



BUSI 3512A: Derivatives

Fall 2026

Instructor	Dr. Yuriy Zabolotnyuk, CFA, FRM
Email Address	yuriy.zabolotnyuk@carleton.ca
Class Times	Friday 11:35am-2:25pm
Modality	In-person
Office Hours	TBA
Office Location	NI7022
TA Name/Email	TBA

Email response policy: I will try my best to respond to emails received during business hours (9am-5pm) during the same business day. Emails received after hours will be responded to during the next business day.

Pre-Requisites & Preclusions

Precludes additional credit for Precludes additional credit for BUSI 4512 (no longer offered).

Pre-requisites: BUSI 2501 or BUSI 2505 (with a grade of C+ or higher in each), and STAT 2601 or STAT 2559, and ECON 1001 and ECON 1002, and MATH 1009 or MATH 1052 (with a grade of C- or higher in each).

Course Description/Instructor's Statement

Course Calendar description from the [2026/2027 University calendar](#):

Derivative instruments and their use for speculation and hedging. Analysis of different markets where instruments trade, and their characteristics. Pricing models highlighted to determine how individuals and corporations can better manage risk; exotics and newer innovations.

Course Description

This is an introductory course on derivative securities. The course will focus on options, forward and futures contracts, and swaps. We will look at how derivatives can be used for hedging risk. We will study the organization of derivatives markets, relevant trading strategies and the pricing models applicable to these securities.

Learning Outcomes

1. Students will be able to describe main features and characteristics of forward, futures, options, and swap contracts and markets.
2. Students will be able to value forwards, futures, options, and swap contracts.
3. Students will be able to demonstrate how derivative contracts can be used for hedging, speculation, and arbitrage.

Required Materials & Prices

John Hull, *Options, Futures, and Other Derivatives*, 11th ed., Pearson, 2022.

Textbook (s) available at the Campus Store in Nideyinàn or order online for pick up:
<https://carletonshop.ca/Course/term>

Grading Scheme

Lecture Video Quizzes (5@2%)	10%
In-class Quizzes (best 4 out of 5 @7.5% each)	30%
Midterm Exam	20-25%
Final Exam	35-40%
Total	100%

Lecture video quizzes: short quizzes designed to focus on material that was discussed in recorded lecture videos. Students must complete these quizzes on Brightspace by stated deadlines after watching the respective videos.

In-class quizzes: Quizzes are designed to focus on material that was just covered. They will be 20-30 minutes in length, written in class on paper, and will consist of a number of multiple-choice questions.

Midterm and final exams: The exams will consist of multiple-choice questions and longer problems. The midterm exam will be held **in-class on October 23**.

The date and location of the final exam will be announced through the University's normal procedures for such matters. Be sure that you are available for the final exam. *Allowance will not be made for conflicting travel plans.* The final exam is for evaluation purposes, not instruction. It will not be returned to students.

Deferred midterm exam:

In the event that you are unable to write a midterm, test, or other scheduled assessments due to extenuating circumstances (such as a death in the family, illness, etc.), you must provide appropriate supporting documentation to your professor. Upon review, a deferred test may be offered. Please note that students who do not provide valid documentation or fail to offer a reasonable explanation for missing an assessment will receive a grade of 0% for that test.

The deferral test will be held on Monday, November 2 at 7:15am.

Deferred final exams:

If you wish to defer a **Formal Final Exam**, you – the student – must reach out to the registrar's office with the proper documentation prior to the deadline (please refer to <https://carleton.ca/registrar/deferral/> for dates). Once the request has been put through, your instructor will be notified for their approval.

Every effort will be made to mark fairly and accurately. Nonetheless, in some cases, students may call into question the grades awarded to assignments or tests. In such cases, please write a brief note describing the difficulty with the awarded grade and provide the note, together with the graded work, to the instructor not later than seven calendar days following the return of the graded

work. Please be sure to include your name and student number on the note to enable the instructor to identify it properly. Note that the resulting remarking may lead to a lower grade.

Policies & Accommodations

<https://students.carleton.ca/course-outline/>

<https://carleton.ca/pmc/current-students/academic-accommodations/>



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Course Schedule

Date	Topic	Chapter (Hull)
Sep.11	Introduction	1
Sep.18	Mechanics of Options Markets	10
Sep.25	Properties of Stock Options, Quiz 1	11
Oct.2	Trading Strategies Involving Options	12
Oct.9	Binomial Trees, Quiz 2	13
Oct.16	The Black-Scholes-Merton Model, Quiz 3	15
Oct.23	MIDTERM EXAM (in person, written on paper)	
Oct.30	Fall break. No class.	
Nov.6	Mechanics of Futures and Forward Markets	2
Nov.13	Hedging Strategies Using Futures	3
Nov.20	Determination of Forward and Futures Prices, Quiz 4	5
Nov.27	Swaps	7
Dec. 4	Credit Derivatives, Quiz 5	25

***Refer to Academic Calendar for dates University Closed Dates and Holidays**

<https://calendar.carleton.ca/academicyear/>

Use of Generative Artificial Intelligence

This is an AI-forward course. Students are expected to use generative-AI tools (e.g., ChatGPT, Claude, Copilot) as thought partners and assistants to enhance the quality of their work. Assignments will be graded assuming students had full access to AI support. Use these tools responsibly. That is, verify outputs, apply your own judgment, and cite AI use when relevant. The goal is not to outwit AI but to elevate your learning through it. You can access resources

related to citing Generative AI on the [MacOdrum Library website](#). Additional resources are also available on Carleton's [Artificial Intelligence Hub](#).

Contribution to Learning Goals of the Program ([BCom](#), [BIB](#)):

Program Learning Goal	Competencies Not Covered	Competencies Introduced (only)	Competencies Taught But Not Assessed	Competencies Taught and Assessed
BC1 Knowledge <i>Graduates will be skilled in applying foundational business knowledge to appropriate business contexts.</i>	X			
BC2 Collaboration <i>Graduates will be collaborative and effective contributors in team environments that respect the experience, expertise and interest of all members.</i>		X		
BC3 Critical Thinking <i>Graduates will be discerning critical thinkers, able to discuss different viewpoints, challenge biases and assumptions, and draw conclusions based on analysis and evaluation.</i>				X
BC4 Communication <i>Graduates will be effective and persuasive in their communications.</i>		X		
BI5 Global Awareness (BIB ONLY) <i>Graduates will be globally-minded.</i>		X		

ADDITIONAL INFORMATION

Course Sharing Websites

Materials created for this course (including presentations and posted notes, labs, case studies, assignments, and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

Recommended Calculator for Examinations

If you are purchasing a calculator, we recommend anyone of the following options: Texas Instruments BA II Plus (including Pro Model), Hewlett Packard HP 12C (including Platinum model), Staples Financial Calculator, Sharp EL-738C & Hewlett Packard HP 10bII

Group work

The Sprott School of Business encourages group assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, followership, and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your professor may assign one or more group tasks/assignments/projects in this course. Before embarking on a specific problem as a group, it is your responsibility to ensure that the problem is meant to be a group assignment and not an individual one.

Grading

In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

A+ = 90-100	B+ = 77-79	C+ = 67-69	D+ = 57-59
A = 85-89	B = 73-76	C = 63-66	D = 53-56
A - = 80-84	B - = 70-72	C - = 60-62	D - = 50-52
F = Below 50			

Grades entered by Registrar:

WDN = Withdrawn from the course

DEF = Deferred

Academic Regulations

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here:

<http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/>

Requests for Academic Accommodation

Carleton is committed to providing academic accessibility for all individuals. You may need special arrangements to meet your academic obligations during the term. The accommodation request processes, including information about the *Academic Consideration Policy for Students in Medical and Other Extenuating Circumstances*, are outlined on the Academic Accommodations website (students.carleton.ca/course-outline).

Pregnancy Accommodation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, please review the [pregnancy academic accommodation process](#).

Religious obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, please review the [religious academic accommodation process](#).

Academic Accommodations for Students with Disabilities

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the [Paul Menton Centre website](#).

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit the [Equity and Inclusive Communities website](#).

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see the [Senate Policy on Accommodation for Student Activities \(PDF, 25 KB\)](#).

Academic Consideration for Medical and Other Extenuating Circumstances

Due to medical and other extenuating circumstances, students may occasionally be unable to fulfil the academic requirements of their course(s) in a timely manner. The university supports the academic development of students and aims to provide a fair environment for students to succeed academically. Medical and/or other extenuating circumstances are circumstances that are beyond a student's control, have a significant impact on the student's capacity to meet their academic obligations, and could not have reasonably been prevented. Students may request Academic Consideration for Coursework or Other Academic Deliverable. For further information please review the [Procedure for Academic Consideration](#) and the [FAQ page](#).

Scheduling and Examination Support

Scheduling and Examination Services provides various supports for both in-term and end-of-term tests and exams. Details can be found on the [Exam Support website](#).

Academic Integrity

Violations of academic integrity are a serious academic offence. Violations of academic integrity – presenting another's ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized co-operation or collaboration or completing work for another student – weaken the quality of the degree and will not be tolerated.

Process: If an alleged violation occurs, all relevant documentation will be forwarded to the Dean. If the allegation proves true, the penalties may include; a grade of Failure on the submitted work and/or course; academic probation; a refusal of permission to continue or to register in a specific degree program; suspension from full-time studies; suspension from all studies at Carleton; expulsion from Carleton, amongst others. **For a first offence, at a minimum, the penalty assigned will normally be a zero on the submitted work and at least a minimum full grade reduction of the final course grade. For a second offence, at a minimum, the penalty assigned will normally lead to a suspension from studies.**

Students are expected to familiarize themselves with and follow the Carleton University Student Academic Integrity Policy which is available, along with resources for compliance at: <https://carleton.ca/registrar/academic-integrity/>.

Sprott Student Services

The Sprott Undergraduate Student Services Office offers program advising and overall student success support. Our team is available to discuss your academic goals and your program progression plans. We can also work with you to develop strategies for success, including study skills for Business. If you experience any difficulty this term or if you would like to access support, please contact our team at academicadvising@sprott.carleton.ca.

Centre for Student Academic Support

The Centre for Student Academic Support (CSAS) is a centralized collection of learning support services designed to help students achieve their goals and improve their learning both inside and outside the classroom. CSAS offers academic assistance with course content, academic writing and skills development. Visit CSAS on the 4th floor of MacOdrum Library or online at: carleton.ca/csas.

Important Information:

- Students must always retain a copy of all work that is submitted.
- All final grades are subject to the Dean's approval.
- For us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CARLETON address. Therefore, in order to respond to your inquiries,

please send all email from your Carleton CMail account. If you do not have or have yet to activate this account, you may wish to do so by visiting <https://carleton.ca/its/get-started/new-students-2/>
