

Standard Course Outline

FIN 480 Derivatives

I. General Information:

Units: 3 credits

Prerequisites: FIN 350.

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II. Catalog Description:

This course covers the pricing and uses of the most common derivatives including options, forward contracts, futures contracts, and swaps. Letter grade only (A- F).

III. Curriculum Justification:

The course addresses a number of [COB Undergraduate Program Learning Goals](#):

General

- ♦ **Critical Thinking:** Students will be able to demonstrate conceptual learning, critical thinking, and problem-solving skills.
 - Students will be able to demonstrate the competence of integrating and applying their conceptual and theoretical knowledge of derivative securities to actively trade these contracts in financial markets especially for risk management purpose.
- ♦ **Ethics:** Students will be able to demonstrate awareness of ethical, social responsibility, and citizenship issues and the ability to apply them in decision making in the local, regional, and global communities.
 - Students will demonstrate that they are aware of the ethical and social responsibility issues in finance and will prepare to make trading derivative decisions in the future using ethical, legal, and socially responsible choices in a financial context.
- ♦ **Team & Interpersonal Skills:** Students will be able to demonstrate interpersonal skills for working in a dynamic and diverse world, including in a team environment.
 - Students will generate team/group decision-making through managing interpersonal conflict, negotiating and integrating their skills with team members to produce investment decisions and deliver oral presentations. Students will also demonstrate that they understand the common errors in team/group decision making and should be able to resolve them as a team.
- ♦ **Communication Skills:** Students will be able to demonstrate effective oral and written communication skills in English.
 - The significant writing requirement of this course, with ongoing feedback, demonstrates that the student must be proficient in written communication skills. Students will also possess the skills enabling them to conduct a combination of the oral and written group presentation.

Management Specific

- ♦ **Business Functions:** Students will be able to demonstrate understanding of all relevant business functions, forward looking practices and related theories and be able to integrate this

functional knowledge in order to address current business problems.

- Students will gain an insight into the properties, risk and theoretical valuation of derivative securities. They will also demonstrate how to trade those securities and what risk and return characterize the various types of trades.
- ◆ **Quantitative & Technical Skills:** Students will develop the competence of quantitative and technological skills enabling them to analyze and interpret business data and to improve business performance.
 - Students will possess quantitative and technical skills enabling them to improve derivative trading decisions as hedgers, speculators, and arbitrageurs in the financial markets. Students will demonstrate that they can make decisions based on quantitative analysis using the principles, concepts, and techniques through their performance on exams, homework assignments, cases and research projects.
- ◆ **Domestic & Global Environment:** Students will be able to demonstrate knowledge of today's domestic and global-oriented business environment (e.g., legal, regulatory, political, cultural, and economic).
 - Students will demonstrate that they can make derivative trading decisions in today's global domestic and global marketing environment (e.g. legal, regulatory, political, cultural and economic environmental factors).

IV. Course Objectives, Student Learning Outcomes, Evaluation Instruments, and Instructional Strategies for Skill Development

OBJECTIVE - Critical Thinking:

A. MEASURABLE STUDENT LEARNING OUTCOME(S):

After taking this course, students will be able to integrate and apply their conceptual and theoretical knowledge of derivative securities to actively trade these contracts in financial markets especially for risk management purpose.

B. EVALUATION INSTRUMENTS (ASSIGNMENTS):

Specific assignments will vary by instructor, but typical assignments include professional trading simulations, trading reports and presentations. Each student has a paper money account with Stock-Trak where the student is required to carry out trading assignments that connect real life applications to theories relating to hedging and trading derivatives. This enables a deeper understanding of the risks involved in derivatives trades.

C. INSTRUCTIONAL STRATEGIES FOR SKILL DEVELOPMENT:

Instructors will explain rubrics for writing expectations both before and after the trading reports, reviewing components of examples of well-written trading reports, incorporating feedback on trading reports with opportunities for revision.

OBJECTIVE - Business Functions:

A. MEASURABLE STUDENT LEARNING OUTCOME(S):

After taking this course, students will learn the properties, risk and theoretical valuation of derivative securities. They will also how to trade those securities and what risk and return characterize the various types of trades.

B. EVALUATION INSTRUMENTS (ASSIGNMENTS):

Specific assignments will vary by instructor, but typical assignments include multiple choice



and problem-oriented exams and quizzes, short answer and essay exams, and in-class problem-solving assignments. Students are expected to demonstrate the competence of EXCEL application and Bloomberg Terminal in research assignments.

C. INSTRUCTIONAL STRATEGIES FOR SKILL DEVELOPMENT:

Instructors will explain rubrics for writing and quantitative expectations both before and after case study discussions, project reports, presentations, and exams.

OBJECTIVE - Quantitative and Technical Skills:

A. MEASURABLE STUDENT LEARNING OUTCOME(S):

After taking this course, will possess quantitative and technical skills enabling them to improve derivative trading decisions as hedgers, speculators, and arbitrageurs in the financial markets. Students will demonstrate that they can make decisions based on quantitative analysis using the principles, concepts, and techniques through their performance on exams, homework assignments, cases and research projects. As part of this course, students will be required to obtain a working knowledge of DerivaGem software packages, Bloomberg terminal and Excel.

B. EVALUATION INSTRUMENTS (ASSIGNMENTS):

Specific assignments will vary by instructor, but typical assignments include professional trading simulations, trading reports and presentations, and assignment and valuation project EXCEL, WRDS and Bloomberg terminal must be implemented whenever possible.

C. INSTRUCTIONAL STRATEGIES FOR SKILL DEVELOPMENT:

Instructors will explain rubrics for writing expectations both before and after the trading reports, reviewing components of examples of well-written trading reports, incorporating feedback on trading reports with opportunities for revision.

V. Outline of Subject Matter

SUGGESTED COURSE SCHEDULE / TOPICS TO BE COVERED

1. Introduction to forwards and futures
2. Hedging with forwards and futures
3. Pricing forwards and futures
4. Interest rate and currency swaps
5. Introduction to options
6. Binomial model
7. Black-Scholes model
8. Hedging with options; Limitations of Black-Scholes

At least one class meeting should be devoted to content related to current topic and futuristic trends of finance including but not limited to Fintech, cryptocurrency, augmented reality, cyber security, public cloud, block chain etc.

VI. Methods of Instruction

INSTRUCTION MODE

Check one or more modes of instruction that this course is authorized to use. Syllabi must also contain an explicit statement describing the mode of instructional delivery.

May refer to university policies on [Academic Technology and the Mode of Instruction](#) and [Course](#)



[Syllabi and Standard Course Outlines](#) for descriptions of modes of instruction and for guidelines for non-traditional modes of instruction.

This class can be offered as an online, hybrid, or flipped class, with the approval of the department chair, subject to program requirements and college guidelines.

✓ Traditional ✓ Hybrid ✓ Local Online ✓ Distance Education

CLASSROOM ACTIVITIES

Method of instruction generally includes a selected combination of the following:

- Lecture
- Class discussions
- In-class exercises
- Homework assignments
- Case studies
- Reports of current financial topics
- Individual or group projects
- Examinations

EXTENT AND NATURE OF TECHNOLOGY USE.

Instructors will require students to use Bloomberg Terminal and Excel as part of instruction. Students are required to finish the course modules of Bloomberg Market Concepts (BMC) which is available on the terminal and eventually adding BMC to the Certificates section of their LinkedIn profile.

Students will work on case studies and use DerivaGem software packages to implement basic derivatives valuation models.

If the course is conducted entirely through Alternative Modes of Instruction, both synchronous and asynchronous learning will be incorporated. Students will access the course material and activities on BeachBoard and will be required to participate in synchronous class meetings via Zoom. All students must have access to a computer or other device with Internet functionality and a webcam to access BeachBoard and Zoom, participate in class activities, and complete assignments. Students must also have access to Internet with sufficient speed in order to be able to participate in synchronous meetings.

Students who experience unexpected technical issues for a class session or assignment will be provided with the opportunity to make up missed work. Students who experience technical issues during a synchronous meeting or with an assignment should notify the instructor via email as soon as possible.

To access this course on [BeachBoard](#) and [Zoom](#), students will need access to the Internet and a supported web browser (Safari, Google Chrome or Firefox). Log in to [BeachBoard](#) with your CSULB Campus ID and BeachID password. Once logged in, you will see the course listed in the My Courses widget; click on the title to access the course. To access Zoom, first [install the latest version](#) of the Zoom app on your device. Use the link provided and/or sign in using your CSULB Campus ID and BeachID password via Single Sign On to create or join a Zoom session. If students need technical assistance during the course or would like to report a technical issue with BeachBoard or Zoom, they should contact the [Technology Help Desk](#).

The university is expected to provide an in-person computer lab in the University Student Union during 2020-21 and the opportunity to borrow laptops and/or wi-fi hotspots, if needed. For



laptops, call 562-985-5587, Mo-Fri, 8 am – 5 pm. Click here to access [A map of campus wi-fi coverage](#).

If you need technical assistance at any time during the course or need to report a problem with BeachBoard or Zoom, please contact the Technology Help Desk at helpdesk@csulb.edu or (562) 985-4959.

VII. Information about Textbooks/Readings

Recommended Textbooks:

Options, Futures, and Other Derivatives, 10th edition, Pearson, 2017, by John C. Hull

VIII. Instructional Policies Requirements

Instructor's syllabi must contain explicit statements regarding their own policies with regard to plagiarism, withdrawal, absences, etc., which should be consistent with the university policies published in the CSULB Catalog. It is expected that every course will follow university policies on [Attendance, Course Syllabi & Standard Course Outlines](#), and [Final Course Grades, Grading Procedures, and Final Assessments](#). If some or all sections of the course are to be taught, in part or entirely, by distance learning, the course must follow the provisions of university policy on [Academic Technology and the Mode of Instruction](#). Instructors should refer to the current [CSULB Catalog](#) and to the [Academic Senate](#) website for campus guidelines and policy statements as they develop their individual course policies.

Lecturing on theories & concepts of finance and applications to investments. Quantitative techniques and problem solving. Managing an investment portfolio, presentation & discussion (group project). Individual hedging strategy using derivative securities.

Instructors in planning the exams, and other grading procedures, should adhere to the relevant [University Policy on Grades, Grading Procedures, and Final Assessments](#).

The textbooks for this course should be chosen in accordance with the university policy on [Selection of Instructional Materials](#). There are many appropriate textbooks for this course; it is generally agreed that none of them is perfect. The following suggestion is based on the special nature of this core MBA course:

- ♦ Students will arrive at this course with extraordinary range of backgrounds; and therefore prior knowledge will be highly variable, however,
- ♦ Students will have a level of maturity that will enable them to look at a broader picture via more advanced cases, simulations, group projects and
- ♦ Examinations must be essay-type and/or problem solving questions and avoid the use of multiple-choice questions.

IX. Course Assessment and Grading

The exact set of course assignments will vary depending on the instructor. However, at least one portfolio analysis project is required and will count for certain percentages of final grade.

Grading policies, procedures, and the percentage of the course grade associated with each assessment must be explicit on each instructor's syllabus and must be consistent with University policy on [Final Course Grades, Grading Procedures, and Final Assessments](#). Instructors must develop scoring guidelines for assessments, which must be made available to students. The final course grade will be based on a descriptive scale such as the following:



Percent	Grade	Grade Description
90-100%	A	Mastery of the relevant course standards.
80-89%	B	Above average proficiency of the relevant course standards.
70-79%	C	Satisfactory proficiency of the relevant course standards.
60-69%	D	Partial proficiency of the relevant course standards.
Below 60%	F	Little or no proficiency of the relevant course standards.

X. Disabilities

The SCO and syllabi should contain a statement regarding support services for students with disabilities. Under the Office of Civil Rights and the Americans with Disability Act, students may disclose **at any time** during the academic semester that they need a classroom accommodation based on a disability. Thus, it is strongly recommended that all SCOs and syllabi use the following language, as it meets both federal and state legal standards.

The Bob Murphy Access Center (BMAC)

The Bob Murphy Access Center (BMAC) provides certification for students with disabilities and helps arrange relevant accommodations: [Bob Murphy Access Center](#). Any student requesting academic accommodations based on a disability is strongly encouraged to register with Disabled Student Services (BMAC) each semester. A letter of verification for approved accommodations can be obtained from BMAC. Please be sure to provide your instructor with BMAC verification of accommodations as early in the semester as possible. The phone number for BMAC is (562) 985 5401. The email address is: amac@csulb.edu.

XI. Assistive Technology

The SCO should contain a statement regarding the university policy on assistive technology.

In compliance with university policy on [Accessibility and Faculty Responsibility for the Selection of Instructional Materials](#), instructors are responsible for ensuring that their syllabi and instructional materials are accessible to all students.

XII. Sexual Assault, Rape, Dating/Domestic Violence, & Stalking

Title IX prohibits gender discrimination, including sexual harassment and sexual misconduct. If you have experienced sexual harassment, sexual assault, rape, dating/domestic violence, or stalking, the campus confidential Victim's Advocate is available to help. Jaqueline Urtez (e: advocate@csulb.edu, p: (562) 985-2668) can provide free and confidential support, accommodations, and referrals for victims without having to report the assault to campus authorities. While students are welcome to discuss assaults with faculty, both faculty and teaching assistants are mandatory reporters who are required to report all incidents of sexual harassment/misconduct to the Title IX office for follow-up and possible investigation. Students who do wish to report the assault for possible investigation may contact the confidential victim's advocate, who can help them through the reporting process, or they can report the assault directly to the [Title IX Office](#) by completing an online reporting form or contacting the Office of Equity & Diversity at OED@csulb.edu.

XIII. Consistency of SCO Standards across Sections

All future syllabi will conform to the SCO. The course coordinator should review the SCO and offer advice and/or materials to faculty member new to teaching the course. The course



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coordinator may offer or require regular review of instructors' course materials as well as anonymous samples of student work.

XIV. [Additional Resources for Development of Syllabi](#)