



B E E D I E S C H O O L O F B U S I N E S S
S I M O N F R A S E R U N I V E R S I T Y

COURSE: BUS 419 D100

TITLE: Advanced Derivative Securities

SEMESTER: Summer 2024

INSTRUCTOR: Geoffrey Poitras

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Prerequisites: BUS 312 & BUEC 333; BUS 315 & BUS 316; 60 credit hours

Recommended Texts:

G. Poitras, *Risk Management, Speculation and Derivative Securities* (Academic Press, 2002)

ISBN #: 9780125588225

Poitras, Geoffrey, *Commodity Risk Management: Theory and Application*, (Routledge, 2013)

ISBN #: 978-0-415-87930-9

Course Description: This course provides a more advanced treatment of topics covered in BUS 316. More precisely, the course provides an historical, theoretical and practical examination of the most common derivative securities: forward, futures, option and swap contracts. Theoretical topics include: pricing future, forward and option by arbitrage. Real world topics include corporate risk management using derivative securities.

Course Objectives: At the end of the course, students will be able to understand the derivation of the Black-Scholes model and how to use the model to structure portfolios and design trade strategies. In addition, by directly examining the relevant sections of the financial statements in public filings, the uses of derivative securities in the financial risk management decisions faced by financial and non-financial corporations are explored.

Course Organization:

A. History of Derivative Securities Contracts

1. Derivative Securities in Ancient Markets
2. The Emergence of Exchange Trading
3. The Renaissance of Derivative Securities

B. Futures and Forwards: Markets and Strategies

1. Hedgers, speculators and arbitrageurs.
2. Hedging Strategies
3. Speculative Strategies: The mechanics of spread trading.

C. Options: Pricing and Strategies

1. Option Strategies
2. Option Valuation I: Mathematical background
3. Option Valuation II: Black- Scholes and its developments

Grading:

20% Participation (futures/options game)

20% Group Presentation

30% Midterm Exam (Take home)

30% Final Exam

100%