

# MBA

## REAL ESTATE CONCENTRATION

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### INTRODUCTION

The Wharton School has offered a real estate concentration for MBA students and undergraduates since 1985. The concentration has grown and developed both in size and scope.

The concentration consists of two required credit units and three electives. While the required courses focus on real estate development, and finance, the electives allow students to explore a variety of issues related to real estate. These include real estate economics, urban fiscal policy, real estate law, housing markets, the relationship between government policy and private development and international real estate markets.

The real estate concentration prepares students to be leaders in the real estate industry and provides the quantitative and qualitative tools necessary for their roles in shaping the future of the industry. To keep students informed of current issues in Real Estate, the Real Estate Department and Samuel Zell & Robert Lurie Real Estate Center sponsors conferences, seminars, and special programs on vital public policy issues relevant to the field.

Professor Gilles Duranton is the Chair of the Real Estate Department. Professor Todd Sinai is the MBA curriculum advisor. He can be reached at: [sinai@wharton.upenn.edu](mailto:sinai@wharton.upenn.edu). The department is located in 1400 Steinberg Hall-Dietrich Hall, and the main phone number is 215- 898-9687.

### THE CONCENTRATION

Two required c.u s:

|                    |   |
|--------------------|---|
| REAL 721 /FNCE 721 | Real Estate Investment: Analysis and Financing                        |
| REAL 821           | Real Estate Development (The above is a prerequisite for this course) |

Three c.u..s selected from the following:

|                    |   |
|--------------------|---|
| REAL 708 /BEPP 708 | Housing Markets                                       |
| REAL 724           | Urban Real Estate Economics                           |
| REAL 730 /FNCE 730 | Urban Fiscal Policy                                   |
| REAL 772 /BEPP 772 | Urban Public Policy and Private Economic Development  |
| REAL 804 /LGST 804 | Real Estate Law                                       |
| REAL 836           | International Housing Comparisons                     |
| REAL 840           | Advanced Real Estate Investment and Analysis          |
| REAL 890*          | International Real Estate Comparisons                 |
| REAL 891*          | Real Estate Entrepreneurship                          |
| REAL 899           | Independent Study/Annual Student Research Competition |

*\*mini-course*

**Pass/Fail Option:** Please note that no real estate class that is taken pass/fail can count toward the real estate concentration.

## COURSE DESCRIPTIONS

### REAL 708 Housing Markets

Gyourko

*Cross-listed with REAL 208/BEPP208/BEPP 708*

**Description:** This course is designed for students interested in the economics and operations of housing markets. It is primarily a U.S. focused course, but does include a limited amount of international material for comparative purposes. The class is divided into four sections: (1) supply and demand for housing, including the operations of homebuilders and rental landlords; (2) house prices, including cycles and price dynamics; (3) international comparisons; and (4) public policy analysis applied to a current housing markets-related issue. This course presumes knowledge of intermediate economics, as we will apply that knowledge throughout the semester. For Wharton students, this means you must have passed BEPP 250 (undergrads) or MGEC 611/MGEC612 (MBAs). Non-Wharton students should have taken the equivalent course in the College.

Prerequisites: Microeconomics for Managers (MGEC 611) and Microeconomics for Managers (Advanced) (MGEC 612) or equivalent.  
Format: Lecture with discussion required.  
Offered: Spring Term

### REAL 721 Real Estate Investment: Analysis and Financing

Ferreira, Handbury, Sinai, Wong

*Cross listed with FNCE 721*

**Description:** This course provides an introduction to real estate with a focus on investment and financing issues. Project evaluation, financing strategies, investment decision making, and capital markets are covered. No prior knowledge of the industry is required, but students are expected to rapidly acquire a working knowledge of real estate markets. Classes are conducted in a standard lecture format with discussion required. The course contains cases that help students evaluate the impacts of more complex financing and capital markets tools used in real estate.

Format: Lecture with discussion required.  
Requirements: Vary by instructor. May include two Midterms, or final exam, and case studies.  
Prerequisites: FNCE 611 OR FNCE 612  
Materials: Coursepack and recommended texts.  
Offered: Both Terms

### REAL 724 Urban Real Estate Economics

Wachter

*Cross listed with REAL 215*

**Description:** Urban Real Estate Economics uses economic concepts to analyze real estate markets, values, and trends. The course focuses on market dynamics in the US and internationally, with an emphasis on how urban growth and local and federal government policies impact urban development and real estate pricing.

A group development project gives hands on experience, and invited guest speakers bring industry knowledge. Besides the group project and presentation, problem sets are required along with a midterm and an optional second exam.

Format: Lecture.  
Requirements: Midterm, market analysis project, and second exam.  
Prerequisites: MGEC 621, Managerial Economics.  
Materials: Coursepack.  
Offered: Both Terms

## **REAL 730 Urban Fiscal Policy**

Inman

*Cross listed with FNCE 730, BEPP 773, REAL 230, FNCE 230, and BEPP 230*

**Description:** The purpose of this course is to examine the financing of governments in the urban economy. Topics to be covered include the causes and consequences of the urban fiscal crisis, the design of optimal tax and spending policies for local governments, funding of public infrastructures and the workings of the municipal bond market, privatization of government services, and public financial systems for emerging economies. Applications include analyses of recent fiscal crises, local services and taxes as important determinants of real estate prices, the infrastructure crises, financing and the provision of public education, and fiscal constitutions for new democracies using South Africa as an example.

|               |                      |
|---------------|----------------------|
| Format:       | Lecture, discussion. |
| Requirements: | Exams.               |
| Prerequisite: | MGEC 621             |
| Materials:    | Journal articles     |
| Offered:      | Fall Term Only       |

## **REAL 772 Urban Public Policy and Private Economic Development**

Duranton

*Cross listed with BEPP 772, REAL 206, and BEPP 206*

**Description:** This course considers a range of local policies in cities and regions. Examples include: clusters and other local development initiatives, large scale regional policies, employment zones and other targeted policies. More traditional urban policies such as zoning and planning and constraints, transportation pricing, and parking policies among many others will also be considered. Practical examples will be extremely diverse and include the Silicon Valley and attempts to copy it, the Tennessee Valley Authority, housing restrictions in developing countries such as Brazil, congestion pricing in London, etc. Students will be expected to actively participate and make presentations. The course emphasizes the importance of the economic context, the understanding of the underlying rationale for policies, and how the private agents respond to public incentives. The main learning goals are the following: be able to use simple empirical tools of economic evaluations, be able to articulate a critical analysis of competing viewpoints and assessments, and be able to integrate various analytic steps into an overall assessment of economic policies that relies on sound principles and is well argued.

|                |   |
|----------------|---|
| Format:        | Lectures, student led presentations.                      |
| Requirements:  | Class participation, midterm and second exam.             |
| Prerequisites: | Micro economics course, basic familiarity with Statistics |
| Offered:       | Fall term   |

## **REAL 804 Real Estate Law**

Staff

*Cross listed with LGST 804*

**Description:** This course examines the fundamentals of real estate finance and development from a legal perspective. The course serves as a foundation course for real estate majors and provides an introduction to real estate for other students. It attempts to develop skills in using legal concepts in a real estate transactional setting. The course will be of interest to students contemplating careers in accounting, real estate development, real estate finance, city planning, or banking. The main topics covered may include the following: land acquisition, finance; choice of entity; tax aspects; management (leasing, environmental); disposition of real property (sale of mortgaged property, foreclosures, wraparound mortgages, sale-leasebacks); and recent legal developments.

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|----------------|---|
| Format:        | Although some of the material is presented by lecture, the instructor expects considerable class participation. |
| Requirements:  | May include midterm exam, final exam and/or group projects.   |
| Prerequisites: | None.   |
| Materials:     | Textbook and/or course pack.  |
| Offered:       | Both Terms  |

### **REAL 821 Real Estate Development**

Nakahara

*Cross listed with ARCH 768*

**Description:** This course evaluates “ground-up” development as well as re-hab, re-development, and acquisition investments. We examine raw and developed land and the similarities and differences of traditional real estate product types including office, R&D, retail, warehouses, single family and multi-family residential, mixed use, and land as well as “specialty” uses like golf courses, assisted living and fractional share ownership. Emphasis is on concise analysis and decision-making. We discuss the development process, including market analysis, site acquisition, due diligence, zoning, entitlements, approvals, site planning, building design, construction, financing, leasing, and ongoing management and disposition. Special topics like workouts and running a development company are also discussed. Throughout the course, we focus on risk management and leadership issues. Numerous guest lecturers who are leaders in the real estate industry participate in the learning process.

|                |  |
|----------------|--|
| Format:        | Predominantly case analysis and discussion, some lecture, project visits.  |
| Requirements:  | Class participation, multiple papers. Readings include articles, books, and related materials as well as the case studies. |
| Prerequisites: | REAL/FNCE 721. This prerequisite is STRICTLY enforced for this class unless it is undersubscribed.                         |
| Materials:     | Coursepack   |
| Offered:       | Both terms   |

### **REAL 836 International Housing Comparisons**

Wachter

*Cross listed with BEPP 836, REAL 236 and BEPP 236*

**Description:** This course analyzes housing finance systems and housing market outcomes across the globe. In the US, the course focuses on the development of securitization markets and addresses current challenges of housing finance reform, including the future of Fannie Mae and Freddie Mac. Internationally, the course covers issues of access to housing and housing informality in developing countries, financial crises arising out of the housing sector, and potential market-oriented and public policy solutions.

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| Format:        | Lectures, guest speakers and discussion                      |
| Requirements:  | Paper, Homework assignments, Midterm exam, and a Second exam |
| Prerequisites: | FNCE 613 Macroeconomics and the Global Economic Environment  |
| Offered:       | Spring Term Only   |
| Other:         | Real Estate concentration preference                         |

### **REAL 840 Advanced Real Estate Investment and Analysis**

Gyourko

**Description:** Advanced Real Estate Investment and Analysis is designed for majors in Real Estate, but is also open to finance-oriented students who wish a deeper analysis of real estate investment and investment analysis issues than that offered in REAL/FNCE 721. The class will contain a mixture of lectures, guest speakers and case discussions. Academic research is paired with recent industry analysis of key issues in order to marry sound theory and empirical results with current events and practices. Several classes will include lectures outlining what economics and finance tell us about a number of topics. Generally, these will be followed by guest lectures from industry professionals who will focus on a specific application of the principles introduced in the lectures.

|                |                             |
|----------------|-----------------------------|
| Format:        | Lecture, industry speakers. |
| Materials:     | Coursepack                  |
| Offered:       | Spring Term only            |
| Prerequisites: | REAL/FNCE 721               |

### **\*REAL 890 International Real Estate Comparisons**

Staff

**Description:** As a truly non-U.S. focused course, we explore the world of cross-border real estate development, with a focus on fast growing emerging market economies. Topics will emphasize the importance of strategy and implementation in cross-border real estate investment, and include: the rationale, opportunities and risks of international real estate investing; the macro factors that influence the performance of real estate markets across countries; market specific factors that impact RE investment performance (property rights, taxes, transparency, planning procedures); the qualitative aspects of identifying and achieving successful projects; and the growing market for international RE securities and strategies for portfolio management. Classes will combine a lecture on specific aspects of global cross-border RE in the first half of the class and an international case presentations in the second half. Cases will be presented by leading executives in charge of major international RE projects or funds. Cases have been selected to cover different types of RE development – residential, office, retail, hospitality and logistics - important emerging market countries/continents (East / South Asia, Latin America, Sub-Saharan Africa, the Middle East) and different development and investment strategies.

This course is offered in the second half of the semester.

|                |   |
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| Format:        | This course allows for the interaction of faculty lectures, student presentations, case analyses, and leading industry speakers. It is a second quarter mini. |
| Prerequisites: | REAL/FNCE 721 or comparable knowledge/work experience   |
| Materials:     | Course pack   |
| Offered:       | Fall Term only  |

*\* This course counts as one half of an elective course.*

### **\*REAL 891 Real Estate Entrepreneurship**

Staff

**Description:** What makes a successful entrepreneur in the real estate industry? This half semester mini-course exposes undergraduates and MBA students to the broad entrepreneurial aspects of creating and executing real estate investments. The course consists of lectures by the professor, case discussions, and guest lectures by leading entrepreneurs. Lectures and discussions will emphasize real estate entrepreneurship, leadership and challenges often encountered in creating successful real estate investments rather than development processes. Cases will be used to illustrate investment decision making and financial evaluations. Short written responses to questions raised in each case will be assigned. Class members are expected to engage the speakers with questions and discussion as well as explain their views on cases. Class participation and writings will each represent 50% of the grade.

|            |   |
|------------|---|
| Format:    | This course consists of lectures by the professor; case discussion and guest lectures by leading entrepreneurs. It is a first quarter mini. |
| Materials: | Course pack   |
| Offered:   | Fall Term   |

*\*This course counts as one half of an elective course.*

### **REAL 899 Annual Student Research Competition**

Gyourko

**Description:** This class meets in the Spring semester to analyze how to conduct research in the real estate market—where to find data; how to critique research; how to frame research questions; how to write a business research report; how to present a business research report. Topics are provided each year. For further information regarding the Annual Student Research Competition see the Real Estate Department's website: <http://real-estate.wharton.upenn.edu/>.

**REAL 899 Independent Study**  
Staff

**Description:** All independent studies must be arranged and approved by a Real Estate Department faculty member with the exception of the Annual Student Research Competition.

**Offered:** Both Terms

**Other:** Real Estate concentration preference (both graduate & undergraduate)

**ADDITIONAL INFORMATION**

Additional information on the opportunities and resources available to students concentrating in real estate at The Wharton School can be found on the following web pages:

**The Wharton Real Estate Department:**

- <http://real-estate.wharton.upenn.edu/> (World Wide Site)
- **The Wharton Real Estate Club:** <http://dolphin.upenn.edu/~realclub/>
- **The Wharton Geographic Information Systems (GIS) Lab:** <http://gislab.wharton.upenn.edu/>
- **The Samuel Zell and Robert Lurie Real Estate Center at Wharton:**  
<http://realestate.wharton.upenn.edu/>