

Econ 670: Financial Economics (Spring 2024)

1.1 Instructors and Classes

Instructor Name: Christian Krestel
Instructor email: ckrestel@umd.edu
Class Meetings: **Tuesday evenings 6:30-9:15 pm, with 15-minute break around 8:00pm**

Location: **College Park, Main Campus
Tydings 2102**

Office Hours: Zoom, Sunday 08.00pm-09.00pm, and by appointment

Link
<https://umd.zoom.us/j/96436279589?pwd=VnUxWXQ2SHRjZWFESEdgrTDB5cEZUZz09>

TA Name: Chenyu Mao
TA email: maocy@umd.edu
TA Office hours: Tuesday 5-6pm (zoom, or occasionally in-person upon request)

Link
<https://umd.zoom.us/j/95252707099?pwd=OVovN2xuejBMb1pkL005RVJwYzZ5QT09>

1.2 Communication

The primary means of communication is email. Emails will be sent to @umd.edu addresses. You are responsible for regularly checking your @umd.edu address including announcements made via ELMS/Canvas. Please note that problems with your mailbox do not excuse missed deadlines or announcements.

I will try to answer your emails as quickly as possible. You are, however, also welcome to attend my office hour (via Zoom). You'll find the link above. Please send me an email before informing me that you want to attend!

1.3 Exams

Midterm: 03/12
Final: 05/14

1.4 Overview

This course is designed to introduce students to the key topics in financial economics. The course will provide an introduction to the theory of asset pricing and the theory of portfolio choice. Topics include the pricing of risk and time, diversification, arbitrage, market efficiency and the valuation of diverse financial instruments such as bonds, stocks, derivatives, securities, futures, options and real options.

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.

1.5 Learning Objectives

Our program has 7 general learning outcomes for students:

- 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

Outcomes 1-6 pertain to ECON 670.

1.6 Textbook(s)

The textbook we will use is *Berk, DeMarzo: Corporate Finance, 4th edition*. You can use previous or later editions, but not the Core edition or the Global edition. We will be reading and discussing journal articles related but not equal to what we study in class. See section presentations below.

We will also use:

Hull, John: Options, Futures And Other Derivatives

Ang, Clifford S.: Analyzing Financial Data and Implementing Financial Models Using R

1.7 Software

In class I will mainly use Mathematica (to which you have access via UMD), R and RStudio (which is for free and can be downloaded at <https://posit.co/download/rstudio-desktop/>). At times I will use Stata or Excel. You are free to choose any of these four programs for your work.

1.8 Tentative Course Outline

Week	Date	Topic	Textbook Chapters
1	01/30	Time Value of Money	4
2	02/06	Interest Rates	5
3	02/13	Valuing Bonds HW1 Release	6
4	02/20	Investment Decision Rules	7
5	02/27	Valuing Stocks, the efficient market hypothesis HW1 Submission, HW 2 release	9
6	03/05	Risk and Return HW2 submission: 03/09	10,11
7	03/12	MIDTERM	
	03/19	SPRING BREAK	
8	03/26	Asset pricing I, the CAPM	11, 12
9	04/02	Asset pricing II	12,13

		Presentation 1 HW 3 release	
10	04/09	Capital Structure in a perfect market, MMI and MMII Presentation 2	14
11	04/16	Debt and Taxes, tax shields and bankruptcy Presentation 3 HW 3 submission	15
12	04/23	Options and Trading Strategies involving options Presentation 4 HW 4 release	20,21
13	04/30	Binomial Trees, The Greek letters, Volatility smile and volatility surfaces Presentation 5	H18,19
14	05/07	TBAO: Futures or Sustainable Finance HW 4 submission	H18,19
15	05/14	FINAL	

2. Grading and related issues

2.1 Types of evaluation:

- (a) Exams: Midterm (22%), Final (30%)
- (b) Quiz (2, 7% each, in total 14%)
- (c) Assignments (4, 5% each, in total 20%)
- (d) Presentation (14%)

(a) Exams: Final and midterm at the above dates. See “Excused Absences” under “Other Policies” for permissible exceptions. All exams are in-person and proctored. No collaboration is permitted and the exam is closed book. The use of calculators or Excel is permitted.

(b) Quizzes: There will be two quizzes throughout the course. The precise date of the quizzes is random. However, there is one quiz in weeks 1-6 and one quiz in weeks 8-14. Each quiz will focus on the material of the last lecture, however, material we have seen before, may also be required.

(c) Assignments: There will be assignments that are both empirical (requiring the use of R or Stata or Excel) and theoretical. All assignments must be submitted through ELMS. You are encouraged to solve and discuss the assignments in groups, however, every student is required to submit an assignment of his/her own. You are also encouraged to discuss any problems/questions relating to the assignments with your TA. The schedule for the assignments is as follows:

	Release	Submission
Assignment 1	02/13	02/27
Assignment 2	02/27	03/09
Assignment 3	04/02	04/16
Assignment 4	04/23	05/07

Late submissions are not accepted.

(d) Presentations: In class we will have presentations, at the dates outlined in the tentative course outline. Presentations are in groups. Group size will depend on enrollment. You find a tentative reading list of articles below, but are invited to find your own articles, if you wish. I will then check if they rhyme with the material of the course. The group formation process and the selection of the paper is to be completed in the second course week. Please send me an email with all group members and the paper after the second lecture.

The presentations are supposed to encourage students to complement and extend the material learned in class with cutting edge research or policy papers. With the presentations we will stimulate discussions in class and add to the material learned. A presentation is the culmination point of a larger project. One week before the presentation, each group is required to send me a draft of the presentation. You will receive comments from me via email (or Zoom if necessary). The more interactive the presentation is, the better for all of us! Should you need additional directions at any point before the presentation, please let me know and we will arrange a Zoom call or meeting.

Tentative Reading list:

1. Monetary Policy Report, Part 1 – Recent Economic Developments Board of Governors of the Federal Reserve System, June 2022
2. Monetary Policy Report, Part 1 – Recent Economic Developments Board of Governors of the Federal Reserve System, July 2021
3. Jefferson, Duarte, Francis A Longstaf, and Fan Yu, 2007: Risk and Return in Fixed-Income Arbitrage: Nickels in Front of a Steamroller?, *Review of Financial Studies*, 20, 769-811
4. Graham, John R. and Campell R. Harvey 2001: The Theory and Practice of Corporate Finance: Evidence from the Field, *Journal of Financial Economics*
5. Fama, Eugene, and Kenneth French, 2005: Financing decisions: Who issues stock?, *Journal of Financial Economics*, p 549-582
6. BG Malkiel, (2003), The efficient market hypothesis and its critics, *Journal of Economic Perspectives*
6. Cochrane, John, 2011: Presidential Address: Discount Rates, *Journal of Finance*, p. 1047-1108, Part I, II, III
7. Baker, Scott, Boom B, Davis S., Kost K, Sammon, M and Viratyosin T. 2020: The unprecedented stock market impact of Covid-19, NBER working paper No 26945
8. Correia, Sergio, Stephan Luck, and Emil Verner, 2020: Pandemics depress the economy, public health interventions do not: Evidence from the 1918 flu. Working paper
9. Fama, Eugene and Kenneth, French 2004: The capital asset pricing model: theory and evidence, *Journal of Economic Perspectives*, 18(3), p 25-46
10. Fama E.F, and French K.R, 1993: Common risk factors in the return on stocks and bonds, *Journal of financial economics*, 33(1) p. 3.56

11. Baker, Malcom and Jeffrey Wurgler, 2007: Investor Sentiment in the Stock market, *Journal of Economic Perspectives*, 21(2) p 129-151
12. Barberis, N. and Thaler, R, 2002: A survey of behavioral finance, NBER working paper
13. Miller, Merton, 1998, The Modigliani-Miller Propositions After Thirty Years, *Journal of Economic Perspectives* 2, p. 99-120
14. Jorion, Philippe, 2000: Risk Management Lessons from Long-Term Capital Management, *European Financial Management* 6, 277-300
15. C Gollier, ML Weitzman (2010): How should the distant future be discounted when discount rates are uncertain?, *Economics letters*

2.2 Grades

At the end of the term, every student will have a numerical course grade between 0 and 100. I will decide upon the numerical cutoffs between various letter grades based on my professional judgment. I will consider students' performance relative to the class. I will also consider absolute standards of professional competence. Highly competent students will get A's. Barely competent students will get B's. Grades of B's or worse indicate work that is below the minimum acceptable standards of our program.

The cutoffs that I use will respect the ordinal ranking of numerical course grades. No student with a given numerical course grade will receive a lower letter grade than someone else with a lower numerical course grade.

Observe that A+ may be given for exceptional achievement for the students at the top of the distribution.

3. Standard Policies

Policies related to all graduate courses at the University of Maryland are posted on this page of the Graduate School's website:

<https://gradschool.umd.edu/faculty-and-staff/course-related-policies>

Please familiarize yourself with these policies related academic integrity, non-discrimination policy, accessibility, absences and accommodations, grading, academic standing, grievance procedures, and other important policies.

Workload: 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. In a regular 15-week semester (as in the College Park version of our program): Taking 3 master's-level courses is supposed to approach the time commitment of a full-time job (~36-39 hours per week, so 12-13 hours per week per course). Taking 3 master's-level courses while simultaneously working at a demanding full-time job during the day is not advisable. Students with questions about the workload in this program should speak with the program directors.

Academic Progress: The 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 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 be forced to leave the program 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.

Excused Absences: 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 to work with study partners, the teaching assistant, and the instructor to make sure you catch up on the missed material. 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've been 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) The program director will also 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. When classes need to be canceled during the semester, we make every effort to schedule makeup classes.

Software (Office, Stata,...) : Note: Stata is not available through Terpware, but many other software packages, including the Microsoft Office suite which includes Microsoft Excel, are available for free or at a discount to University of Maryland students via Terpware:

<https://terpware.umd.edu/Windows> or <https://terpware.umd.edu/Mac>

Stata Purchasing Options:

Students in our program are required to purchase Stata. Stata offers different "flavors" and different lengths of licensing. Price varies according to these two factors. Stata also offers discounted pricing for students. Stata/BE is the least expensive version of Stata, and is sufficient version for your coursework in this program. With a single-user license, you can install Stata on up to three computers. Description of all the "flavors" are given here:

<http://www.stata.com/products/which-stata-is-right-for-me/>

The most cost-effective license duration is to purchase a perpetual license (which never expires). The student price for a perpetual Stata/BE license is \$225. The student price for an annual license is \$94, so more expensive if you end up using Stata for longer than 1 year – which you will do just to graduate from our program. Most of our graduates continue to use Stata even after they graduate, so

the \$225 perpetual license is worthwhile. Perpetual license holders are also entitled to discounted Stata upgrades in the future.

Here is the link for student single-user purchase:

<https://www.stata.com/order/new/edu/gradplans/student-pricing/>

Laptop Computer Requirement: Completing some of this course's requirements will require a laptop computer (not a notebook or a tablet!) with at least 1 GB of RAM and at least 5 GB of free space available on the hard-drive. We recommend laptops with at least a 15-inch screen. Screens smaller than 13 inches are probably not practical.

UMD Counseling Center: Sometimes students experience academic, personal and/or emotional distress. The UMD Counseling Center in Shoemaker Hall provides comprehensive and confidential 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, and the Testing Office, all described at <http://www.counseling.umd.edu/>

Graduate Academic Counselor: The UMD Graduate School also has an academic counselor available to support students who are having difficulty navigating mental health resources on campus, are considering a leave of absence and/or need assistance finding mental health care off campus. The Graduate Academic Counselor also facilitates bi-weekly Graduate Student Circle Sessions which provide an opportunity to learn about resources and connect with other graduate students. Students can learn more about the Graduate Academic Counselor by going to: <https://gradschool.umd.edu/gradcounselor>

UMD Accessibility & Disability Service: The University of Maryland is committed to creating and maintaining a welcoming and inclusive educational, working, and living environment for people of all abilities. The University of Maryland is also committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the University, or be subjected to discrimination. The Accessibility & Disability Service (ADS) provides reasonable accommodations to qualified individuals to provide equal access to services, programs and activities. ADS cannot assist retroactively, so it is generally best to request accommodations several weeks before the semester begins or as soon as a disability becomes known. Any student who needs accommodations should contact ADS as soon as possible so that they have sufficient time to make arrangements. For assistance in obtaining an accommodation, contact Accessibility and Disability Service at 301-314-7682, or email them at adsfrontdesk@umd.edu. Information about sharing your accommodation letter, discussing accommodation logistics and getting assistance from ADS staff and more can be found on the ADS website.

Course Evaluations: Near the end of the term, you will receive an email inviting you to submit a voluntary and anonymous course evaluation. Your feedback on courses will be very helpful in improving the quality of instruction in our program.

Access to Morrill Hall and Morrill 1102: Morrill Hall is locked every day from 7:00 p.m. - 7:00 a.m. Your university ID gives you swipe access to the back door of the building. There is keypad

access to the door of Morrill 1102. The code will be shared with students by the program coordinator.