NYU LONDON
[Derivatives: From Farm to Cable]
[FINCUB 9043] [Course Section 1]
[In-Person, and/or Remote Synchronous]

Greenwich Mean Time
(NYC + 5, except for +4 Oct. 24th-31st due to Daylight Savings Time)

Fall 2020
We know that you may be taking courses at multiple locations this semester. If you are enrolled in this course 100% remotely and are not a Go Local/Study Away student for this course site, please make sure that you’ve completed the online academic orientation via NYU Classes so you are aware of site specific support structure, policies and procedures. Please contact the site academic staff (nyul.academics@nyu.edu) if you have trouble accessing the NYU Classes site.

If you are attending in person, you will be assigned a seat on the first day and are expected to use that seat for the entire semester due to NYU COVID-19 safety protocol.

Course Information

- Prerequisite: All core courses as Foundations of Finance (FINC-UB 2) and Statistics or equivalents.
- London Academic Calendar: https://www.nyu.edu/london/calendar.html

Course Overview and Goals
This course covers the theoretical and practical aspects of futures, options, and other derivative instruments, which have become some of the most important tools of modern finance. While the primary focus is on financial derivatives, contracts based on commodities, credit risk, and other non-financial variables are also covered. Topics
include market institutions and trading practices, valuation models, hedging, and other risk management techniques. The course requires relatively extensive use of quantitative methods and theoretical reasoning. There will be emphasis on both developing the tools and mindset of the financial practitioner as well as examining specific applications in the form of examples and several case discussions.

Each session begins with a lecture. There follows case presentations and discussions

Upon Completion of this Course, students will be able to:

- Understand why derivatives have become one of the most important tools of modern finance, from both the academic and the practical standpoint.

- Acquire the necessary skills to design, value, and hedge derivatives contracts.

- Understand the analytical arguments in the technical publications that deal with the latest innovations in the field.

- Separate fact versus fiction regarding the valuation and trading of complex derivative contracts as Energy, MBS, XVAs and Cryptos

Course Requirements

Class Participation
You are expected to attend class in person or remote synchronously. Your active participation in class and attendance will be reflected in this part of the course requirements.

Grading of Assignments
The grade for this course will be determined according to these assessment components:

<table>
<thead>
<tr>
<th>Assignments/Activities</th>
<th>Description of Assignment</th>
<th>% of Final Grade</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class participation</td>
<td></td>
<td>10%</td>
<td>End of the term</td>
</tr>
<tr>
<td>Homework</td>
<td>Hand in 4 homework for 5 points each</td>
<td>20%</td>
<td>Beginning of each lecture</td>
</tr>
</tbody>
</table>
Midterm Project | 30%
---|---
Final Exam | 40%

**Grades**

- Letter grades for the entire course will be assigned as follows:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percent</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-range</td>
<td>Example: 90% and higher</td>
<td>[Enter expectations for A]</td>
</tr>
<tr>
<td>B-range</td>
<td>Example: 80% - 89.49%</td>
<td>[Enter expectations for B]</td>
</tr>
<tr>
<td>C-range</td>
<td>Example: 70% - 79.49%</td>
<td>[Enter expectations for C]</td>
</tr>
<tr>
<td>D-range</td>
<td>Example: 63.5% - 69.49%</td>
<td>[Enter expectations for an D]</td>
</tr>
<tr>
<td>F</td>
<td>Example: 63.49% and lower</td>
<td>[Enter description of failing work]</td>
</tr>
</tbody>
</table>

**Course Materials**

**Required Textbooks & Materials**

*Options, Futures and Other Derivatives (H)*
John Hull
Pearson
10th Edition,

**Optional Textbooks & Materials**

*Derivatives Principles and Practice (SD)*
Rangarajan Sundaram and Sanjiv Das
McGraw-Hill Education
2nd Edition
SBN-10 : 0078034736

An Introduction to the Mathematics of Financial Derivatives (N)
Ali Hirsa and Salih N. Neftci
Academic Press; Inc
Third Edition
ISBN-10 : 012384682X

McMillan on Options (McM)
Lawrence G Mcmillan
John Wiley & Sons
2nd Edition
ISBN-10 : 9780471678755

Resources
- Access your course materials: NYU Classes (nyu.edu/its/classes)
- Databases, journal articles, and more: Bobst Library (library.nyu.edu)
- Assistance with strengthening your writing: NYU Writing Center (nyu.mywconline.com)
- Obtain 24/7 technology assistance: IT Help Desk (nyu.edu/it/servicedesk)

Course Schedule
Reminder: Links to join class Zoom meetings will all be available in NYU Classes.

Topics and Assignments

<table>
<thead>
<tr>
<th>Session/Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Assignment Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1:</td>
<td>Introduction</td>
<td>H Ch1</td>
<td></td>
</tr>
<tr>
<td>Session 2:</td>
<td>Forwards and Futures Markets</td>
<td>H Ch 1 &amp; N ch1</td>
<td>Problem set</td>
</tr>
<tr>
<td>Session 3:</td>
<td>Trading Futures</td>
<td>H Ch 3</td>
<td>Problem set</td>
</tr>
<tr>
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</tr>
<tr>
<td>Session 4:</td>
<td>Pricing Forwards and Futures</td>
<td>SD Ch 3 &amp; 4</td>
<td>Harvard Case I</td>
</tr>
<tr>
<td>Session 5:</td>
<td>Hedging with Futures and Forwards</td>
<td>SD Ch 5</td>
<td>Harvard Case II</td>
</tr>
<tr>
<td>Session 6:</td>
<td>Swaps</td>
<td>H ch 7 &amp; SD Ch</td>
<td>Problem set</td>
</tr>
<tr>
<td>Session 7:</td>
<td>Midterm Presentation</td>
<td></td>
<td></td>
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<tr>
<td>Session 8:</td>
<td>Options Markets</td>
<td>H ch 10</td>
<td></td>
</tr>
<tr>
<td>Session 9:</td>
<td>Trading Strategies involving options Par 1</td>
<td>H ch 12</td>
<td>Problem set</td>
</tr>
<tr>
<td>Session 10:</td>
<td>Trading Strategies involving options Par 2</td>
<td>McM ch 2</td>
<td>Problem set</td>
</tr>
<tr>
<td>Session 11:</td>
<td>A Primer on Derivatives Pricing</td>
<td>H ch 13, 15 &amp; N Ch 4</td>
<td></td>
</tr>
<tr>
<td>Session 12:</td>
<td>Trading systems and Risk Management</td>
<td>McM ch 5 &amp; H Ch 22</td>
<td>Trading Simulation I</td>
</tr>
<tr>
<td>Session 13:</td>
<td>XVAs &amp; Credit Risk</td>
<td>H ch 9</td>
<td>Industry Case III</td>
</tr>
<tr>
<td>Session 14:</td>
<td>Complex Derivatives</td>
<td>Class Notes</td>
<td>Trading Simulation II</td>
</tr>
<tr>
<td>Final Assessment</td>
<td>Final Exam</td>
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</tbody>
</table>

Course Policies

Hygiene/Physical Distancing policies
- Students will be assigned/choose a seat on the first day of class. For NYU COVID-19 Safety protocols, please use the same seat for the duration of the semester.
Attendance and Tardiness

Studying at Global Academic Centers is an academically intensive and immersive experience, in which students from a wide range of backgrounds exchange ideas in discussion-based seminars. Learning in such an environment depends on the active participation of all students. And since classes typically meet once or twice a week, even a single absence can cause a student to miss a significant portion of a course. To ensure the integrity of this academic experience, class attendance at the centers or online through NYU Classes if the course is remote synchronous/blended, is expected promptly when class begins. Unexcused absences will affect students' semester participation grade. Students are responsible for making up any work missed due to absence. Repeated absences in a course may result in failure.

Key information on NYU London’s absence policy, how to report absences, and what kinds of absences can be excused can be found on our website (http://www.nyu.edu/london/academics/attendance-policy.html)

Classroom Etiquette/Expectations

Things to consider:

- Please be mindful of your microphone and video display during synchronous class meetings. Ambient noise and some visual images may disrupt class time for you and your peers.
- If you are not using your cell phone to follow the lesson, cell phones should be turned off or in silent mode during class time.
- Make sure to let your classmates finish speaking before you do.
- Please do not eat during class and minimize any other distracting noises (e.g. rustling of papers and leaving the classroom before the break, unless absolutely necessary)
- If deemed necessary by the study away site (ie COVID related need), synchronous class sessions may be recorded and archived for other students to view. This will be announced at the beginning of class time.
- Students should be respectful and courteous at all times to all participants in class. Consider using the chat function or “raise hand” function in order to add your voice to class discussions especially if leaving the video on presents challenges.

Final Exams

Final exams must be taken at their designated times. Should there be a conflict between final exams, please bring it to the attention of the London Academics team (nyul.academics@nyu.edu) as soon as this is known to facilitate alternate arrangements. Final exams may not be taken early, and students should not plan to leave the site before the end of the finals period.

Incomplete Grade Policy

An “incomplete” is a temporary grade that indicates that the student has, for good reason, not completed all of the course work. This grade is not awarded automatically nor is it guaranteed;
rather, the student must ask the instructor for a grade of “incomplete,” present documented evidence of illness, an emergency, or other compelling circumstances, and clarify the remaining course requirements with the instructor.

In order for a grade of “incomplete” to be registered on the transcript, the student must fill out a form, in collaboration with the course instructor and the academic administration at the site; it should then be submitted to the site’s academic office. The submitted form must include a deadline by which the missing work will be completed. This deadline may not be later than the end of the following semester.

**Academic Honesty, Plagiarism and Late Work**

As the University's policy on "Academic Integrity for Students at NYU" states: "At NYU, a commitment to excellence, fairness, honesty, and respect within and outside the classroom is essential to maintaining the integrity of our community. By accepting membership in this community, students take responsibility for demonstrating these values in their own conduct and for recognizing and supporting these values in others." **Students at Global Academic Centers must follow the University and school policies.**

The presentation of another person’s words, ideas, judgment, images, or data as though they were your own, whether intentionally or unintentionally, constitutes an act of plagiarism.

You can find details on these topics and more on this section of our NYUL website ([https://www.nyu.edu/london/academics/academic-policies.html](https://www.nyu.edu/london/academics/academic-policies.html)) and on the Policies and Procedures section of the NYU website for students studying away at global sites ([https://www.nyu.edu/academics/studying-abroad/upperclassmen-semester-academic-year-study-away/academic-resources/policies-and-procedures.html](https://www.nyu.edu/academics/studying-abroad/upperclassmen-semester-academic-year-study-away/academic-resources/policies-and-procedures.html)).

**Inclusion, Diversity, Belonging and Equity**

NYU is committed to building a culture that respects and embraces diversity, inclusion, and equity, believing that these values – in all their facets – are, as President Andrew Hamilton has said, “...not only important to cherish for their own sake, but because they are also vital for advancing knowledge, sparking innovation, and creating sustainable communities.” At NYU London, we are committed to creating a learning environment that:

- fosters intellectual inquiry, research, and artistic practices that respectfully and rigorously take account of a wide range of opinions, perspectives, and experiences; and

- promotes an inclusive community in which diversity is valued and every member feels they have a rightful place, is welcome and respected, and is supported in their endeavours.

**Moses Accommodations Statement**

Academic accommodations are available for students with documented and registered disabilities. Please contact the Moses Center for Student Accessibility (+1 212-998-4980 or mosescsd@nyu.edu) for further information. Students who are requesting academic accommodations are advised to reach out to the Moses Center as early as possible in the
semester for assistance. Accommodations for this course are managed through the site sponsoring the class once you request it.

Instructor Bio/About Your Instructor

Diego Salzman is an Adjunct Professor of Finance at NYU and a Senior Teaching Fellow of the UCL School of Management at University College London (UCL). Prof Salzman has held positions at Hult International Business School, the University of Amsterdam, and the Radboud University. He holds a PhD in Economics with specialisation in Behavioural Finance and has been a visiting lecturer in Europe, Asia, North and South America.