

COURSE CODE: BUAD 353

COURSE TITLE: Derivative Securities

Calendar Description

This course discusses the valuation methods and hedging strategies of options, futures, swaps and other financial derivatives. It presents a balance of the institutional details, theoretical foundations, and practical applications.

Prerequisite(s): BUAD 350 and minimum third-year standing

Co-requisite(s): None

Prerequisite For: None

Substitutable Courses: None

Graduation Requirement: BBA, Finance - Elective

Transfer Credit: None

Special Notes: None

Credits: 3

Hours per Week: 3

Originally Developed: January 2003

EDCO Approval: November 2013

CHAIR'S APPROVAL:



Learning Outcomes

- Outcome Upon completion of this course students will be able to:
- 1 **Analyze** profit/loss of options, futures, swaps, and other derivatives.
 - 2 **Demonstrate** sufficient knowledge of the pricing mechanism of derivatives.
 - 3 **Trade** derivatives as hedgers or speculators.
 - 4 **Design** strategies in portfolio management using various derivatives.

Course Objectives

- Objectives This course will cover the following content:
- 1 See weekly Schedule

Professors

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Evaluation Procedure

Investment Practice	15 %
Term Work	10 %
Mid-Term Exam	35 %
Final Exam	40 %
Total	100 %

What is the acceptable and approved use of Artificial Intelligence (AI) in this course?

Generative AI tools are permitted with specific restrictions

- Students are permitted to use AI tools for formative work such as gathering information or brainstorming but may not use them for any assessed work or final submission. Whenever generative AI tools are used, they must be appropriately cited. (See [How to cite ChatGPT \(apa.org\)](#))
- Students can use AI tools to assist in proofreading, grammar checking, and language refinement for written assignments where the student has composed the first draft. Students should keep in mind that AI revisions are only suggestions and that they are ultimately responsible for the quality of their submissions. Students may be asked by their instructor how they interacted with AI tools and be prepared to explain and justify their process.

Required Materials

Fundamentals of Futures and Options Markets, John C. Hall, Pearson
Solutions Manual and Study Guide

Notes

In order to pass this course, the student must obtain a weighted average of 50% or higher on the exams. There will be no make-up or supplementary exams/quizzes. Class attendance and active class participation/contributions are expected.

Course Format

Lectures, in-class discussions, investment practice, assignments and quizzes, and exams.

Investment Practice - Individual

The investment practice component requires students to participate in the StockTrak Global Portfolio Simulations. The registration link is below.

<https://www.stocktrak.com/members/register?sessionid=325515>

The due date for registration is January 31 – and you are encouraged to register ASAP. You can start trading on January 6 and your last trading day is April 30.

You are allowed to trade stocks, bonds, options, futures and spots.

You will be given trading assignments to complete through the course.

Course Schedule

(Subject to change at the discretion of the professor)

Date		Topic	Textbook
2025 Week of:		Monday, January 6 th , First day of class Friday, January 17 th , Last day to register for Winter 2025 Friday, January 17 th , Last day to withdraw from class without academic penalty Monday, February 17 th , Statutory Holiday (no classes) Tuesday, February 18 th – Friday, February 21 st , Mid-semester break (no classes) Friday, April 11 th , Last day of classes Friday, April 18 th and Monday, April 21 st – Statutory Holidays (no classes) Tuesday, April 15 th – Tuesday, April 29 th – Final Exam Period	Chapter(s):
Jan	6	Introduction Arbitrage discussion, Use of derivatives	Ch 1,2
	13	Introduction to futures and forwards Futures markets and margin requirements Interest rates and FRA's	3, 4
	20	Hedging strategies using futures Valuation of forwards and futures	5
	27	Interest rates futures	6
Feb	3	Interest rate swaps	7
	10	Currency swaps Review for midterm exam	7
	17	No class on Monday Feb 17 Mid-semester break	
	24	Midterm exam Review and Mechanics of Options markets	9
Mar	3	Properties of stock options Put call parity	10,11
	10	Trading strategies involving options	11
	17	Options valuation – binomial model	12
	24	Options valuation – The Black-Scholes Model	13
	31	Options Greeks and Risk Management	17
Apr	7	Review for the final exam	
	15	Final Exam Period	

Skills Across the Business Curriculum

The Okanagan School of Business promotes core skills across the curriculum. These skills include reading, written and oral communications, computers, small business, and academic standards of ethics, honesty and integrity.

Student Conduct and Academic Honesty

What is the Disruption of Instructional Activities?

At Okanagan College (OC), disruption of instructional activities includes student “conduct which interferes with examinations, lectures, seminars, tutorials, group meetings, other related activities, and with students using the study facilities of OC”, as well as conduct that leads to property damage, assault, discrimination, harassment and fraud. Penalties for disruption of instructional activities include a range of sanctions from a warning and/or a failing grade on an assignment, examination or course to suspension from OC.

What is Cheating?

“Cheating includes but is not limited to dishonest or attempted dishonest conduct during tests or examinations in which the use is made of books, notes, diagrams or other aids excluding those authorized by the examiner. It includes communicating with others for the purpose of obtaining information, copying from the work of others and purposely exposing or conveying information to other students who are taking the test or examination.”

Students must submit independently written work. Students may not write joint or collaborative assignments with other students unless the instructor approves it in advance as a group/team project. Students who share their work with other students are equally involved in cheating.

What is Plagiarism?

Plagiarism is defined as “the presentation of another person’s work or ideas without proper or complete acknowledgement.” It is the serious academic offence of reproducing someone else’s work, including words, ideas and media, without permission for course credit towards a certificate, diploma, degree and/or professional designation. The defining characteristic is that the work is not yours.

“Intentional plagiarism is the deliberate presentation of another’s work or ideas as one’s own.” Intentional plagiarism can be a copy of material from a journal article, a book chapter, data from the Internet, another student, work submitted for credit in another course or from other sources.

“Unintentional plagiarism is the inadvertent presentation of another’s work or ideas without proper acknowledgement because of poor or inadequate practices. Unintentional plagiarism is a failure of scholarship; intentional plagiarism is an act of deceit.”

What are the Students’ Responsibilities to Avoid Plagiarism?

Students have a responsibility to read the OC Plagiarism Policy and Procedures outlined in the OC calendar, which is available in online format www.okanagan.bc.ca. Students must acknowledge the sources of information used on all their assignments. This usually involves putting the authors’ name and the year of publication in parentheses after the sentence in which you used the material, then at the end of your paper, writing out the complete references in a Reference section.

“Students are responsible for learning and applying the proper scholarly practices for acknowledging the work and ideas of others. Students who are unsure of what constitutes plagiarism should refer to the UBC publication “*Plagiarism Avoided; Taking Responsibility for your Work*”. This guide is available in OC bookstores and libraries.

Students are expected to understand research and writing techniques and documentation styles. The Okanagan School of Business requires the use of the APA or MLA style, but suggests that students cite references using the APA guidelines (see Publication Manual of the American Psychological Association, 6th edition (2009)). A copy of the APA manual is available in the reference section and also available for circulation from OC libraries. The library website has access to these two major citing styles.

What are the Penalties for Plagiarism and Cheating?

The Okanagan School of Business does not tolerate plagiarism or cheating. All professors actively check for plagiarism and cheating and the Okanagan School of Business subscribes to an electronic plagiarism detection service. All incidents of plagiarism or cheating are reported and result in a formal letter of reprimand outlining the nature of the infraction, the evidence and the penalty. The Dean of the Okanagan School of Business and the Registrar record and monitor all instances of plagiarism and cheating. Penalties for plagiarism and cheating reflect the seriousness and circumstances of the offence and the range of penalties includes suspension from OC.