

REAL ESTATE MASTERS/GC (REAL1-GC)

REAL1-GC 1005 Principles of Real Estate Accounting and Taxation (3 Credits)

Typically offered Fall, Spring, and Summer terms

This course provides students with an understanding of the uses of accounting in the real estate and construction industries. It reviews concepts, principles, rules, regulations, and reporting requirements and the accounting and tax procedures needed to understand financial statements related to management, operations and investments, including income tax analysis. As such it provides a first introduction to the Time Value of Money concept and to Appraisal.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 1035 Real Estate Finance (3 Credits)

Typically offered Fall, Spring, and Summer terms

This course covers the debt and equity financing of real estate with particular emphasis on income-producing property. It identifies and explains the legal instruments involved in mortgage underwriting and lending; the role of government in the financing of commercial and residential real estate; sources of both private and public debt and equity capital, and the financing of real estate construction and development activity. The course analyzes income property cash flows, the valuation of property, the measurement of investment returns and the impact of debt leverage and income taxes.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 1045 Real Estate Economics & Market Analysis (3 Credits)

Typically offered Fall, Spring, and Summer terms

This course examines connections between the national and global economies and real estate markets from both theoretical and an empirical perspectives. It explores the performance of specific property types under different macroeconomic business and growth cycles and changing monetary conditions. The course explores key policy issues, their economic impact on real-estate decision-making, and identifies indicators used to track economic and real estate performance. The course also examines the economic structure of major metropolitan areas, the impact of local governments on urban economic growth, the impact of urban economic growth on supply and demand identification for specific property types, and conditions under which certain regions thrive while others decline. Building upon the concepts and tools of economic analysis, this course introduces appropriate data sources and techniques useful in analyzing and forecasting real estate demand and supply in different markets for specific property types at specific locations. Class assignments will also follow current economic news and potential impacts for real estate markets.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 1046 Real Estate Media and Information (1.5 Credits)

In this course, students will examine the important role media, data and information technology play in real estate and why these components are essential to a successful real estate project. As with other major industries, real estate is covered closely by a variety of media outlets and analysts who document market cycles and trends vital to the final goal of a development. Real estate is a for-sale/lease and investment commodity, therefore it is routinely publicized in the media through PR, advertising and branding in order to garner attention and spur transactions. This course will teach students about the dynamic, often intricate relationship between developers and other real estate professionals and the array of media channels which impact each of them. Students will be focusing on a single mixed-use real estate project, for which they will devise a complete messaging campaign including PR, advertising and branding.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 1050 Legal Principles & Practices (3 Credits)

Typically offered Fall, Spring, and Summer terms

This course teaches students the principles and instruments of real property and construction law, as well as when and how to utilize the legal system. It reviews the contracts and issues that arise in the course of construction, development, ownership and operations and examines the roles, rights, obligations and liabilities of the major parties involved in transactions including the owner, architect, engineer, contractor and allied professionals.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 1055 Real Estate Valuation & Feasibility Analysis (3 Credits)

Typically offered Fall, Spring, and Summer terms

This course provides an introduction to the income, market, and cost approaches with extensive treatment of the highest and best use concept and applications of discounted cash flow, income capitalization, and residual techniques. It emphasizes investment, risk, and lease valuation models and looks at their role in providing essential income and cash flow measurements used in arriving at sound value based decisions. Feasibility analysis realistically grounded in market analysis and featuring the cost versus value creation equation, is also treated.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 1060 The Development Process (3 Credits)

Typically offered Fall, Spring, and Summer terms

This course provides a step by step analysis of the phases utilized in the real estate development process including conceptualization, site acquisition, zoning and permits, planning and design, the construction process, financing, and financial reporting and evaluation. The key components of construction contracts and subcontracts are covered including lump sum, unit price, and cost-plus delivery methods are examined. Leadership, management and control of the development team are featured issues.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 1065 Hotel Development and Investment (3 Credits)

This course will explore the development process for hospitality properties from inception to operation and disposition, as well as methods of valuation and drivers of demand for a variety of property types, including downtown, suburban, boutique and resort. Students will become familiar with income analysis for food and beverage, retail components, spas and golf courses. Additionally, the course will introduce students to fundamental concepts of design psychology and considerations, as well as the space allocation and programming of public areas, guestrooms, back-of-house areas and amenities. Case studies and interactive assignments will be used to illustrate best practices, as well as the conditions under which certain properties thrive while others decline.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 1070 Corporate Finance (3 Credits)

Typically offered Fall, Spring, and Summer terms

This course is a study of the decision making process by financial management in a corporate environment. It includes an examination of the costs of capital, capital pricing methods and applications of net present value in business and valuation decisions. Students review the factors involved in the issuance of capital stock, the role of venture capital, initial public offerings, investment banking, application of the option pricing theory, warrants and convertible securities and corporate dividend policies. Also covered are corporate, foreign and Euro bonds and debt financing in general. The role of the public equity and debt markets to real estate pricing and finance is included.

Grading: GC SCPS Graded

Repeatable for additional credit: No

Prerequisites: (REAL1-GC 1035 OR DEVE1-GC 1035).

REAL1-GC 1075 ESG & Commercial Real Estate (3 Credits)

This course enables students to understand the complexities of the development, investment, management and operation of commercial real estate assets in a sustainable manner following Environmental, Social, and Corporate Governance (ESG) practices and by ESG risk assessment. Environmental risks are associated with properties or land, their interface with each other, and their impact on human health. Social risk refers to the impact companies can have on communities, neighborhoods and society. Governance risk refers to the way companies are run and often can include diversity and equity issues as well as ethics. This course further examines the opportunities and challenges involved in formulating and implementing strategies by taking a "systems" view of commercial real estate firms. Students examine multiple aspects of how real estate leaders address strategy, structure, culture, tasks, people, and outputs.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 1080 Negotiation & Dispute Resolution (3 Credits)

Typically offered Fall, Spring, and Summer terms

This course presents an examination of major negotiation theories, strategies and tactics as applied to real estate and construction transactions and disputes. Proposed and completed transactions are analyzed before or after each negotiation process as a benchmark for measuring the effectiveness of negotiators. Alternative dispute resolution techniques examined and practiced in the course include mediation, arbitration, and litigation settlement techniques. Students also review the defense of claims, liens and law suits. The role of ethics in professional practice is addressed.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 1095 Real Estate Capital Markets (3 Credits)

Typically offered Fall, Spring, and Summer terms

This course identifies the sources of debt and equity capital for commercial real estate, and the vehicles by which this capital is delivered to the property markets. In covering these topics, the course analyzes the 'four quadrants' of capital: private debt, public debt, private equity and public equity, including class discussions and exercises in the structure and pricing of CMBS and CRE CDO, and the performance and valuation metrics of equity REITs.

Grading: GC SCPS Graded

Repeatable for additional credit: No

Prerequisites: (REAL1-GC 1035 OR DEVE1-GC 1035).

REAL1-GC 2300 Real Estate Finance & Investment Analysis (3 Credits)

Typically offered Fall, Spring, and Summer terms

Students in this course examine various analytical techniques and structure appropriate financing requirements for all major types of income-producing real estate investments and developments. Students learn traditional and innovative methods of finance such as joint ventures, private placements, and mezzanine structures as well as the derivation of rates of return, cash flow analysis and modeling, estimates of residual and present intrinsic value, commercial lease and expense analysis and inflation sensitivity analysis.

Grading: GC SCPS Graded

Repeatable for additional credit: No

Prerequisites: (REAL1-GC 1035 OR DEVE1-GC 1035) AND REAL1-GC 1055.

REAL1-GC 2315 Risk & Portfolio Management (3 Credits)

Typically offered Fall, Spring, and Summer terms

This course examines the methods employed in both strategic and tactical value enhancement decision-making for real estate. Students learn how to balance the potential for positive financial reward with concurrent exposure to risk and uncertainty in both single assets and portfolios. Risk analysis begins with a review of the credit worthiness of tenants and buyers and moves up the scale to risk analysis of portfolios of assets and modern portfolio theory. The advantages and disadvantages of small versus large-scale enterprises; single versus multiple property type portfolios; and local, regional and national market diversification strategies are evaluated. The interaction of volatility, risk and diversification is examined.

Grading: GC SCPS Graded

Repeatable for additional credit: No

Prerequisites: (REAL1-GC 1035 OR DEVE1-GC 1035).

REAL1-GC 2399 Applied Project in Finance & Investment (3 Credits)

Typically offered Fall and Spring

The capstone course in each concentration integrates and applies all of the prior coursework taken, engaging the student in the production of a professional quality project or proposal. Capstone projects are the principal assessment device to evaluate each student's understanding of the discipline. In each case actual market data and industry resources are researched and employed in the creation of an investment related product specific to each concentration. In the Finance and Investment concentration participants research current public and private sources of debt and equity and develop and present an investment proposal.

Grading: GC SCPS Graded

Repeatable for additional credit: No

Prerequisites: REAL1-GC 2300 AND REAL1-GC 1095 AND REAL1-GC 1070.

REAL1-GC 2400 Planning & Design Issues in Development (3 Credits)*Typically offered Fall, Spring, and Summer terms*

This course addresses planning at the regional, community, neighborhood and site as practiced by both the public and private sectors. It examines the public master planning process as well as the project site planning and trends in planning and regulation such as smart growth and sustainability. In the design area, the course addresses building design and design theory for various product types as well as urban design.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**Prerequisites:** REAL1-GC 1060.**REAL1-GC 2410 Land Use & Environmental Regulation (3 Credits)***Typically offered Fall, Spring, and Summer terms*

This course addresses in detail the full range of federal, state and local governmental regulations that a developer may have to deal with relating to issues such as water, air and hazardous materials. It also covers regional land use regulatory programs such as those found in select states, and local subdivision, zoning and special purpose ordinances. Emphasis would be on identifying what measures apply to a given project, formulating a strategy for addressing each, and understanding the reasons for their adoption.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**Prerequisites:** REAL1-GC 1060.**REAL1-GC 2610 Asset Management (3 Credits)***Typically offered Fall, Spring, and Summer terms*

This course examines techniques for increasing the value of real estate assets under management on behalf of ownership. It reviews the components of asset management that directly affect the cash flow and underlying value of a single asset or a portfolio of assets. Topics covered include financing and refinancing opportunities and techniques, designing a tenant mix, creating and implementing repositioning strategies, planning capital expenditures, budget and management reporting, cost control techniques, management and operations strategies.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**REAL1-GC 2635 Commercial Lease Analysis (3 Credits)***Typically offered Fall, Spring, and Summer terms*

This course provides an extensive and detailed overview and analysis of the commercial leasing process with a special emphasis on the theory and types of clauses used in a modern leasing transaction. It places leases in context with other commercial contracts, analyzes each of the major leases provisions and then examines leases as financial instruments. Student's use financial devices as a tool for understanding leasing economics and participate in a negotiation workshop at the course's end.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**REAL1-GC 2699 Applied Project in Asset Management (3 Credits)***Typically offered Fall and Spring*

The capstone course in each concentration integrates and applies all of the prior coursework taken, engaging the student in the production of a professional quality project or proposal. Capstone projects are the principal assessment device to evaluate each student's understanding of the discipline. In each case actual market data and industry resources are researched and employed in the creation of an investment related product specific to each concentration. In the Asset Management concentration participants engage in developing a proposal to reposition an actual property looking at everything from it's physical characteristics to its financing and tenant mix.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**Prerequisites:** REAL1-GC 2610.**REAL1-GC 2720 PropTech and the Digital Evolution of Real Estate (3 Credits)**

As the age of technology rapidly displaces and augments all aspects of the built environment, including design, construction, leasing, financing, and operations, students must begin to think critically and rationally about these platforms. The rapid adoption of technology within the real estate industry has created a surge of activity across the lifecycle of new products, from conceptualization, beta development, funding, production introduction, and industry adoption. This course introduces topics relating to the current ecosystem of Property Technology ("PropTech"), the evolution of the sector, and an in-depth analysis of each aspect of this lifecycle through a survey of existing PropTech platforms.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**REAL1-GC 2800 International Real Estate (3 Credits)***Typically offered not typically offered*

This course covers the practical issues encountered when doing business in another country from both the US and non-US perspectives. It examines three principal areas of concern: legal, political and economic systems. Topics include land ownership and title; development rights and laws; regulation; legal representation; local attitudes and the general climate for foreign investment; working with joint venture partners; tax and currency considerations.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**REAL1-GC 3015 Affordable Housing Finance and Development (3 Credits)***Typically offered Fall, Spring, and Summer terms*

This course provides an introduction to the income, market, and cost approaches with extensive treatment of the highest and best use concept and applications of discounted cash flow, income capitalization, and residual techniques. It emphasizes investment, risk, and lease valuation models and looks at their role in providing essential income and cash flow measurements used in arriving at sound value based decisions. Feasibility analysis realistically grounded in market analysis and featuring the cost versus value creation equation, is also treated.

Grading: GC SCPS Graded**Repeatable for additional credit:** No

REAL1-GC 3025 Private Equity Real Estate (1.5 Credits)*Typically offered Fall and Spring*

This course will evaluate PERE from the perspective of both LP/investor and GP/manager. Topics include the genesis of private equity funds; private equity investment vehicles; the spectrum of strategies, risk & return; fund structures; counterparties; different types of PERE investors & motivations; fund formation & life cycle; j-curve; waterfalls; performance measurement; governance issues & alignment of interest; regulatory environment; and key standard document provisions.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**REAL1-GC 3035 Commercial Mortgage Backed Securities (1.5 Credits)***Typically offered Fall and Spring*

This course introduces the tools and skills needed to evaluate the interplay between real estate loan markets and overall fixed income/structured finance markets. The course will address the influence of micro- and macro-economic conditions on fundamental real estate space/leasing markets, property/asset markets, and capital market conditions (e.g., loan and bond markets). Particular focus will be given to achieving a mastery of commercial mortgage backed securities (CMBS) components and their structuring as well as to providing a rich understanding of the economic and legal structure of CMBS and the impact of various market participants on the final terms of a bond transaction. Additionally, due to the "global" nature of real estate, the course will address the role of the CMBS market in the financial crisis and on the commercial real estate markets, on the formation and flow of funds within capital markets, the emergence of new investors since the crisis, and the current appetite of the various investor groups for the CMBS product. The course will be enriched with discussions on the potential impact of CMBS on the economy in general, as well as its implications for real estate business cycles. Remember, this is a graduate-level course and, as such, it is as much about learning a process (how to ask the right questions, how to solve problems, and how to work within a group setting) as it is about learning specific concepts.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**REAL1-GC 3055 Analyzing Reit Securities (1.5 Credits)***Typically offered Fall and Spring*

The class is designed to familiarize students with the quantitative and qualitative aspects of REIT stocks and to provide an experience in presenting their results in writing and in a public forum. Students learn how to find and understand pertinent data, build an earnings model, assess various risks and potential rewards hidden in financial statements and employ various valuation methods used in determining the relative attractiveness of REIT securities.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**REAL1-GC 3075 Managing Bldg Systems & Operations (3 Credits)***Typically offered occasionally*

This course examines the essential business elements of property management as they relate to the maintenance, control and performance of the physical asset, specifically the mechanical, electrical, plumbing, fire safety, security and telecommunications systems as well as the building exterior and adjacent property. Topics covered include managing building operations including staff, contractors, vendors, and regulatory and contractual requirements, tenant relations and improvements, and building performance standards involved in lease obligations, office operations and reporting.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**REAL1-GC 3085 CRE Modeling & Underwriting: Residential (1.5 Credits)**

This course belongs to a series of accelerated 7-week courses emphasizing financial modeling and underwriting of specific asset classes. Each module in this case-study-based course will focus on a different residential property type: multifamily, for-sale condominiums, student housing, single-family rentals, and manufactured housing. The course reviews specific financial analyses that apply to capital markets and market participants in various transaction types (e.g., acquisition, development, recapitalization, debt structuring).

Grading: GC SCPS Graded**Repeatable for additional credit:** No**Prerequisites:** REAL1-GC 1035 AND REAL1-GC 1070 AND REAL1-GC 1055 AND REAL1-GC 1095.**REAL1-GC 3095 Debt Finance: Non-Bank & Alternative Lenders (1.5 Credits)**

This course will introduce students to non-bank lenders consisting of public and private mortgage REITS, Debt Funds, Private Equity and Hedge Funds, Family Offices, and others. Students will learn and understand the landscape of debt providers to maximize returns on their investments and developments, and to avoid the pitfalls that come along with picking the "wrong" lender.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**REAL1-GC 3120 Developing Residential Multi-Family Real Estate (3 Credits)***Typically offered Fall*

This course will discuss the actual and practical aspects of developing residential real estate in New York City. We will discuss the big picture as well as the little details that help ensure successful real estate developments. The course will go into depth on the entire development process from vision, acquisition, financing design, construction, and disposition with real examples culled from over 20 years of hands-on development deals. This is not a course on investment theory or strategy but more of a discussion on how things get done in the real world of New York City Development.

Grading: GC SCPS Graded**Repeatable for additional credit:** No**REAL1-GC 3135 Real Estate Data Analytics (3 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. Applied statistics will be presented using the open-source R statistical computing environment, together with Jupyter notebooks, an increasingly popular presentation environment. Students will gain hands-on experience creating statistical models to drive informed decision making in real estate investment decisions.

Grading: GC SCPS Graded**Repeatable for additional credit:** No

REAL1-GC 3145 Acquisition Procedures & Analysis W/ Argus Softwr (3 Credits)

Typically offered Fall, Spring, and Summer terms

This course will provide an overview of the acquisition process from asset evaluation and underwriting through due diligence, purchase and sale agreements, closing and asset integration. The primary focus of this class will be property valuation using Argus Software™ and examination of underwriting scenarios as well as in-depth audits of models. Other topics will include the creation of concise management reports and an examination of the criteria used by senior executives in pursuing a property acquisition.

Grading: GC SCPS Graded

Repeatable for additional credit: No

Prerequisites: REAL1-GC 2300.

REAL1-GC 3175 Real Estate Investing in a Distressed Environment (1.5 Credits)

Typically offered Fall and Spring

To introduce the basic framework of Commercial Real Estate (CRE) investment through a lens of distressed situations. Basic elements of bankruptcy procedure and valuation will be discussed, with a specific concentration on those issues most pertinent to CRE workout situations. Common characteristics of and factors that lead to distress also will be addressed.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 3180 Global Real Estate Markets & Investments (3 Credits)

Typically offered Spring

This course concentrates on the global real estate markets of Europe, Asia, the Middle East and the Americas. The students will examine transnational real estate transactions and investments and the firms who operate in this environment with a special focus on four principal areas of concern: 1) the institutional framework at the property and sovereign level, 2) political considerations, 3) the currency markets, and 4) the capital markets. Specific topics covered include globalization, global real estate trends, risk and portfolio management, country risk, development and ownership rights, taxes, currency risk, hedging, and cultural considerations.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 3185 Urban Economic Development (3 Credits)

Typically offered not typically offered

This course examines the evolution in theory and practice of economic development concepts, programs, and projects in cities, with particular emphasis on the New York metropolitan area. It seeks to provide students with 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 and current issues in economic development.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 3206 Global Cities: Europe (1.5 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: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 3405 Advanced Real Estate Development and Investment Transactions (3 Credits)

Typically offered Fall and Spring

This course will provide an advanced overview of real estate development and investment whether that development activity occurs here in the U.S. or overseas. The course will highlight differences and similarities between development activities in a variety of locations and of various property types. Students will analyze the differences in development methodology and consider how they could be advantageously applied in the U.S. Specific topics will include market perceptions, financing methods, construction methods, and sustainable design concepts. A comprehensive paper and presentation on specific topics will be required as a term project. Prerequisites: Completion of all Tier I and II courses, with the exception of Negotiation and Dispute Resolution Y64.1080. In addition, it would be beneficial, but it is not required, for students to have taken the Planning and Design Issues (Y64.2400) and Land Use and Environmental Regulation (Y64.2410) courses.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 3410 Entrepreneurship & Innovation in Re & Dev (3 Credits)

Typically offered not typically offered

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. Guest speakers who are successful entrepreneurs in real estate industry provide insights into understanding risks and capitalizing on opportunities for new ventures.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 3900 Independent Study (3 Credits)

Typically offered not typically offered

Individual coursework with related topics in Real Estate. Approval by academic department.

Grading: GC SCPS Graded

Repeatable for additional credit: Yes

REAL1-GC 3905 Independent Study Capstone (3 Credits)

Typically offered not typically offered

Individual coursework with related topics in Real Estate. Approval by academic department.

Grading: GC SCPS Graded

Repeatable for additional credit: No

REAL1-GC 3911 Professional Internship (3 Credits)

Typically offered not typically offered

Professional practice under faculty supervision within public agency or private firm. Recommended of those with no industry experience.

Grading: GC SCPS Graded

Repeatable for additional credit: Yes

REAL1-GC 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