

SIMON FRASER UNIVERSITY
Faculty of Business Administration

BUS 492
RISK MANAGEMENT

DETAILED COURSE SYLLABUS

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Required Text:

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

Supplementary Materials:

Lecture notes and some supplementary readings will be posted on the class webpage
(www.sfu.ca/~poitras/BUS492.htm)

Course Objectives:

This course provides a more advanced treatment of topics covered in BUS 316. More precisely, the course provides both a theoretical and practical examination the use of “free standing” derivative securities in commodity and financial risk management, i.e., forward, futures, option and swap contracts. Theoretical topics include the mean-variance optimal solution to the hedging problem. Practical topics include examination of actual risk management practices of firms as revealed in public filings.

NOTE: RSD is *Risk Management, Speculation and Derivative Securities*; Poitras (2000) is the *Early History of Financial Economics*; SAIS is Poitras (2005), *Security Analysis and Investment Strategy*.

WEEKLY CLASS SCHEDULE

RISK MANAGEMENT

Week 1 Introduction

- 1.1 Review of Syllabus/Class Materials/Formation of Groups
- 1.2 What is Risk Management?
- 1.3 History of Risk Management with Derivative Securities
- 1.4 Exchanges, OTC and Available Contracts

Readings: RSD, Sec. 1.I, 1.II, 1.III; Poitras (2000), chapter 9.

Week 2 Intro. to Risk Management

- 2.1 Corporate Usage of Derivative Securities
- 2.2 Financial Risk Management
- 2.3 Commodity Risk Management
- 2.4 Regulations and Regulators

Readings: RSD Sec. I.IV, I.V, 2.III

Week 3 Institutional and Theoretical Basics

- 3.1 Definitions, Profit Functions and Margins
- 3.2 Types of Risk and Measuring Risk
- 3.3 Value at Risk and Other Measures
- 3.4 Sources of Information on the Internet

Readings: RSD Sec. 1.IV, 2.II.

Week 4 Risk Management and Hedging

- 4.1 Risk Minimization or Speculation?
- 4.2 Optimal Hedging
- 4.3 Transactions Hedging
- 4.4 Managing Interest Rate Risk

Readings: RSD, Sec. 2.I, 6.I; ; SAIS chapter 5.

Week 5 Corporate Risk Management

- 5.1 Basics of Corporate Risk Management
- 5.1 Rationales for Corporate Risk Management.
- 5.2 Developing a Risk Management Philosophy
- 5.3 Strategic and Enterprise Wide Risk Management

Readings: RSD, 2.IV, 6.II

Week 6 Natural Hedging, Diversification and Insurance

- 6.1 Implementing Natural Hedges
- 6.2 Diversification and Risk Management
- 6.3 Various Forms of Portfolio Insurance
- 6.4 Risk Management in Agriculture

Readings: RSD, 2.IV, 6.III, 7.IV

Week 7 Midterm Exam and Review

Week 8 Review of Option Properties

- 8.1 Definitions and Expiration Date Profit Diagram
- 8.2 Put-Call Parity and Replication
- 8.3 Risk Management with Options
- 8.4 Introduction to Black-Scholes

Readings: RSD Sec. 7.I, 7.II, 8.I

Weeks 9-11

**GROUP PRESENTATIONS OF
CORPORATE RISK MANAGEMENT PRACTICES**

Week 12 Applications of Option Techniques

- 12.1 Portfolio Management with Options
- 12.2 The Greeks: Delta, Theta, Gamma
- 12.3 Portfolio Insurance: Methods and Application
- 12.4 Value at Risk with Options

Readings: RSD Sec. 9.I, 9.II; 9.III

Week 13 Windup and Final Exam Review