

**Financial Analysis**  
**Course Number: 22:430:685**  
**Course Title: Real Estate and Alternative Investments**

## **COURSE DESCRIPTION**

This course is part of the Masters of Financial Analysis Program. It is designed to introduce the student to the fundamentals of real estate investment analysis and the equity and debt markets that affect real estate decision making. Emphasizing the commercial real estate sector, the student will develop the essential skills needed to make proper qualitative decisions, understand financial terms and conditions, evaluate different underwriting structures and investigate the relationship between owners and lenders. Students will view real estate through the prism of the corporate / institutional owner as well as the sole entrepreneur.

Topics that will be discussed include legal documentation, valuation, types of mortgage loans, cash flow & income capitalization, alternative investments, commercial & residential underwriting, lease analysis, and negotiations. Students will be expected to have and know how to use a financial calculator. The course is based on lectures with an emphasis on problem solving, case analysis and active student participation.

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## **COURSE MATERIALS**

Textbook: (Required) Commercial Real Estate Analysis and Investments, 3<sup>rd</sup> Edition

Authors - Geltner, Miller, Clayton and Eichholtz

Students should bring the textbook to class each week.

Additional materials will be made available on Canvas or handed out in class. Canvas ([canvas.rutgers.edu](https://canvas.rutgers.edu)) is the primary course management tool for this course. It is your responsibility to make sure you have proper access to Canvas. This will be one of the primary means of communicating to students. Canvas will contain class announcements, syllabus, course assignments, reading materials and other important information. Every student should also check their official Rutgers email account regularly.

## **FINANCIAL CALCULATOR**

You will need a financial calculator. I recommend the HP12c Platinum Financial Calculator which is the one that I use. Students should bring them to class every week.

## **LEARNING GOALS AND OBJECTIVES**

This course is designed to help students develop skills and knowledge in the following areas:

- a. Demonstrated understanding of real estate finance principles.
- b. Solving problems related to real estate equity and debt markets.
- c. Evaluating different loan underwriting structures.
- d. Applying legal documentation, appraisal theory and lease analysis to practical real estate investment analysis.
- e. Computing real estate values using the capitalization method.

Students who complete this course will demonstrate the following:

- a. Proficiency at analyzing and interpreting real estate data to solve real estate mortgage problems.
- b. Understand basic legal document terms and conditions.
- c. Calculate real estate mortgage payment amounts.
- d. Understand basic lease terms.
- e. Calculate the value of a commercial real estate investment.
- f. Recognize and appreciate other points of view.

Students will develop these skills and knowledge through homework assignments, case studies, in class problem solving exercises and other class materials.

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## **PREREQUISITES**

None

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## **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](http://business.rutgers.edu/ai) for more details.

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## **ATTENDANCE AND PREPARATION POLICY**

Attendance is expected at all regularly scheduled classes. If you miss a class, please consult your classmates on what was covered. Please consult the Rutgers University regulations in regards to the attendance 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 X days of your first absence]. [Explain other aspects of your absence policy in detail; it will save you trouble later.]

- For weather emergencies, consult the campus home page. If the campus is open, class will be held.

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## **EXAM DATES AND POLICIES**

See Course Syllabus below

During exams, the following rules apply:

1. 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.
  2. No cell phones or other electronics are allowed in the testing room.
  3. You may be required to show a valid Rutgers photo ID to enter the room and to turn in the exam.
  4. Alternate seating; do not sit next to another student or in your usual seat.
  5. Use the bathroom prior to the exam start; bathroom breaks, if essential, will be escorted.
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## **GRADING POLICY**

Final course grades are based on 100 points allocated as follows:

Class Participation	-	6%
HWs & Case Assignments	-	24% **
Midterm Exam	-	30%
Final Exam	-	40%
Total		100%

The final course grade is not subject to negotiation. There is no pre-determined grade distribution. The midterm and final exams are closed book. Financial calculators will be needed for the exams.

\*\* HWs & Case Assignments - These assignments may be individual or team oriented and will be graded. Due dates will be announced in advance. Late assignments will receive points off or a grade of zero at the discretion of the professor. All assignments are to be handed in and not e-mailed. THERE WILL NOT BE ADDITIONAL ASIGNMENTS GIVEN FOR EXTRA CREDIT.

## COURSE SCHEDULE

GM: Geltner, Miller, Clayton and Eichholtz (course textbook)

C: Canvas

<u>CLASS</u>	<u>- DATE</u>	<u>TOPIC</u>	<u>READING</u>
			<u>ASSIGNMENT</u>
1	-	Course Overview & Introduction	GM Ch 1, pgs 11-21 Canvas: Glossary Canvas: Web Sites Canvas : Listing of Companies
		<ul style="list-style-type: none"> <li>a. Common terms and phrases used in real estate</li> <li>b. Real estate characteristics</li> <li>c. Why invest in real estate</li> <li>d. Real estate property types</li> <li>e. Career opportunities in real estate</li> <li>f. 4 quadrants of real estate investment</li> <li>g. Equity vs debt assets</li> </ul>	
2	-	The Real Estate Marketplace & the Mortgage Markets	GM Ch 7

- a. Benefits of real estate ownership
- b. Risks in real estate ownership / commercial real estate lending
- c. Real Estate in the Capital Markets & the participants
- d. Prudential and Met Life real estate reports
- e. Cap Rates: what are they and how do they determine market value
- f. On Canvas: Problem set discussed in class

3 - Financial Economics GM Ch 17, pgs 402-419; GM Ch 8

- a. Understanding loan types, payment structures & loan balances
  - (i) Interest only mortgage (IOM)
  - (ii) Constant amortization mortgage (CAM)
  - (iii) Constant payment mortgage (CPM)
  - (iv) Graduated payment mortgage (GPM)
  - (v) Adjustable rate mortgage (ARM)
- b. Understanding financial calculations
  - (i) Present value
  - (ii) Future value
  - (iii) Payment Amount
  - (iv) Interest rate
- c. Computing mortgage yields
  - (i) Yield to Maturity (YTM)
  - (ii) Use of points, fees and prepayment penalties
  - (iii) Interest rates vs yield to maturity
  - (iv) Single sum vs multi-period cash flow problems
- d. On Canvas: Problem set discussed in class
- e. On Canvas: HW # 1

4 Financial Decision Making Ch 10 pgs 203 – 220

- a. Understanding bond math
  - (i) Bond equivalent yield (BEY)
  - (ii) Mortgage equivalent yield (MEY)
- b. Understanding financial decision making
  - (i) Discounted cash flow (DCF)
  - (ii) Net present value (NPV)
  - (iii) Internal Rate of Return (IRR)
- c. On Canvas: Problem Set discussed in class

5 The Cash Flow Structure GM Ch 11, pgs 230 -241  
GM Ch 18, pgs 442-451

- a. Understanding the operating statement to derive NOI
- b. Mechanics of underwriting a commercial loan
- c. Investment analysis – calculating loan metrics, ratios and market value

- d. On Canvas: The Wilson Bldg Case - class discussion
  - e. On Canvas: Problem set discussed in class
  - f. Before tax cash flow calculations and reversion
  - g. Factors in assessing a mortgage loan investment
  - h. Tips on Village Shopping Center case assignment
  - i. On Canvas: HW # 2 due
- 6- Lease Analysis & Rent Role Analysis GM Ch 30
- a. Elements of a Lease
  - b. Analyzing a rent roll
  - c. Review an actual lease
  - d. On Canvas: “Friendly Nails” lease.
  - e. Understanding the rights of a landlord vs a tenant
  - f. Understanding important lease terms and conditions
  - g. On Canvas: HW # 3 - Village Shopping Center Case due
- 7- Legal Documents & Midterm Exam Review GM Ch 16 pgs 377-392
- a. Mortgage
  - b. Note
  - c. Guaranty
  - d. Review for Midterm Exam
- 8 – MIDTERM EXAM - IN CLASS
- NO CLASS
- 9- Evaluating an Actual Real Estate Transaction Read “SVV” Case
- a. On Canvas: “The Shoppes at Victory Village” Case – in class discussion
  - b. Negotiating the deal – role play with student teams to represent buyer and seller
  - c. Hand back Village Shopping Center Case and discuss answers
- 10 Introduction to Residential Lending
- a. Fundamentals of Residential Underwriting
  - b. On Canvas: “Understanding The Residential Mortgage Loan”
  - c. Loan programs, underwriting criteria, credit issues
  - d. Buy vs rent decision
  - e. Review a residential loan application
  - f. On Canvas: HW # 4 Residential Lending Case due
- 11 – Introduction to Alternative Investments
- a. Understanding the different types and characteristics of alternative investments, how they influence the risk/return of an investment portfolio, sources of capital, risks and benefits of these investments and their contributions to society.
  - b. On Canvas: Alternative Investments 2020 – An Introduction to Alternative Investments, World Economic Forum

- c. On Canvas: “Introduction to Alternative Investments”, Hatteras Funds
- d. On Canvas: “The Role of Alternative Investments in a Diversified Investment Portfolio”, Baird Private Wealth Management
- e. On Canvas: Princeton University’s Report on Investments – June 30, 2014

12 – Debt and The Capital Stack GM pgs 392- 399  
 a. Debt and the use of leverage

b. Review for Final exam

13 – Valuation of Income Property Read Appraisal Report on Canvas

- a. How commercial properties are appraised
- b. Understand the appraisal data, documentation and due diligence that goes into preparing an appraisal
- c. Understand the three approaches to value
- d. On Canvas: Appraisal Report

14 – FINAL EXAM – IN CLASS

NOTE: LAST DAY OF CLASSES

PLEASE MAKE SURE YOU ARE HERE TO TAKE THE FINAL EXAM.

Note: This course syllabus should be viewed as a general guide to what I plan on covering during the semester. However, I expect it will change from week to week depending on how much material we cover in each previous class. Therefore, it is important that you attend every class and keep up with all of the assignments. I will inform you in advance when there will be a class quiz, HW graded assignment or team case study due.

## 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](http://ods.rutgers.edu).

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

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

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

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

[Rutgers–New Brunswick: [eslpals@english.rutgers.edu](mailto: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.]