

**29:390:329:B6**

Summer 2024  
Monday and Wednesday 6:00 pm – 9:45 pm  
Office Hours by Appointment

**Instructor: Shaghayegh  
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**Course Description:** This course is designed to provide students with a foundation in the key concepts underlying the analysis and execution of financial decisions. The course will blend theory and practice.

**Course Goals and Objectives:**

**Business knowledge.** RBS undergraduate students will have a command of business theory and practice.

**Students will demonstrate:**

- a. Mastery of fundamental business concepts and an ability to integrate and apply these concepts to resolve practical business problems.
- b. Proficiency at analyzing and interpreting numerical data to resolve practical business problems.

In particular, students will

1. have a fluent, working knowledge of how to apply TVM concepts to complex asset valuation and project valuation. For example, students should be able to face a very complex cash flow stream and value it.
2. have a solid understanding of capital budgeting techniques and usage, and be able to apply capital budgeting criteria to complex situations (and incorporate risk).
3. understand the working knowledge of the capital asset pricing model and be able to estimate beta and use it to determine required rates of return.
4. have a working knowledge of the concept of diversification, market efficiency, portfolio statistics and asset statistics. Students must be able to explain risk aversion and its relation to portfolio theory.
5. learn how to use Excel and the Financial Calculator to analyze and evaluate investment and corporate choices.

**Course Materials and Other Study Aides:**

1) *I do not require a text book. However, if you feel you need a textbook, I recommend one of the following textbooks:*

- 1) **Principles of Corporate Finance** – by Richard Brealey, Stewart Myers and Franklin Allen, McGraw Hill Irwin
- 2) **Fundamentals of Corporate Finance** – by Stephen Ross, Randolph Westerfield and Jeffrey Jaffe, McGraw Hill Irwin

- 2) **Course Web Site (MANDATORY):** CANVAS: There is a class website that will include the syllabus, grades, and other materials. Please always check the class website at least a day prior to each class session.
- 3) It is also important for you to purchase a financial calculator. I will use the HP10 bII+ financial calculator to solve questions in class.
- 4) You are required to have a laptop during class time.

### **Do I Have to Memorize Equations for the Exams?**

No, you do not. You can bring one sheet of formulas. No cell phone and/or other communication device are allowed to be visibly available.

### **Course Delivery Mode**

This course is delivered in person.

### **Grading Policy:**

3 Quizzes	45%
Cumulative final exam	55%

The final average that determines your letter grade is based upon 45% quizzes (three quizzes) and 55% final exam. If you fail to take a quiz, you will receive a zero for the exam unless you have a valid excuse (e.g., medical emergency, family emergency, and religious observance) with appropriate documentation.

### **ACADEMIC INTEGRITY**

*I do NOT tolerate cheating.* Students are responsible for understanding the RU Academic Integrity Policy (<http://academicintegrity.rutgers.edu/>). I will strongly enforce this Policy and pursue *all* violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, “On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment.”

### **Prerequisites:**

All the Pre-Business Requirements.

### **Office Hours**

If you have questions, first contact me via email at [Shaghayegh.Pourvosoughi@Rutgers.edu](mailto:Shaghayegh.Pourvosoughi@Rutgers.edu). Email is the only way to communicate with me outside of class. If it becomes important for you to meet me, I will arrange a mutually convenient time and place for us to meet. Feel free to ask for an appointment.

# Course Syllabus

## **I. Introduction**

- A. What is a Corporation?
- B. Who is the Financial Manager?
- C. Corporate Investment and Financing Decisions
- D. The Financial Goal of the Corporation

## **II. Concepts and Applications of the Time Value of Money**

- A. Discounted Cash Flow: Present Value and Future Value
- B. Annuities and Perpetuities
- C. Loan Amortization
- D. Annual Percentage Return and Effective Annual Yields

## **III. Investment Criteria**

- A. Net Present Value Model
- B. Pay Back Period Model
- C. Internal (or Discounted Cash Flow) Rate of Return
- D. Choosing Capital Investments When Resources Are Limited

## **IV. Making Investment Decisions using NPV**

- A. Applying the Net Present Value Rule
- B. Cash Flows Vs Earnings
- C. Using the NPV Rule to Choose among Projects
  - The Investment Timing Decision
  - The Choice between Long- and Short-Lived Equipment
  - When to Replace an Old Machine

**Quiz 1, June 12<sup>th</sup>**

## **V. Bond Valuation**

- A. Using Present Value Formula to Value Bonds
- B. How Bond Prices Vary with Interest Rates
- C. The Term Structure of Interest Rates
- D. Real and Nominal Rates of Interest
- E. The Risk of Default

## **VI. Stock Valuation**

- A. How Common Stocks Are Traded
- B. How Common Stocks Are Valued
- C. Dividend Discount Model
- D. Discounted Cash Flow Model

**Quiz 2, June 19<sup>th</sup>**

## **VII. Risk and Return**

- A. Over a Century of Capital Market History
- B. Stock Risk and Return
- C. Portfolio Risk and Return
- D. Diversification
- E. How Individual Securities Affect Portfolio Risk
- F. Beta Measure of Risk

## **VIII. Portfolio Theory and CAPM**

- A. Harry Markowitz and the Birth of Portfolio Theory
- B. The Relationship between Risk and Return
- C. Capital Asset Pricing Model
- D. Some Alternative Theories

**Quiz 3, June 26<sup>th</sup>**

## **IX. Cost of Capital and Company Valuation**

- A. Cost of Equity Capital
- B. Cost of Capital of Debt
- C. Weighted Average Cost of Capital

## **X. Introduction to Financial Statement Analysis**

- A. Financial Statements
- B. Financial Ratios
- C. Interpreting Financial Ratios

**Final Exam: July 3<sup>rd</sup>**

## **SUPPORT SERVICES**

If you need accommodation for a *disability*, obtain a Letter of Accommodation from the Office of Disability Services. The Office of Disability Services at Rutgers, The State University of New Jersey, provides student-centered and student-inclusive programming in compliance with the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments of 2008, Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act of 1998, and the New Jersey Law Against Discrimination. More information can be found at [ods.rutgers.edu](http://ods.rutgers.edu).

[Rutgers University-New Brunswick ODS phone (848)445-6800 or email [dsoffice@echo.rutgers.edu](mailto:dsoffice@echo.rutgers.edu)]

[Rutgers University-Newark ODS phone (973)353-5375 or email [ods@newark.rutgers.edu](mailto:ods@newark.rutgers.edu)].