Overview: Globally, estimates suggest the value of investable real estate assets in the world exceeds $60 trillion. This is an introductory course to global real estate markets, with a focus on income-producing real estate assets. The goal is to introduce students to the basics of real estate valuation and risk management, emphasizing concepts that are salient in the global context, including currency risk, political risk, rule of law, property rights, and culture. We will use current events to help us characterize real estate risks facing global investors. For example, how might currency shocks in one country impact global capital flows? Will politicians respond with capital controls? Will this trigger geopolitical risks in the region? What are the implications for the cross-border investment strategies of firms and the implications for real estate markets? What should they consider in choosing a country and a local partner? How should they structure contracts with local partners to mitigate risks?

This is a full-semester course, open to undergraduates and MBAs. The course is part of the Wharton Undergraduate Global Flex Fundamentals bracket. The course will cover markets outside the United States, except for one special topic on international investors in the United States. We will focus more on the qualitative aspects of real estate investment analysis and less on the quantitative aspects.

Pre-requisites: There is no pre-requisite for the course. No prior real estate experience is needed and no prior financial modeling experience is needed. The cases will require basic cash flow modeling (revenues and expenses only, with no leverage nor taxes). If needed, there will be recitation(s) to cover the basic modeling concepts.

Course materials:

- There is no required textbook but I have placed three on reserve for students who want to further their real estate interests:
  - Real Estate Finance and Investments, 3rd edition or newer, by Peter Linneman.
  - Commercial Real Estate Analysis and Investments by David Geltner, Norman Miller, Jim Clayton, Piet Eicholtz
  - International Macroeconomics, 4th edition or newer, by Robert C. Feenstra and Alan M. Taylor
- The class schedule below lists the relevant readings.
  - Note, * indicates required articles (which will be fair game in exams) and ^ indicates highly relevant articles (these are generally more technical and will not be tested).
  - You can find the articles in two places on Canvas:
    - Textbook chapters can be found on Course Materials @Penn Libraries
    - Other articles are under Files>Readings (organized by topics)
- On Canvas you will find:
Guest speakers:
They are 9 guest speakers for this class, including 6 guest lectures and 3 case discussants. These sessions are **required** material. I do not videotape these lectures so the guests feel comfortable speaking freely. **Attendance is required and I will take attendance.** The guest speakers and topics for this semester include:

- 1/29: Global Real Estate Markets, Jacques Gordon, LaSalle Investment Management
- 2/12: Case discussion (Demand Analysis), Saul Goldstein, ActivumSG
- 2/14: Case discussion (Currency Risks), Chris Moore, Chatham
- 3/26: Real Estate Investments in Asia, Christina Gaw, Gaw Capital
- 3/28: Case discussion (Finding a Local Partner), Grace Bucchianeri, GIC
- 4/9: Political Risks, Brian Finerty, Equity International
- 4/11: Public vs. Private Markets, John Lutzius, Green Street Advisors
- 4/18: International Investors in the U.S., Steve Hason, APG
- 4/23: Infrastructure, Gilles Duranton, Wharton Real Estate

Midterms:
Two midterm exams will be held on:

- Tuesday, 2/26
- Tuesday, 4/30

Exam 2 is not cumulative in content, but assumes proficiency in basic skills taught in the first portion of the class. Exams will cover the material examined in class and during guest lectures, the class notes, the cases, and the required readings. The exams are closed-book, but you are allowed to bring one 8.5 x 11” piece of paper (double-sided) of notes into each exam. In addition, seats will be randomly assigned on exam days.

*Both* exams must be passed in order to receive a passing grade for the course. **Exams must be taken at the assigned time.** If you cannot attend class on these dates, please drop the class now. Make-ups are not given unless you have a Wharton Dean’s Office-approved excuse. For a medical excuse, you must have been admitted to student health or the hospital, or have a note explaining that you were incapacitated.

Cases:
There will be four cases handed out in class. You will choose your own group of three to five members, and must work with the same team on all cases. You and your teammates should sign up under the “team sign-up” section on Canvas.

If you cannot find a group and you email me before the first case is handed out, I will either form a group for you or assign you to different teams over the course of the semester. Late cases will not be accepted nor will extensions be given. The four cases are:
Honor code: Each group must separately prepare their own case materials and write-ups without reference to anyone else’s case materials or write-ups. It is your responsibility to make sure your entire team prepares the cases independently. Violations by any team member will result in the entire team getting a zero on the assignment. You may verbally discuss the cases, including ideas, approaches, and solution methods, with other students who are currently enrolled in REAL 205/705. You may not obtain assistance, or solicit advice, from former students, current or past employees of firms involved with the cases, or anyone else involved in the real estate investment.

You also may not provide such assistance or advice once you are no longer enrolled in this class. You may not share your written materials or Excel with anyone at any point. Violations of these rules will be treated as violations of Penn’s Code of Academic Integrity. I do not distinguish between the plagiarizer – the team using other’s materials – and the provider of the materials. Do not circulate your solutions to the cases. If I find your case to be the source of plagiarized material, I will report the violation and do my best to retroactively change your grade.

Grading:
The course grade will be based on the following:

- Exams: 55 percent (27.5 percent each);
- Cases: 40 percent;
- Participation (5 percent). I take attendance during all guest lectures and case discussions.

I will consider superb or sub-par class participation when deciding grades. Sub-par participation includes arriving late to or missing classes. The dates and times for all assignments are final, and must be strictly adhered to. Failure to complete any exam or hand in any case on time will result in zero points for that exercise.

Technology:

- I allow the use of tablets to take notes. Screens must be flat on the table (even for students in the last row).
- Phones must be turned off and put away.
- If you have a medical excuse, please inform me before class begins.
- I reserve the right to change the policy if it impacts the learning environment. Out of fairness to all students and in adherence to guidelines from the MBA office, course participation points will be deducted for students who violate this policy.
Other policies:

- **Whatever seat you choose on the second class meeting is yours for the entire semester.** Please sit there every class.
- The class schedule is an ambitious goal and may not reflect the actual timing, or even sequence, of covering material.
- Be prepared for changes to the class schedule and guest speaker dates. Many of our guest speakers have global commitments and may need to re-schedule their visit. Since all guest lectures are during regular class time, you are expected to attend all guest speaker dates, even if they are re-scheduled.
- Depending on the guest speaker’s availability, there may be an opportunity for lunch with the speaker right after class.
  - Please sign up on Canvas as soon as possible as it is easier to plan this in advance (it should be available for signup within the first week).
  - A week before the speaker’s visit, Mary Kay Adair (madair@wharton) will reach out to confirm if the speaker will be able to attend lunch.

Getting help:

- Contact me. Do not think that a question is too “basic” to ask me. I am here to help you understand the material.
  - My email is maisy@wharton. I reply to all emails regarding class matters within 24 hours. If I do not, please re-send the email in case I missed the first one.
  - Office hours will be held in my office: 1464 SHDH
- I hold regular office hours, take appointments, and answer questions by email.
- I also hold extra office hours before a case is due and before each midterm.
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<thead>
<tr>
<th>Date</th>
<th>Topics</th>
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| 1/17, Th | **Introduction:** Course overview and introduction to global real estate markets  
Topics: Course overview, survey of global real estate assets, property types, stakeholders  
Readings:  
- *Geltner et al., Chapter 24.2 (International Real Estate Investment, p. 611 – p. 618, p. 624 – p. 627)  
- Emerging Trends in Real Estate  |
| 1/22, Tu | **Basics of real estate valuation and risks**  
Topics: Gordon Growth Model, rents, vacancies, cap rates, cycles  
Readings:  
- *Linneman, Ch. 5 (Property-level Pro Forma Analysis, p. 43 – p. 56, ignore taxes and leverage)  
- *Linneman, Ch. 9 (Use and Selection of Cap Rates, p.114 - p.124)  |
| 1/24, Th | **Basics of real estate valuation and risks (continued)** |
| 1/29, Tu | Guest lecture: Global real estate markets                                    |
| 1/31, Th | **Currency risks**  
Topics: Assessing and managing currency risks, currency hedging, implications of foreign currency debt, currency crises  
Readings:  
- *PREA, The increasing importance of currency risk in real estate  
- *Feenstra and Taylor, Chapter 2 (Introduction to Exchange Rates and the Foreign Exchange Market)  
- Feenstra and Taylor, Chapter 9, esp. Argentine crises (p. 375 - p. 379), Sidebar on Reserve Accumulations (p.380 - p.382)  
- *Standard and Poor, “The new Fragile Five”, 2017  
- ^ "Why is the Turkish lira tumbling?”, Financial Times, 2018  
- ^ “Argentina’s economic woes”, The Economist, 2018  
- ^ “How the Gherkin was pickled: a tale of debt, risk and ambition”, Financial Times, 2014  
**Case 1 due on Canvas by 12pm** (Case discussion on Feb 12th) |
| 2/5, Tu  | **Currency risks (continued)** |
| 2/7, Th  | **Inflation, liquidity, and global financial markets**  
Topics: Assessing and managing inflation risks, interest rate risks, liquidity issues, capital controls  
Readings:  
- ^ “How fake money saved Brazil”, NPR Planet Money, 2010  
- ^ “China’s Tight Capital Controls Fail to Address Underlying Problems”, Financial Times, 2018  |
<p>| 2/12, Tu | <strong>Case 1 discussion: Demand analysis</strong> |
| 2/14, Th | <strong>Case 2 discussion: Brexit and currency risks</strong> (Case 2 due on Canvas by 12pm) |
| 2/19, Tu | Why invest outside your country? Basics of portfolio diversification |</p>
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<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
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<tr>
<td>2/21, Th</td>
<td>Midterm review</td>
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<td>2/26, Tu</td>
<td><strong>Midterm 1, in class</strong></td>
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<td>3/14, Th</td>
<td><strong>Contracts and rule of law</strong></td>
<td>Topics: Contracts, legal systems, landlord/tenant rights, lender/borrower protection, foreclosure laws&lt;br&gt;Readings: &lt;br&gt;• “Next Big Bet for Apartment Rentals: Mexico City”, <em>Wall Street Journal</em>, 2016 &lt;br&gt;• “Parliament Passes Insolvency and Bankruptcy Bill”, <em>Livemint</em>, 2018 &lt;br&gt;• Shleifer, <em>Failure of Judges and Rise of Regulation</em> (2012), Ch. 1 &lt;br&gt;• Shleifer, <em>Failure of Judges and Rise of Regulation</em> (2012), Ch. 5</td>
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<td>3/19, Tu</td>
<td><strong>Contracts and rule of law (continued)</strong></td>
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<td>3/21, Th</td>
<td><strong>Direct and indirect investments</strong></td>
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<td>3/26, Tu</td>
<td>Guest lecture: Real estate investments in Asia</td>
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<td>3/28, Th</td>
<td>Case 3 due: Finding a local partner</td>
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<td>4/2, Tu</td>
<td>Direct and indirect investments (continued)</td>
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<td>4/4, Th</td>
<td>Property rights and land markets</td>
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<td>Topics: Land markets, land assembly, strata titles, fractional ownership</td>
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<td>Readings:</td>
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<td>• Glaeser, <em>Triumph of Cities</em> (2011), Ch. 3 (What’s good about slums?)</td>
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<td>• Glaeser, <em>Triumph of Cities</em> (2011), Ch. 4 (How were the tenements tamed?)</td>
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<td>4/9, Tu</td>
<td>Guest lecture: Political risks</td>
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<td>4/11, Th</td>
<td>Guest lecture: Public vs. private real estate markets</td>
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<td>4/16, Tu</td>
<td>Case 4 due: Property rights</td>
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<td>4/18, Th</td>
<td>Guest lecture: International investors in the U.S.</td>
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<td>4/23, Tu</td>
<td>Infrastructure and the role of government</td>
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<td>Topics: Role of infrastructure in complementing real estate investments, role of local taxes and subsidies on real estate investments, special economic zones</td>
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<td>Readings: Class notes</td>
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<td>4/25, Th</td>
<td>Midterm review</td>
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<tr>
<td>4/30, Tu</td>
<td>Midterm 2</td>
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Regrade Policy:
I strive for accuracy and equity in the grading for this class. However, despite our best efforts, grading is sometimes imperfect and the onus for bringing any errors to my attention falls upon you. Be sure to take the time to make sure you understand the errors you made before submitting the regrade request. Under no circumstances will I go over the grading of your assignment in “real time,” with no forewarning.

Steps to submit a regrade request:
1) You must drop off your regrade request in my mailbox in SHDH and send me an email to notify me about the submission. Do not submit regrade requests by email only.
2) The regrade requests should include cover sheet indicating:
   a. The question that needs to be regraded
   b. An explanation of the error and justification for why points should be rewarded
   c. The number of points associated with the request