Derivatives (FINC 3521/6521)

Basic Course Information

<table>
<thead>
<tr>
<th>Semester</th>
<th>Zoom Room</th>
<th>Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2024</td>
<td>923 535 6947</td>
<td>Online Asynchronous</td>
</tr>
</tbody>
</table>

Instructor: Dr. Leo Pugachev  
Course website: Canvas

Office: ABH-227  
Phone: 314-516-6149  
Email: lpbnd@umsl.edu

Office Hours: Tuesday & Thursday 11:00 AM -12:30 PM; and any day by appointment.

1. Course Description and Objectives

Students engage in a comprehensive investigation of advanced risk management techniques. Futures, forwards, options and synthetic securities are explored to determine their effectiveness in generating the desired risk exposure. A comprehensive study of speculative market conditions and characteristics are assessed in conjunction with a variety of financial innovations. Valuation techniques and hedging theories are combined with mathematical models to determine their effectiveness in practical situations. Special topics are introduced as market conditions dictate. It is recommended that students take Investments (FINANCE 3520) prior to enrolling in FINANCE 3521.

2. Prerequisites and Required Materials

You should be at least a sophomore student. Prior to the beginning of the semester, you should have successfully completed ECON 1002, FIN 3500, and ACCTNG 2400.


Financial Calculator: We will use Excel for all calculation.

3. Content Delivery

This is a fully online, asynchronous class. All lectures have been recorded. At the start of each unit, you are required to watch and take notes on the recorded video lectures and email me any questions you have on the content.
4. Deliverables
   a. Video lectures and notes
      i. Weekly video lectures are posted to Canvas. Most are in 10-30 minute segments. Expect 45-120 minutes of video instruction per week.
      ii. Students are required to take notes, either on my video lectures or over the book chapter. Notes must be submitted on Sunday of the week the Unit is being taught.
      iii. These will be graded for completion but I drop your two lowest grades.
      iv. **No late submissions are accepted. No exceptions.**
   b. Homework assignments
      i. At the end of each unit or sub-unit, you will be required to submit a homework assignment.
      ii. These are meant to be attempted individually but it is fine to work with someone else. **However, you are expected to fully understand everything you submit.** That means you can’t mindlessly scribble down something from ChatGPT or your friend’s work.
      iii. The assignments will not be repetition of the notes but they will be untenable if you do not watch the videos.
      iv. Your lowest two grades across homework assignments will be dropped.
      v. **No late submissions are accepted. No exceptions.**
   c. Exams
      i. There will be one mid-term exam on **Saturday 3/23 from 12-4 PM** and one final exam, **Tuesday 5/6 from 6-10 PM.**
      ii. Exams may be part multiple choice, solving problems, and free response.
      iii. **No make-up exams will be given. No exceptions.**
   d. Final Project
      i. On the last Saturday of the semester, you will deliver a brief group presentation that I will assign at a later point. The presentation will showcase your grasp of the material discussed throughout the semester.
      ii. Groups will consist of 2-4 members. Members will evaluate each others’ contributions so your peers’ assessments will play prominently into your individual grade.
      iii. A rubric for the project will be distributed at a later date.

5. Grading and Testing Policies

Your final course grade will reflect the following components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 10 of 12 completed notes (10 x 10 points)</td>
<td>100</td>
<td>(10%)</td>
</tr>
<tr>
<td>Top 10 of 12 homework assignments (10 x 30 points)</td>
<td>300</td>
<td>(10%)</td>
</tr>
<tr>
<td>Midterm exam (150 points)</td>
<td>150</td>
<td>(15%)</td>
</tr>
<tr>
<td>Final exam (250 points)</td>
<td>250</td>
<td>(25%)</td>
</tr>
<tr>
<td>Group presentation (200 points)</td>
<td>200</td>
<td>(20%)</td>
</tr>
<tr>
<td><strong>Total Possible</strong></td>
<td>1000</td>
<td></td>
</tr>
</tbody>
</table>
Grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>940&lt;</td>
</tr>
<tr>
<td>A-</td>
<td>900-939</td>
</tr>
<tr>
<td>B+</td>
<td>870-899</td>
</tr>
<tr>
<td>B</td>
<td>840-869</td>
</tr>
<tr>
<td>B-</td>
<td>800-839</td>
</tr>
<tr>
<td>C+</td>
<td>770-799</td>
</tr>
<tr>
<td>C</td>
<td>740-769</td>
</tr>
<tr>
<td>C-</td>
<td>700-739</td>
</tr>
<tr>
<td>D+</td>
<td>670-699</td>
</tr>
<tr>
<td>D</td>
<td>640-669</td>
</tr>
<tr>
<td>D-</td>
<td>600-639</td>
</tr>
</tbody>
</table>

EXAM CURVING PARAMETERS:
At least 20% of students should be able to get an A; at least 50% should be able to get a B. If the raw score distribution fails either rule, every student’s test is curved upwards until both rules are satisfied. I will never curve downwards. If the raw score distribution meets these requirements, there is no curve.

PETPEEVES - PLEASE DO NOT ASK FOR:
- Extra credit opportunities (they will be available on exams only).
- Borderline grade consideration (I make ‘bumping up’ calls very sparingly at my sole discretion. I never ‘bump down’).
- Me to compute your grade for you. If you cannot add numbers and divide by total points available, let me know who your second grade teacher was and I’ll reach out to them.

Doing any of these things will assure me that you have not read the syllabus and further irk me…
6. **My responsibilities**

   a. **Stoke your interest in the material**

      Few people describe derivatives as fun or interesting. If you are willing to give it a chance, I usually have decent success at convincing you that it is actually pretty cool. It is crucial in understanding how and why the world around you works the way it does. It shouldn’t surprise you to learn that risk and return underpins a lot of decisions and finance is the science of evaluating risk and return.

   b. **Diligently and effectively communicate the material**

      I commit to preparing thoroughly for each class and explaining material lucidly. I hold myself to a very high standard in these commitments. If I’ve failed you in either, let me know and I will remedy the situation to your satisfaction.

   c. **Manage a casual and hospitable e-classroom where you feel comfortable asking questions**

      My goal is for every student, no matter how shy, to learn the material to whatever degree they want to. I will create as welcoming and friendly an atmosphere as I possibly can. I will strive toward a level of openness in which you feel comfortable asking me finance and non-finance related questions. I will make myself available outside of class whenever you need to help you understand the concepts or council you on professional questions.
7. Your responsibilities

a. Watching the lecture videos

12.5% of your grade is based simply on watching the video lectures and taking notes. The other 87.5% will be very hard to attain without the knowledge from those lectures. You are adults, make your own decisions but deal with the consequences of those decisions like adults, as well.

b. Commit to learning the material

It is your responsibility to learn the material!!! I cannot cram finance into the skulls of reluctant bystanders. If you would like to learn the material, I can provide you with resources, including video instruction, to help you do so. In the past, these resources have proven highly effective. Almost formulaically, students committed to learning the material will get A’s and B’s in the class.

When I say ‘committed,’ here’s what I mean:

- Spend 2–4 hours a week preparing for class by watching video lectures and filling out the notes.
- Spend 1–2 hours on each HW assignment
- Spend 5–10 hours studying for each exam.
- Spend 5–10 hours on the project.
- Ask questions when anything is unclear.
- Review deliverables to understand why you missed points and seek clarification.
- Seek my help outside class as frequently as you need it via office hours.

The most important of these is the last point. I am willing to meet with you 24/7 as fits your schedule. I am dedicated to helping you learn this material because I have a passion for both the material and teaching. I cannot help you unless I know you need help. Please let me know.

If you believe you exemplify this commitment but did not receive the grade you wanted I have failed you, accept full responsibility, and will work with you to bridge the gap toward the grade you deserve. If you have fallen short on any part of this commitment, I cannot accept the blame.

c. Final Note

Please excuse the strict language throughout this syllabus. I’m actually a nice guy but you wouldn’t believe what kind of idiotic, irresponsible, entitled stuff students have tried to pull over the years. Most of you aren’t those kind of people, but statistically one or two of them lurk among you. I’m just trying to caution those few schmucks…