

Finance
Course Number: 29:390:480
Course Title: Real Estate Finance

COURSE DESCRIPTION

The central objective of this course is to provide you with the background and tools necessary to analyze value, risk, and return in property markets.

We will first focus on mortgage debt and provide an overview of mortgage structure and mechanics in both residential and commercial markets. The focus then shifts to the evaluation of investment in property markets from the perspective of an institutional investor. This involves developing projections of the expected future cash flows from a given property and using them to construct measures of value, risk and return. Extensions include tax issues, the relationship between value, returns and leverage and structuring the distribution of cash flows in partnership agreements. Finally, the course provides extensive training and certification in ARGUS, a real estate industry-standard software package used for entering lease information and analyzing risk and return in property markets.

COURSE MATERIALS

There are two primary texts for the course. The first is *Real Estate Finance and Investments* by Brueggeman and Fisher, 16th edition, ISBN 9781259919688. The text can be purchased in a variety of different forms. The text can be purchased or rented as an eBook either directly from the publisher at <https://tinyurl.com/y4kg3xpl> or by purchasing an Access Card at the Rutgers bookstore. New or used hardcover copies can be purchased from Amazon, ABEBooks or other online booksellers, but please make sure that it is the 16th edition. The second is the ARGUS Enterprise Certification Manual which will be distributed in the 7th week of class.

Slides, announcements and supplemental materials will be posted on Canvas (canvas.rutgers.edu) which will serve as central location for all information concerning the course. It is expected that you will check the course page on Canvas on a daily basis for updated information and announcements.

In addition to the course materials listed previously, you are required to have a financial calculator, a laptop computer and familiarity with the use of a spreadsheet package such as Excel. A good, and relatively inexpensive financial calculator is the HP 10bII. On the other hand, if you plan on a career in finance or real estate you may want to spend the extra money and get the HP 12c Platinum. A scientific calculator is fine, but will not generally offer the same programs used in financial calculations.

You will be provided an academic license for ARGUS Enterprise that must be installed and running by ()

Installing and running ARGUS Enterprise requires a computer with at least 2GB of memory and capable of running Windows 7, 8 or 10. Most PCs and Macs of recent vintage, 2014 or newer, will work. If you do not have access to a laptop computer meeting this requirement, you will need to purchase a laptop to be able to perform the course work relating to ARGUS. A new laptop computer capable of running Windows and ARGUS can be purchased for less than \$250. Windows 10, Word and Excel can all be acquired at no cost from Rutgers.

LEARNING GOALS AND OBJECTIVES

This course is designed to help students (1) develop skills and knowledge in applied corporate finance and (2) demonstrate their ability to use portfolio theory to analyze the risk and return associated with investment in real property.

In this course, students will:

- ...acquire a thorough understanding of both residential and commercial mortgage finance. (1)
- ...acquire a working understanding of commercial lease terms and conditions and the ability to determine the revenues and expenses corresponding to the space that is subject to the lease. (1)
- ...understand the relationship between capitalization rates and returns on investment and use capitalization rates to estimate the value of property for a given net income. (1), (2)
- ...develop projections of the future cash flows for a given property to determine the value and return generated by the property. (1), (2)
- ...quantify risks associated with an investment using investment performance ratios and understanding the sensitivity of return to changes in base assumptions. (2)
- ...understand the relationship between leverage, risk and the return to equity. (1), (2)
- ...consider the risks and incentives associated with financing alternatives to simple debt and equity. (2)
- ...become proficient in the use of ARGUS, an industry-standard software package. (1)

Students will develop these skills and knowledge through homework assignments, the analysis of cases and exams. Homework assignments will serve as the basis for the developing the basic skills and concepts that are at the core of applied corporate finance and exams will provide an opportunity for students to demonstrate this knowledge. Written case assignments offer an opportunity for students to use and synthesize their knowledge by assessing trade-offs between risk and return in applications taken from real world investment opportunities.

Important: For students enrolled in the concentration/minor in real estate, you are expected to take the Argus certification exam at some date/time prior to the final day of class and, depending on your performance on the certification exam, may be excused from the final. The details are provided in the Grading Policy section of the syllabus.

PREREQUISITES

Success in this course requires a solid understanding of the basic tools of finance. The formal prerequisite for this course is satisfied by completing any one of the following three courses: Finance (29:390:329), Financial Economics (21:220:439), or Finance for Entrepreneurs and Small Businesses (29:382:203). A quick review of fixed-income analysis will take place during the first week of the course in order to provide a common foundation for the material that will follow.

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 destroy your hard-earned opportunity to learn. See business.rutgers.edu/ai for more details.

ATTENDANCE AND CLASSROOM POLICY

Regular attendance is vital to success in this course. If you must miss a class, it is your responsibility to find out what material was covered in class during which you were absent and to understand that material prior to the next lecture.

The use of cellphones and laptops are not allowed in class at any time except when students are instructed to work on a specific problem or case requiring a computer. Students may leave the room to take an emergency phone call. Otherwise, students observed to be texting or looking at their phone will receive a 0 for class participation for the day.

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. For weather emergencies, consult the campus home page.

EXAM DATES AND POLICIES

There are 2 exams in this course:

Midterm Exam: (), in-class, closed book.

Final Exam: Scheduled date/time of final exam, based on ARGUS software, open book, open notes, laptop computer.

The following rules apply during exams:

- 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 or other electronics are allowed in the testing room unless stated otherwise.
 - Your exam will not be accepted unless you sign the Honor Pledge.
 - If you must miss the exam, notify me as soon as possible before the time of the exam either by phone or email. Anyone missing an exam without such notification will receive no credit for the exam and will not be given a make-up.
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GRADING POLICY

The letter grade you receive in the course will be based on a curve relative to the rest of the students in your section and determined by your performance on graded homework assignments, exams and case assignments. If you believe that your exam or case has been graded incorrectly, please bring it to my attention as soon as possible. Finally, in the interest of fairness, please do not ask for opportunities or exceptions that have not been granted to all others in the class.

- **Quiz:** A short quiz based on the review material presented in the first week of the course will take place at the end of class on () which will account for 5% of your grade.
 - **Homework assignments:** There will be six (6) homework assignments during the course of the semester which will make up 25% of your grade. Solutions to homework assignments will be submitted through Canvas. Written solutions will be provided within a day or two of the due date. Homework assignments that are submitted late will be penalized.
 - **Case analysis:** There will be one case assigned during the semester and will account for 20% of your grade. The case will be assigned in two parts. Part I will ask you to develop cash flow projections for two buildings on a before-tax basis in Argus and then to import these cash flow projections into Excel and use them to general cash flow projections on an after-tax basis. Part II requires a detailed investment recommendation based on a comparative financial analysis of the two buildings. Case assignments that are submitted late will be penalized.
 - **Midterm exams:** The midterm exam will account for 35% of your grad and will correspond to the material covered from the beginning of the course through week 6.
 - **Final exam (ARGUS)** The second exam will be based on course material relating to ARGUS and will account for 10% of your grade.
 - For those of you in the concentration in real estate:
 - If you **pass** the Argus certification exam, you are excused from the final exam and will receive 10/10 for the final exam score.
 - If you **do not pass the Argus certification exam but achieved a minimum score of 60% on each part of the exam**, you are excused from the final exam and will receive a final exam score that corresponds to the overall percentage score you received on the exam
 - If you **do not pass the Argus certification exam and did not achieve a score of 60% or more on both sections of the exam**, you are not excused from the final exam
 - **Class participation:** Regular attendance and active participation is expected and will account for 5% of your course grade.
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COURSE SCHEDULE

Week 1

0	Course introduction and overview Review		BF 3, Notes
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Week 2

0	Review Legal concepts, notes and mortgages		BF 1-2
0	Mortgage markets	Quiz	Notes

Week 3

0	Fixed-rate mortgages	HW #1 assigned	BF 4
0	Fixed-rate mortgages		BF 4

Week 4

0	Adjustable-rate mortgages	HW #1 due HW #2 assigned	BF 5
0	Markets for Real Estate		BF 9

Week 5

0	Commercial leasing and effective rent	HW #2 due HW #3 assigned	BF 10
0	Net operating income (NOI)		BF 11

Week 6

0	The capitalization rate	HW #3 due HW #4 assigned	BF 11
0	The capitalization rate		BF 11

Week 7

0	Cash flows before debt service		BF 11
0	Cash flows before debt service	HW #4 due	BF 11

Week 8

0	Commercial mortgages and before-tax cash flows	ARGUS Installation	BF 11
0		Midterm examination	BF 11

Week 9

0	Excel for real estate	HW #5 assigned	Notes
0	Introduction to ARGUS		AM

Week 10

0	Tax issues and after-tax cash flows	HW #5 due	BF 11
0	ARGUS		AM Ch. 1 - 4

Week 11

0	Investment analysis	HW #6 assigned	BF 13
0	ARGUS		AM Ch. 5 - 6

Week 12

0	Investment analysis	HW #6 due Case part I assigned	BF 13
0	ARGUS		AM Ch. 7 - 9

Week 13

0	Leverage, value and return	Case part I due Case part II assigned	BF 12
0	ARGUS		

Week 14

0	Leverage, value and return		BF 12
0	Joint ventures and private equity	Case part II due	BF 18

Week 15

0	Joint ventures and private equity		BF 18
0	Course summary and wrap-up		

Final exam: Date/time according to official Rutgers final examination schedule

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/>]

[Optional items that many faculty include:

- Students must sign, date, and return a statement declaring that they understand the RU Academic Integrity Policy.

- Students must sign, date, and return a statement declaring that they understand this syllabus.]