



Rotman Commerce UNIVERSITY OF TORONTO

Course Outline

RSM 484H1F

Real Estate Finance and Investment

Fall 2017

Course Meets: Wednesday, 9-11am, Room WO 35

Professor: Lu Han
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Office Hours: Wednesday, 2-3pm, and by appointment.*
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*It is very important that we be able to meet outside of class. If the timing of my office hours does not work, just ask. I am sure we can work out another time. Please see me at class or email to set up a meeting time.

Course Scope and Mission

Real estate assets account for about one-third of the value of all capital assets in the world. An understanding of real estate investment is, therefore, important no matter what line of business a student plans to be in. This course provides students with a comprehensive understanding of real estate valuation, house price dynamics, real estate liabilities, decision-making and public policies associated with real estate investment, using modern finance and economics tools. Topics include commercial and residential real estate investment, housing market dynamics, bubbles, mortgage financing and pricing, real estate securities and international real estate. Academic lectures are supplemented by a series of case discussions. Reading the course material and preparing for class discussion are both demanding and extremely important, permitting the maximal benefit from your investment in understanding the real estate investment decisions.

Required Readings

The main textbook is "Real Estate Finance and Investments: Risks and Opportunities" (fourth edition) by Peter Linneman. This book provides background material and context for many of the concepts covered in class. You may want to share copies to reduce the cost. A small course packet is available in bookstore.

Optional readings are marked by * in the course outline. These readings are supplementary; they provide supporting details on either the lectures or the required readings in the textbook. If you wish to develop specialized expertise in a particular area then the optional readings are a good starting point. The optional readings are not necessary to do well on the tests. Many of the optional readings are posted on the course website.

Course Prerequisites

ECO204Y/206Y, ECO220Y/227Y, RSM 332H1 Co-requisite: RSM333H1.

Evaluation and Grades

Your final grade will be determined by the weighted sum of your scores on the following:

<u>Work</u>		<u>Due Date</u>
Class Participation	10%	Ongoing
Case	10%	October 11
Debate	10%	November 1
Term Project	20%	December 6
Final Exam	50%	Scheduled by Arts & Science

The case write-up, debate, and the term project are group projects. You are allowed to choose your own groups, with each group having 4-5 members. It is solely your responsibility to form the group and coordinate with other group members. You must work with the same group on all group projects. Please email me AND the TA your group list as soon as you have it with RSM484: REAL ESTATE FINANCE AND INVESTMENT GROUP (capital letters) in the subject. You must email the list before the third class.

Class participation: Your contribution to class discussions is very important to the rest of the class. Please don't be shy –Ask questions to clarify what we are discussing or to bring a different perspective in class. The course is cumulative, so being lost gets quite costly very quickly. Constructive comments in class will increase the participation points. Naturally, consistently bad or irrelevant participation will decrease the participation points. Please display your name card in every class. Absence or late arrivals will be considered as a negative factor in class participation.

Case: The case assignment is described in a separate handout. The case write-up is due at the beginning of the class.

Debate: There will be a debate on November 1. Groups will be randomly assigned positions in the debate (affirmative, negative). I will describe the debate in more detail in a separate handout.

Term Project: The term project for this class involves the analysis of a real estate investment of your choosing. The detailed requirement is posted in a separate handout. Each group must turn in a brief proposal (1 page) of the research question and what you hope to accomplish before October 18. Topics will be approved based on its relevance and originality. A final written report of the project is due at the beginning of the class on December 6. The report may not exceed 15 pages (12 pt. font, double spaced, 8x11 paper, 1 inch margins) plus references and any quantitative or graphical exhibits. Each group should also prepare a PowerPoint presentation of the highlights of the project in class on December 6.

Final: The final will be on a date scheduled by the program office.

Classes will never be recorded. I am very happy to help a student make up a missed class by providing additional readings and by discussing material in my office.

COURSE EXPECTATIONS

To Use Turnitin.com:

Students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the university's use of the Turnitin.com service are described on the Turnitin.com website.

For Written Assignments:

Please note that clear, concise, and correct writing will be considered in the evaluation of all written assignments. That is, you may lose points for writing that impedes communication: poor organization, weak paragraph development, excessive wordiness, hard-to-follow sentence structure, spelling mistakes and grammatical errors. Students who require additional support and/or tutoring with respect to their writing skills are encouraged to visit the Academic Success Centre (www.asc.utoronto.ca) or one of the College Writing Centres (www.writing.utoronto.ca/writing-centres). These centres are teaching facilities – not editing services, where trained staff can assist students in developing their academic writing skills. There is no charge for the instruction and support.

For Teamwork:

Learning to work together in teams is an important aspect of your education and preparation for your future careers. That said, project-based teamwork is often new to students; to work well in teams, it helps to follow a set of core expectations to best succeed at your team projects.

1. Read the document entitled, "Working in Teams: Guidelines for Rotman Commerce Students" which is available on the RC portal under the Academic Services tab.

2. When working in a team, Rotman Commerce students are expected to:

- Treat other members with courtesy and respect;
- Honour the ground rules established by the team;
- Contribute substantially and proportionally to the final project;
- Ensure enough familiarity with the entire contents of the group project/assignment so as to be able to sign off on it as original work;
- Meet the project timeline as established by the team.

3. Resolving conflicts:

Conflicts are part of the team's process of learning how to work together. When handled well, it can generate creativity and bring-multiple perspectives to the solution.

Student teams are expected to work through their misunderstandings as soon as they arise (and prior to submission of the final project). When teams are unable to arrive at a solution that works for all members, the team must meet with the Rotman Commerce Team Coach** as soon as possible. The Coach will listen to the team and help develop options for improving the team process. All members of the project team must commit to, and, utilize their action plans.

**For an appointment with a Rotman Commerce Team Coach, please contact Nouman Ashraf at nouman.ashraf@rotman.utoronto.ca Nouman is highly skilled at facilitating team dynamics and

collaboration. Note that the Team Coach's role is to provide guidance, support and advice on team matters – not to formally evaluate or assess teamwork for academic purposes.

POLICY AND PROCEDURE

Missed Assignments/Midterms

Students who miss a test or assignment for reasons entirely beyond their control (e.g. illness) may submit a request for special consideration. Provided that notification and documentation are provided in a timely manner, and that the request is subsequently approved, no academic penalty will be applied.

In such cases, students must notify Rotman Commerce on the date of the missed test (or due date in the case of course work) and submit supporting documentation (e.g. [Verification of Student Illness or Injury form](#)) to the Rotman Commerce Program Office within **48 hours** of the originally scheduled test or due date. Students who do not provide Rotman Commerce or the instructor with appropriate or sufficient supporting documentation will be given a grade of 0 (zero) for the missed test or course deliverable.

Documentation submitted in support of petitions for missing tests and assignments must be original; no faxed or scanned copies will be accepted

Note that the physician's report must establish that the patient was examined and diagnosed at the time of illness, not after the fact. Rotman Commerce will not accept a statement that merely confirms a later report of illness made by the student to a physician.

Course Work, Accessibility Needs & Academic Honesty

Submission of Assignments - Late submissions of any assignment may be considered; however, a resolution may be determined at the instructor's discretion and may include an academic penalty. Students who, for reasons beyond their control, are unable to submit an assignment by its deadline must obtain approval from the instructor for an extension. Supporting documentation will be required as per the policy on missed tests and assignments.

Accessibility Needs - The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: accessibility.services@utoronto.ca or <http://www.studentlife.utoronto.ca/as>.

Academic Integrity

Academic Integrity is a fundamental value essential to the pursuit of learning and scholarships at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the UofT degree that you earn will continue to be valued and respected as a true signifier of a student's individual work and academic achievement. As a result, the University treats cases of academic misconduct very seriously.

The University of Toronto's Code of Behaviour on Academic Matters

<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm> outlines the behaviours that constitute academic misconduct, the process for addressing academic offences, and the penalties that may be imposed. You are expected to be familiar with the contents of this document. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.

- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

On test and exams:

- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers
- Misrepresenting your identity.
- Submitting an altered test for re-grading.

Misrepresentation:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to), medical notes.

All suspected cases of academic dishonesty will be investigated by the following procedures outlined in the *Code of Behaviour on Academic Matters*. If you have any question about what is or is not permitted in the course, please do not hesitate to contact the course instructor. If you have any questions about appropriate research and citation methods, you are expected to seek out additional information from the instructor or other UofT resources such as College Writing Centres or the Academic Success Centre.

Email

At times, the course instructor may decide to communicate important course information by email. As such, all UofT students are required to have a valid UTmail+ email address. You are responsible for ensuring that your UTmail+ email address is set up AND properly entered on the ROSI system. For more information please visit <http://help.ic.utoronto.ca/category/3/utmail.html>

Forwarding your utoronto.ca email to a Hotmail, Gmail, Yahoo or other type of email account is not advisable. In some cases, messages from utoronto.ca addresses sent to Hotmail, Gmail or Yahoo accounts are filtered as junk mail, which means that important messages from your course instructor may end up in your spam or junk mail folder.

Blackboard and the Course Page

The online course page for this course is accessed through Blackboard. To access the course page, go to the UofT Portal login at <https://portal.utoronto.ca/> and log in using your UTORid and password. Once you have logged in, look for the My Courses module where you'll find the link to all your course websites. If you don't see the course listed here but you are properly registered for the course in ROSI, wait 48 hours. If the course does not appear, go to the Information Commons Help Desk in Robarts Library, 1st floor, for help, or explore the Portal Information and Help at www.portalinfo.utoronto.ca/students and review the Frequently Asked Questions.

Recording Lectures

Lectures and course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the Canadian Copyright Act. Students wishing to record a lecture or other course material in any way are required to ask the instructor's explicit permission, and may not do so unless permission is granted (note: students who have been previously granted permission to record lectures as an accommodation for a disability are, of course, excepted). This includes tape recording, filming, photographing PowerPoint slides, Blackboard materials, etc.

If permission is granted by the instructor (or via Accessibility Services), it is intended for the individual student's own study purposes and does not include permission to "publish" them in anyway. It is absolutely forbidden for a student to publish an instructor's notes to a website or sell them in any other form without formal permission.

Course Outline

Part I: Commercial Real Estate Investment

Lecture 1: Course Overview and Commercial Real Estate (September 13)

Readings: Lecture Note

Linneman, Chapter 1: "Introduction: Risks and Opportunities"

Linneman, Chapter 2: "What is Real Estate?"

*Geltner and Miller, Chapter 1: "Real Estate Space and Asset Markets"

Lecture 2: Real Estate Development and Real Option Analysis (September 20)

Readings: Lecture Note

Lecture 3: Real Estate Valuation and Pro Forma Analysis (September 27)

Readings: Lecture Note

Linneman, Chapter 5: "Financial Modeling"

Linneman, Chapter 4: "Property Level Pro Forma Analysis"

Linneman, Chapter 7: "The Use and Selection of Cap Rates"

*Vernon Martin III "Nine Abuses in Pro Forma Cash Flow Projections"

Lecture 4: Real Estate Investment Strategy (October 4)

Readings: Lecture note

Linneman, Prerequisite 1: "The Basics of Discounted Cash Flow and Net Present Value Analyses"

Linneman, Prerequisite 2: "IRR: What It Is and What It Isn't?"

Linneman, Chapter 6: "Real Estate Due Diligence Analysis"

Lecture 5: Case: Toronto Condominium Investment (October 11)

Part II: Residential Real Estate Markets

Lecture 6: What Drives House Prices? (October 18)

Readings: Lecture note

Linneman, Chapter 20: "Real Estate Cycles"

*Haugwout, Peach, Sporn, and Tracy, "The Supply Side of the Housing Boom and Bust of the 2000s", *NBER working paper*, 2011

*Mankiw and Weil, "The Baby Boom, the Baby Bust, and the Housing Market," *Regional Science and Urban Economics* 1984 (May): 235-258

Lecture 7: Supply, Demand and Housing Bubbles (October 25)

Readings: Lecture Note

*Case and Shiller, "Is There a Bubble in the Housing Market?" *Brookings Papers on Economic Activity*, 2003

*Head and Lloyd-Ellis, "Has Canadian House Price Growth Been Excessive?" working paper, 2015

Lecture 8: Housing Policies (November 1)

Readings: Lecture Note

Debate: Toronto Housing Markets

*Glaeser and Shapiro, "The Benefits of the Home Mortgage Interest Deduction," *Tax Policy and the Economy*, MIT Press, 2003

*Han, Lutz, and Sand, "The Effects of Macroprudential Mortgage Insurance Regulation During a Housing Boom: Evidence from Canada," working paper, 2015

Part III: Real Estate Finance

Lecture 9: Optimal Leverage (November 15)

Readings: Lecture Note

Linneman, Chapter 12, "Should You Borrow?"

Linneman, Chapter 13, "The Use of Debt and Mortgages"

Lecture 10: Mortgage Pricing (November 22)

Readings: Lecture Note

*Linneman, Prerequisite III: "Amortization Fundamentals"

Brueggeman/Fisher, Chapter 4, "Fixed Rate Mortgage Loans"

*Dean Foust, "The Mortgage Trap," *Business Week*, June 27, 2005

Lecture 11: International Real Estate and REITs (November 29)

Readings: Lecture Note

*Linneman, Chapter 2, Supplement A: "International Real Estate Investing"

*Linneman, Chapter 18: "REITs and Liquid Real Estate"

Lecture 12: Student Presentation (December 6)