INTRODUCTION

The Wharton School has offered a real estate concentration for undergraduates since 1985. The concentration consists of one required credit unit and three electives. While the required course focuses on real estate finance, the electives allow students to explore a variety of issues related to real estate. These include real estate development, housing markets, the legal aspects of real estate investment and financing, and the relationship between government policy and real estate development.

The real estate concentration is offered under the auspices of the Real Estate Department of the Wharton School. Professor Gilles Duranton serves as the Chair of the department. Professor Susan Wachter is the undergraduate advisor, and can be reached at: wachter@wharton.upenn.edu. The Real Estate Department is located in 1400 Steinberg-Dietrich Hall and the phone number is 215-898-9687.

Before declaring a concentration at the beginning of their junior year, Wharton undergraduates have built foundations in both business and liberal arts education. The real estate concentration combines and develops the business, analytical, and communication skills students have gained during their first two years at Wharton. The results are students possessing the skills required to enter the business world, as well as an unusual sensitivity to the larger issues involved in creating and maintaining working and living environments.

THE CONCENTRATION

The real estate concentration consists of one required credit unit and three electives. Students concentrating in real estate must take the following course:

REAL 209/FNCE 209 Real Estate Finance: Investment and Analysis

Three other c.u.s are required from the following list of electives:

REAL 204/LGST 204 Real Estate Law
REAL 206/BEPP 206 Urban Public Policy and Private Development
REAL 208/BEPP 208 Housing Markets
REAL 215 Urban Real Estate Economics
REAL 230/FNCE 230 Urban Fiscal Policy
REAL 236/BEPP 236 International Housing Comparisons
REAL 240 Advanced Real Estate Investment and Analysis
REAL 321* Real Estate Development
REAL 399 Student Research Seminar/Independent Study
REAL 390 International Real Estate Comparisons
REAL 396 Real Estate Entrepreneurship

*with faculty permission
COURSE DESCRIPTIONS

REAL 204 Real Estate Law
Staff
Cross listed with LGST 204 and REAL 804

Description: This course examines the fundamentals of real estate finance and development from a legal and managerial 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.

Format: Lectures and class discussion
Requirements: Midterm and final exam
Prerequisites: None
Offered: Both Terms

REAL 206 Urban Public Policy and Private Economic Development
Duranton
Cross listed with BEPP 206, REAL 772, and BEPP 772

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

REAL 208 Housing Markets
Gyourko
Cross-listed with BEPP208/REAL708/BEPP708

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: Managerial Economics (BEPP 250) or equivalent.
Format: Lecture with discussion required.
Offered: Spring Term
REAL 209 Real Estate Investments: Analysis and Financing
Ferreira, Handbury, Sinai, Wong,
Cross listed with FNCE 209

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: Lectures and class discussion required.
Requirements: Midterm(s), case studies
Prerequisites: FNCE 100
Offered: Both Terms

REAL 215 Urban Real Estate Economics
Wachter
Cross listed with REAL 724 (MBA section)

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: Lectures and discussions; occasional guest lecturers
Requirements: Midterm, market analysis project and second exam.
Prerequisites: FNCE 100 & 101
Offered: Spring and Fall Term

REAL 230 Urban Fiscal Policy
Inman
Cross listed with FNCE 230, BEPP 230, REAL 730, FNCE 730, and BEPP 773

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 financial 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 and class discussion
Requirements: Midterm and Final Exams
Prerequisites: FNCE 101
Offered: Fall Term Only

REAL 236 International Housing Comparisons
Wachter
Cross listed with BEPP 236

Description: This course focuses on international comparisons of housing finance systems and housing market outcomes. This includes comparative analyses of the economic factors that underlay housing market differences and similarities. Changing housing market institutions and policies in previously socialist economies and newly emerging countries are examined. The course also addresses the integration of global financial markets for national housing markets. International speakers present their views on institutional innovations and the policy setting.
process in their respective markets. Various approaches to understanding these issues will be used, including readings, written assignments, and group projects.

Format: Lectures, guest speakers and discussion  
Requirements: Paper, Homework assignments, Midterm exam, and a Second exam  
Prerequisites: ECON 1, ECON 2, FNCE 101  
Offered: Spring Term Only  
Other: Real Estate concentration preference

REAL 240 Advanced Real Estate Investment and Analysis  
Gyourko  
*Cross listed with REAL 840 (MBA section)*

Description: This course 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 209. 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 209

REAL 321 Real Estate Development  
Nakahara  
*Cross listed with ARCH 768 and REAL 821 (MBA section)*

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 209 & REAL/LGST 204; The prerequisites are STRICTLY enforced for this class unless it is undersubscribed  
Materials: Coursepack  
Offered: Both terms

REAL 390 International Real Estate Comparisons  
Staff  
*Cross-listed with REAL 890 (MBA section)*

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. We examine the rational for international RE investing and its challenges – including demographic, economic, transparency, taxation, subsidy, legal and political issues, the strategies of composing an international real estate portfolio, the macro and micro factors that will determine the performance of the investment, and the different investment formats suited to different international settings. International cases presented by practitioners are an integral part of the course. Cases have been selected to cover
different types of real estate developments – residential, office, retail, hospitality, and logistics - important emerging market countries/continents (East / South Asia, Latin America, Russia, SSAfrica) and different investment strategies.
This 6-week course is offered in the second half of the semester.

**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 209

**Materials:** Course pack

**Offered:** Fall Term only

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

**REAL 396 Real Estate Entrepreneurship**

**Staff**

**Cross-listed with REAL 891 (MBA section)**

**Description:** What makes a successful entrepreneur in the real estate industry? This half semester mini-course exposes undergraduates and MBA students to this question in the context of real estate opportunities past and present: equity investments, debt investments and real estate operating companies. The topics require the evaluation of entrepreneurial opportunities, structures, investment decision-making, and risks which are present in commercial real estate markets. This course requires a strong understanding of core business topics, especially: entrepreneurship, finance, management and real estate. No formal prerequisites or past experience are required but will prove helpful. This course focuses on identifying real world opportunities, developing concepts, identifying and mitigating risks, raising capital and exiting investments.

**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 399 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/](http://real-estate.wharton.upenn.edu/).

**REAL 399 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/](http://real-estate.wharton.upenn.edu/) (World Wide Site)

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• The Wharton Real Estate Club:  http://www.whartonrealestateclub.com/
• 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/