## **Baruch College**

# Economics & Finance FIN 9783

## Fall 2021

Instructor: Chris Droussiotis

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Course: Fin 9783 Investment Analysis-

Saturdays 11:10am - 2:00pm

#### **Course Outline:**

This course is designed to provide practitioners and those seeking careers in finance with a rigorous combination of theory and practice as we explore the fundamental principles of finance. Students currently employed in this dynamic and evolving field will have the opportunity to become familiar with many of the core principles and concepts commonly applied in their field daily. From a practical perspective, Introduction to Finance is meant to reinforce work-related practices, such as analyzing financial statements, the application of time value of money concepts, asset valuation on a discounted cash flow (DCF) basis, cost benefit analysis (CBA), and the quantification of the multifaceted relationship between risk and return in financial markets. The course will be divided into sections: The first part of the semester the course will introduce investment analysis concepts and the second part of the semester the course will introduce corporate finance.

Through this course, students wishing to enter diverse areas of finance, such as asset management, credit analysis, financial and investment analysis, portfolio management, and risk management, will have the opportunity to acquire and develop critical work-related skills. These include evaluating corporate performance based on a thorough analysis of financial statements, estimating the present and future values of a wide range of cash flows, and using these concepts as the basis for asset valuation, applying commonly used cost-benefit analysis methods to evaluate investment decisions, and estimating the risk and return of individual securities and diversified portfolios.

The topics covered in this course provide students with the necessary background and preparation to take more advanced courses in finance.

## **Learning Objectives (LO)**

Upon successful completion of this course, you will be able to:

- 1. Apply the principal time value of money (TVM) concepts used in financial analysis and valuation.
- 2. Understand Risk & Return tradeoff and the mitigation of such risk though allocation and diversification.
- 3. Compare the risk and returns to market and learn other measurements of calculating expected return.
- 4. Understand how stocks and bonds trade in the secondary markets and how they are valued. Apply basic risk & return analysis based on expected cash flows (dividends or coupon payments)

- 5. Classify the core components of the three (3) principal financial statements: the balance sheet, the income statement, and the statement of cash flows.
- 6. Describe the applications and uses of common-size financial statement analysis.
- 7. Identify commonly used financial ratios to measure a firm's financial performance.
- 8. Determine the value of debt and equity securities using discounted cash flow methods (DCFs) and alternative valuation techniques and use these for various transactional situations such as Mergers and Acquisition or Leveraged Buyout outs (LBO)

## **Textbooks (Optional)/ Reading Material:**

## An Analytical Approach to Investments, Finance and Credit, 1st Edition (CD)

**Chris Droussiotis** 

**Cognella Academic Publishing** 

Cognella Store Link: https://store.cognella.com/93857

Please note that this textbook will be used for lectures, spreadsheets, projects, and your homework (via the digital platform Active Learning) will be my own textbook that was published a few years ago called: "The Analytical Approach to Investments, Finance and Credit" First Edition by Chris Droussiotis. I believe this book will not only help you navigate this class better but more importantly in includes many sections that should help you prepare to get ready for your banking career after graduation. The purchase is recommended and but not required.

<u>Essentials of Investments – latest Edition (BKM)</u> *Zvi Bodie, Alex Kane & Alan Marcus*Bookstore

The Quants: How a New Breed of Math Whizzes Conquered Wall Street and Nearly Destroyed Scott Patterson

Amazon Link: <a href="http://www.amazon.com/Quants-Whizzes-Conquered-Street-Destroyed/dp/0307453375">http://www.amazon.com/Quants-Whizzes-Conquered-Street-Destroyed/dp/0307453375</a>

#### Materials to be provided by the Instructor (found on www.ProfessorDrou.com):

- IPO offering prospectus on a live deal
- Bond Prospectus on a live deal
- Excel spreadsheets of various portfolio management analyses Equity and Bond Analysis / DCF / CAPM models / Option strategy spreadsheets

#### Financial Calculators

Given the scope and nature of Introduction to Finance, students are strongly recommended to obtain a financial calculator, such as: HP-10BII or Texas Instruments (TI) BAII.

RWJ's Chapters 4 and 6 in your textbook include an appendix that shows how to use both financial calculators to perform present value and future value calculations and to solve for the rate of return.

#### Excel

In addition, students are encouraged to use Excel to perform the analytical calculations discussed in the course. All of the lectures will include spreadsheet analysis on the website and/or *Active Learning*. Course Requirements (Assignments)

## Graded Homework Problems (15%):

Graded Homework Problems give you an opportunity to demonstrate your mastery of the topics covered in the course and solidify your knowledge of finance theory through the practical application of the concepts, models, and theories, discussed in class. Students are required to submit a set of Graded Homework Problems. The student can access homework from Cognella's *ACTIVE LEARNING* platform.

### **Individual Project (15%):**

Each student will be assigned a publicly traded company. See Appendix for Project description.

## Midterm Exam (30%):

The Midterm Exam will be based on the instructor's class notes (PowerPoint presentations) and excel spreadsheets provided on Canvas. To prepare for the exam is recommended reading using the practice problems from the optional CD textbook - chapters 1-4 and chapters 10 and 11 which includes Time Value Money (TVM) concepts, Risk & Return, stock, and bond investing. (Check the date on Canvas and/or the website www.ProfessorDrou.com).

#### Final Exam (30%):

The Final Exam will include some of the concepts from the midterm including equity valuation, Return and TVM. Most of the exam though will focus on chapters 6-16. The students need to study spreadsheets analysis covered in class including the Alexandria Hotel projections and DCF analysis, Hyatt stock valuation, LBO and Capital Markets financial model, and return and bond analytics spreadsheet. The exam will be taken during the Exam Period. It will be opened books and notes taken in the computer lab (on-line) (check the date on the website <a href="https://www.ProfessorDrou.com">www.ProfessorDrou.com</a>).

The students need to study the various spreadsheet analysis covered in class including the Celerity Technology Company case study; the Alexandria Hotel WACC analysis and Hyatt Corporation enterprise valuation methods. The exam will be closed books and notes taken in class.

#### Class Attendance (10%):

Students are expected to attend on-line and to participate in classroom discussions. It is important to attend every class because the Exams are based on the instructor's lectures and classroom notes. Class participation will count as part of the course grade. Attendance accounts for 10% of your grade. The attendance will be monitored via zoom tools including the login and logout as well as be ready for discussions in class. The grade breakdown for attendance is as follows:

Missing 1 class	90 x 10% x final grade
Missing 2 classes	80 x 10% x final grade
Missing 3 classes or more	70 x 10% x final grade

#### Materials to be provided by the instructor:

- IPO offering prospectus on a live deal.
- Bond Prospectus on a live deal
- Excel spreadsheets of various portfolio management analyses Equity and Bond Analysis / DCF / CAPM models / Derivative

#### **Grading:**

Mid Term Exam *	30%
Final Exam*	30%
Homework	15%
Attendance	10%
Project	15%
Total	100%

\*CD Factor:

This is to give the benefit for students of significant improvement between Mid-Term Exam and Final. The Weighted averages are as follows (based on pre midterm curve score):

Improvement	Mid-Term Weighting	Final Exam Weighting
35% and higher	10%	50%
30-34%	15%	45%
25%-29%	20%	40%
20%-24%	25%	35%
19% or lower (including negative)	30%	30%

## **Academic Integrity**

Cheating and plagiarism are serious offenses. The following definitions are based on the College's Academic Honesty website:

Cheating is the attempted or unauthorized use of materials, information, notes, study aids, devices, or communication during an academic exercise.

Examples include but are not limited to:

- Copying from another student during an examination or allowing another to copy your work.
- Unauthorized collaborating on a take home assignment or examination
- Using unauthorized notes during a closed book examination
- Using unauthorized electronic devices during an examination
- Taking an examination for another student
- Asking or allowing another student to take an examination for you.
- Changing a corrected exam and returning it for more credit
- Submitting substantial portions of the same paper to two classes without consulting the second instructor
- Preparing answers or writing notes in a blue book (exam booklet) before an examination
- Allowing others to research and write assigned papers including the use of commercial term paper services
  - Plagiarism is the act of presenting another person's ideas, research or writing as your own, such as:
- Copying another person's actual words without the use of quotation marks and footnotes (a functional limit is four or more words taken from the work of another)
- Presenting another person's ideas or theories in your own words without acknowledging them
- Using information that is not considered common knowledge without acknowledging the source.
- Failure to acknowledge collaborators on homework and laboratory assignment.

My policy is to give a 0 grade to any assignment that has been plagiarized or an exam in which you have cheated. In addition, I am required by college policy to submit a report of suspected academic dishonesty to the Office of the Dean of Students. This report becomes part of your permanent file.

#### **Course Outline**

Go to www.ProfessorDrou.com for the outline including lectures, textbook chapters, homework and projects due dates and description as well as exams.

## Course Outline

#### EXHIBIT I - Project

Construct a portfolio of Stocks and Cash (Excel) using the following information:

- 1. Initial Capital \$50,000 (Equity)
- 2. Obtain a loan (up to 50% Margin) for 7.0% interest per annum.
- 3. Starting Date (Apr 30, 2021)
- 4. Value Date (Nov 30, 2021)
- 5. Maintain Diversification discipline\*
- 6. Always maintain at least 10% Cash. Cash interest income at 1.5% per annum.
- 7. Trading stocks at least 5 times during this period (5 initial stock positions need to be replaced during this period)
- 8. Assume no trading costs or any additional expenses (except interest on the margin loan)

#### You Spreadsheet should include the following:

- 1. Initial Transaction Sources and Uses (May 31, 2021)
- 2. List of stocks (Symbols)
- 3. Business Description and Industry categorization for each stock
- 4. Monthly Cash Flow which will include any dividends, gains and losses on trades, interest payments, interest income of cash balance.
- 5. Overall monthly performance (including a graph) from April 30 November 30, 2021
- 6. S&P 500 Index on Apr 30, May 31, June 30, July 30, Aug 31, Sep 30, Oct 29, and Nov 30, 2021.

#### At Value Date calculate the following:

- 1. Total Portfolio HPR
- 2. Total Portfolio Standard Deviation of average returns.
- 3. Portfolio performance as compared (including a graph) to S&P500 index during this period (Beta Coefficient calculation, Regression Analysis between portfolio and S&P500)
- 4. Sharpe Ratios.

Suggested website to use: <a href="http://finance.yahoo.com">http://finance.yahoo.com</a>

#### \*Diversification Discipline:

- No less than 10 stocks in the portfolio at all times
- Each stock value cannot represent more than 20% of the total portfolio.
- Each industry value cannot represent more than 25% of the total portfolio
- Across 8 different industry sectors and one of the industry sectors should have at least 2 companies.