

RUTGERS UNIVERSITY
School of Business – Camden

Innovations in Wealth Management

53:390:546 online Summer 2020

Tuesday to Monday

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Office Hours: By Appointment

COURSE DESCRIPTION:

This course explores recent innovations in the practice of Investment Management. Specifically, it demonstrates how the latest advancements in computation and data science enhance the practice of wealth management. The class is based on hands-on manipulation of financial data to construct and analyze custom investments portfolios. It covers the latest analyses and simulation techniques to investigate the robustness of various portfolio configurations for achieving a wide spectrum of financial planning goals.

REQUIRED TEXTBOOK & MATERIALS:

1. Textbook: NONE. Since the topics are so new, there are no appropriate textbooks on the market as of 2020. We will instead rely on weekly readings assembled and hand selected from various sources.
2. Software: R and R Studio. These are free.
 - First, you need to download and install ‘R’ on your machine from here: <https://www.r-project.org/> (we will use version 4.0.0)
 - Second, download R Studio – this is the graphical user interface from which we’ll be running R. You can download the latest version here: <https://rstudio.com/products/rstudio/download/>

RECOMMENDED MATERIALS:

NOTE: The following are NOT required, but recommended.

You should read The Wall Street Journal as it is a premier source of most business and finance related news. Substantial student discounts are available at the WSJ student rates subscription page. I will refer periodically to various WSJ content. Although not required, a subscription to The Wall Street Journal is highly recommended. Your future boss and colleagues are all reading it NOW!

You should also read something with a broader and more global focus. I strongly recommend The Economist, which also offers substantial student subscriptions. The Financial Times is another excellent source of finance news. Visit the Financial Times Education contact page and contact them regarding a student subscription for the semester, if not for the year.

TEACHING METHODS:

The material presented in the weekly readings form essential backbone of the course. However, much of your time will be devoted to activities that flesh out the material presented in the text through hands on project in R. Reading all assigned material should be your first priority, doing the assigned projects on-time, consulting with the professor immediately when you need help are strongly recommended actions for the student to excel in this course.

Syllabus updates and other course communication:

All changes and announcements will be made through the course website on Canvas. If you do not use your rutgers.edu email domain for your email address, please insure that you forward messages to whatever email address you use. Handouts will be post on Canvas from time-to-time. You are responsible for keeping up with this course. Be sure to check the course web site on a daily basis.

COURSE GOALS AND OBJECTIVES:

The finance area at the School of Business – Camden has adopted the following Learning Goals and Objectives for Finance 546.

By the completion of this course, you will be able to:

1. Identify and explain the reasons for disrupting the traditional investment practice.
2. Identify and explain the rise of Big Data and its analytical tools
3. Identify, explain and apply the techniques of R programming to portfolio optimization
4. Perform portfolio rebalancing
5. Perform portfolio backtesting
6. Perform Monte Carlo simulation of portfolio performance through bootstrapping
7. Identify, explain, and calculate the tail risks of a portfolio
8. Conduct a portfolio style analysis.
9. Explain and Identify the concepts of risk contribution, risk parity, and volatility trading

STUDENTS WITH LEARNING DISABILITIES

Students who are seeking an accommodation because of a disability are directed to the website <http://learn.camden.rutgers.edu/disability/disabilities.html> or they can contact the Camden campus Disability Coordinator, Mr. Tim Pure at 856-225-6442, Armitage Hall Room 362. The email address is disabilityservices@camden.rutgers.edu. All contact will be considered confidential.

COURSE REQUIREMENTS:

1. EXAMS:

There are no exams in this course

2. PROJECTS:

You will need to submit an R-based project at the end of each week for a total of 10 projects. Each project is worth 10% of your grade.

Academic Integrity:

“Academic integrity requires that all academic work be wholly the product of an identified individual or individuals. Joint efforts are only legitimate when the assistance of others is explicitly acknowledged...The principles of academic integrity entail simple standards of honesty and truth. Each member of the university has a responsibility to uphold the standards of the community and to take action when others violate them...Students are responsible for knowing what the standards are and for adhering to them. Students should also bring any violations of which they are aware to the attention of their instructors.”¹

Students are expected to know, understand and adhere to the policies on academic integrity outlined above. Procedures for violation of these policies outlined in the University Code of Academic Conduct will be followed.

Project Make-up Policy:

If, for a university approved reason, you cannot submit a weekly assignment project at the scheduled time you must give the professor written notice at least one week in advance so that other arrangements can be made. If the situation does not allow for advance notification (for example, emergency hospitalization), contact the professor as soon as possible after a missed assignment. Make-up assignments for non-university approved reasons are not guaranteed. I reserve the right to request written documentation to support your missed assignments (such as a doctor’s note, an obituary, or military orders).

GRADING:

For the assignment of final grades, the course requirements will be weighted approximately as follows:

Weekly projects	100%
90-100%	A
85-89%	B+
80-84%	B
75-79%	C+
70-74%	C
Less than 70%	F

ADMINISTRATIVE DETAILS:

- **[May 26, 2020]:** Last day to DROP a course without a W grade.
- **[June 16, 2020]:** Last day to DROP courses with a W grade and without academic penalty.
- Any students in need of classroom accommodations due to disabilities should see Associate Dean Nathan Levinson in BSB248. You may also contact him by Email at nlevinso@camden.rutgers.edu or by phone at 856-225-6216.

¹ Rutgers University Code of Academic Conduct, taken from the Student Advising Handbook - <http://camden-sbc.rutgers.edu/CurrentStudents/students/advising.pdf>.