Instructor Information:

Kwaku Addae-Ankrah | addaeankrah@gmail.com Office Hours: W 1:00pm-3:00pm Gardner 102 in person

Class Schedule:

Section 001 T/R 12:30pm – 1:45pm in Gardner 307 Section 002 T/R 2:00pm – 3:15pm in Gardner 307

TA Office Hours:

The TA for this course is Shuofan Zhang. She will hold 4 hours of office hours each week during the following times:

Monday: 10am-12pm (remote): https://unc.zoom.us/j/95139407218. Passcode: ECON45

Friday: 12pm-2pm (in-person): Gardner Hall Room 405

<u>Course Website</u>: Assignments, announcements, grades, readings, and other information will be posted on Sakai. It is your responsibility to check Sakai and your UNC email regularly to stay informed regarding course content, exam dates, schedule changes, etc.

Email Guidelines: All emails should begin with the subject line **ECON 425-01/02:** + [**Brief descriptive title**]. e.g. *ECON 425-02: doctor's appointment*. Please, follow this policy all the time when emailing the instructor so that your email can be properly sorted into the correct folder and read in a timely manner. Allow the instructor 48 hours to respond to your email. If your email does not include the subject line, your email could get lost or receive a delayed response.

Course Materials:

Recommended Texts: *Investments* by Bodie, Kane and Marcus, 12th edition *The Economics of Money, Banking and Financial Markets* by Mishkin *Modern Investment Theory by* Haugen

Note that Bodie et al. have 2 different but related textbooks: *Investments* and *Essentials of Investments*. While the course will follow closely their *Investments* book, either book is fine and earlier versions are also fine since both books cover similar topics with same texts in many chapters. The only technical difference between the two books is that *Investments* uses more math than *Essentials of Investments*. If I should assign homework from either text, I will make the homework available on Sakai. Previous versions of *Essentials of Investments* may not include the part on introduction to Derivative Markets but the 12th edition does. In addition, a few more topics on derivatives are covered in *Investments*. However, we will only cover the basics of derivatives if time allows. Students interested in learning more about derivatives can consult

Fundamental of Options and Futures Markets by John C. Hull and Derivative Markets by Robert McDonald which are used in first-year MBA and graduate finance courses.

Electronics Policy:

The use of electronics in class is prohibited unless for participating in class activities such as Poll Everywhere. I suggest you print out the class slides and take notes on it or take notes in a book. You may take notes with your computer but you must be seated at the back rows to minimize distraction to other students. During some of the classes that require data manipulation in Excel, I will post announcement in Sakai to bring your laptop to class to follow along.

Recommended Periodicals:

Keeping abreast of the financial and macro news is essential for this course. Although not officially required, reading the Wall Street Journal and/or the Economist is highly recommended.

<u>Software</u>: You are not required to purchase software for this course. However, many assignments require access to a program that will store and manipulate data. Excel is the candidate for such tasks.

Prerequisites:

ECON 420 (Intermediate Theory: Money, Income, and Employment)

ECON 410 (Intermediate Theory: Price and Distribution) with a grade of C or better

ECON 400 (Economic Statistics) with a grade of C or better

Course Goal:

A central theme underlies the course: How does a risk averse individual allocate their funds? Students begin by defining and measuring risk, making connections to their microeconomics training. They then develop and use asset pricing models to explore the interplay between risk and return. These pricing tools are then applied to several assets, including equities, fixed income, and foreign exchange. Finally, students use these tools to develop a mean-variance optimal portfolio allocation. Along the way, students are introduced to basic quantitative tools, and participate in myriad practical applications.

Assessment:

Assessment is based on the following 5 components:

Homework (individual): 20%

Midterm 1: 20% Midterm 2: 20% Final Exam: 20%

Group portfolio management exercise: 20%

Homework: There will be several equally-weighted homework assignments throughout the semester. At the very least, you should expect one homework assignment for every topic that we cover. The homework will be due one week from the day we finish that

chapter. Homework submission will be on Sakai. If you have a university approved absence, then it is your responsibility to email me at addaeankrah@gmail.com either before or during the week you return to let me know which assignment(s) you would like to make up. If you email well past the week you return, you will be unable to make up the missed work.

Midterm and Final Exam: There will be 2 midterms and a comprehensive final exam. Midterm 1 will cover the first half of the material and Midterm 2 will cover the second half. Students in section 001 will not be permitted to leave the class until 1:50pm if they finish their midterm exams early. Also, students in section 002 who arrive more than 10 minutes late (i.e. after 2:10pm) during the midterm exams will not permitted to take the test. No make-up midterm or final exam will be given. If you missed any of the midterms with an "excused" absence, the Final Exam will account for 40% of the course grade. I will post a sample midterm on Sakai as a guide. The comprehensive final exam will cover all chapters.

Group portfolio management project: details will be announced later in class.

Tentative Course Outline

Tentante Course Outline	
Weeks 1-2	Introduction to Financial Markets & Trading platform What are financial markets? How are trades placed inside of our platform?
Weeks 3-4	Performance Measurements What are the best practices for computing and describing returns?
Weeks 4-5	Understanding the Risk/Return Tradeoff What is risk? How do we measure risk? How do investors allocate funds in the face of risk?
Weeks 5-6	Asset Allocation Why is diversification useful? How do we construct Markowitz-style optimal portfolios?
Weeks 7-8	Risk Free Asset Pricing What is the price of an asset in the simple case of no risk?
Weeks 9-11	Asset Market Equilibrium How do the CAPM and APT models permit investors to price assets in the face of risk?
Weeks 12-15	Asset Pricing How do investors price Equities, Fixed Income, and Foreign Exchange?

Macro & Markets

What is the interaction between the financial markets and the macro economy?

Grades:

Letter grades are computed from the total points earned during the semester and assigned based on the scale below:

A	93% and above
A-	90 - 92
B+	85-89
В	80-84
B-	75-79
C+	70-74
С	65-69
C-	60-64
D+	50-59
D	40-50
F	Below 40

Attendance Policy

University Policy: No right or privilege exists that permits a student to be absent from any class meetings, except for these University Approved Absences:

- 1. Authorized University activities
- 2. Disability/religious observance/pregnancy, as required by law and approved by <u>Accessibility</u> Resources and Service and/or the Equal Opportunity and Compliance Office (EOC)
- 3. Significant health condition and/or personal/family emergency as approved by the Office of the Dean of Students, Gender Violence Service Coordinators, and/or the Equal Opportunity and Compliance Office (EOC).

Class Policy: Attendance will be taken online using Polls Everywhere. You can log in at either polleverywhere.com or by using the Poll Everywhere mobile app. With either method, you must enter your official UNC-CH email address, select the Single Sign-On link, and then enter your Onyen and Password. Important: The email address you have listed under your profile in Poll Everywhere must exactly match the email address you have listed in the UNCDirectory. If this is not the case, your poll scores will not properly synch to Sakai! (It's a problem, for example, if your email is onyen@email.unc.edu in Poll Everywhere.) If your emails do not match exactly, please change your email address in Poll Everywhere to what is listed in the UNC Directory. If you need assistance, please visit https://edtech.unc.edu/service/poll-everywhere/orcontact_ITS_Help.

Though attendance is not mandatory, at the end of the semester, students who did not miss more than 4 classes (excluding documented University Approved Absences listed above) will receive extra credit of 5% towards their grade. If you miss 5 or more classes, you will receive 0 for the extra credit.

Honor Code

All students are expected to follow the guidelines of the UNC honor code. In particular, students are expected to refrain from "lying, cheating, or stealing" in the academic context. If you are unsure about which actions violate the honor code, please see me or consult honor.unc.edu.

Mask Use (In-Person Instruction Modes)

This semester, while we are in the midst of a global pandemic, all enrolled students are required to wear a mask covering your mouth and nose at all times in our classroom. This requirement is to protect our educational community—your classmates and me—as we learn together. If you choose not to wear a mask, or wear it improperly, I will ask you to leave immediately, and I will submit a report to the Office of Student Conduct. At that point you will be disenrolled from this course for the protection of our educational community. Students who have an authorized accommodation from Accessibility Resources and Service have an exception. For additional information, see Carolina Together.

Acceptable Use Policy

By enrolling as a student in this course, you agree to abide by the University of North Carolina at Chapel Hill policies related to the acceptable use of IT systems and services. You may be asked to participate in online discussions or other online activities that may include personal information about you or other students in the course. The rights and protection of other participants are protected under the UNC-Chapel Hill <u>Information Technology Acceptable Use Policy</u>, which covers topics related to using digital resources, such as privacy, confidentiality, and intellectual property.

Consult the University website "Safe Computing at UNC" for information about the data security policies, updates, and tips on keeping your identity, information, and devices safe.

Accessibility Resources and Services

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities.

Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Website for contact information: https://ars.unc.edu or email ars@unc.edu.

Counseling and Psychological Services

CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their website: https://caps.unc.edu/ or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

Title IX Resources

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Reports can be made online to the EOC at https://eoc.unc.edu/report-an-incident/. Please contact the University's Title IX Coordinator (Elizabeth Hall, interim—titleixcoordinator@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gysc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at safe.unc.edu.

Policy on Non-Discrimination

The University is committed to providing an inclusive and welcoming environment for all members of our community and to ensuring that educational and employment decisions are based on individuals' abilities and qualifications. Consistent with this principle and applicable laws, the University's Policy Statement on Non-Discrimination offers access to its educational programs and activities as well as employment terms and conditions without respect to race, color, gender, national origin, age, religion, creed, genetic information, disability, veteran's status, sexual orientation, gender identity or gender expression. Such a policy ensures that only relevant factors are considered and that equitable and consistent standards of conduct and performance are applied.

If you are experiencing harassment or discrimination, you can seek assistance and file a report through the Report and Response Coordinators (see contact info at safe.unc.edu) or the Equal Opportunity and Compliance Office, or online to the EOC at https://eoc.unc.edu/report-an-incident/.

Diversity Statement

I value the perspectives of individuals from all backgrounds reflecting the diversity of our students. I broadly define diversity to include race, gender identity, national origin, ethnicity, religion, social class, age, sexual orientation, political background, and physical and learning ability. I strive to make this classroom an inclusive space for all students. Please let me know if there is anything I can do to improve. I appreciate suggestions.

Undergraduate Testing Center

The College of Arts and Sciences provides a secure, proctored environment in which exams can be taken. The center works with instructors to proctor exams for their undergraduate students who are not registered with ARS and who do not need testing accommodations as provided by ARS. In other words, the Center provides a proctored testing environment for students who are unable to take an exam at the normally scheduled time (with pre-arrangement by your instructor). For more information, visit http://testingcenter.web.unc.edu/.

Learning Center

The UNC Learning Center is a great resource both for students who are struggling in their courses and for those who want to be proactive and develop sound study practices to prevent falling behind. They offer individual consultations, peer tutoring, academic coaching, test prep programming, study skills

workshops, and peer study groups. If you think you might benefit from their services, please visit them in SASB North or visit their website to set up an appointment: http://learningcenter.unc.edu.

Writing Center

The Writing Center is located in the Student and Academic Services Building and offers personalized writing consultations as well as a variety of other resources. This could be a wonderful resource to help with your writing assignments in this course (and any assignments in your other courses). You do not need a complete draft of your assignment to visit; they can help you at any stage! You can chat with someone in the writing center or set up as appointment on their website: http://writingcenter.unc.edu.

Grade Appeal Process

If you feel you have been awarded an incorrect grade, please discuss with me. If we cannot resolve the issue, you may talk to our departmental director of undergraduate studies or appeal the grade through a formal university process based on arithmetic/clerical error, arbitrariness, discrimination, harassment, or personal malice. To learn more, go to the <u>Academic Advising Program</u> website.