SCHACK UNDERGRADUATE REAL ESTA (REBS1-UC)

REBS1-UC 1001 Real Estate Principles (4 Credits)

Typically offered Fall and Spring

This course introduces the terminology, concepts and basic practices of real estate. It surveys real estate law, appraisal, marketing, brokerage, management, finance, investment analysis and taxation. Topics include property rights, valuation methods, listing agreements, purchase and sale contracts, deeds, mortgages, leases, management and development. **Grading:** UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1002 Real Estate Law (4 Credits)

Typically offered Fall and Spring

This course examines the interplay between private property rights and governmental restrictions on private property, including eminent domain, zoning ordinances, building codes and environmental laws. Different forms of real estate business entities and co-ownership are evaluated. Students study deeds, easements, transferable development rights, and the legal aspects of a variety of real estate related contracts, including listing agreements, letters of intent, options, purchase and sale contracts, mortgages, insurance, construction contracts, and leases. **Grading**: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1005 Real Estate Finance (4 Credits)

Typically offered Fall and Spring

This course investigates the institutions, instruments, and structures by which real estate investments are financed. It reviews capital markets, the sources and uses of real estate funds, components of a capital structure, and the role of government in real estate finance. Students apply core financial principles to real estate, and become acquainted with different methods used by professional investors to evaluate commercial real estate acquisitions and development opportunities including common formulas, financial projections and models. Risks and strategies employed by commercial real estate investors are also reviewed.

Grading: UC SPS Graded Repeatable for additional credit: No

REBS1-UC 1009 Real Estate Valuation (4 Credits)

Typically offered Spring

This course provides an introduction to the valuation process, and to the income, market, and cost approaches to real estate value. Topics include highest and best use analysis, depreciation, and capitalization fundamentals, including discounted cash flow analysis. Students evaluate different types of appraisal reports and apply valuation techniques to case studies.

Grading: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1010 Real Estate Development (4 Credits)

Typically offered Fall and Spring

This course provides an overview of the real estate development process from initial planning and visioning, through project feasibility and decision making, entering into partnerships and structuring project financing, design, entitlement and approvals, site acquisition, construction management project completion, leasing and asset management. Through readings, lectures, and guest lectures by industry practitioners, site visits and hands-on assignments simulating the development process, students will become familiar with the process in urban and suburban locations, for a range of uses, and under a variety of different financing, ownership and execution structures. The course will also examine contemporary and future trends, including sustainability, mixed use, public-private partnerships, trends in design, planning and the public realm.

Grading: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1012 Real Estate Accounting and Taxation (4 Credits) *Typically offered Fall and Spring*

This course reviews accounting principles, concepts, rules, regulations, and reporting requirements applied to long-term construction projects and income-producing properties. It also examines the tax implications of business entity selection, basis, loss deductions, depreciation, like-kind tax-free exchanges, and various leases. Balance sheet analysis is also covered.

Grading: UC SPS Graded Repeatable for additional credit: No

REBS1-UC 1015 Market Analysis in Real Estate (4 Credits)

Typically offered Fall

This course presents methods for the measurement of demand for real estate products and projects in specific markets and neighborhoods. It studies the effects on specific markets of national, regional, and local factors such as economic change, social attitudes, changing laws and legal interpretations, and changes in individual attitudes. This course introduces appropriate data sources and modeling techniques useful in analyzing and forecasting real estate demand and supply in different markets for specific property types at specific locations.

Grading: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1020 Real Estate and Sustainability (4 Credits)

Typically offered not typically offered

This course examines the sustainability movement and the impacts it has had on the real estate industry and built environment. Sustainable construction and retrofitting methodologies, green building certifications and building codes are also discussed. Research and best practices are presented on the topics of site selection, building orientation, material selection, low-impact development, water conservation, energy efficiency and waste management. Solutions are evaluated from economic, environmental and social justice perspectives.

Grading: UC SPS Graded

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REBS1-UC 1025 Commercial Lease Analysis (4 Credits)

Typically offered Spring

This course analyzes key lease clauses relating to rent, loss factors, use, subletting, assignment, and leasehold improvements. Various methods and cash-flow implications for allocating expenses for base building taxes, insurance, and energy consumption are examined. Sample leases are used to train students to review, abstract, and negotiate the business terms of a variety of commercial real estate leases.

Grading: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1033 Managing the Construction Process: Cost and Project Management Systems (4 Credits)

Typically offered not typically offered

This course provides an introduction to the construction business, with an emphasis on cost and project management systems. Topics include organizational forms; marketing and sales; types of contracts; general contractor and construction manager contracts; the requisition process from a lender's, owner's, and subcontractor's perspectives; estimating, bidding, and award practices; bonds and insurance; subcontracts and material purchasing; cash-flow life-cycle analysis; field supervision; scheduling and expediting changes, claims, and extras; community, public agency, and labor relations; company finances, cash management, accounting/accounting/cost control procedures; and sources of capital. **Grading:** UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1034 Planning and Scheduling: Construction Project Management Practices (4 Credits)

Typically offered occasionally

This course acquaints students with analytical and quantitative techniques used in effective project management. It examines the roles of the project manager, superintendent, architect, engineer, and owner-representatives in planning and scheduling. Topics include feasibility studies, developing the project plan and network, CPM and PERT techniques, optimizing resource allocation and costs, schedule and budget control programs, plan and schedule updating and corrective action process, time/cost analysis, and network compression. Payment requisitions, project delays; labor rules and regulations are also discussed.

Grading: UC SPS Graded Repeatable for additional credit: No

REBS1-UC 1035 Real Estate Data Analytics (4 Credits)

Real estate has become a sophisticated industry that now relies on advanced data analysis to drive investment and other critical decisions. This course is designed to give students an understanding of the techniques of data analysis and quantitative methods used in the industry. Students will be exposed to hands-on projects using data from major providers in the industry. Students will gain hands-on experience creating statistical models to drive informed decision making in real estate investment decisions.

Grading: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1040 Introduction to Risk and Portfolio Management (4 Credits)

Typically offered Fall

This course provides an understanding of the concept of portfolio management and the importance of diversification in controlling portfolio risk. It discusses modern portfolio theory and asset-pricing models to value and select from alternative investments. Students learn to quantify risk, explain and construct an optimal portfolio, apply risk/return concepts to different real estate investments, and explain how lenders, developers, and investors mitigate risk and analyze possible investments. **Grading:** UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1041 Asset Management (4 Credits)

Typically offered occasionally

This course presents techniques for managing a single real estate asset as well as a diverse portfolio of real estate assets. It reviews strategies to increase net operating income and to create and preserve asset value. Topics include identifying owner investment goals, strategic planning, cost control techniques, financial reporting, leasing, and operations. **Grading:** UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1042 Real Estate Capital Markets and Corporate Finance (4 Credits)

Typically offered Fall

This course introduces students to the debt and equity real estate capital markets. Economic investment drivers, financing vehicles, and public and private sources of capital are discussed. Students gain an understanding of the ebb and flow of capital to real estate and its implications for owners, lenders, and investors. Also covered is real estate securitization, and the role of rating agencies, securities analysts and agents. **Grading:** UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1045 Global Real Estate Markets (4 Credits)

Typically offered occasionally

This course analyzes the risks and benefits of cross-border commercial real estate investments from an institutional perspective. Students evaluate factors that affect the real estate economies in key international markets in Asia, Europe, and Latin America through the study of local land use controls, private property rights, contract enforcement, transaction costs and currency risks. Investment vehicles, urbanization trends, clusters, and the rise of megacities are also discussed. **Grading:** UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1050 Real Estate Urban Economic Development (4 Credits) *Typically offered occasionally*

This course explores the economic, social, and political forces that shape cities, real estate demand, and urban economic development. Students examine urban economic theory and practice, including the methods by which local economic development projects are created, evaluated, and implemented. The financing of urban economic development projects is also considered. Topics include public-private real estate development partnerships, development on public land, zoning and urban renewal, tax incentives, exactions, affordable housing, public infrastructure, landmark preservation and community facilities.

Grading: UC SPS Graded

REBS1-UC 1060 Urban Real Estate Economics (4 Credits)

"This is a change in course content from Students will master the fundamentals of urban economics necessary for engaging professionally in the real estate world. This course examines the evolution in theory and practice of urban economic development concepts, as well as actual initiatives in cities from housing production, transportation systems, supply chains, infrastructure and unique product types such as culturally anchored commercial developments and district development. Students will be provided a toolbox of economic development strategies and tactics, along with relevant real-world examples through case study, video and guest lectures. Students also obtain a basic understanding of forces affecting economic development strategies, information on successful and unsuccessful approaches, and an opportunity to engage in a critical analysis of current thinking in urban economic development. As a byproduct, they will be well prepared to sit at any side of a public/private real estate development negotiation table: as government, citizen / community resident, or developer/investor."

Grading: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1065 Environmental, Social and Corporate Governance (4 Credits)

The goal of this course is to enable students to contribute to, manage or lead in the development, investment, and operation of management of real estate in a sustainable manner following ESG practices. Environmental risks created by business activities often involve properties or land which have an impact on human health. Social risk refers to the impact companies can have on society. Governance risk refers to the way companies are run and often can include diversity and equity issues as well as ethics. "Sustainable investing" is an umbrella term for investments that seek positive returns and long-term impact on society, environment and the performance of the business. The real estate professional needs to be able to address ESG market drivers. Students will be better prepared to quantify the benefits of ESG programs, certification and reporting protocols when building an optimal investment portfolio.

Grading: UC SPS Graded Repeatable for additional credit: No

REBS1-UC 1070 Management of the Real Estate Firm (4 Credits)

This course examines the opportunities and challenges involved in formulating and implementing strategies by taking a "system" view of organizations. Students examine multiple aspects of how managers address the real estate industry, strategy, structure, culture, tasks, people, and outputs. The course helps students understand and analyze how managers can formulate and implement real estate business strategies effectively. It will be particularly valuable if you are interested in management consulting, investment analysis, or entrepreneurship - but it will help you to better understand and be a more effective contributor to any organizations you join, whether they are large, established real estate firms or real estate industry startups. Students will gain an understanding of social and ethical issues, data analysis skills, financial theories and a knowledge of the global, political and legal context within which business functions.

Grading: UC SPS Graded Repeatable for additional credit: No

REBS1-UC 1100 Financial Modeling for Real Estate (4 Credits) *Typically offered occasionally*

Students gain proficiency with best-practice finance software tools used for analyzing real estate development and income-producing projects. The course software is employed throughout the real estate industry by real estate developers, investors, lenders, commercial brokers, appraisers and property managers. Students first learn the use of each software tool through in-class demonstrations and by ror checking, and understanding model limitations is stressed throughout the course individually solving small-scale problems. Next, student groups address real-world-scale modeling projects and prepare in-depth modeling reports. Use of best practices for modeling design are emphasized.

Grading: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1101 Statistics for Real Estate Economics (4 Credits)

This course introduces real estate students to statistical and empirical methods and their application to the real estate sector. Topics include descriptive statistics, probability, hypothesis testing, univariate and bivariate statistical inference, and multivariate analysis. In addition to statistical theory, the course introduces students to applied statistics and real estate data analysis, using the software package STATA. Students will explore the latter topic in greater depth in Real Estate Data Analytics. **Grading:** UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1105 Real Estate Applications of Quantitative Finance (4 Credits)

This course presents a variety of quantitative methods used by finance academics, investment banks and hedge funds, and the application of these tools to various problems in Real Estate Finance. Students learn the theoretical bases of the methods covered, how to employ them generally, and how to apply them to Real Estate applications. **Grading:** UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1110 Real Estate Securities (4 Credits)

This course provides a solid foundation in the fundamentals of the Commercial Mortgage-Backed Securities (CMBS) market and Real Estate Investment Trusts (REITS). An economic outlook report by Natixis Investment Managers (January 2021) states 80 percent of U.S. REITs fall within industries less dependent on foot traffic unlike other real estate like offices and housing. As industrial warehouses and data centers have proven more resilient and also have benefited from shifts to more online purchases during the pandemic REITs are positioned for a resurgence that students need to be prepared to address. At the same time, according to an analysis by Mizuhou Securities (January 2021), the pandemic has brought concern by analysts that commercial office REIT stock prices are likely to be delayed as employers further push return-tooffice dates. Students will therefore need to know how to build additional bad debt reserves and write off additional accounts receivables which will be taught in this course.

Grading: UC SPS Graded

REBS1-UC 1115 Private Equity (4 Credits)

Private equity plays an important role in the real estate finance and investment ecosystem. Private equity allocates capital from institutional investors to real estate development and operations through a complex decision tree model, evaluating risk and reward. Students will learn the tools necessary to evaluate a range of real estate investment types, as well as various modalities to generating superior long-term, risk-adjusted returns.

Grading: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1120 Use of Space and Urban Design in Real Estate (4 Credits)

This course will address the spatial needs of a development, what developers need to build or readapt in order to attract tenants to a building and the site requirements and community benefits or amenities that may have to be incorporated into a project. Real Estate developers need to understand how space is used, designed and fits in the city. In order to meet user demand spaces and buildings must be designed for how people live, work and recreate today. This course covers the many options open in how developers create new buildings and spaces. **Grading:** UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 1125 Real Estate and the Community: Legal Basis, Planning and Engagement (4 Credits)

This course will focus on the legal zoning process required for developers to engage in before they are given approval for new construction projects to proceed. Students learn the fundamentals of how best to engage the local community so the real estate project receives government and community approval.Real estate development occurs in an economic, political, legal and community context. This course provides students the parameters within which real estate, especially development occurs; laws that control use of property, transfers and ownership; environmental considerations, well as community and political concerns. **Grading**: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 2000 Public-Private Real Estate Projects (4 Credits)

Typically offered occasionally

Students gain proficiency in analyzing Public Private Real Estate Development Projects. Students will also learn how to design and propose a private development deal that provides real value to towns and cities. As part of this education, students will learn to address the intangible wants and needs of the community, and how to manage developers ambitions from the Public perspective. The first half of the semester will teach students some frameworks for developing and executing Public-Private projects. The second half of the semester will focus on the analysis and critical review of completed and in-process projects. During this phase, students work in teams to analyze either: a) a deal that is desired by the public and possibly feasible for private investment, or b) a project that is proposed by private sponsors who claim that material public participation is mandatory and beneficial to the local neighborhood, town or city.

Grading: UC SPS Graded Repeatable for additional credit: No

REBS1-UC 2005 Property Technology (4 Credits)

The Property Technology course focuses on the increasingly important role of technology entrepreneurship and innovation in the real estate sector, in applications ranging from smart buildings to automated underwriting to predictive modeling. The course will examine the process of real estate technology startup formation, business planning and execution, valuation, and venture capital fundraising. Case studies will address successes and failures of property technology companies. **Grading:** UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 2010 Real Estate Entrepreneurship and Innovation (4 Credits)

This course explores in-depth the numerous facets of new venture creation and growth and to foster innovation in real estate development projects. The emphasis is on bridging theory and practice to learn how to transform ideas into action. Specifically, this course analyzes the unique financial, legal, political, and organizational issues associated with entrepreneurial real estate development. Guest speakers who are successful entrepreneurs in the real estate industry provide insights into understanding risks and capitalizing on opportunities for new ventures. The purpose of this course is to explore in-depth the numerous facets of new venture creation and growth and to foster innovation in real estate development projects. The emphasis is on bridging theory and practice to learn how to transform ideas into action. Specifically, this course analyzes the unique financial, legal, political, and organizational issues associated with entrepreneurial real estate development.

Repeatable for additional credit: No

REBS1-UC 2015 Real Estate Data Visualization (4 Credits)

This course will provide participants an experiential opportunity to critically engage and participate in the assessment, production, and design of real estate information visualization as both a tool of decisionmaking, as well as internal and external communication. Utilizing a variety of variable types (e.g., numeric, percentage, categorical, date, coordinates) across real estate datasets, participants will learn the transformative techniques to visualize market and time-series data functionally. Participants will learn how to use R effectively from a beginner's perspective, gain a thorough understanding of R syntax using tidyverse, then quickly progress to cleaning data, calculating performance trends and other metrics as they would do in Excel, and visualizing such insights through custom, professional graphics and dashboards that reflect their brand. Each class session will focus on the theory and concept behind each course topic, with greater emphasis placed on running code, strategically resolving errors, and creating reproducible working environments that can be integrated into future projects. Participants will be encouraged to bring both their own datasets and expertise from their backgrounds to discussion, practice, and assignments. Whether the participant aims to better understand data wrangling in R, metric calculation and variable creation with tidyverse, or sound practices in storytelling with polished, informative graphics, this course will provide a robust overview

Grading: UC SPS Graded

REBS1-UC 3202 Global Cities: Latin America (2 Credits)

This course belongs to the "Global Cities" series of courses offered by the NYU Schack Institute of Real Estate and focuses on the rapid growth of global cities in Europe, the Middle East, Africa, Latin America, South Asia, East Asia, and Southeast Asia. As urbanization continues to reshape human settlement patterns, a new class of connected and global cities has emerged providing significant opportunities for real estate development.

Grading: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 5000 Real Estate Seminar: Distinguished Speaker Series (0 Credits)

This real estate industry seminar features distinguished guest speakers selected from throughout the real estate industry, addressing their segment of the field as well as critical issues and topics in their area of expertise. Topics will range from global capital markets to sustainability, new investment opportunities, financing and deal structures, and more. Current projects, case studies, brief company profiles, career paths, and other approaches constitute the formal presentation, which is typically followed by a question and answer session with a lively exchange between students and the seminar leaders.

Grading: Not For Credit

Repeatable for additional credit: No

REBS1-UC 7942 Internship: Real Estate (2-4 Credits)

Typically offered occasionally

Real Estate students may undertake an internship early in their academic career which can be 2 to 4 credits. To qualify for an REAL internship, students should be in good standing within their program and have the approval of their advisor. Students wishing to consider an REAL internship should submit a proposal outlining their internship which must then be approved by the Internship Coordinator. After the proposal is approved, students undertake an internship which typically entails outplacement in an organization related to the student's interests or academic concentration. A minimum of 100 hours is required over the course of the semester. In addition to the hours at their internship, students meet regularly with the internship coordinator and other interns, maintain a weekly journal and, (required for a 4 credit internship) complete a final paper or work portfolio.

Grading: UC SPS Graded

Repeatable for additional credit: No

REBS1-UC 7990 Special Topics in Real Estate (2-4 Credits) *Typically offered occasionally*

This course offers intensive study of specific topics in Real Estate focusing on different themes. (As offered).

Grading: UC SPS Graded

Repeatable for additional credit: Yes

REBS1-UC 7991 Real Estate Senior Project (4 Credits)

Typically offered Spring

This course allows students to develop a real estate project under the guidance of a faculty member. Experience acquired through a real estate internship will be a valuable input to this project. The seminar requires regular class attendance to discuss and document project progress, as well as individual meetings with the instructor. The project may be in any one of the degree's various concentration areas. Projects must be the student's individual, original work and include the product, the technical documentation, and a learning experience essay summarizing the process and skills used. In addition, students present their projects orally to a jury panel at the end of the semester.

Grading: UC SPS Graded Repeatable for additional credit: No

REBS1-UC 7992 Real Estate Internship (2-4 Credits) *Typically offered occasionally*

The internship project provides advanced students with an opportunity to test and apply the theories and concepts of the classroom in an actual public or private real estate industry setting. Students are required to log at least eight hours per week of "on-the-job" experience during the semester. In addition, students meet regularly with an internship advisor, maintain weekly logs or journals, and complete a final learning-experience essay summarizing the outcome. (Students' regular employment cannot serve as an internship. All internship proposals must be reviewed and approved by the internship advisor prior to registration of the course). **Grading:** UC SPS Graded

Repeatable for additional credit: Yes

REBS1-UC 7993 Real Estate Independent Study (2-4 Credits) *Typically offered occasionally*

Students conduct an independent investigation of a selected topic outside the boundaries of the classroom. Independent study allows students to pursue specialized interests, within the framework of the discipline, that are not covered in existing courses. Although self-directed, students work closely with a faculty member who guides and evaluates their work.

Grading: UC SPS Graded

Repeatable for additional credit: Yes

REBS1-UC 9001 Elementary Principles in Financial Management and Analysis (3 Credits)

Typically offered not typically offered

Did you ever wonder how sports entities, hotels, and real estate properties manage their finances? How do they raise money to build stadiums, resorts, or office buildings? Who are the key employees involved in managing the overall financial health of their businesses? What types of jobs are available in financial management and analysis? If you are considering a career in this field, this course provides a comprehensive overview that delves deep into the critical areas which you must understand in order to be successful in this highly competitive, yet extremely lucrative profession. Topics will include: basic financial concepts, introduction to reading financial statements, an orientation to financial markets, and to the ways in which to raise and invest capital. As a student enrolled in this program, you will work on real-life case studies that will provide the opportunity to turn theories and concepts into concrete practice. On-site visits to well-known arenas, convention centers, and hotels across New York City will provide an insider's view to the exciting world of financial management and analysis. Course Takeaways - An understanding of the elementary functions of the financial markets - The ability to read financial statements - The skills to identify key standards in reporting requirements - The know-how to utilize calculations to make informed business decisions - An understanding of what it takes to raise capital in the real estate, hospitality, and sports industries

Grading: UC SPS Graded Repeatable for additional credit: No

REBS1-UC 9901 Project Seminar: Elementary Principles in Financial Management and Analysis (1 Credit)

Typically offered not typically offered

In this one-credit seminar, students will engage more deeply with the subject of study as they apply what they learn in the class and field through hands-on projects. Each student will focus on a project that addresses contemporary industry challenges and real-world problem solving. This course is a corequisite to Elementary Principles in Financial Management and Analysis **Grading:** UC SPS Graded