

Syllabus -- FIRE 311-005  
Financial Management -- On-line Asynchronous  
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Semester - Fall 2025 and Credit hours - 3

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## Course Details

This course helps provide a student with conceptual understanding of financial economics / financial management. It covers the following five topics of finance: Time Value of Money; Time-varying interest rate; Risk-neutral pricing and default; Portfolio theory and Capital Asset Pricing Model; and Free cash flows and valuation of firms. Although the course focuses on the issues related to corporate finance, the pedagogical approach is also helpful to better understand the issues faced in other areas of finance such as asset pricing, investments, banking, household finance, and financial markets.

Throughout the course, the emphasis is given in understanding a given finance concept using the lens of economic principles. A few examples are as follows: (a) the concepts of time value of money (compounding and discounting) can be better understood by linking it to the economic paradigm of intertemporal consumption smoothing, (b) concepts of default and risk-neutral pricing can be linked to the economic principles of intra-temporal consumption insurance, and (c) portfolio theory is based on the principles of diversification.

Once a student understands a given finance concept, they will be challenged to solve problems which are close to the real-life situations. Then only, they will be introduced to the available formula, if any. Overall, our approach is “concepts first – formula at the end”.

## Required Materials

- **Learning resources:** Course syllabus, videos, quizzes, exams, announcements, and your grades will be posted on VCU’s Learning Management System - Canvas.
- **Textbook:** Corporate Finance: 5th Edition, 2022 by Ivo Welch. The on-line version of the textbook is available for free at <https://corpfin.ivo-welch.info/read/>. The print edition costs approximately \$49 at Amazon.

## Course Objectives / Learning outcomes

A student who successfully completes the course:

1. will improve their understanding of financial concepts.

2. will be motivated to take academically rigorous (finance or non-finance) courses.
3. will notice an improvement in their problem-solving, reading, listening, and communication skills.

## **Course Structure**

### **Class Schedule (Tentative)**

#### **1. Module 1: Time value of money (TVM)**

Week 1: Timeline and Future value

Suggested reading: 2.3 and 2.4 of the textbook

Homework Quiz 1 - Due

Week 2: Present value and perpetuity

Suggested reading: 2.5 and 3.1 of the textbook

Homework Quiz 2 - Due

Week 3: Annuity and additional application of future value formula

Suggested reading: 3.2 and 3.3 of the textbook

Homework Quiz 3 - Due

Week 4: Compounding frequency and effective interest rate; Application to mortgages

Suggested reading: 2.3 and 3.2 (Fixed-rate mortgage) of the textbook

Homework Quiz 4 - Due

Week 5: Applications of TVM – Capital budgeting, bond valuation, and stock valuation

Suggested reading: 4.1 and 4.2; 3.1 (Stock valuation with Gordon growth model) and 3.2 (Bond valuation – A level coupon bond) of the textbook

Homework Quiz 5 - Due

**Week 6: EXAM 1**

#### **2. Module 2: Time-varying interest rate**

Week 7: Spot interest rate, forward interest rate, and term-structure of interest rate; and holding period return

Suggested reading: Chapter 5 of the textbook

Homework Quiz 6 - Due

### **3. Module 3: Uncertainty (Risk)**

Week 8: Default risk and risk-neutral pricing

Suggested reading: 6.1 and 6.2 of the textbook

Homework Quiz 7 - Due

Week 9: Intra-temporal consumption insurance and additional problems on risk-neutral pricing

Suggested reading: 6.3 and 6.4 of the textbook

Homework Quiz 8 - Due

### **4. Module 4: Portfolio theory**

Week 10: Expected return and risk; and Concept of market portfolio

Suggested reading: Chapter 7 and 8.1 of the textbook

Homework Quiz 9 - Due

Week 11: Covariance, beta, portfolio beta, and CAPM

Suggested reading: 8.2, 8.4, and 8.5; and 10.2 of the textbook

Homework Quiz 10 - Due

**Week 12: Exam 2 (Non-cumulative, covers Modules 2-3-4)**

### **5. Module 5: Free cash flow and firm valuation**

Week 13: Introduction to free cash flow and application of TVM for firm valuation

Suggested reading: Chapter 14 of the textbook

Homework Quiz 11 - Due

**FINAL EXAM (Cumulative, covers all Modules 1 to 5) - During the final exam week**

### **Assessments**

Assessment will be based on a student's performance in homework quizzes and exams. In both quiz and exam, the questions will be of problem-solving type. These problems will be mainly of a numerical type of Canvas.

## Homework Quizzes

Each week other than the exam week, a given homework quiz will be due. Most likely, each homework quiz will have more than 10 attempts. However, in each attempt, a student may see different numbers for the same problem, or may find a completely separate set of problems. **NO LATE SUBMISSION OF A HOMEWORK QUIZ WILL BE ALLOWED.**

## Exams

There are total three exams. Exam 1 and Exam 2 are non-cumulative. The Final Exam is a cumulative exam. Each exam will have two attempts. The maximum of these two attempts will be counted. However, each attempt either may have a separate set of problems or may have different numbers for the same problem. **NO LATE SUBMISSION OF AN EXAM WILL BE ALLOWED.**

## Grading Policy

The grade will count the assessments using the following proportions:

- 40% of your grade will be determined by Exam 1 and Exam 2 (20% each).
- 30% of your grade will be determined by the final exam.
- 30% of your grade will be determined by homework assignments.

## Other Information

- Syllabus Policy Statement <https://provost.vcu.edu/faculty/faculty-resources/syllabus/>
- Library resources <https://www.library.vcu.edu/>