

BU.132 (REAL ESTATE)

BU.132.615. Real Estate Legal Environment. 2 Credits.

Complex legal issues involved in a real estate development and management transaction are reviewed and analyzed in this course. Students explore legal topics, beginning with the basic principles of property law and extending to zoning and comprehensive planning, environmental issues and safeguards of site acquisitions through construction, including leasing, conflict resolution, operation, and sale of a real estate project. Negotiation, legal aspects of entity structures and resolving disputes are discussed.

BU.152.725. Real Estate Entrepreneurship. 2 Credits.

Real Estate is historically and fundamentally an entrepreneurial industry. This class examines how to become a real estate entrepreneur and compete in today's marketplace. Course topics focus on the skills and knowledge real estate entrepreneurs successfully use to thrive. Students will learn techniques such as: how to create wealth, real estate pro-formas, back-of-the-envelope calculations, leverage, attracting external investors, and creating a winning business plan. Students will work in teams on case studies.

Prerequisite(s): BU.241.610 OR BU.231.620

BU.230.640. Development Modeling and Risk Analysis. 2 Credits.

This course emphasizes the estimation of development and investment budgets, including construction costs, construction loan interest, tenant improvements, lease-up reserves, marketing costs, and other soft costs. Ongoing property operations, including lease-up and refit allowances, are also examined. In this context, various capital structures are analyzed including mortgage loans, various equity investors, and possible refinancing opportunities. In addition, critical risks are examined using sensitivity analysis, Monte Carlo simulation, scenario analysis to calculate the most likely returns, and the probability of loss.

Prerequisite(s): BU.241.610 OR BU.231.620

BU.234.610. Real Estate and Infrastructure Finance. 2 Credits.

This course examines selected techniques and issues in the area of real estate finance. Special emphasis will be placed on the design and valuation of mortgage instruments. This class will be conducted using a lecture format. While lectures will follow the textbook to some extent, supplemental readings will be required. Students are assumed to have some knowledge of finance. Before taking this class, it is important for students to have a clear understanding of the time value of money concept and knowledge of how to use spreadsheets to solve time value of money problems. Knowing how to use a calculator to solve present value problems (but without a clear understanding of the underlying concept) is not sufficient for tackling the course material of this class. Use of calculators or spreadsheets will not be taught in this class.

BU.241.610. Real Estate Investment and Development. 2 Credits.

This course provides an overview of the real estate development and investment processes, as well as introduces students to various disciplines, professionals, and industry sectors, and how they interact and participate in these processes. Students learn to apply direct capitalization models and discounted cash flow models to estimate real estate values by converting future income expectations into present values. These values are compared to current costs and prices to determine the financial feasibility of proposed projects and existing properties. The concept of highest and best use is also introduced and discussed. The use of Excel software is introduced along with the CoStar database. This course was previously titled Development I.

BU.241.620. Design and Construction Feasibility. 2 Credits.

This course examines site planning, building design, and managing the construction project. The class is divided into two sections. The design section focuses on the conceptualization of the project, and the construction section looks at the management of the implementation of the project. Emphasis is placed on how the selection of materials, equipment, and systems can affect both the function and cost of the building. The course also includes a detailed review of the forms of construction contracts and associated documents commonly used in the industry.

BU.241.725. Global Perspectives in Real Estate. 2 Credits.

This course focuses on real estate and infrastructure investment and financing issues around the globe. Using a case approach supplemented by assigned articles and textbook readings, the course examines the global nature of the real estate asset class, the market players and the issues they encounter when identifying opportunities, and executing real estate strategies in various global markets. Topics covered include risks and returns of international real estate investment; challenges in international real estate development; identification of opportunities and execution of real estate strategies around the world; REITs around the globe; and global real estate portfolio considerations.

Prerequisite(s): BU.241.610 OR BU.234.610 OR BU.231.620

BU.241.735. Infrastructure Development for Sustainable Cities. 2 Credits.

This course provides an understanding of the demand and supply of sustainable infrastructure in a context of accelerating urbanization and growing risks related to global warming. The economic principles that make sustainability in cities so challenging are examined. Then, the course presents potential new strategies, new technologies, new business models, and new financing techniques that could make a difference in addressing a full range of infrastructure needs while addressing sustainability objectives. The course includes an understanding of the demand and supply side, cultural factors, politics, and the potential impact of technology and innovation on sustainability of infrastructure, real estate projects and urban policies.

BU.241.740. Project Finance and Public-Private Infrastructure Delivery. 2 Credits.

Project financing, as an alternative to conventional direct financing, is a well-established technique for large capital intensive projects. It grew in importance in the 1990s as a means of financing projects designed to help meet the tremendous infrastructure needs existing in both developed and developing countries. Whether project financing is suitable for such a purpose will depend, ultimately, on if this financing method offers the most cost-effective means of accomplishing the project after all social and private benefits and costs are considered. This course will discuss the basic project financing framework; the rationale for using project financing as opposed to direct conventional financing; the identification and management of risks associated with a large scale project; evaluating a project's viability using analytical tools; sources of project funds; using public-private partnerships as a mode of project financing; and the crafting of contractual arrangements to allocate a project's risk and economic rewards among the parties involved.

Prerequisite(s): BU.234.610 OR BU.231.620 OR BU.910.611

BU.241.750. Advanced Valuation and Investment Analysis. 2 Credits.

This course will integrate advanced valuation principles with the science of econometrics. Trend analysis, in the form of regression analysis, is used to reveal the influences on value for real estate. This integrates the results of regression analysis into the discounted cash flow methodology. This course is intended to prepare the student for real-world challenges in valuing complex real estate through the use of three case studies.

Prerequisite(s): BU.242.715 OR BU.510.601

BU.241.760. Strategic Commercial Leasing. 2 Credits.

Strategic Commercial Leasing teaches students how to understand and negotiate commercial leases to create maximum value for property owners of all sizes, including institutional owners and investors. The course provides in-depth coverage the economic, legal and control issues related to commercial leasing. In-class discussions include the risk-return considerations property owners must evaluate when negotiating individual lease provisions. Leasing considerations include the impact on property valuation, property financing and asset disposition strategies. Students evaluate how a company's leasing strategy impacts their overall real estate portfolio risk, valuation and returns. The course structure will include lectures, group discussion, in-class negotiation. Guest speakers will include institutional owners, lenders and appraisers, enabling students to understand how lease terms are evaluated by a range of professionals. A special focus will be on how institutional owners and REITS view leases, various tenant uses, and overall leasing strategies. This highly interactive course will also cover the differences between apartment leases and commercial leases.

BU.241.770. Smart Growth, Infrastructure and Real Estate Development. 2 Credits.

For the past twenty years smart growth has had an increasingly significant impact on the built environment. Smart growth results in better cost-benefit outcomes for both developers and the public sector, more efficient and appealing land use in prime locations, and new financing tools. This course provides an understanding of historic development patterns of cities and towns, the emergence of the American suburb, and the countervailing smart growth approach. Examined are the principles behind smart growth, the demographic and economic forces furthering the widespread adoptions of these principles—urban revitalization, smaller households, a more transient workforce and racial and ethnic diversity. The growing strength of the Baby Boomers and the Millennials on the market is discussed. Attention is given to the increasingly important impacts of climate change, sustainability, changing tools of economic development competitiveness, health and equity of communities. The main tools of smart growth, such as higher density, mix of land uses, transportation and housing choices, transit-oriented development, walkable neighborhoods, and form-based zoning are examined. Collectively many of these tools are parts of Complete Streets policies. The impacts of public policies and private demand are discussed.

BU.242.601. Real Estate Market Feasibility Study. 2 Credits.

Understanding the urban environment is the key to understanding the marketability of real estate. Likewise, understanding the marketability of real estate is the key to making wise investment decisions. In this course, students will examine the forces that form, shape, and influence the growth of cities with the goal of understanding how real estate benefits and suffers from these dynamics. Students will explore the techniques for forecasting demand and supply in specific markets, as well as evaluating sites based on product criteria. Products include residential, commercial, and retail properties. Final sessions deal with feasibility analysis.

BU.242.701. Real Estate Investment Trusts: Analysis and Structuring. 2 Credits.

This course examines the role that Real Estate Investment Trusts play in commercial real estate capital and investment. Topics include the history, legal structure, and financial basis for establishing REIT portfolios. Students will examine the role of public and private capital markets in facilitating commercial real estate investments through REITs using real world examples. The primary course objective combines public company finance theory with practical real estate capital applications for intelligent business decisions in complex scenarios. Subjects include a history of the REIT industry; how REITs compete for capital and control investment risk; how to value individual REIT stocks and REIT shares generally; the regulatory and capital markets process for the REIT IPO; quarterly and annual filings; follow-on capital raising; and recent developments and strategies in the REIT industry.

Prerequisite(s): BU.234.610 OR BU.231.620 OR BU.241.610

BU.242.710. Real Estate Funds and Portfolio Management. 2 Credits.

A significant amount of commercial real estate investments is held in the form of large real estate funds. These funds typically range in size from \$50 million to over \$50 billion. Many of the large office buildings, regional malls, apartment buildings, and industrial parks in the country are held in these funds. Some funds invest in senior housing, student housing, parking, healthcare, and even farm and timberland. The managers of these funds are large institutional investment management firms that manage the properties on behalf of wealthy investors, pension funds, endowments, and sovereign wealth funds. The purpose of this course is to understand how these funds are organized, how they arrive at an investment strategy, and how to evaluate how they have actually performed relative to that strategy. Case studies and actual industry data will be used to reinforce the concepts discussed in the course.

Prerequisite(s): BU.231.620 OR BU.234.610

BU.242.715. Real Estate and Infrastructure Valuation. 2 Credits.

This course integrates the real estate curriculum with the valuation process. The three traditional approaches to value (land and site valuation; building cost estimates, depreciation, direct capitalization; and yield capitalization) will all be covered in the course. This course is integral for students pursuing the appraisal/valuation concentration within the MS Real Estate and Infrastructure Program.

BU.242.720. Real Estate Capital Market Analysis. 2 Credits.

This course examines selected topics and issues related to real estate capital markets. Special emphasis will be placed on mortgage backed securities (MBSs) and real estate investment trusts (REITs). This class will be conducted using a lecture format. While lectures will follow the table of contents of the textbook rather closely, quite often supplemental readings are required. Students are assumed to have some knowledge of real estate finance. Before taking this class, it is important that students have a clear understanding of the design of mortgages and knowledge of how to use spreadsheets to solve mortgage related problems. Knowing how to use a calculator to solve present value problems is not sufficient for tackling the course materials of this class.

Prerequisite(s): BU.234.610 OR BU.231.620

BU.245.790. Real Estate and Infrastructure Capstone. 2 Credits.

The Capstone course provides you with a mentored professional real estate industry experience that integrates all aspects of the MS in Real Estate and Infrastructure curriculum. You may choose one of three options:

- 1. A real estate and/or infrastructure development project proposal. Students selecting this option work in teams to produce a state-of-the-art development proposal for a challenging site selected by Capstone faculty and judged by a project review board of faculty and industry professionals.
- 2. A real estate and infrastructure research. Students selecting this option work individually or in teams to conduct original research and analysis of a critical issue in real estate and infrastructure development.
- 3. An internship with a real estate company. Students selecting this option work on a portfolio of defined assignments mentored by an industry professional in a real estate company, agency, professional or industry association, or portfolio management company.

Capstone choices will differ based on individual interests and career goals, but you are encouraged to choose experiences that provide an opportunity for growth and showcase your professional knowledge, skills and talent. Examples include a development proposal for a brownfield site; an analysis of weather-related risks in coastal infrastructure security; or a written participation/ observation report based on a supervised internship. The structure of deliverables may vary, but deliverables for all capstone experiences will include a written report, presentation slide deck, and oral presentation. Students must receive approval and permission from their academic adviser before enrolling in this course.