

**Brandeis University**  
**Department of Economics**

Summer School 1 Session 2023  
ECON 171A - Financial Economics  
T/W/R | 11:10 AM - 1:40 PM | 06/05/2023 - 07/07/2023  
Shiffman Humanities Center: 123

**Instructor:** Krisztian Gado

**Office Hours:** Thursdays 1:40 PM to 2:40 PM in person, after class. (Or on Zoom by appointment)

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**Overview:**

This course aims at developing key concepts in investment theory and practice from the perspective of an investment professional rather than an individual investor. The goal of this class is to provide students with a structure for thinking about investment theory and with the framework for addressing investment problems in a systematic manner. The course covers topics related to financial economics, including investors' attitudes toward risk, capital allocation, portfolio selection, asset pricing models (Capital Asset Pricing Model and Arbitrage Pricing Theory), efficient markets, fixed income, and equity.

**Learning goals and outcomes:**

- Explain the fundamental principles of investment in financial markets: how investors make investment decisions and what determines returns and asset valuations
- Develop quantitative models to inform decisions involving: capital allocation and fixed income securities/bond markets
- Apply principles and theories related to financial economics to current events in financial markets.
- Develop a professional and persuasive presentation based on research and synthesis of learning materials.

**Pre- and Co-Requisites**

For this course students are expected to have completed Econ 80a (Microeconomic Theory) and 83a (Statistics for Economic Analysis). While the instructor will review some material from these prerequisite courses during lectures, such review will not serve as substitutes for completing the required courses.

### **Course Materials**

The textbook for the course is: **Bodie, Kane, and Marcus (BKM) “Investments” 12<sup>th</sup> edition**. The 10<sup>th</sup> and 11<sup>th</sup> edition of this book covers very similar material but there are parts of the book that have changed substantially. IF you are able to locate a reasonably priced copy of the textbook, I recommend the 11<sup>th</sup> edition as reference.

### **Policy on calculators**

You can use any calculator you would like when solving problems on the problem sets, including scientific, programmable, graphing, financial, or software (such as Excel). In order to prepare for this, I strongly advise everyone to make sure that you have a calculator available to you which you can use to solve problems at exam time.

### **Academic Accommodation**

Brandeis seeks to create a learning environment that is welcoming and inclusive of all students, and I want to support you in your learning. If you think you may require disability accommodations, you will need to work with Student Accessibility Support (SAS) (781-736-3470 - [access@brandeis.edu](mailto:access@brandeis.edu) - [brandeis.edu/accessibility.edu](http://brandeis.edu/accessibility.edu)). You can find helpful student FAQs and other resources on the SAS website, including guidance on how to know whether you might be eligible for support from SAS.

**If you already have an accommodation letter from SAS, please provide me with a copy as soon as you can so that I can ensure effective implementation of accommodations for this class. In order to coordinate exam accommodations, ideally you should provide the accommodation letter at least 48 hours before an exam.**

### **Academic integrity**

You are expected to be familiar with and to follow the University’s policies on academic integrity. Instances of alleged dishonesty will be forwarded to the Office of Campus Life for possible referral to the Student Judicial System. Potential sanctions include failure in the course and suspension from the University.

See: “Brandeis University Rights and Responsibilities” chapter 3;  
(<http://www.brandeis.edu/studentlife/sdc/rr/>).

Here is the first part: “3.0 Every member of the University community is expected to maintain the highest standards of academic integrity. A student shall not submit work that is falsified or is not the result of the student's own effort. Infringement of academic honesty by a student subjects that student to serious penalties that may include failure on the assignment, failure in the course, suspension from the University or other sanctions (see [Section 21](#)). A student who is in doubt regarding standards of academic honesty in a course or assignment should consult the faculty

member responsible for that course or assignment before submitting the work. A student's lack of understanding is not a valid defense to a charge of academic dishonesty.” If you are ever in doubt about any of these rules, please contact me immediately.

### **ChatGPT / Other AI Tools**

As a college student, it is your responsibility to maintain the highest standards of academic integrity. Representing work generated by artificial intelligence as one's own work is considered to be academically dishonest. This includes (a) ensuring that all work submitted for grades is your own original work, and (b) properly citing any sources that you use.

### **Your Grade Will be based on the following**

1. Class Participation and Current News Discussion (20%)
2. Problem Sets (25%)
3. Presentation (15%)
4. Midterm (15%)
5. Final (25%)

### **Class Participation**

Our class is interactive. Hence, attendance of all classes is expected in person. If you can't attend for any reason, zoom attendance is possible with permission. Since following current events plays a significant role in developing your understanding of financial markets, questions and discussions connecting real world news to class materials are encouraged and necessary to do well in this course.

### **Problem Sets**

The problem sets are aimed at preparing you for the midterm and final. You are free and encouraged to collaborate on these, however, everyone must have their own submission on Latte!

### **Midterm and Final**

The midterm will be a take-home exam, due halfway through the course on the 21st of June. The final will be cumulative, and is a take-home exam due on the last day of class. The midterm and the final will contain some longer questions related to your ‘investment philosophy’ and the current news discussions we will be doing during class as well. In addition to these, expect regular concept/understanding testing problems as well, akin to what you see on problem sets. Collaboration on the midterm and final is not allowed.

### **Presentation**

Through the midterm and final, you will in part be working on developing and testing and investment strategy. You will be evaluated on presenting your investment strategy and your insights about it.

### **Detailed Course Outline:**

Overall, I will try to follow the course textbook as closely as possible.

#### **Week 1**

##### **6th of June (Chapters 1, 2)**

- Overview and Introduction
- Review of Statistical Concepts

##### **7th of June (Chapters 3, 4, 5)**

- Financial Securities
- Risk and Return
- **PROBLEM SET 1 ASSIGNED**

##### **8th of June (Chapter 5, 6)**

- Risk Preferences and Capital Allocation

#### **Week 2**

##### **13th of June (Chapters 6, 7):**

- Portfolio Selection
- Markowitz Portfolio Selection
- **PROBLEM SET 1 in Class**

##### **14th of June (Chapters 8, 9):**

- Index Models
- Capital Asset Pricing Model
- **MIDTERM ASSIGNED**

##### **15th of June (Chapters 10, 11):**

- Arbitrage Pricing Theory
- Market Efficiency and Empirics

#### **Week 3**

##### **20th of June (Chapter 14):**

- Bond Pricing / Fixed Income Securities introduction
- **MIDTERM DUE**
- **PROBLEM SET 2 ASSIGNED**

##### **21st of June (Chapter 15, 16):**

- Portfolio Investing, Real world decisions
- Term Structure of Interest Rates

##### **22nd of June (Chapter 15, 16, 23):**

- Duration, Convexity, Swaps
- Credit Ratings

#### **Week 4**

##### **27th of June (Chapter 17, 18, 19):**

- Equity Valuation
- Dividend Discount Model
- **PROBLEM SET 2 DUE**

##### **28th of June (Chapter 22):**

- Futures
- **FINAL ASSIGNED**

##### **29th of June (Chapter 20, 21):**

- Options and Option Strategies

#### **Week 5**

##### **5th of July (Chapter 25):**

- Investing In International Markets / Behavioral Finance

##### **6th of July – Final Period**

- **FINAL DUE & PRESENTATIONS**