

Course Outline

RSM 483 H1 F

Real Estate Markets

Fall 2020

Course Meets: Thursdays 11-1 on Blackboard Collaborate (Synchronous)

Instructor:	Nathaniel Baum-Snow, Rotman South Room 8030
E-Mail:	Nate.Baum-Snow@rotman.utoronto.ca
Webpage:	q.utoronto.ca
Phone:	416-978-4273
Fax:	416-978-7030
Office Hours:	Mondays 9:30-10:30AM or Please Email for an Appointment
Office Hours Link:	(Zoom) https://us02web.zoom.us/j/83685402869
Teaching Assistant:	Ramin Forouzandeh (Ramin.Forouzandeh@rotman.utoronto.ca)

Course Scope and Mission

This course uses methods from economics and econometrics to analyze real estate markets. Topics covered include real estate valuation, the location decisions of households and firms, land use, urban growth and agglomeration, real estate market dynamics, intermediation and brokerage, behavioral real estate, and real estate development.

The course is designed to be useful to students from across the Commerce program. In addition to those who pursue careers in real estate itself, an understanding of real estate markets can be useful to students interested in banking and asset management. A background in real estate can also be useful to managers in general as they sometimes deal directly with location decisions and because firms frequently own or rent a significant amount of real estate. As a result, firms in many different industries must understand how to operate in the real estate business in addition to their core business.

The data analytics component of the course uses the software package R. This is the leading package used for data management and statistical analysis. It is free to use and can be done completely online. No prior knowledge of R is required or assumed.

Course Prerequisites

ECO204Y/206Y (Intermediate Microeconomics)

ECO220Y/227Y/STA(220H+221H)/(257H+261H) (Introductory Statistics/Econometrics)

RSM 332H1 (Capital Market Theory)

Statement on Equity, Diversity and Inclusion

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

Required Technology

For Fall-Winter 2020-21, this course may be conducted entirely online. To participate fully and to complete the course successfully, you must ensure you have a computer with a working webcam, microphone and reliable access to an internet connection. For further details, please visit this link: [Recommended Technology Requirements for Remote/Online Learning](#)

Required Readings

All readings except one will be posted to the course website (on Quercus). There are no books or readings that need to be purchased except “The Big Short”. However, you can watch the movie instead (Netflix, Tubi)

Evaluation and Grades

Grades are a measure of the performance of a student in individual courses. Each student shall be judged on the basis of how well they have command of the course materials.

Work	Percentage	Due Date
Class Participation (I)	10%	Ongoing
Written Ans. to Discussion Questions (I, G)	6%	After Classes 2,4,6
Weekly Quercus Quizzes (I)	4%	Ongoing
Assignment #1 (I)	15%	After Class 3
Case Write-Up (G)	5%	Before Class 8
Case Participation (I)	5%	Class 8
Debate (G)	5%	Class 10
Assignment #2 (I)	15%	After Class 12
Final Assessment	35%	Scheduled by Arts & Sciences

Course Format and Expectations

Most new course material will be presented in the form of asynchronous videos. Synchronous class sessions will be primarily oriented toward discussion questions and practice materials.

Class Participation: Your contributions to class discussions are very important for class dynamics. Please do not be shy! Ask questions to clarify what we are discussing and bring new perspectives to class. The course is cumulative, so being lost early becomes costly very quickly. Constructive comments in class will increase participation points. It is important to recognize that good class participation is not at all about knowing all the answers. Sometimes, the best participation means asking the right question. To stimulate this engagement and evaluate understanding, I will include some questions from classquestion.com during class time. While your participation in answering these questions will contribute to your participation grade, whether or not your answers are correct will never factor into your grade.

Discussion Questions: Most classes will have one pre-announced open freeform discussion topic. For some of these topics, I will ask each group to hand in a 1-2 page written answer that is well-reasoned and concise, due shortly before the beginning of class. Your participation in these discussions counts toward your participation grade.

Weekly Quiz on Quercus: As the course meets only once a week, it is easy to forget about the course material. To help prepare yourself for each class, I will post “quizzes” with a few multiple choice questions each week on Quercus to be completed before class meets. These are intended mainly to help you keep up with the material and to give you a sense of the types of multiple choice questions that could

be asked on the final assessment. As long as you complete these questions, you will get full marks for this portion of the grade.

Case: The case assignment deals with the Canary Wharf development project in London, UK. I will give out the assignment in early October. It is before the beginning of Class 8.

Debate: Class 10 will be devoted to a debate about the state of the Toronto area housing market. It is thus useful for you to keep abreast of GTA housing market developments. Follow articles about real estate in the Toronto Star (thestar.com), the Globe and Mail (theglobeandmail.com) and the Toronto Realty Blog (torontorealtyblog.com).

Assignments: There will be two problem sets that ask you to carry out analysis using the software package R. While they are graded individually, I encourage groups to work together on the problem sets. The first problem set will be about calculating a house price index and using hedonic methods to value a property. The second problem set will be about analyzing housing cycles. These will be fully self-contained and web-based such that no prior knowledge of R nor software installation is necessary. When the problem sets are released, I will send everyone registered for the course a link to access the workspace at rstudio.cloud.

Final Assessment: The final will be on a date scheduled by the Arts and Science office. To help you prepare for the final, review questions will be posted to the course website that covers all topics from class.

[Turnitin.com:](#)

Normally 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.

Written Assignments:

Please note that **clear, concise and correct writing** will be considered in the evaluation of all written assignments. 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 (<http://www.studentlife.utoronto.ca/asc>) or one of the College Writing Centres (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.

Rotman Commerce Centre for Professional Skills Teamwork Support:

Certain assignments noted above are assigned as group work. Working as a team is challenging; this is true both in the real world and in your academic classes. However, learning to work together in teams is an important aspect of your education and preparation for your future careers. You are encouraged to review the teamwork resources available to all Rotman Commerce students at <https://rotmancommerce.utoronto.ca/teamwork-resources> while navigating these challenges, but keep in mind that supports are also available for when you think you may need extra help.

New in the 2020-2021 academic year, the Rotman Commerce Centre for Professional Skills (RC-CPS) will offer appointments with Teamwork Mentors for any teams encountering challenges in their teamwork. Some possible reasons you might book an appointment with a Teamwork Mentor include:

- Team members have identified constraints on their time, work or accommodations they require that conflict with necessary timelines for the team.
- Teams are unsure how to divide their workload for a team project.
- Teams are concerned about how to integrate the individual contributions of each member and how to ensure team members are contributing equally.
- Teams are concerned about how to ensure all group members are aware of academic integrity guidelines (e.g. properly attributing sources) and follow them.
- Teams would like to be able to communicate more effectively with each other, particularly when navigating a remote work academic environment.

To book a meeting with a Teamwork Mentor, send an email to rotmancommerce.teamworkhelp@utoronto.ca with the course code (e.g. RSM100) and team number (if available) in the subject line of the email. Any member of the team may reach out individually to book an appointment, but we also encourage teams to book their appointments as a team. You will normally receive a response within 24-36 hours, but note that during busy times of the semester the waiting period may be longer. Be proactive in booking your meeting and do so **as soon as** challenges arise!

If you are a student registered with Accessibility Services, and extensions are one of your academic accommodations, you should consult with your Accessibility Advisor about this course. For considerations pertaining to teamwork and accessibility, please see information in the section on Accessibility Needs below under the Policies and Procedures heading.

Electronic Course Materials

This course will be using the following electronic course materials:

Readings posted to Quercus

“The Big Short” (Movie available on Netflix or Tubi)

R assignments completed on rstudio.cloud

These materials have no charge. As such, the use of these materials complies with all University of Toronto policies which govern fees for course materials.

Credit/No-Credit Option in Rotman Commerce

You may request to Credit/No-Credit (CR/NCR) an RSM course in the following cases only:

- The course will not be used for any specialist or focus, including the 8.0 RSM FCE requirement.
- The course does not have a group work component.

If you wish to request CR/NCR for an RSM course, you must contact a Rotman Commerce academic advisor by the drop deadline for the current term. **The deadline for this term is November 9, 2020.**

Final approval is on a case-by-case basis with the permission of the Director, Rotman Commerce.

Weekly Schedule

The course will be about one-half synchronous and one-half asynchronous. Synchronous sessions will take place on Blackboard Collaborate (BBC) each Tuesday and Thursday starting at 4:00PM Toronto time starting September 10. Synchronous sessions will run for anywhere between 30 minutes and two hours. Except for the first one, synchronous sessions will be primarily oriented toward discussions, questions and practice rather than the presentation of new material.

Asynchronous videos of lectures with new material are to be watched before associated synchronous class sessions. For example, asynchronous lectures for Class 2 should be watched before Class 2 meets. After each lecture segment, you should complete the posted quiz questions to confirm your familiarity with the material. You are given multiple chances to complete them correctly. I also encourage you to complete the other longer-form review questions posted to Quercus, which will look more like questions on the take-home portion of the final assessment.

This schedule is tentative except for the Canary Wharf case (Class 8) and the debate (Class 10), which have fixed dates. We may get behind and have to cut some material at the end. Everything covered in both asynchronous and synchronous sessions is fair game for the final assessment.

The lecture notes (posted to Quercus) will be your primary source for course material.

Part I: Introduction and Real Estate Valuation

Class 1: Course Introduction (September 10)

Readings: Lecture Notes

Class 2: Real Estate Valuation and Hedonic Pricing

Readings: Lecture Notes

“How Do You Evaluate A Multi-Plex For Investment?” *Toronto Realty Blog* (May 31, 2017)

Discussion: How much would you pay for this house?

Part II: Land Use and Urban Spatial Structure

Class 3: Home Price Indexes and Spatial Equilibrium Ideas

Readings: Lecture Notes

“Unemployment, lower immigration to slow housing activity in major cities, CMHC says” *Globe and Mail* (June 23, 2020)

“Despite the pandemic, Ottawa’s real estate market thunders ahead” *Globe and Mail* (June 17, 2020)

Discussion: COVID-19 and housing prices. Supply and demand factors.

Class 4: Fundamentals of Rent and Land Use

Readings: Lecture Notes

“A 2:15 Alarm, 2 Trains and a Bus Get Her to Work by 7 A.M.” *New York Times* (August 17, 2017)

“Scarborough Subway will cost more and attract fewer people” *Globe and Mail* (Feb 28, 2017)

Discussion: Should Toronto build more subways?

Class 5: Urban Growth and Zoning

Readings: Lecture Notes

“Dupont Street Prepares for a Wave of Redevelopment” *urbantoronto.ca* (Mar 23, 2016)

“Growth to Watch for ...” *urbantoronto.ca* (Jan 30, 2017)

“Developer’s plan to build beside the rail corridor at Dupont St. would put lives at risk, city says” *Toronto Star* (May 29, 2017)

“Why revamped Dupont Street will likely be more than just another condo mishmash,” *Toronto Star* (August 15, 2017)

“Is the Greenbelt squeezing Toronto’s housing market?” *The Globe and Mail* (Oct 14, 2016)

“Greenbelt forcing up home prices in GTA: Critics” *Toronto Sun* (Jan. 28, 2017)

Discussion: Develop Dupont St., the Toronto Greenbelt or neither?

Class 6: Residential Housing Demand and Supply

Readings: Lecture Notes

Brueckner, J. *Lectures on Urban Economics* Chapter 6

Gyourko, J. (2009) “Housing Supply.” *Annual Review of Economics*

Brueckner, J. (2009) “Government Land Use Interventions: An Economic Analysis” in *Urban Land Markets: Improving Land Management for Successful Urbanization*. (optional)

Discussion: Would establishing a tax deduction for mortgage interest make sense for Canada?

Part III: Nonresidential Real Estate

Class 7: Business Location and Agglomeration

Readings: Lecture Notes

“As companies relocate to big cities, suburban towns are left scrambling” *Washington Post* (July 16, 2017)

“How the U.S. Lost Out on iPhone Work” *New York Times* (Jan. 21, 2012)

“Why is this Toronto block home to 5 Florists” *Toronto Star* (Aug. 29, 2017)

“Tenants Troubles put stress on commercial real estate” *New York Times* (June 5, 2020)

Discussion: Should cities give incentives for business relocation (Amazon HQ2)?

Class 8: Canary Wharf Case

Readings: Case writeup

Part IV: Real Estate Dynamics

Class 9: Real Estate Cycles

Reading: Lecture Notes

Glaeser, Edward L., “A Nation of Gamblers: Real Estate Speculation in American History,” NBER Working Paper #18225

Wu, Gyourko & Deng, “Evaluating the risk of Chinese housing markets: What we know and what we need to know” NBER Working Paper #21346 (2015)

Discussion: TBA

Class 10: Debate on the state of the Toronto housing market

Crawford, Meh & Zhou “The Residential Mortgage Market in Canada: A Primer” Bank of Canada (2013)

“Canada’s Cooling Experiment” *The Globe and Mail* (August 3, 2017)

Part V: Advanced Topics

Class 11: Case Study of The 2008 US Financial Crisis

Readings: Lecture Notes

“The Big Short” movie (Netflix or free on Tubi) – or, even better, read the book

Mayer, Christopher, Karen Pence, and Shane M. Sherlund, “The Rise in Mortgage Defaults,” *The Journal of Economic Perspectives*, Vol. 23, No. 1 (Winter, 2009), pp. 27-50.

Mian & Sufi “The Consequences of Mortgage Credit Expansion: Evidence from the U.S.

Mortgage Default Crisis” *Quarterly Journal of Economics* (2009) (optional)

Discussion: Was the 2008 financial crisis unstoppable?

Class 12: Real Estate Brokerage and Wrap-Up

Readings: Lecture Notes

“How to Get a Better Deal From a Real Estate Agent” *New York Times* (Oct 24, 2019)

Barwick, Panle Jia, Parag A. Pathak & Maisy Wong “Conflicts of Interest and Steering in Residential Brokerage” *AEJ: Applied Economics*

Levitt and Syverson, “Market Distortions when Agents are Better Informed: A Theoretical and Empirical Exploration of the Value of Information in Real Estate Transactions,” *Review of Economics and Statistics*, November 2008. (optional)

Example Commercial Lease

Discussion #1: Should we encourage more competition in real estate brokerage? If so, how? If not, why not?

Discussion #2: Commercial lease terms

Final Assessment: Detailed timings to be announced.

Please note that the last day you can drop this course without academic penalty is November 9, 2020.

Policies and Procedures

Missed Tests and Assignments (including mid-term and final-term examinations)

Students who miss a test or assignment for reasons entirely beyond their control (e.g. illness) may request special consideration.

In such cases, students must:

1. Notify the instructor AND the Rotman Commerce Program Office **on the date** of the missed course deliverable, e.g. missed test, final assessments, assignment or class (in the case of participation marks).
2. Complete a [Request for Special Consideration Form](#) and submit it along with supporting documentation this may include either your Self-Declaration of Absence on ACORN, or [Verification of Student Illness or Injury form](#) to the Rotman Commerce Office within **2 business days** of the originally scheduled course deliverable.

Students who do not provide appropriate or sufficient supporting documentation will be given a grade of 0 (zero) for the missed course deliverable.

Note that documentation must clearly establish that you were ill or had other circumstances that prevented you from attending on the date in question. After-the-fact reports are not sufficient.

Students who do provide full documentation will be granted an extension which gives them ample time to complete the work, as determined by mutual agreement of the professor and the student, within the confines of the course schedule.

Late Assignments

All assignments are due on the date and at the time specified in Quercus. Late submissions will be penalized by 10% if the assignment is not received on the specified date, at the specified time. A further penalty of 10% will be applied to each subsequent day.

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 temporary or ongoing disability or health concern, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible at accessibility.services@utoronto.ca or studentlife.utoronto.ca/as.

For courses with deliverables that require you to work in teams, please note the following. If you are a student registered with Accessibility Services, and extensions are one of your academic accommodations, requests for extensions impact everyone in the group. As a result, requests for late submissions of any component of teamwork will require compelling reasons, advance notice, and must work for everyone in the team. You are encouraged to discuss with your course instructor, Accessibility Advisor, and other team members what you need in order to successfully complete your coursework. Additionally, the Rotman Commerce Centre for Professional Skills offers Teamwork Mentors (see section above) who can help you and your team discuss how to support you effectively and how to develop a work plan that meets the needs and constraints of all team members.

Volunteer Notetaking

If you're interested in helping to make our classroom more accessible, volunteer to be a notetaker!

Accessibility Services needs dependable volunteer notetakers to assist students living with a disability to achieve academic success. All you have to do is attend classes regularly and submit your notes consistently.

1. Register online as a Volunteer Note-Taker at:

<https://clockwork.studentlife.utoronto.ca/custom/misc/home.aspx>

2. Follow the link that says "Volunteer Notetakers"

3. Select your course and upload a sample of your notes

4. Once you have been selected as a notetaker, you'll get an email notifying you to upload your Notes.

If you have any questions or require assistance, please email as.notetaking@utoronto.ca or call 416-978-6186.

Volunteers may receive co-curricular credit or a certificate of appreciation.

Academic Integrity

Academic Integrity is a fundamental value essential to the pursuit of learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly and fairly in this academic community ensures that the U of T 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](#) 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 U of T 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 U of T 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 ACORN. For more information visit help.ic.utoronto.ca/category/3/utmail.html.

Forwarding your utoronto.ca email to a Gmail or other type of email account is not advisable. In some cases, messages from utoronto.ca addresses sent to Gmail 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.

Quercus and the Course Page

The online course page for this course is accessed through Quercus. To access the course page, go to q.utoronto.ca and log in using your UTORid and password. Once you have logged in, you will be at the Quercus Dashboard. On this page you will see all of the courses you are presently enrolled in. If you don't see the course listed here but you are properly registered for the course in ACORN, wait 48 hours.

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. Students who have been previously granted permission to record lectures as an accommodation for a disability are excepted. This includes tape recording, filming, photographing PowerPoint slides, Quercus materials, etc.

If permission for recording 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 any way. It is forbidden for a student to publish an instructor's notes to a website or sell them in any other form without formal permission.

FIPPA Language

Notice of video recording and sharing (Download and re-use prohibited)

This course, including your participation, will be recorded on video and will be available to students in the course for viewing remotely and after each session.

Course videos and materials belong to your instructor, the University, and/or other sources depending on the specific facts of each situation, and are protected by copyright. Do not download, copy, or share any course or student materials or videos without the explicit permission of the instructor.

For questions about recording and use of videos in which you appear please contact your instructor.