



FBE 555: Investment Analysis and Portfolio Management
3 units – Spring 2023

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Office: ACC 301D
Office hours: Tuesdays 1:00 - 2:00 p.m.
Thursdays 11:00 a.m. - 12:00 p.m.

This syllabus describes the content, policies, and procedures of this course. Please read it.

Course Summary & Objectives

The primary objective of the course is for students to understand Modern Portfolio Theory and apply it to investment decisions. Major topics include:

- financial assets,
- market efficiency,
- optimal portfolio selection, and
- the relationship between risk and return.

Upon successful completion of this course, students will be able to:

- describe how modern financial markets function;
- explain how stock, bond, and derivative security prices are determined;
- implement Modern Portfolio Theory, which maximizes the expected return of a portfolio given a certain amount of risk; and
- be able to evaluate potential investments and investment strategies.

Prerequisites and Expectations

Students are expected to have completed core courses in microeconomics, finance, and statistics. You are assumed, for example, to know what common financial instruments are (as described in the 2nd chapter of the textbook), to be comfortable with present value calculations, and to be familiar with the CAPM and understand expected returns and present value.

The study of investments is inherently quantitative. Knowledge of basic statistics (means, covariances, regression, *etc.*) is critical, as these tools will be used throughout the semester. Also, problem sets may require the use of Excel, so familiarity with it will be helpful, though not necessary.

Lectures and Reading

The bulk of class time will consist of lectures. The lectures are a complement to, rather than a substitute for the textbook; your understanding of the material in lectures will be compromised if you do not do required reading before class.

Lecture notes and other materials will be available on the course page on Blackboard. I will not bring handouts to class, so please check the course page on Blackboard to stay up to date on what materials are available.

Readings will most often come from the textbook, which is Investments, by Bodie, Kane, and Marcus (“BKM”). The current—12th—edition is available in the bookstore. The 10th and 11th editions are similar, but if you use one of them, you do so at your own risk. Other mandatory readings will be downloadable from the course website.

Course Requirements and Grading

The course grade will be based on five problem sets, a midterm exam, a final, an investment contest report, and your course participation. Your course grade will be determined using the following weights:

- 20% problem sets,
- 25% midterm exam,
- 35% final exam,
- 10% investment game, and
- 10% class contribution and professionalism.

Your course *letter grade* will be determined based on how your score compares to those of other students. The average grade target for this class is a 3.5 out of 4.

Problem sets

There are five problem sets that are to be completed in groups of up to three students. I expect these groups to be unchanged for the length of the semester. You may work individually, but I recommend that you work in a group.

All problem set scores are numbers between 0 and 1 and are not curved. Your problem set score is based on your best four scores out of the five problem sets. Failing to turn in a problem set results in a grade of zero for that problem set. Your score will be based on completeness, rather than correctness.

At least one member of your group must have available for bringing to class a network-ready laptop computer that runs Microsoft Excel. In addition, both Solver and the Data Analysis add-ins must be installed in Excel. I will let you know in advance when bringing the laptop will be required.

All assignments and problem sets should be turned in by uploading them to Blackboard. The name of your group should be part of your file name. The names of all members in your group should appear inside each submission.

Solutions will be available shortly after each assignment's due date. I strongly advise all students to read and understand these solutions.

At the end of the semester, all students will be allowed to submit a form evaluating the contributions of their teammates. *A student's problem set grade may be reduced if there is a consensus that his or her contributions were significantly lower than those of the rest of the team.*

Exams

All exams will be in class. They are closed books and closed notes but will include a formula sheet. Both the midterm and final grades are standardized (*i.e.* curved) using the mean and standard deviation from the class.

Students with medical or family emergencies will be given an opportunity to take a makeup exam. The makeup will occur after the regular exam and will differ from the original exam. The time of the makeup will be at my discretion, and I reserve the right to ask for documentation of all excuses.

Investment game

This course includes a two-phase investment game. In the first phase (due in the second week of classes), student groups will make an imaginary \$1 million investment in a portfolio of securities. No knowledge of investments is expected and your grade for the investment game will *not* depend on the quality of your portfolio or its performance. In the second phase (due in the penultimate week of classes), students will calculate their portfolio's earnings and critique their own investment. The grade for the game will depend only on accurately calculating their portfolio's return and the quality of their analysis of their original portfolio selections.

Class contribution and professionalism

There are a variety of ways to earn contribution and professionalism credit. They include (but are not limited to):

- answering questions in class in a way that evinces preparation for class (*note that I may cold call students*),
- asking thought-provoking questions or offering relevant comments in class,
- participating in in-class trading and investment games, and
- submitting electronic responses to in-class surveys.

Regrade Policy

Requests for an exam or problem set regrade must be submitted in writing no later than one week following the day the item was returned. For the regrade request, please give your name(s) along with a brief summary of why you think the grading was in error. Note that the entire exam or assignment may be regraded, so any regrade request could result in a lower grade.

Ungraded Practice Problems

I will post additional problem sets and their solutions on the course web page. These provide examples of computation and questions that might appear on an exam.

These problem sets will not be handed in, so I won't be grading them. I will be happy to discuss them in class or in office hours.

Class Schedule and Topics

January 10	First day of class
March 14 & 16	Spring recess
March 23	Midterm exam
April 27	Last class
May 4	Final exam
Topic 1	Course introduction and syllabus (skim BKM chapters 1 & 2)
Topic 2	Trading and markets (BKM chapter 3)
Topic 3	Investment funds (BKM chapter 4)
Topic 4	Historical returns on assets (BKM chapter 5)
Topic 5	Optimal portfolios with one risky asset (BKM chapter 6)
Topic 6	Optimal portfolios with multiple risky assets (BKM chapter 7)
Topic 7	CAPM (BKM chapters 8 - 9)
Topic 8	Multifactor models (BKM chapter 10)
Topic 9	Empirical evidence on CAPM and factor models (BKM chapter 13)
Topic 10	The Efficient Market Hypothesis (BKM chapters 11 and 12)
Topic 11	Options (BKM chapters 20 & 21)
Topic 12	Fixed income securities (BKM chapter 14)

OPEN EXPRESSION AND RESPECT FOR ALL
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An important goal of the educational experience at USC Marshall is to be exposed to and discuss diverse, thought-provoking, and sometimes controversial ideas that challenge one's beliefs. In this course we will support the values articulated in the USC Marshall "[Open Expression Statement](https://www.marshall.usc.edu/about/open-expression-statement)" (<https://www.marshall.usc.edu/about/open-expression-statement>).

STATEMENT ON ACADEMIC CONDUCT AND SUPPORT SYSTEMS

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on [Research and Scholarship Misconduct](#).

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University’s educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call

studenthealth.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call

suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL), press “0” after hours – 24/7 on call

studenthealth.usc.edu/sexual-assault

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

eeotix.usc.edu

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298

usc-advocate.symplicity.com/care_report

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776

osas.usc.edu

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

USC Campus Support and Intervention - (213) 821-4710

campussupport.usc.edu

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - (213) 740-2101

diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call

dps.usc.edu

Non-emergency assistance or information.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

ombuds.usc.edu

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - (323) 442-3340 or otfp@med.usc.edu

chan.usc.edu/otfp

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.