

# 52:390:315:01 Investments and Portfolio Management Spring 2023

Instructor: Prof. Tengfei Zhang Office: BSB 258 Email: <u>tengfei.zhang@rutgers.edu</u> Course Time: Tuesday & Thursday (11:10 AM – 12:30 PM) at BSB 106 Office hours: 2:00 pm – 4:00 pm Tuesday (Office or Zoom)

#### **Course Description and Objectives**

The objective of the course is to study the theory and practical evidence relevant to investments. The major topics include:

- . Overview of capital markets
- . Optimal portfolio selection and efficient diversification
- . The relation between risk and return and asset pricing models
- . Efficient market hypothesis and behavior finance

. Alternative investing (cryptocurrency, responsible investing, factor investing, retail investing) The course material is biased toward equity markets since there are separate courses that cover fixed income and derivative markets.

Learning goals include understand how capital market work and how optimal investment decisions are made, apply theoretical and quantitative models to solve practical financial problems, evaluate the strengths and limitations of investment theories, explain how bias affects investment decision making, relate investment decisions with financial market regulations, etc.

It is my intention to provide a collaborative and supportive learning environment where students will learn from one another both in and out of the classroom. To that end, modifications to this syllabus might be warranted as determined by the instructor as I assess the learning needs of this class.

#### **<u>Required Course Materials</u>**

Required Readings Bodie, Kane and Marcus, Essentials of Investments, 12e, Mc-Graw-Hill/Irwin

Connect: McGraw-Hill's Connect is a web-based assignment and assessment solution **required** for this course.

Pick either one	ISBN
Essentials of Investments, 12e Connect access card (e-book included)	
(2022 copyright)	9781264140244
Essentials of Investments, 12e Loose-leaf print with Connect (e-book included)	9781266440243

(2022 copyright)

McGraw-Hill link:

https://www.mheducation.com/highered/product/essentials-investments-bodiekane/M9781260772166.html

You can purchase it through Rutgers Barnes & Noble. <u>https://universitydistrict.bncollege.com/course-material-listing-</u> <u>page?utm\_campaign=storeId=65132\_langId=-</u> <u>1\_courseData=390\_315\_01\_W23&utm\_source=wcs&utm\_medium=registration\_integration</u>

After purchasing the Connect, register the Connect through the link below.

https://connect.mheducation.com/class/t-zhang-52-390-315-01-investments-and-portfoliomanagement-spring-2023

### **Prerequisites**

- Finance: You must have a basic understanding of the fundamental concepts in finance: the time-value of money; the relation between risk and return; the basic features and valuation of stocks and bonds. These topics are covered in 52:390:301 (a prerequisite course). I expect you to review the material from 52:390:301 as necessary.

- Math and Statistics: The study of investments is inherently quantitative, although we don't focus on mathematical derivation or statistical analysis. Knowledge of basic statistics (means, covariance, multiple regression, etc.) is indispensable and used repeatedly throughout the semester. If you have troubles with basic statistics (such as mean, covariance, and linear regression), please review relevant materials. In addition, you should be very comfortable with basic algebra and calculus.

- Computers/Software: Many of the examples in lectures and problem sets may require Microsoft Excel (or a similar product). You will need access to a computer and familiarity with Excel. I will assume that you know how to use spreadsheets to perform some basic analysis.

# **Communication**

- Connect: Reading assignments, homework, quizzes, and exams will be done through the Connect.

- Canvas: Posted will be the syllabus, resources (articles and examples), Power Point slides, announcements, guides, etc. To access this system, go to http://canvas.rutgers.edu to log in, and click on the course on the dashboard.

- Rutgers email: USE YOUR RUTGERS EMAIL ADDRESS. All communications to students will be done using the Rutgers email address provided to you. Please forward your Rutgers email to your personal email if necessary. Not checking your Rutgers email is not an excuse for missing any communications.

# **Grading**

Grades will be based on reading assignments, homework assignments, two midterms, a final, and class participation.

The percentage that each component contributes to your final grade is:

Reading assignments: 10%

Homework assignments: 15%

In-class coding/Excel assignments: 5% Two midterm exams: 30% Final exam: 20% Class participation: 20% Breakdown Class Participation: Group Presentation: 10% Group Presentation Q&A: 5% General Class Participation: 5%

Bonus points (up to 10%): class participation and behavior expectations (up to 4%); final exam bonus questions (1%); midterm/final course evaluation (2%); attend course-related seminars and speaker series (2%); Bloomberg training certificate (1%).

#### **Reading and Homework assignments**

- Reading assignments will be done through Connect. You will be asked to answer some conceptual questions when reading the textbook through Connect. You can answer questions multiple times until get correct answers. No late assignments will be accepted.
- Homework assignments will consist of questions from the chapters in the textbook. It will be done through Connect. You can answer questions multiple times until get correct answers. No late homework will be accepted.
- In-class coding/Excel assignments will consist of practical questions to help students to apply theoretical knowledge into practice. We will use R for coding. To promote class attendance and participation, these assignments have to be done in class.

Class participation: Presentation and group trading game.

• Presentation: We will have 8 groups (4 members each group). Each student in each group is expected to present once in class. Each presentation consistent of a 30-minute presentation and a 10-minute Q&A. The presentation materials are "stock/fund analysis and investment debate" in four special topics including cryptocurrency investing, CSR/ESG investing, factor investing, and retail investing. Each group will be asked to pick one topic out of the above four. The analysis information should come from The Wall Street Journal, Yahoo Finance, Seeking Alpha, Bloomberg, Morningstar and materials from CFA or other resources. You must submit the presentation slides to Canvas before the class. Other students who are not presenting are required to ask at least one question. Your score depends on presentation and Q&A. More details will be provided.

#### Exams

The exams will generally consist of multiple-choice questions, short answer, and problem solving. Partial credit will be awarded on any multiple-choice questions.

- All exams will be done on the Connect in classroom and will be proctored.
- Exam Make-up Policy: The course does NOT allow any regularly scheduled class

dates for "Make – up Exams." If for some legitimate "university approved" reason you are not able to take a scheduled exam, you must immediately submit valid proof concerning the reason for your absence (e.g.: doctor's note, an obituary, university approved excuse related to participation in university athletic event, military orders). Written notice regarding this absence must be provided at least one week in advance, so other options can be evaluated. Make-up exams for non-university approved reasons are NOT guaranteed.

#### **Grading Scale**

89.5%-100%	А
84.5%-89.4%	B+
79.5%-84.4%	В
74.5%-79.4%	C+
69.5%-74.4%	С
60%-69.4%	D
Below 60%	F

Course	outline and	assigned	readings*•
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Week	Class	Date	Day	Торіс	Chapters
1	1	01/17	Tu	Syllabus; Introduction; The Investment Environment	1
	2	01/19	Th	The Investment Environment	1
2	3	01/24	Tu	Asset Classes and Financial Instruments	2
	4	01/26	Th	Asset Classes and Financial Instruments	2
3	5	01/31	Tu	Security Markets	3
	6	02/02	Th	Security Markets	3
4	7	02/07	Tu	Mutual Fund	4
	8	02/09	Th	Mutual Fund and Review Q&A session	4
5	9	02/14	Tu	MIDTERM EXAM I	1,2,3,4
	10	02/16	Th	Risk and Return	5
6	11	02/21	Tu	Risk and Return	5
	12	02/23	Th	Group Presentation on Cryptocurrency Investing	
7	13	02/28	Tu	Efficient Diversification	6
	14	03/02	Th	Efficient Diversification	6
8	15	03/07	Tu	Efficient Diversification	6
	16	03/09	Th	Group Presentation on ESG Investing	
9	17	03/21	Tu	Capital Asset Pricing and Arbitrage Pricing Theory	7
	18	03/23	Th	Capital Asset Pricing and Arbitrage Pricing Theory	7
10	19	03/28	Tu	Arbitrage Pricing Theory and Review Q&A session	5,6,7
	20	03/30	Th	MIDTERM EXAM II	5,6,7
11	21	04/04	Tu	The Efficient Market Hypothesis	8
	22	04/06	Th	The Efficient Market Hypothesis	8
12	23	04/11	Tu	Behavioral Finance and Technical Analysis	9
	24	04/13	Th	Behavioral Finance and Technical Analysis	9
13	25	04/18	Tu	Group Presentation on Factor Investing	
	26	04/20	Th	Equity Valuation	13
14	27	04/25	Tu	Group Presentation on Retail Investing	
	28	04/27	Th	Evaluating Investment Performance and Review Q&A	8,9,13,18
15	29	05/09	Tu	FINAL EXAM (11:30 AM - 2:20 PM)	8,9,13,18

\*This course schedule is tentative and subject to modifications under instructor's discretion on students' needs and progress.

#### **Behavior Expectations**

I expect you to treat the instructor and other students with respect and courtesy. I expect students to arrive on time and stay for the entire class.

It will be helpful if you read the assigned chapters and attempt to work homework problems before we discuss them in class. If you are unprepared your learning efficiency will be much lower and ultimately you will have to work harder to get thesame grade!

Students are required to turn off their phones (or turn to silence) while they are in class. Please inform me BEFORE CLASS if you are expecting an emergency call and must leave your phone turned on.

#### General/Administrative

Pronouns: This course affirms people of all gender expressions and gender identities. Feel free to correct me on your preferred gender pronoun. If you have any questions or concerns, please do not hesitate to contact me.

Chosen Name (Preferred Name): If you have a chosen name or preferred name other than what is listed on the roster, kindly let me know. If you would like to have your name changed within the rosters officially, go to: https://deanofstudents.camden.rutgers.edu/chosen-name-application

#### Key Spring 2023 Dates

Tuesday, January 17
Thursday, January 26
Thursday, January 26
Monday, April 3
Saturday, March 11 - Sunday, March 19
Monday, May 1
Tuesday, May 2 & Wednesday, May 3
Thursday, May 4 - Wednesday, May 10

#### **Disability Services/Accommodations**

The University is committed to supporting the learning of all students and faculty will provide accommodations as indicated in a Letter of Accommodation issued by the Office of Disability Services (ODS). If you have already registered with ODS and have your letter of accommodations, please share this with me early in the course. If you have or think you have a disability (learning, sensory, physical, chronic health, mental health or attentional), please contact <a href="https://success.camden.rutgers.edu/disability-services.">https://success.camden.rutgers.edu/disability-services</a>.

Accommodations will be provided only for students with a letter of accommodation from ODS. Their services are free and confidential. Letters only provide information about the accommodation, not about the disability or diagnosis.

#### Academic Integrity

The Academic Integrity policy can be found at <u>http://studentconduct.rutgers.edu/student-</u> <u>conduct-processes/academic-integrity/</u>

Students are responsible for understanding the principles of academic integrity and abiding by them in all aspects of their work at the University. Students are also encouraged to help educate fellow students about academic integrity and to bring all alleged violations of academic integrity they encounter to the attention of the appropriate authorities.

Academic Integrity means that you (the student) must:

- •properly acknowledge and cite all use of the ideas, results, or words of others,
- •properly acknowledge all contributors to a given piece of work,
- •make sure that all work submitted as your own in a course activity is your own and not from someone else
- •obtain all data or results by ethical means and report them accurately
- treat all other students fairly with no encouragement of academic dishonesty

Adherence to these principles is necessary in order to ensure that:

- •everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments
- •all student work is fairly evaluated and no student has an inappropriate advantage over others
- •the academic and ethical development of all students is fostered
- •the reputation of the University for integrity is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld. Violations are taken seriously and will be handled according to University policy.

#### **Code of Student Conduct**

Rutgers University-Camden seeks a community that is free from violence, threats, and intimidation; is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and does not threaten the physical or mental health or safety of members of the University community, including in classroom space.

As a student at the University you are expected adhere to the Code of Student Conduct. To review the code, go to the Office of Community Standards: <u>https://deanofstudents.camden.rutgers.edu/student-conduct</u>

Note that the conduct code specifically addresses disruptive classroom conduct, which means "engaging in behavior that substantially or repeatedly interrupts either the instructor's ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities."

# 52:390:315

# Investments and Portfolio Management Spring 2023

Instructor: Dr. Tengfei Zhang

# SIGN BELOW AFTER YOU HAVE READ THE SYLLABUS.

I have read the notice in the syllabus and accept the Student Conduct Code of Rutgers University (https://studentconduct.rutgers.edu/processes/university-code-student-conduct). I understand and agree to abide by the policies set by the course, the department, the school, and the university.

Due Date: January 22, 11:59pm, 2023

SIGNATURE:	(Please sign)
NAME:	(Please print)

STUDENT ID:\_\_\_\_\_