

FIRE 441 Section 001

Instructor: Chintal A. Desai email: cdesai2@vcu.edu

Course modality: RINP (In-person)

Class time/day/location: 11:00 am - 12:15 pm / TR / Snead Hall B1114

Office hours: For clarifying the doubts regarding the material covered in the class, a student is encouraged to visit during the office hours. The office hours are at Snead Hall B4135 on Tuesday and Thursday from 9:30 a.m. to 10:30 a.m. or by appointment.

Course Description / Learning objectives:

This course aims to enhance a student's understanding of financial intermediation. Our focus will be on depository institutions such as a commercial bank. To enhance learning, the course emphasizes first on understanding the conceptual ideas, then on applying those ideas to solve numerical problems which are close to the real-life situations. The course is designed to keep a balance between the quantitative and qualitative aspects of financial intermediation.

The course contains seven modules clustered in two distinct parts. The first part motivates with the role of a financial intermediary within an economy. It also provides an overview of some of the known risks faced in financial intermediation such as interest rate risk, credit risk, liquidity risk, and foreign exchange rate risk. It further expands by studying the interest rate risk in detail, while focusing on the risk management tools. The second part helps learn valuation of a fixed-income security. It employs the noarbitrage framework as unifying tool to determine fundamental values of various fixed-income securities such as regular coupon bond, annuity, zero coupon bond, forward interest derivatives, forward exchange rate derivatives, and bond options.

(Preliminary) Module 1: Continuous Compounding and an introduction to no-arbitrage principle

Module 2: Financial Intermediary – An overview

Module 3: Interest Rate Risk

Module 4: Fixed-income Security Valuation using No-Arbitrage Principle

Module 5: Forward Interest Rate

Module 6: Forward Exchange Rate

(if time permits) Module 7: Financial Bond Options

Course Prerequisites: FIRE 312 with a minimum grade of C.

Learning resources:

Class syllabus, personal class handouts, quizzes, exams, and your grades will be posted on VCU's Learning Management System - Canvas.

For each module, the instructor-written notes will be provided.

Recommended Textbooks / study material:

(For Modules 2-3): Financial Institutions Management: A Risk Management Approach, Ninth edition, by Saunders, A. and M. M. Cornett, McGraw-Hill, (2018) ISBN: 978-1-259-71777-2.

(For Modules 1 and 4-6): Adventures in Debentures by Michael Gibbons.

https://www.academia.edu/35067034/Adventures in Debentures Important Announcements

COURSE POLICIES

<u>Check Canvas and your VCU Email Regularly. You are deemed to be officially notified once email is sent to your VCU email address.</u>

Preparation and participation:

A student is expected to attend each class session and participate actively. In case of a missed class, they need to take class material from other students and try to understand on their own before asking doubts to the instructor. A student also needs to bring a laptop to each class.

Homework Quizzes:

The homework quizzes will be given throughout the semester. Each quiz will contain instructions such as deadline and number of points. During the office hours, only the clarification regarding a given homework quiz question will be provided. <u>All quizzes need to be submitted through Canvas.</u> NO LATE SUBMISSION IS ALLOWED. The final homework points will be based on the combined scores of all homework quizzes.

Exams:

There are total three exams -- two mid-term exams and a final exam. The first exam will be after the completion of modules 1-3, and the second exam after the completion of modules 4-7. The cumulative final exam will be during the week for final exam. Each exam will be in the classroom, unless the instructor is out-of-town to attend an academic conference. **There will be no make-up exam.** The student can have a make-up exam only on those extenuating circumstances in which the university requires the instructor to give a make-up exam. **Please note that the make-up exam** is more difficult and challenging than a regular exam due to limited pool of possible questions.

Grade Determination:

Final grades will be based on performance as follows:	
Homework quizzes	45 points
Exam 1	20 points
Exam 2	20 points
Final Exam (cumulative)	15 points

Letter grade will be assigned, *most likely*, using the following scale:

A (above 90 points), B (above 80 points), C (above 65 points), D (above 50 points).

Withdrawal: Please note the last dates to withdraw from the class by visiting at http://academiccalendars.vcu.edu/.

(Tentative) Timeline for class schedule

Week of	Topic / Textbook Chapter
18-Jan	Syllabus and Module 1
25-Jan	Module 1 and Module 2
1-Feb	Module 2
8-Feb	Module 2 and Module 3
15-Feb	Module 3
22-Feb	Module 3
1-Mar	Exam 1 (Most likely it will be on Tuesday)
8-Mar	Spring Break
15-Mar	Module 4
22-Mar	Module 4 and Module 5
29-Mar	Module 5
5-Apr	Module 5
12-Apr	Module 6
19-Apr	Module 7
26-Apr	Exam 2 (Most likely it will be on Tuesday)*
12-May	Final Exam (Cumulative)*

^{*}Instructor **may** travel to attend an academic conference. In such a situation, Exam 2 will be during the previous week and Final Exam can be taken on-line. It will be communicated during the class.

SCHOOL/UNIVERSITY POLICIES

VCU School of Business Mission

The mission of the VCU School of Business is to prepare students for successful careers and lifelong learning by providing management education firmly grounded in technology, interdisciplinary teamwork and global perspectives. Essential to achieving this mission is striving to excel in teaching and scholarly research, and to build effective, value-based relationships with the external community.

Other important information

Students should visit http://go.vcu.edu/syllabus and review all syllabus statement information. The full university syllabus statement includes information on safety, registration, the VCU Honor Code, student conduct, withdrawal and more.