COURSE OVERVIEW AND OBJECTIVES

This course covers the major types of derivatives such as forwards, futures, swaps, ABS, CDS and options. By the end of the course, students will have good knowledge of how these products work, how they are used in real world, how they are priced, and how they are used as hedging instruments. In addition, the course will challenge students to use the derivative tools that are available in Bloomberg. This course will help students who are seeking a career relating to derivatives.

COURSE MATERIALS

All lecture notes, assignments and case materials will be distributed via Canvas.

Main textbook: “Derivatives”, Wendy L. Pirie, CFA, CFA Institute Investment Series (especially Chapters 1 to 5)

Other related textbooks (Optional)
“Fundamentals of Futures and Options Markets”, by John C. Hull, publisher: Pearson Prentice Hall. (8th and 7th editions suffice)

Wall Street Journal, Economist and Bloomberg.com are other reading materials. Students should be very familiar with Excel.

Students should form a team of 4. Each team is encouraged to work on a project that requires them to apply derivative solutions to some kind of real-world problem. Each team will have to present the project at the end of the semester.

ACADEMIC INTEGRITY

I do NOT tolerate cheating. Students are responsible for understanding the RU Academic Integrity Policy (http://academicintegrity.rutgers.edu/).

I will strongly enforce this Policy and pursue all violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, “On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment.” I will screen all written assignments through SafeAssign or Turnitin, plagiarism detection services that compare the work against a large
database of past work. Don’t let cheating destroy your hard-earned opportunity to learn. See business.rutgers.edu/ai for more details.

GRADING POLICY

Mid-Term 40%

Final 40%

Team Project 20%

Bonus: 90% to 100% Attendance 1 point

Active Participation 2 points

(Attendance will be taken on random days)

COURSE SCHEDULE

Week 1: Basics of Derivatives ML1, ML2, CFA-Chapter 1
ABS, CDO and Credit Derivatives ML3, CFA-Chapter 1

Week 2: Option Basics ML4, CFA-Chapter 1
Basics of Derivative Pricing & Arbitrage ML5, CFA-Chapter 2

Week 3: Pricing of Forward & Futures contract ML6, CFA-Chapter 3

Week 4: Pricing of Swap Contracts & FRA ML7, CFA-Chapter 3

Week 5: Pricing of Option & Put-Call Parity ML8, CFA-Chapter 3

Week 6: Review for exam 1
Week 7: Mid-Term

Week 8: Binomial Trees & Black-Scholes-Merton ML9, CFA-Chapter 4

Week 9: The Greeks and Hedging ML10, CFA-Chapter 4

Week 10: Synthetic Positions and Trading Strategies ML11, CFA-Chapter 5

Week 11: Covered Calls and Protective Puts ML12, CFA-Chapter 5

Applications of Derivatives in real world ML13

Week 12: Applications of Derivatives in financial world ML14

Week 13: Team Presentation

Week 14: Review for exam 2

Week 15: Final Exam

SUPPORT SERVICES


[Rutgers University-New Brunswick ODS phone (848)445-6800 or email dsoffice@echo.rutgers.edu]

[Rutgers University-Newark ODS phone (973)353-5375 or email ods@newark.rutgers.edu]
If you are pregnant, the Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy.

[Rutgers University-New Brunswick Title IX Coordinator phone (848)932-8200 or email jackie.moran@rutgers.edu]

[Rutgers University-Newark Office of Title IX and ADA Compliance phone (973)353-1906 or email TitleIX@newark.rutgers.edu]

If you seek religious accommodations, the Office of the Dean of Students is available to verify absences for religious observance, as needed.

[Rutgers University-New Brunswick Dean of Students phone (848)932-2300 or email deanofstudents@echo.rutgers.edu]

[Rutgers University-Newark Dean of Students phone (973)353-5063 or email DeanofStudents@newark.rutgers.edu]

If you have experienced any form of gender or sex-based discrimination or harassment, including sexual assault, sexual harassment, relationship violence, or stalking, the Office for Violence Prevention and Victim Assistance provides help and support. More information can be found at http://vpva.rutgers.edu/.

[Rutgers University-New Brunswick incident report link: http://studentconduct.rutgers.edu/concern/. You may contact the Office for Violence Prevention and Victim Assistance at (848)932-1181]

[Rutgers University-Newark incident report link: https://cm.maxient.com/reportingform.php?RutgersUniv&layout_id=7. You may also contact the Office of Title IX and ADA Compliance at (973)353-1906 or email TitleIX@newark.rutgers.edu. If you wish to speak with a staff member who is confidential and does not have a reporting responsibility, you may contact the Office for Violence Prevention and Victim Assistance at (973)353-1918 or email run.vpva@rutgers.edu]

If students who have experienced a temporary condition or injury that is adversely affecting their ability to fully participate, you should submit a request via https://temporaryconditions.rutgers.edu.

If you are a military veteran or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. http://veterans.rutgers.edu/
If you are in need of **mental health** services, please use our readily available services.

[Rutgers University-Newark Counseling Center: http://counseling.newark.rutgers.edu/]
[Rutgers Counseling and Psychological Services–New Brunswick: http://rhscaps.rutgers.edu/]

If you are in need of **physical health** services, please use our readily available services.

[Rutgers Health Services – Newark: http://health.newark.rutgers.edu/]
[Rutgers Health Services – New Brunswick: http://health.rutgers.edu/]

If you are in need of **legal** services, please use our readily available services: http://rusls.rutgers.edu/

Students experiencing difficulty in courses due to *English as a second language (ESL)* should contact the Program in American Language Studies for supports.

[Rutgers–Newark: PALS@newark.rutgers.edu]
[Rutgers–New Brunswick: eslpls@english.rutgers.edu]

If you are in need of additional **academic assistance**, please use our readily available services.

[Rutgers University-Newark Learning Center: http://www.ncas.rutgers.edu/rlc]
[Rutgers University-Newark Writing Center: http://www.ncas.rutgers.edu/writingcenter]
[Rutgers University-New Brunswick Learning Center: https://rlc.rutgers.edu/]

[Optional items that many faculty include:]

- Students must sign, date, and return a statement declaring that they understand the RU Academic Integrity Policy.
- Students must sign, date, and return a statement declaring that they understand this syllabus.]