



Rutgers Business School
Newark and New Brunswick

Finance

Course Number: 33:390:415

Course Title: Indexing and ETFs

COURSE DESCRIPTION

This is an advanced, modern finance course with the objective of studying indices and Exchange Traded Funds (ETFs) and their application in investment management. The course is designed to be comprehensive in covering the economic space available to investors and the many investment objectives/strategies represented by indexes and ETFs. The contemporary and practical class content is enhanced by exposure to useful industry resources and participants. The course covers major asset classes, investment themes and markets and the portfolio strategies providing exposure to them. There is a thorough examination of ETFs including their design, anatomy, mechanics, application, availability, and the eco-system of industry participants. The passive/active investment style debate is woven into the material during much of the course. A semester project is required that involves working on either a current industry challenge or new investment opportunity that includes, portfolio design, calculation, backtesting and marketing. The class project includes working on teams, at times directly with industry experts, to practice the application of tools and material learned in class to actual real-world situations.

Course Delivery Mode: This class is in-person instruction, there may be some classes switched to remote if the circumstances warrant such a change (such as illness, bad weather or other).

Learning Management System: Canvas

Hardware and software requirements: Tests will be given in class unless otherwise instructed. They may be given via Canvas or with hard copy tests so students should be prepared to bring a laptop with access to Canvas on the days when a test has been announced.

Students should be able to download most needed software from RU software portal:

<https://it.rutgers.edu/software-portal/>

We will not be using Zoom for regularly scheduled classes. However, if a change is announced and a class is moved to remote, then we will use Zoom and students should use their RU Zoom accounts when logging in to my class. When using Zoom you will be expected to turn on your cameras.

Below are the minimum hardware requirements recommended by OTIS and should allow your systems to capably support a full Windows10 Professional environment with Office365, RBS course-specific applications and virtual computing environments).

- I5 Processor
- Windows 10 Professional (or later version)
- 8gb of RAM
- 256gb hard drive
- 720p webcam
- Internal mic

Given the hardware/software requirements, if you are in need of financial assistance, please reach out to RU NB Dean of Students or RU-N CARE Team for help with getting needed hardware.

RBS New Brunswick Students in need of financial assistance can send an email to:

deanofstudents@echo.rutgers.edu

RBS Newark Students in need of financial assistance may submit their request via a form:

<https://myrun.newark.rutgers.edu/care-team>

METHOD OF INSTRUCTION

1. **Lectures**- slides will be made available sometime after class. The slides are custom created by me and owned by me. They are provided for you to study only, not yours to redistribute in any fashion. This will be strictly enforced.
2. **Homework** - Each student is to read the assignments for each week. Assigned required homework reading and any reports are described in the Modules/Assignments section in Canvas and announced in class each week. The reports and any extra-credit assignments must be typed and submitted by the due date and time according to the instructions provided. No late submissions will be accepted.
3. **Class participation** - (and discussion) is very important in this course where many of the situations which we will examine do not have clear-cut “right or wrong” answers. Your answer may often depend on your background, both spiritually and culturally. This class is designed to make you think about issues, consider challenges facing financial industry participants, and discuss behavior both ethical and unethical. Therefore, class participation is essential to enhance your understanding of the critical role ethics plays in corporate finance and capital markets (investment products and management). Students will be assessed on class participation and graded on the quality of their answers.
4. **Guest Speakers** – TBD, Periodically, throughout the semester there will be guest speakers bringing real life experiences to the classroom. Their talks are designed to enhance topics discussed in class. This content will be included on the quizzes/exams.

COURSE MATERIALS

- Canvas and email will be used
- The course will not have a required textbook. Instead, a non-fiction novel, **Trillions** by Robin Wigglesworth, is required with specific assignments posted on Canvas.
- There will be many articles, white papers, blogs and other required reading assigned. Students should read the identified assignments for each week and be prepared to discuss the work in class. Assigned homework reading required is explicitly described in the Modules & Assignments sections

in Canvas and announced at the beginning and/or the end of each class. Occasionally, extra-credit homework opportunities will be provided.

- Use of various specific websites will be suggested strongly and include:
 - www.bloombergindices.com (website for Bloomberg (former Barclays) Indices)
 - www.barra.com (reference for “value” and “growth” indexes)
 - www.bloomberg.com (financial news and information)
 - www.efficientfrontier.com (the online journal)
 - www.etf.com (source for ETF data and research)
 - www.etfdb.com (source for ETF news, data and strategies)
 - www.etfstategy.com (website for ETF news and research)
 - www.etftrends.com (website for news, tips, webcasts)
 - www.ftserussell.com (website for FTSE Russell Indices)
 - www.finra.org (Financial Industry Regulatory Authority)
 - www.ici.org (mutual fund facts and figures)
 - www.ihsmarkit.com (Fixed income indices and market data)
 - www.ishares.com (website for BlackRock iShares ETFs)
 - www.investopedia.com/simulator/ (Trading Market Simulator)
 - www.koyfin.com (tools for researching stocks and other asset classes)
 - www.marketwatch.com (source for financial news and information)
 - www.morningstar.com (comprehensive source of investment information)
 - www.msci.com/products/indexes (MSCI Indexes)
 - www.nasdaq.com (website for the NASDAQ)
 - www.nyse.nyx.com (NYSE Euronext)
 - www.powershares.com (leading provider of “intelligent” ETFs)
 - www.proshares.com (website for Alternatives ETF provider)
 - www.seekingalpha.com (stock market news and financial analysis)
 - www.sifma.org (trade association for broker-dealers, investment banks, asset managers)
 - www.spdrs.com (website for State Street Global Advisors ETFs SPDRS)
 - www.standardandpoors.com (website for S&P 500)
 - www.stoxx.com (website for STOXX Indices)
 - www.us.spindices.com (website for S&P Dow Jones Indexes)
 - www.vanguard.com (website for Vanguard ETFs and Index Funds)
 - www.vaneck.com (global ETF provider)
 - www.wisdomtree.com (website for WisdomTree ETFs)
 - www.wsj.com (daily financial and economic news)

LEARNING GOALS AND OBJECTIVES

Students completing this course should be able to:

- Understand the importance and implications of asset allocation
- Understand best practices and challenges in portfolio construction, optimization and attribution
- Discuss the multiple dimensions of indexing (asset classes, investment themes and trends)
- Understand the origins and role of indexing in investment management (passive investing)
- Understand market-capitalization weighted and alternatively weighted portfolios

- Understand implications in passive versus active management
- Understand the mechanics of ETFs in Primary and Secondary Markets
- Understand and discuss the benefits of ETF use by institutional and retail investors
- Understand how to find, analyze, and trade ETFs
- Analyze ETFs in the context of strategic and tactical portfolio activity
- Understand data and information used by index providers, ETF sponsors, asset managers, traders, clearing houses, data providers and more.

Course Content (Not Necessarily Covered in This Exact Order)

- A. Course Foundation – Genesis of Passive Investing (Indexing)
 - 1) Summary of the Evolution of Optimal Portfolio Construction and Maximization Techniques
 - 2) Review of Investment Risk
 - 3) Overview of Beta/Alpha in Investment Management
 - 4) Overview of Portfolio Attribution
 - B. Indexing (Passive Portfolios)
 - 1) Methodology of Index Construction
 - 2) Evolution of Popular Indices
 - 3) Multiple Dimensions of Indexing
 - C. Overview of Asset Classes (equity, fixed income, real estate, commodities, & more)
 - D. Overview of Alternatives to Market-cap Weighting
 - E. Smart Beta and Factor Strategies
 - F. Socially Responsible Investing
 - G. Role of Indexes in Passive and Active Management
 - 1) Overview of benchmarks versus tradable indices
 - 2) Overview of index-linked funds and derivatives
 - 3) Overview of Levered and Inverse strategies
 - 4) Industry Trends
 - H. Overview of Exchange Traded Funds (ETFs)
 - 1) Details on The Mechanics of ETFs in Primary and Secondary Markets
 - 2) Understand and Practice the Trading of ETFs
 - 3) Review the compelling features
 - 4) Examples of benefits to different users/investors
 - 5) Industry Trends
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PREREQUISITES

To best take advantage of this class students should have a good understanding of statistics, investments and financial management, including a basic understanding of capital markets and portfolio analysis.

ACADEMIC INTEGRITY

- *I do NOT tolerate cheating.* Students are responsible for understanding the RU Academic Integrity Policy (<http://academicintegrity.rutgers.edu/>). I will strongly enforce this Policy and pursue *all* violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, “On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment.” [I will screen all written assignments through *SafeAssign* or *Turnitin*, plagiarism detection services that compare the work against a large database of past work.] Don’t let cheating or plagiarism destroy your hard-earned opportunity to learn. See business.rutgers.edu/ai for more details.
 - **Students are responsible for understanding the RU Academic Integrity Policy:** <https://myrbs.business.rutgers.edu/academic-integrity/students>
 - **“Use of AI such as ChatGPT is only permitted to help you brainstorm ideas and see examples. All material you submit must be your own.”**
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ATTENDANCE AND PREPARATION POLICY

- Expect me to attend all class sessions. I expect the same of you. If I am to be absent, my department chair or I will send you notice via email and Canvas as far in advance as possible. If you are to be absent, report your absence in advance at <https://sims.rutgers.edu/ssra/>. If your absence is due to religious observance, a Rutgers-approved activity, illness, or family emergency/death and you seek makeup work, also send [me/TA] an email with full details and supporting documentation [within 2 days of your first absence].
- Please be mindful that class participation figures into your final grade (50% attendance plus 50% for literal participation) Students missing an occasional class for minor illness or personal circumstances do not require written documentation or verification from the dean. In these circumstances, *each student is allowed two of these unexcused absences during the semester* without penalty. These absences cannot be used during exam periods and for classes designated as MANDATORY ATTENDANCE by me (such as class presentations).
- **ABSENCE DUE TO SHORT-TERM ILLNESS REQUIRES USE OF YOUR UNEXCUSED ABSENCES. ABSENCE TO ATTEND INTERVIEWS, CAREER DAYS, CAREER FAIRS, EMPLOYMENT REQUIREMENTS, ETC. REQUIRES USE OF YOUR UNEXCUSED ABSENCES. PLAN ACCORDINGLY. NO ADDITIONAL UNEXCUSED ABSENCES WILL BE GRANTED FOR THESE PURPOSES.**
- Each unexcused absence over the allowed maximum is a 20-percent reduction of the student’s class participation grade. Failure to attend a Mandatory Attendance session as indicated in the Class Schedule (on Canvas) is also a 20-percent reduction in the class participation grade unless you have an excused absence per Rutgers policy.
- Absences due to religious observance, participation in certain approved university-sponsored events such as intercollegiate athletics, or dean approved EXTENDED illness are treated as authenticated,

excused absences and do not result in a reduction in the class participation grade or quiz score. Authenticated excused absences, however, do not waive the overall policy for attendance. Students who must, for any reason, miss more than an occasional class should consult with the instructor in advance to discuss the implications of their absences on their ability to achieve the learning objectives and to earn a high grade in the course. Missing more than a few classes for whatever reason is likely to adversely impact a student's ability to master the material. A student, regardless of circumstances, must still demonstrate mastery of the course material under exam conditions in order to earn a good, or even passing, grade.

- Expect me to arrive on time for each class session. I expect the same of you. [If you are going to be tardy, then email the TA and enter the room quietly.]
 - Expect me to remain for the entirety of each class session. I expect the same of you. [If you need to leave early, then do so quietly.]
 - Expect me to prepare properly for each class session. I expect the same of you. Complete all background reading and assignments. You cannot learn if you are not prepared. The minimum expectation is that you complete all assignments listed in Canvas.
 - Expect me to participate fully in each class session. I expect the same of you. Stay focused and involved. You cannot learn if you are not paying attention.
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CLASSROOM CONDUCT

Students are expected to behave with respect for the instructor, classmates and guests. This includes hand-raising for questions and comments, silencing cell phones and laptops, and not engaging in side conversations during the lecture.

Bias incidents: an act – either verbal, written, physical, or psychological that threatens or harms a person or group on the basis of actual or perceived race, religion, color, sex, age, sexual orientation, gender identity or expression, national origin, ancestry, disability, marital status, civil union status, domestic partnership status, atypical heredity or cellular blood trait, military service or veteran status.

Bias incidents can be reported online at:

[New Brunswick campus - Bias Incident Report Form](#)

[Newark campus - Bias Incident Report Form](#)

EXAM DATES AND POLICIES

There are 2 exams (tests) in this course, all dates are listed on Canvas.

During exams, the following rules apply:

- If you have a disability that influences testing procedures, provide me an official letter from the Office of Disability Services at the start of the semester.
- No cell phones are allowed in the testing area.
- You must show a valid Rutgers photo ID to take and turn in the exam.
- Use the bathroom prior to the exam start (no exam is longer than 75 minutes).

- Your exam will not be accepted unless you sign the Honor Pledge.

GRADING POLICY

- There will be no intended grade distribution, however, expect tests to include a curve.
- Grades will be communicated via email, and possibly posted on Canvas (TBD) within a few days after the test.
- **Two** quizzes/tests/exams, homework assignments (including extra credit opportunities), and a final project will account for 90% of final grade, which means class participation is very important!
 - Quizzes, will include multiple choice questions, will account for 60%.
 - Homework is primarily reading assignments (any reports will be extra credit unless otherwise noted.)
 - The semester project, that will account for 30% of the final grade
 - Class participation will be judged by instructor and count for 10% of final grade
 - Attendance will be recognized (if campus is open class will be held)
 - Discussion (questions and answers) will be noted

Please note that your final grade is not subject to negotiation. If you feel I have made an error, submit your written argument to me within one week of receiving your final grade. Clarify the precise error I made and provide all due supporting documentation. If I have made an error, I will gladly correct it. But I will adjust grades only if I have made an error. I cannot and will not adjust grades based on consequences, such as hurt pride, lost scholarships, lost tuition reimbursement, lost job opportunities, or dismissals. Do not ask me to do so. It is dishonest to attempt to influence faculty in an effort to obtain a grade that you did not earn, and it will not work.

COURSE SCHEDULE – Listed in detail on Canvas by way of MODULES

SUPPORT SERVICES

If you need accommodation for a *disability*, obtain a Letter of Accommodation from the Office of Disability Services. The Office of Disability Services at Rutgers, The State University of New Jersey, provides student-centered and student-inclusive programming in compliance with the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments of 2008, Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act of 1998, and the New Jersey Law Against Discrimination. More information can be found at ods.rutgers.edu.

[Rutgers University-New Brunswick ODS phone (848)445-6800 or email dsoffice@echo.rutgers.edu]

[Rutgers University-Newark ODS phone (973)353-5375 or email ods@newark.rutgers.edu]

If you are ***pregnant***, the Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy.

[Rutgers University-New Brunswick Title IX Coordinator phone (848)932-8200 or email jackie.moran@rutgers.edu]

[Rutgers University-Newark Office of Title IX and ADA Compliance phone (973)353-1906 or email TitleIX@newark.rutgers.edu]

If you seek ***religious accommodations***, the Office of the Dean of Students is available to verify absences for religious observance, as needed.

[Rutgers University-New Brunswick Dean of Students phone (848)932-2300 or email deanofstudents@echo.rutgers.edu]

[Rutgers University-Newark Dean of Students phone (973)353-5063 or email DeanofStudents@newark.rutgers.edu]

If you have experienced any form of ***gender or sex-based discrimination or harassment***, including sexual assault, sexual harassment, relationship violence, or stalking, the Office for Violence Prevention and Victim Assistance provides help and support. More information can be found at <http://vpva.rutgers.edu/>.

[Rutgers University-New Brunswick incident report link: <http://studentconduct.rutgers.edu/concern/>. You may contact the Office for Violence Prevention and Victim Assistance at (848)932-1181]

[Rutgers University-Newark incident report link: https://cm.maxient.com/reportingform.php?RutgersUniv&layout_id=7 . You may also contact the Office of Title IX and ADA Compliance at (973)353-1906 or email at TitleIX@newark.rutgers.edu. If you wish to speak with a staff member who is confidential and does **not** have a reporting responsibility, you may contact the Office for Violence Prevention and Victim Assistance at (973)353-1918 or email run.vpva@rutgers.edu]

If students who have experienced a temporary condition or injury that is adversely affecting their ability to fully participate, you should submit a request via <https://temporaryconditions.rutgers.edu> .

If you are a military ***veteran*** or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. <http://veterans.rutgers.edu/>

If you are in need of ***mental health*** services, please use our readily available services.

[Rutgers University-Newark Counseling Center: <http://counseling.newark.rutgers.edu/>]

[Rutgers Counseling and Psychological Services–New Brunswick: <http://rhscaps.rutgers.edu/>]

If you are in need of ***physical health*** services, please use our readily available services.

[Rutgers Health Services – Newark: <http://health.newark.rutgers.edu/>]

[Rutgers Health Services – New Brunswick: <http://health.rutgers.edu/>]

If you are in need of ***legal*** services, please use our readily available services: <http://rusls.rutgers.edu/>

Students experiencing difficulty in courses due to ***English as a second language (ESL)*** should contact the Program in American Language Studies for supports.

[Rutgers–Newark: PALS@newark.rutgers.edu] [Rutgers–

New Brunswick: eslpals@english.rutgers.edu]

If you are in need of additional ***academic assistance***, please use our readily available services.

[Rutgers University-Newark Learning Center: <http://www.ncas.rutgers.edu/rlc>

[Rutgers University-Newark Writing Center: <http://www.ncas.rutgers.edu/writingcenter>]

[Rutgers University-New Brunswick Learning Center: <https://rlc.rutgers.edu/>]

CODE OF PROFESSIONAL CONDUCT

Please refer to the conduct policy online which can be found with this link:

<https://myrbs.business.rutgers.edu/students/code-professional-conduct>]

Rutgers Business School is recognized for its high-quality education. To that end, maintaining the caliber of classroom excellence requires students to adhere to the same behaviors that are expected in professional career environments. These include the following principles:

Please pay extra special attention to the following under Misappropriating Intellectual Property:

- Unauthorized use includes such things as copying, sharing, forwarding, selling, renting, online posting, publication, or any other form of distribution of these materials without the written permission of the copyright holder. Such misconduct may potentially subject you to disciplinary action by the University, significant civil penalties, and even severe criminal sanctions.
- For more instructions on copyright protections at Rutgers University, please refer to the [Rutgers Libraries](#).

Rutgers Business School is committed to the highest standards of integrity. We value mutual respect and responsibility, as these are fundamental to our educational excellence both inside and outside the classroom.

CLASS BIBLIOGRAPHY

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