Class Schedule

Wednesdays 6:00–9:15pm  
Room: Gerlach 315

Professor

Itzhak Ben-David  
Office: 606A Fisher Hall  
E-mail: bendavid@fisher.osu.edu  
Web: http://fisher.osu.edu/fin/faculty/Ben-David/index.htm  
Office Hours: Wednesdays 4:00–5:00 pm

Teaching assistants:  
Spencer Couts: couts.14@osu.edu

Course Description

This course provides a graduate-level framework for analyzing individual real-estate transactions (both commercial and residential) and real-estate assets as an asset class. We will cover three topics in depth. First, we will examine several valuation techniques used in practice and their underlying assumptions. These practices include cash flow discounting, cap rates, and real-options. Second, we will discuss how real-estate assets are integrated in capital markets through Real-Estate Investment Trusts (REITs), private equity, and the securitization process. Third, we will discuss the role of the real-estate market in the financial crisis of 2008.

Prerequisites

The only prerequisite is either MBA 6221 (Finance I), MBA 6222 (Finance II), MBA 6223 (Finance), or an equivalent (upon the instructor’s approval). The following courses are recommended, but not mandatory: Financial Accounting and Statistical Analysis. This is a quantitative class and you will need to have basic knowledge of microeconomics, statistics and math. You will need a calculator that has a $x^y$ function. A financial calculator is not required, but it can help you solve the problems we study faster. In addition, you need a good command of Microsoft Excel in order to write the case reports.
**Course Materials**

1. An online course packet, which contains reading material and cases. The packet is available on [https://cb.hbsp.harvard.edu/cbmp/access/43202291](https://cb.hbsp.harvard.edu/cbmp/access/43202291).

2. I will post slides and additional class material on the course web page on Carmen [https://carmen.osu.edu/](https://carmen.osu.edu/)

**Evaluation**

Grades in this course will be based on the following components:

1. 5 group case studies (5 x 9% = 45%)
2. 1 individual assignment (1 x 8%)
3. 6 individual pre-guest lecture one-page write-ups (6 x 1% = 6%)
4. Class participation (14%)
5. Final examination (27%)

The following are the primary principles for evaluation:

- Grading is relative to the performance of your peers.
- The grade distribution is **not** truncated. It is possible to earn any of the official OSU grades in this course.
- Please note that there will not be any make-up exams except as required by university policy. If illness or an emergency should force you to miss an exam, please contact me **before** the exam is given.
Group Cases

Group cases should be submitted by groups of up to 5 people (individual submissions are OK). The instructions for the case will include grade breakdown. Please submit hard copies only; email submissions are not acceptable. Note that we will discuss some of the case studies in class, while others will remain as homework assignments only.

Individual Assignment

There will be one individual assignment towards week 7 (see schedule below).

Individual pre-guest lecture one-page write-ups

Our class heavily relies on the experience and expertise of industry leaders. In preparation for each talk, all students must conduct a short research on the person coming to class and his/her institution. In addition, each student will prepare three questions for the speaker. The summary of the research and the three questions will be submitted on a (up to) one-page summary through Carmen. (Carmen will verify that there is no plagiarism). To remove any doubt, in your write-up you are not allowed to copy and paste parts of vita of people from the internet.

To submit these assignments through Carmen please follow the instructions on the below referenced website. Use Contents > Dropbox:
https://resourcecenter.odee.osu.edu/carmen/uploading-files-dropbox-students

Class Participation

Class participation is an important component of the grade. I will pass attendance sheets in the class. Attendance in each class accounts for 1% of the participation grade (i.e., up to 6 percentage points out of the 12 percentage points participation grade). The rest participation grade will be determined according to the quality of classroom discussion. Please remember to bring name plaques in order to receive participation credit.

Regrading Policy

All regrade requests must be made within one week of the day the exams or cases are returned. Any exam submitted for regrading of a question is subject to a complete regrade. As a result, the regraded score may increase, stay the same, or decrease. A regrade form will be available for download on the course website. Note that I will not consider any regrade request after the one week deadline has passed.
Academic Integrity

You have affirmed to adhere to the following honor statement:

As a member of the Fisher College of Business community, I am personally committed to the highest standards of ethical behavior. Honesty and integrity are the foundation from which I will measure my actions. I will hold myself accountable to adhere to these standards. As a leader in the community and business environment, I will pledge to live by these principles and celebrate those who share these ideals.

In addition, the University's Code of Academic Integrity is designed to ensure that the principles of academic honesty and integrity are upheld. All students are expected to adhere to this Code. Please visit the following website for more information on the University's Code of Academic Integrity and possible sanctions: http://oaa.osu.edu/procedures. In accordance with University Faculty Rule 3333-5-487, all instances of academic misconduct will be reported to the Committee on Academic Misconduct which recommends appropriate sanctions to the Office of Academic Affairs. There will be no exception to this rule.
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<th>Topic &amp; Readings</th>
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| 1            | 1/13   | Classroom Discussion:  
• Lecture: Valuation techniques in real estate: replacement cost, sales comparables, income (cap rates, DCF – pro forma analysis)  
• In-class case: Residences at Scarlet & Gray  
Pre-class Preparation:  
• READ: Angus Cartwright IV case (Packet)  
• READ: Financial analysis of real-estate property investments (Packet)  
• READ: DCF analysis (Carmen)  
• WATCH: [https://www.youtube.com/watch?v=UwnVWZJp0B0](https://www.youtube.com/watch?v=UwnVWZJp0B0)  
• READ: Residences at Scarlet & Gray (Carmen)                                                                 | Bring Laptops         |
| 2            | 1/20   | Guest Lecturer:  
• Frank Kass (Chairman of Continental Real Estate Companies): “Deal structuring”  
Classroom Discussion:  
• Case discussion: Angus Cartwright IV  
• Lecture: Leasing vs. owning: residential and commercial  
Pre-class Preparation:  
• READ: Buy or lease: Commercial property decisions (Carmen)  
• READ: Lease vs buy: The corporate perspective (Carmen)  
• WATCH: [https://www.youtube.com/watch?v=kwIWeijKUNo](https://www.youtube.com/watch?v=kwIWeijKUNo)  
| Guest Write-up (Frank Kass)  
Case Write-up (Angus Cartwright IV) | |
| 3            | 1/27   | Guest Lecturer:  
• Mark Wagenbrenner (CEO, Wagenbrenner Development): “Syndications in real estate transactions”  
Classroom Discussion:  
• Case discussion: Wildcat Capital Investors  
• Lecture: Using Monte Carlo simulation for credit risk modeling  
Pre-class Preparation:  
• WATCH: [https://www.youtube.com/watch?v=Q3rv3yF0bPA](https://www.youtube.com/watch?v=Q3rv3yF0bPA)  
• WATCH: [https://www.youtube.com/watch?v=VaFCTQ0cvI0](https://www.youtube.com/watch?v=VaFCTQ0cvI0)  
• WATCH: [https://www.youtube.com/watch?v=UeGncSFjUM](https://www.youtube.com/watch?v=UeGncSFjUM)  
• WATCH: [https://www.youtube.com/watch?v=XOA0_X5yJHQ](https://www.youtube.com/watch?v=XOA0_X5yJHQ)  
• WATCH: [https://www.youtube.com/user/ExcelIsFun](https://www.youtube.com/user/ExcelIsFun)  
| Guest Write-up (Mark Wagenbrenner)  
Case Write-up (Wildcat Capital Investors) | |
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- WATCH: American Call Options [https://www.youtube.com/watch?v=nnl3x1wo25g](https://www.youtube.com/watch?v=nnl3x1wo25g)  
- WATCH: Basic Shorting [https://www.youtube.com/watch?v=jAOiWm_WZiE](https://www.youtube.com/watch?v=jAOiWm_WZiE)  
- WATCH: American Put Option [https://www.youtube.com/watch?v=6CUcgUeQS-w](https://www.youtube.com/watch?v=6CUcgUeQS-w)  
- WATCH: Call Option as Leverage [https://www.youtube.com/watch?v=N8h45mDI80s](https://www.youtube.com/watch?v=N8h45mDI80s)  
- WATCH: Put vs. Short and Leverage [https://www.youtube.com/watch?v=q25h5xLdk](https://www.youtube.com/watch?v=q25h5xLdk)  
- WATCH: Call Payoff Diagram [https://www.youtube.com/watch?v=MZQxeQYCUg](https://www.youtube.com/watch?v=MZQxeQYCUg)  
- WATCH: Put Payoff Diagram [https://www.youtube.com/watch?v=VST_U97pH0](https://www.youtube.com/watch?v=VST_U97pH0)  
- WATCH: Black-Scholes [https://www.youtube.com/watch?v=pr-u4LCFYE](https://www.youtube.com/watch?v=pr-u4LCFYE) | (Bob Schottenstein) | (Unlikely Outcome) |
| 5   | 2/10 | Michael Mitro (Senior Vice President at Huntington Bank) | “Commercial real estate lending” | - READ: CITIC Tower II: The Real Option (Packet)  
- READ: Introduction to Real Options (Packet)  
- READ: Ott: Real Options and Real Estate (Carmen)  
- WATCH: Real Options [https://www.youtube.com/watch?v=yegyVwgCE0M](https://www.youtube.com/watch?v=yegyVwgCE0M)  
[https://www.youtube.com/watch?v=TIJKWzJ-KMc](https://www.youtube.com/watch?v=TIJKWzJ-KMc)  
[https://www.youtube.com/watch?v=IwoCGAqv5RU](https://www.youtube.com/watch?v=IwoCGAqv5RU) | (Michael Mitro) | |
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| 6 2/17 | Todd Harrop (Vice President, Nationwide Real Estate Investments) | “The financial crisis from Wall Street’s perspective” | - Case discussion: The Right of Acquisition  
- Lecture: Securitization | Guest Write-up  
(Todd Harrop)  
Case Write-up  
(The Right of Acquisition) |
| 7 2/24 | Michael Glimcher (CEO of Health Care REIT): “Real Estate Investment Trusts (REITs)” | Lecture: Real estate cycles / Financial crisis | - READ: BofAML-REIT-Primer (Packet)  
- READ: FAQs about REITs (Packet)  
- WATCH: https://www.youtube.com/watch?v=enzJmTCYmo9g  
- WATCH: https://www.youtube.com/watch?v=EsA9tR2XB3A  
- WATCH: https://www.youtube.com/watch?v=yD11uLR5Os | Guest Write-up  
(Michael Glimcher)  
Individual Assignment |
| 2/29 | **Final exam: Gerlach 315 (Monday, February 29, 6:00pm – 8:00pm)** | | | Case Write-up  
(H&R REIT - due on 3/2, put it in my mailbox in Fisher 700) |