

Master of Science in Applied Economics
University of Maryland, College Park

ECON 670: Financial Economics (Spring 2021)

Instructor Name Joonkyu Choi
Instructor Email choijk85@gmail.com
Class Thursdays 6:45-7:30pm, 8:30-9:15pm

Office Hours Thursdays 6:00-6:45pm

Quiz 2/18
Midterm 3/25
Final 5/13

TA Name TBA
TA Email TBA
TA Office Hours TBA

Overview

This course applies microeconomic theory and applied econometric techniques to the study of financial markets and investment. Students will learn how economists model and estimate the value of financial assets. The course will also cover the interaction between the macroeconomy, financial markets, and monetary and fiscal policy. Specific topics include bonds, behavior of interest rates, portfolio theory, capital asset pricing model, efficient market hypothesis, and equity valuation.

Course Objectives

Our program has 7 general learning objectives:

- 1. Ability to understand, evaluate and analyze economic data**
- 2. Ability to understand and interpret statistical evidence from economic data**
- 3. Ability to apply empirical evidence to assessing economic arguments**
- 4. Ability to apply macroeconomic theories to policy discussions**
5. Ability to apply microeconomic theories to policy discussions
- 6. Ability to communicate economic ideas to a broader audience**
7. Ability to evaluate the effectiveness of policy programs using sound economic techniques

The learning outcomes that pertain to this course are: 1, 2, 3, 4, and 6

Prerequisites

ECON 641 and ECON 644. Students may take the course concurrently with ECON 644

Textbook

Zvi Bodie, Alex Kane and Alan J. Marcus, *Investments*, 12th Edition, McGraw Hill

Course Outline

| Week | Date | Topic | Textbook Chapters |
|------|------|---|-------------------|
| 1 | 1/28 | Financial Assets and Time Value of Money | 1, 2, Notes |
| 2 | 2/4 | Bond Pricing | 14, 15, 16 |
| 3 | 2/11 | Equilibrium Interest Rates and Risk Structure | 14, 15, 16 |
| 4 | 2/18 | Quiz / Term Structure of Interest Rates | 14, 15, 16 |
| 5 | 2/25 | Risk and Return | 5 |
| 6 | 3/4 | Capital Allocation to Risky Assets | 6 |
| 7 | 3/11 | Efficient Diversification | 7 |
| | 3/18 | Spring break – no meeting | |
| 8 | 3/25 | Midterm Exam / Index Models | 8 |
| 9 | 4/1 | The CAPM, APT, and Multifactor models | 9, 10 |
| 10 | 4/8 | The Efficient Market Hypothesis | 11 |
| 11 | 4/15 | Macroeconomic and Industry Analysis | 17 |
| 12 | 4/22 | Equity Valuation Models | 18 |
| 13 | 4/29 | Options | 20 |
| 14 | 5/6 | Futures | 22 |
| 15 | 5/13 | Final Exam | |

Grading Policy

| | |
|-------------------|------|
| Quiz | 5% |
| Assignments | 25% |
| Midterm | 30% |
| Final | 30% |
| Presentation | 5% |
| Online Discussion | 5% |
| Total | 100% |

Assignments

There will be three assignments which involve empirical analysis using financial and macroeconomic data and require the use of STATA. All assignments must be submitted through ELMS. I will cover relevant STATA commands and analysis techniques in class. Students are encouraged to meet with the TA to discuss any questions regarding assignments. All graded assignments will be returned to students within 7 days after submitting the assignments.

Exam Policy

There will be two exams: a mid-term and a final. Final exam is NOT cumulative. Calculators are needed and you may use Excel spreadsheets. The midterm and final must be taken on the scheduled dates. See “Excused Absences” under “Other Policies” for permissible exceptions.

Presentations and Online Discussion

On the first day of the course, I will post a list of economic/financial articles that will be used for presentation and online discussion. The articles will be mostly short and non-technical pieces written for public audience. Each student will present one article.

Presenters are expected to read the article thoroughly and give a presentation in less than 10 minutes during class summarizing (i) what the article is about, (ii) what the main findings/messages are, and (iii) one or two discussion items related to the article. I will provide some guidance and examples for discussion items in class. Presenters will

be evaluated on the quality of the presentation and discussion items. After each presentation, the presenter is required to post the discussion items on ELMS under "Discussions" tab by 11:59pm of the day after the presentation. Online discussion will begin after the presenter posts the discussion items on ELMS and will continue until the 11:59pm of the day before the following class. All students are expected to participate in all online discussions, either by responding to the presenter's discussion items or other participants' comments. Participation and the quality of your posts will determine the final online discussion grade. I will be regularly monitoring the discussions, respond to some of it, and redirect the discussions as necessary.

Late Penalty

All assignments and discussions are subject to late penalties. The penalties are as follows: 20% for late work submitted after the specified time on the due date, 50% for second day. Assignments are not accepted after the second day. Late penalties apply except when prior approval is obtained.

Final Course Grades

Final letter grades are based on the weighted score. Numerical course grades will be translated into letter grades as follows:

| | |
|-----------|----|
| [93, 100] | A |
| [90, 93) | A- |
| [80, 90) | B+ |
| [70, 80) | B |
| [60, 70) | B- |
| [50, 60) | C+ |
| [40, 50) | C |
| [30, 40) | C- |
| [20, 30) | D+ |
| [10, 20) | D |
| [0, 10) | F |

"[" indicates "greater than or equal to," and ")" indicates "less than." A+ may be given for exceptional achievement to a student or two at the very top of the class' grade distribution.

Standard Program Policies and Information

Course Website: Copies of the course syllabus, your grades, and other relevant links and documents will be posted on the course's ELMS/Canvas website. You can access the site via www.elms.umd.edu. You will need to use your University of Maryland "directory ID" and password.

Email: The University has adopted email as the primary means of communication outside the classroom, and I will use it to inform you of important announcements. Students are responsible for updating their current email address via <http://www.registrar.umd.edu/current/> (Under the first major heading of "Online Transactions" there is a link to "Update Contact Information".)

Contact Hours: Three credit master's-level courses at the University of Maryland require a minimum amount of contact between instructors and students. Our courses' 12 weekly meetings only satisfy 80% of the university's contact requirement. The other 20% is satisfied by weekly mandatory and graded online contact. In principle, the contact hours requirement could be satisfied by scheduling 3 additional 150-minute meetings per term, or 6 additional 75-minute meetings, or 10 additional 45-minute meetings. But in practice the contact hours requirement is satisfied by the weekly online discussions. The weekly online discussions are a more flexible way to

ensure that our program's courses in DC provide the same level of student-instructor contact as the traditional 15-week face-to-face version of the same course when it is taught on campus in College Park.

Work Load: Mastering the material covered in this course requires a significant amount of work outside of class. Students should expect to spend more time outside of class than in class – typically at least twice as much time. The courses in our DC program are 12-week courses that cover all the same material as a traditional semester-long 3-credit course (15 weeks). The compressed schedule makes it possible to complete our degree in just 15 months if you take 2 courses each term. But the compressed schedule also implies an accelerated pace with an average of 25% more work per week in a given course ($15/12 = 1.25$). The normal full-time load in a master's program is 3 courses per semester, or 6 courses per year. The weekly work load when taking 2 of our DC courses per term is equivalent to the load from 2.5 "normal" 15-week courses - so $2.5/3.0 = 83\%$ of a full-time load. Students who take 2 courses per quarter in our program complete 8 courses per year. So over the course of a year, taking 2 courses per quarter in our DC program is equivalent to 133% of a full-time load ($8/6 = 1.33$).

Academic Integrity: The University of Maryland has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards applicable to all undergraduate and graduate students, and you are responsible for upholding these standards as you complete assignments and take exams in this course. Please make yourself aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information see www.studenthonorcouncil.umd.edu.

Student Conduct: Students are expected to treat each other with respect. Disruptive behavior of any kind will not be tolerated. Students who are unable to show civility to one another or myself will be referred to the Office of Student Conduct. You are expected to adhere to the Code of Student Conduct.

Excused Absences: The University of Maryland's policy on excused absences is posted here:

<http://www.president.umd.edu/administration/policies/section-v-student-affairs/v-100g>

Please note:

If you miss any class meetings for any reason, you are still responsible for all material covered during the meeting you missed. It is your responsibility – not the instructor's – to get yourself caught up in the course. Instructors routinely facilitate things by posting lecture notes, etc.

If you need to miss an exam or other graded course requirement because of illness, injury, or some other emergency: Follow doctor's orders and get documentation. Get in touch with the instructor as soon as you're able – preferably prior to missing the exam or deadline. Communicate with the instructor to make up the course requirement as soon as possible. You are entitled to recover before you make up the course requirement, but you are not entitled to extra days to study beyond the time the doctor's note says you're incapacitated. If you are incapacitated for more than a week or so beyond the end of the term, your grade in the course will be an "Incomplete". In such cases you must negotiate a plan with your instructor for completing the course requirements. Once you make up the course requirement the instructor will change your "I" to the appropriate letter grade.

School Closings and Delays: Information regarding official University closing and delays can be found on the campus website and the snow phone line: (301) 405-SNOW (405-7669). Since our program is an evening program in downtown Washington, DC, rather than a day program in College Park, we do not always cancel classes on the same days as the College Park campus. The program director will always announce cancellation information to the program as an announcement on the program's ELMS/Canvas site. This will generally be done by 1:00 p.m. on days when weather or other factors are an issue.

UMD Counseling Center: Sometimes students experience academic, personal and/or emotional distress. The UMD Counseling Center in Shoemaker Hall provides comprehensive support services that promote personal, social, and academic success. The cost of these services is covered by the fees you already paid when you registered for classes, and there is no additional charge if you use the services. Proactively explore the range of services available, including the Counseling Service, Accessibility and Disability Service, Learning Assistance Service, and the Testing Office, all described at <http://www.counseling.umd.edu/>

Students with Disabilities: The University of Maryland does not discriminate based on differences in age, race, ethnicity, sex, religion, disability, sexual orientation, class, political affiliation, or national origin. Reasonable accommodations will be arranged for students with documented disabilities. Students who have an accommodations letter from the Accessibility and Disability Service (ADS) should meet with me during the first week of the term to discuss and plan for the implementation of your accommodations. If you require reasonable accommodations but have not yet registered with ADS, please contact the Accessibility and Disability Service at 301-314-7682 or adsfrontdesk@umd.edu.

Academic Progress: The UMD Graduate School requires that students maintain a GPA of at least 3.0. Students whose cumulative GPA falls below 3.0 will be placed on academic probation by the graduate school. Students on academic probation must ask the program's director to petition the graduate school if they want to remain enrolled in the program. The petition must include a plan for getting the student's GPA up to at least 3.0. Students who do not live up to their plan can have their enrollment in the program terminated without having earned the degree. Note: a grade of "B" corresponds to a GPA of 3.0. A grade of "B-" corresponds to a GPA of 2.7.

Building Access: The door to the building at 1400 16th Street is unlocked on weekdays until 7:00 PM. Students who arrive after 7:00 PM or on weekends will find the door locked. The building's concierge station has been moved in the recent lobby renovation, so the concierge can no longer easily see when someone is at the door. You can call the phone on the security guard's desk by dialing (202) 328-5158. If the security guard is off duty or happens to be away from his or her desk when you arrive, you can always also go around to the other door at 1616 P Street and pick up the black phone to the right of that door. You will be connected to the company that handles security for our building. If you tell them you're with the University of Maryland (suite 140 in 1400 16th Street), they should ask you for a password. When you tell them the password, they will buzz you in. You can get the password from the program coordinator, the TAs, or the program director. Please note: the building security staff are not able to buzz you in at the 1400 16th Street door. You have to go around to the 1616 P Street door to be buzzed in.