CONTACT INFORMATION

Course: ECON 6295 Financial and Derivatives Markets
Section 15
Semester: TBD
Time: Monday 6:10-8:40
Location: TBD

INSTRUCTOR
Name: Ken Danger
Campus Address: Department of Economics
2115 G St., NW, Washington, DC 20052
Phone: (202) 994-6150
E-mail: Danger@gwu.com
Office hours: By appointment

COURSE DESCRIPTION
Recent events have heightened student interest in broadly understanding financial and derivative markets. Banks, financial institutions, hedge funds and governments are interested in employing talented people who can manage and analyze data with a view towards providing thoughtful recommendations of courses for action.

This course is designed to provide students with a thorough introduction to the theoretical and practical aspects of financial and derivative markets. Students will apply quantitative and statistical approaches to a variety of problems throughout this course. A practical approach is adopted through the use of case studies and real life examples.

Students will learn about important interest rate markets, how asset prices are determined, securities markets and the important role that central banks play in financial markets. Students will also learn how to price, value and use derivatives from a practical perspective. Derivative topics covered include, no arbitrage based pricing, the pricing of forwards and futures, position valuation based on market prices, and option markets, pricing and strategies. Students will turn in six graded homework assignments and take a midterm and a final exam.
PREREQUISITES
ECON 6300 Mathematical Methods for Economists and ECON 6374 Probability and Statistics.

TEXTBOOKS


LEARNING OUTCOMES
Students will

- learn how to price, value, and use swaps, futures and forwards to hedge positions;
- learn about the relationship between forwards, futures and swaps
- be able to explain how arbitrage theory identifies a fair price;
- learn how to use options and price them using the Black-Scholes model;

AVERAGE MINIMUM AMOUNT OF INDEPENDENT, OUT-OF-CLASS, LEARNING EXPECTED PER WEEK
In a 15 week semester, including exam week, students are expected to spend a minimum of 100 minutes of out-of-class work for every 50 minutes of direct instruction, for a minimum total of 2.5 hours a week. A 3-credit course should include 2.5 hours of direct instruction and a minimum of 5 hours of independent learning or 7.5 hours per week.

GRADING

- Homework assignments 30%
- Midterm 35%
- Final 35%

Discussions: Each class will feature discussions about the week’s readings. Students are expected to have completed the readings before coming to class. Questions are encouraged.

Final exam: The final is not cumulative. It focuses on the material after the midterm.

UNIVERSITY POLICY ON RELIGIOUS HOLIDAYS
1. Students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance;
2. Faculty should extend to these students the courtesy of absence without penalty on such occasions, including permission to make up examinations;
3. Faculty who intend to observe a religious holiday should arrange at the beginning of the semester to reschedule missed classes or to make other provisions for their course-related activities

For GW’s teaching policies, see [http://www.gwu.edu/~academic/Teaching/main.htm](http://www.gwu.edu/~academic/Teaching/main.htm)
ACADEMIC INTEGRITY
I personally support the GW Code of Academic Integrity. It states: “Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, submitting the work of others in whole or part without crediting them and without appropriate authorization, and the fabrication of information.” Please note that allowing another student to copy your work is defined as cheating under the Academic Integrity code.

- Examples of academically dishonest behavior include, but are not limited to:
  1) Cheating
  2) Fabrication
  3) Plagiarism
  4) Falsification and forgery of University academic documents
  5) Facilitating academic dishonesty

Sanctions range from failure of the assignment, to failure of the course, to suspension or expulsion from the University.

For the remainder of the code, see: http://www.gwu.edu/~ntegrity/code.html

SUPPORT FOR STUDENTS OUTSIDE THE CLASSROOM

DISABILITY SUPPORT SERVICES (DSS)
Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: http://gwired.gwu.edu/dss/

UNIVERSITY COUNSELING CENTER (UCC) 202-994-5300
The University Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include:
- crisis and emergency mental health consultations
- confidential assessment, counseling services (individual and small group), and referrals
  http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices

SECURITY
In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.
## CLASS SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Readings</th>
<th>Assignment</th>
<th>Item Due</th>
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<tbody>
<tr>
<td>January 9</td>
<td>Financial and Futures Markets</td>
<td>B: Chapters 1 &amp; 2</td>
<td>PS. 1</td>
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<td>H: Chapters 1 &amp; 2</td>
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<td>January 16</td>
<td>MARTIN LUTHER KING HOLIDAY</td>
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<td>January 23</td>
<td>Asset Prices, Interest Rates and their</td>
<td>B: Chapters 3 &amp; 4</td>
<td>PS. 1</td>
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<td></td>
<td>Determinants</td>
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<tr>
<td>January 30</td>
<td>Interest Rates and Zero Rates</td>
<td>H: Ch. 4.1 – 4.5</td>
<td>PS. 2</td>
<td>PS.1</td>
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<tr>
<td>February 6</td>
<td>Forward and Futures Prices</td>
<td>H: Chapter 5</td>
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<tr>
<td>February 13</td>
<td>Interest Rate Futures and Forward Rate</td>
<td>H: Ch. 4.6 – 4.7 &amp; 6.1 – 6.3</td>
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<td></td>
<td>Agreements</td>
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<td>PS.3</td>
<td>PS.2</td>
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<tr>
<td>February 20</td>
<td>Hedging Strategies with Futures</td>
<td>H: Chapter 3</td>
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<td>February 27</td>
<td>Securities Markets</td>
<td>B: Chapter 5</td>
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<td>March 5-11</td>
<td>SPRING BREAK</td>
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<td>March 13</td>
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<td>MIDTERM</td>
<td>P.S. 3</td>
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<td>March 20</td>
<td>Option Markets</td>
<td>H: Chapter 10</td>
<td>PS. 4</td>
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<td>March 27</td>
<td>Option Properties</td>
<td>H: Chapter 11</td>
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<td>April 3</td>
<td>Option Strategies</td>
<td>H: Chapter 12</td>
<td>P.S. 5</td>
<td>P.S. 4</td>
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<tr>
<td>April 10</td>
<td>Binomial Trees</td>
<td>H: Chapter 13</td>
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<td>April 17</td>
<td>Wiener Processes and Ito’s Lemma</td>
<td>H: Chapter 14</td>
<td>PS. 6</td>
<td>P.S. 5</td>
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<td>April 24</td>
<td>Black Scholes</td>
<td>H: Chapter 15</td>
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<td>May 4</td>
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<td>FINAL</td>
<td>P.S. 6</td>
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