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.

**Course materials:** Slides for projection in class and other course materials are available on the course webpage: [http://www.econ.jhu.edu/courses/367](http://www.econ.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 or exam must be submitted in writing within two weeks of the homework or exam being given back.
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).


