Investments and Portfolio Management (Econ-180.367)  
Fall 2020

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Office Hours: 3pm-4pm Thursdays and by appointment

**Teaching Assistants:**  
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This is an introductory course in investments. The course is broken into four parts. The first part covers the fundamental concepts of asset returns, risk, and risk-aversion, and then studies how investors should optimally choose their portfolios given the observed patterns of risk and return. The second part of the course studies the reverse question: given how investors choose their portfolios, what are the equilibrium patterns of risk and expected return in financial markets: in other words, what is the expected return that various types of assets must earn to compensate investors for bearing their risk. The second question is studied in the context of two theories of returns: the capital asset pricing model (CAPM) and arbitrage pricing theory (APT). The third part of the course studies the empirical evidence for and against the equilibrium theories of asset returns, with an emphasis on the evidence in support and against the efficient markets hypothesis. The fourth and final part of the course studies four classes of assets in more detail. The topics that are covered include models of equity valuation, bond valuation and hedging, futures markets, and option valuation.

Homeworks and class will include empirical work, to be done in Excel. Bloomberg will also be used in class and may be part of the homeworks, depending on student access to the library.

**PREREQUISITES:** Statistics 111-112 and Microeconomic Theory 301.

**Textbook:** The textbook for the course is “Investments” by Bodie, Kane and Marcus, 12th Edition.

**Learning Goals:** At the conclusion of this course, students should be familiar with different classes of financial securities, measurement of interest rates, returns and risk premia, optimal portfolio management, and the valuation of equities, bonds and derivative securities. The course also aims to give you the analytical tools to understand finance-related topics in current analysis that you might read about in newspapers such as the Wall Street Journal or the Economist. While the course emphasizes broad principles rather than preparation for specific jobs, it should be helpful in preparing students for job interviews and for jobs in investment analysis or public policy. It also has some overlap with professional qualifications such as the CFA exams.

**Homework:** I expect to assign around 6 homeworks during the semester. Late homeworks will not be accepted. You can collaborate on homeworks but everyone must write up their own solutions. If the TA finds that two people have identical solutions, then both will receive a grade of zero.
Classroom Climate: I am committed to creating a classroom environment that values the diversity of experiences and perspectives that all students bring. Everyone here has the right to be treated with dignity and respect. I believe fostering an inclusive climate is important because research and my experience show that students who interact with peers who are different from themselves learn new things and experience tangible educational outcomes. Please join me in creating a welcoming and vibrant classroom climate. Note that you should expect to be challenged intellectually by me, the TAs, and your peers, and at times this may feel uncomfortable. Indeed, it can be helpful to be pushed sometimes in order to learn and grow. But at no time in this learning process should someone be singled out or treated unequally on the basis of any seen or unseen part of their identity. If you ever have concerns in this course about harassment, discrimination, or any unequal treatment, or if you seek accommodations or resources, I invite you to share directly with me or the TAs. I promise that we will take your communication seriously and to seek mutually acceptable resolutions and accommodations. Reporting will never impact your course grade. You may also share concerns with the department chair (Yingyao Hu, yhu@jhu.edu), the Director of Undergraduate Studies (Bruce Hamilton, bruce.hamilton@jhu.edu), the Assistant Dean for Diversity and Inclusion (Darlene Saporu, dsaporu@jhu.edu), or the Office of Institutional Equity (oie@jhu.edu). In handling reports, people will protect your privacy as much as possible, but faculty and staff are required to officially report information for some cases (e.g. sexual harassment).

Family accommodation policy: You are welcome to bring a family member to class on occasional days when your responsibilities require it (for example, if emergency child care is unavailable, or for health needs of a relative). In fact, you may see my children in class on days when their school is closed. Please be sensitive to the classroom environment, and if your family member becomes uncomfortably disruptive, you may leave the classroom and return as needed.

Course materials: Slides for projection in class and other course materials are available on the course webpage: [http://www.econ2.jhu.edu/courses/367](http://www.econ2.jhu.edu/courses/367)

Grades:
- Homework: 20 percent.
- Midterm 1: 20 percent.
- Midterm 2: 20 percent.
- Final: 40 percent.

The overall grade will then be determined from the following table.

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Exam Times:
● Midterm 1: October 1 at class time
● Midterm 2: October 29 at class time
● Final: TBD

Important Points:
1. There is no senior option in this course.
2. This year, exams will be open book and online in Blackboard, but they are timed tests and must be taken at the assigned time. You should have studied the material before the test. If for some reason you cannot take the exam at the assigned time, then you will have a makeup oral exam on Zoom with the professor.
3. Exams will cover all topics discussed in class. Slides, the book, and past exams are there to help you with studying. But they are not the primary reference. Anything that I cover in class is fair game, even if it isn’t in the slides, in the book or in past exams.
4. Course grades depend on homeworks, midterms and final alone. There is no way of getting “extra credit” or revising a grade from that determined by performance on homeworks and exams.
5. Any request for a regrade of a homework must be submitted in writing within two weeks of the homework being given back.
6. As with all classes this semester, the default grade is S/U. But you can opt in to getting a letter grade.
7. Because of the coronavirus situation, the plans for this course may need to be changed.

Course Outline:


2. Optimal portfolio choice and risk sharing. (Chapter 7).

3. The Capital Asset Pricing Model and single index models, including solving for the efficient frontier in Excel. The security market line. (Chapters 8 and 9).


