

# ECONOMICS (ECON-UH)

## ECON-UH 1112 Introduction to Macroeconomics (4 Credits)

*Typically offered Fall and Spring*

Through the lens of historic episodes this course introduces students to basic concepts and theories of macroeconomics: national income, economic growth, unemployment, money and inflation, the financial system, and open economies. Via extensive data work, readings, and classroom discussions students gain familiarity with the tools, methods, arguments and challenges of modern macroeconomics. At the end of this course, students are expected to be able to explain key macroeconomic concepts, analyze historic and current issues using simple macroeconomic theories, and employ data effectively to support their arguments.

**Grading:** Ugrd Abu Dhabi Graded

**Repeatable for additional credit:** No

**Prerequisites:** SOCSC-UH 1111 or Microeconomics Proficiency Assessment.

- Bulletin Categories: Economics: Development Economic History Track
- Bulletin Categories: Economics: Global Macroeconomics Track
- Bulletin Categories: Social Science: SPEH Electives

## ECON-UH 1701 Economics of Gender (4 Credits)

*Typically offered Fall*

The role of women in the economy changed drastically in the 20th century. Many women around the world enjoy unprecedented freedom to decide what to study, where to work, and when to have a family, nowadays. These changes coupled with the evidence of a persistent gap in the earnings of men and women around the world raise important questions about family planning, female participation in the labor force, and public policy. These questions are at the center of this course. That is, we will explore how men and women make decisions about work and family that have a long-lasting impact on their lives. Using insights from economic theory and empirical data - predominantly from Europe, the USA and the UAE- the course covers topics such as the different incentives for men and women to study and participate in the labor market, as well as explore the reasons behind gender differences in earnings and employment. Students will learn about trends in fertility and marriage rates, and discuss recent government policies aimed at combating discrimination, encouraging women to participate in the labor force, and achieving a better work-life balance.

**Grading:** Ugrd Abu Dhabi Graded

**Repeatable for additional credit:** No

**Prerequisites:** SOCSC-UH 1010Q.

- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Elective
- Bulletin Categories: Economics: Labor Health Economics Track
- Bulletin Categories: Gender Studies: Empirical Analysis of Gender
- Bulletin Categories: Political Science: Breadth Electives
- Bulletin Categories: SRPP: Institutions Public Policy
- Bulletin Categories: SRPP: Social Structure Global Processes
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics
- Crosslisted with: Gender Studies
- Crosslisted with: Political Science Major: Social Science Required
- Crosslisted with: Political Science
- Crosslisted with: SRPP: Major Soc Sci Required
- Crosslisted with: Social Research Public Policy

**ECON-UH 2010 Intermediate Microeconomics (4 Credits)***Typically offered Fall and Spring*

This course introduces the major concepts and tools of modern microeconomic analysis. Students will study the manner in which consumers, producers and resource owners, acting through markets, determine the prices and output of goods and the allocation of productive resources. Consumers and producers are viewed as agents with well-defined objectives, choosing optimally under constraints on their resources. The price mechanism is viewed as an institution that disseminates information to decision makers - firms and consumers - and coordinates their behavior. Students will study circumstances under which markets promote an efficient allocation of resources, as well as sources of market failure where the price mechanism can lead to inefficient outcomes.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1111 and either MATH-UH 1013Q or SOCSC-UH 1101.

- Bulletin Categories: Economics Major: Required
- Bulletin Categories: Economics
- Bulletin Categories: Mathematics: Breadth Electives

**ECON-UH 2020 Data Analysis: Economics (4 Credits)***Typically offered Fall and Spring*

Social Science research and policy analysis rely heavily on observational data. Students learn to analyze such data and apply appropriate statistical techniques to address various empirical questions. Topics include multivariate regression and classification analysis as well as time series modeling and forecasting. The course emphasizes applications of these techniques using statistical software.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1010Q and (MATH-UH 1013Q or SOCSC-UH 1101).

- Bulletin Categories: BOS: Methods and Analytics Electives
- Bulletin Categories: Economics Major: Required
- Bulletin Categories: Economics
- Bulletin Categories: Mathematics: Breadth Electives
- Bulletin Categories: Political Science: Methods
- Bulletin Categories: SRPP: Methods Electives

**ECON-UH 2030 Intermediate Macroeconomics (4 Credits)***Typically offered Fall and Spring*

Intermediate Macroeconomics addresses in depth four foundational aspects of macroeconomic theory and policy: (1) theories of exogenous and endogenous growth in per capita incomes; (2) theories of fluctuations in output, employment and other macroeconomic aggregates with a focus on policy and other economic stimuli that can lead to booms and recessions; (3) determinants of inflation including capacity constraints, money, credit and expectations; (4) the aims, objectives and tools of monetary and fiscal policies and their relationship with financial intermediation and its regulation. Throughout the course data will regularly be analyzed to critically assess the theoretical insights.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1111, SOCSC-UH 1011 and (MATH-UH 1013Q or SOCSC-UH 1101).

- Bulletin Categories: Economics Major: Required
- Bulletin Categories: Economics
- Bulletin Categories: Mathematics: Breadth Electives

**ECON-UH 2310EQ Behavioral Economics (4 Credits)***Typically offered Fall*

This course introduces students to the field of behavioral economics, which seeks to combine standard economic thinking with more psychologically-plausible assumptions about human behavior. This is accomplished by making nonstandard assumptions about human preferences, exploring nonstandard beliefs, and emphasizing the limitations of our decision-making faculties. Predictions about individual behavior are more accurate and the policies of governments are more effective when these more-realistic models are effectively used. The topics covered include, but are not restricted to, choice under uncertainty, overconfidence and competitiveness, stereotypes and discrimination, moral and social norms, and procrastination and intertemporal choice. Each topic is approached by examining evidence that is not easily explained by the canonical economic model and then asking how and why it can be better explained by making specific deviations from the standard rationality assumptions. Specific policy interventions that can be used to help people make better decisions will also be discussed.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1010Q (or any equivalent introductory statistics course, or MATH-UH 2011Q, or PSYCH-UH 1004Q) and SOCSC-UH 1111.

- Bulletin Categories: BOS: General Business Electives
- Bulletin Categories: Behavioral Institutional Design Minor: Electives
- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Required
- Bulletin Categories: Economics: Behavioral Experimental Track
- Crosslisted with: Behavioral Institutional Design
- Crosslisted with: Business, Organizations, and Society
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 2320E Experimental Economics (4 Credits)***Typically offered Spring*

As a methodological field within the discipline, experimental economics develops laboratory techniques (similar in spirit to those found in the 'hard sciences') in the pursuit of two broad ends: to empirically evaluate existing assumptions and theories of economic behavior and to 'wind tunnel' test new assumptions, theories and policies. In this course, students will learn how to marry theory with the economists' laboratory, how to interpret the results of experiments, how to advance economic thinking using those results and how this tool applies equally to individual, group, and aggregate economic behavior.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1010Q (or any equivalent introductory statistics course, or MATH-UH 2011Q, or PSYCH-UH 1004Q) and SOCSC-UH 1111.

- Bulletin Categories: Behavioral Institutional Design Minor: Required
- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Required
- Bulletin Categories: Economics: Behavioral Experimental Track
- Bulletin Categories: Political Science: Breadth Electives
- Crosslisted with: Behavioral Institutional Design
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics
- Crosslisted with: Political Science Major: Social Science Required
- Crosslisted with: Political Science

**ECON-UH 2410 Development Economics (4 Credits)***Typically offered Fall*

This course covers the roles of factor accumulation, technology, human capital and ideas in the growth process; the political economy of growth; the role of openness to international trade versus international trade barriers; and growth and income inequality. The course provides an overview of foreign aid in the economic development process and the policies of international institutions like the IMF and World Bank. The course also includes: the study of randomized experiments in evaluating aid projects and development interventions; rural land markets; credit markets in imperfect and fragmented capital markets; the household migration decision; and nutrition and fertility decisions.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1010Q and SOCSC-UH 1111.

- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Required
- Bulletin Categories: Economics: Development Economic History Track
- Bulletin Categories: Political Science: Breadth Electives
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics
- Crosslisted with: Political Science Major: Social Science Required
- Crosslisted with: Political Science

**ECON-UH 2411 Technology and Economic Development: Markets and Networks (4 Credits)***Typically offered Spring*

This course will cover topics on the interface between economics and computer science, with special emphasis on issues of importance to economically developing regions. Students will work in teams to tackle real-world and interdisciplinary problems. Students will address questions of markets and economic development using Information and Communications Technologies for Development (ICTD) techniques in the context of development.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1111, CS-UH 1001, or ENGR-UH 1000.

- Bulletin Categories: BOS: General Business Electives
- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Elective
- Bulletin Categories: Economics: Development Economic History Track
- Crosslisted with: Business, Organizations, and Society
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 2451X Economic History of the Middle East (4 Credits)***Typically offered occasionally*

The Middle East was the cradle of civilization and one of the most vibrant regions of the world for thousands of years. Since the Middle Ages, however, it has been surpassed by Europe in economic performance. This course explores this reversal in fortune. Was it due to culture, religion, law, geography, agrarian structure, globalization, or state policy? What attempts have been made to catch up with the West? Which have been successful? How has the history of the Near East compared to that of other parts of the world and what light do those comparisons shed on the region's experience?

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1111.

- Bulletin Categories: Arab Crossroads Studies: Society Politics
- Bulletin Categories: BOS: General Business Electives
- Bulletin Categories: Economics: Development Economic History Track
- Bulletin Categories: History: Mediterranean Zone Electives
- Bulletin Categories: Pre-1800
- Crosslisted with: Arab Crossroads Studies Major: Required
- Crosslisted with: Arab Crossroads Studies
- Crosslisted with: Business, Organizations, and Society
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics
- Crosslisted with: History: Major Required
- Crosslisted with: History

**ECON-UH 2510 Foundations of Financial Markets (4 Credits)***Typically offered Fall and Spring*

This course offers a rigorous examination of the basic concepts and tools of modern finance. Students are introduced to cash flow analysis and present value, as well as basic concepts of return and risk, in order to understand how financial markets work and how financial instruments are valued. These instruments, including equities, fixed income securities, options, and other derivative securities, become vehicles for exploring various financial markets and their utilization by managers in different kinds of financial institutions to enhance return and manage risk.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** BUSOR-UH 1501, SOCSC-UH 1010Q and SOCSC-UH 1111.

- Bulletin Categories: BOS: Business Foundations Electives
- Bulletin Categories: Econ Conc: Finance Market Studies Required
- Bulletin Categories: Economics: Entrepreneurship Finance Track
- Crosslisted with: Business, Organizations, and Society
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 2512 FinTech Innovation: Finance, Technology, Regulation (4 Credits)***Typically offered Spring*

FinTech innovation is the hottest topic in Financial Services and touches all aspects of industry transformation. Digitizing a financial institution or competing with established players requires an interdisciplinary approach. For FinTech entrepreneurs and investors to be capable of creating or evaluating innovative business models that can generate revenues they need to possess knowledge on 3 key areas: Finance (quantitative methods and behavioral finance), Technology (artificial intelligence, blockchain, API) and Regulation (MIFID2, PSD2, GRDP). In this course we will cover these key three areas and study their implications for FinTech founders and investors, established financial institutions and regulators.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No

- Bulletin Categories: BOS: General Business Electives
- Bulletin Categories: Econ Conc: Finance Market Studies Elective
- Bulletin Categories: Economics: Breadth Electives
- Bulletin Categories: Economics: Entrepreneurship Finance Track
- Bulletin Categories: Legal Studies: Electives
- Crosslisted with: Business, Organizations, and Society
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics
- Crosslisted with: Legal Studies
- Crosslisted with: No longer in use

**ECON-UH 2514 Economics of Sovereign Wealth Funds (4 Credits)***Typically offered Spring*

Sovereign wealth funds (SWFs) are key actors in the global financial landscape of the twenty-first century. These funds manage assets worth more than 7 trillion of US dollars and have grown more rapidly than any other class of large global investors - and thus appear set to strongly influence international investing for the foreseeable future. Yet, in spite of their size and relevance, SWFs are still quite poorly understood. What explains their momentous rise? What is the economic rationale for their establishment? How do they differ from other global institutional investors? Which economic, institutional, and governance challenges to they face? Against this backdrop, this course will introduce the student to the economic principles of sovereign investing and to key, selected problems and issues in sovereign wealth management in the international context and with special reference to the impact COVID-19 crisis in the UAE, home of some of the leading SWFs.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1010Q, SOCSC-UH 1011 and SOCSC-UH 1111.

- Bulletin Categories: Economics: Entrepreneurship Finance Track

**ECON-UH 2610 International Economics (4 Credits)***Typically offered Spring*

Examining both macro and micro aspects of the globalization of world economies, this course begins with the fundamentals of trade: comparative advantage, gains from trade, the price of factors of production, and the implications of labor and capital mobility. The second part of the course covers the role of money and finance in global economic activity. Topics include: the roles of the exchange rate; current and capital accounts as key variables in international economic relations; purchasing power parity and interest rate parity; the international effects of macro policy and government exchange rate policies; the role of oil exports in the world economy; and the role of international economic organizations such as the International Monetary Fund and the World Trade Organization.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1111.

- Bulletin Categories: BOS: General Business Electives
- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Required
- Bulletin Categories: Economics: Global Macroeconomics Track
- Crosslisted with: Business, Organizations, and Society
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 2710 Labor Economics (4 Credits)***Typically offered occasionally*

This class will study the various ways that workers and firms interact in labor markets. What factors determine how much labor individuals supply to the market? What determines labor demand by firms? How do firms design contracts to provide the right incentives to their workers? What determines wage inequality in the economy? What can insights from labor economics contribute to debates surrounding policies such as immigration reform, welfare reform, and income taxation? The class will expose students to the basic theoretical models used by economists to tackle these issues. Students will also survey evidence from empirical studies on these topics.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** (SOCSC-UH 1010Q, SOCSC-UH 1111 and ECON-UH 2010) and Co- or Prerequisite: SOCSC-UH 3220.

- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Required
- Bulletin Categories: Economics: Labor Health Economics Track
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 2711 Health Economics (4 Credits)***Typically offered occasionally*

This course will focus on the application of economic principles to examine issues in health economics. The first part of the course will focus on theoretical models of supply and demand for health and health care, and the transformation of health care into health. We will then apply these models to understand how health insurance markets work, the importance of externalities in health and health care, the interaction between markets for health and labor, and the role of government intervention in health care provision. We will also discuss key characteristics of current health care programs in the United States and elsewhere. Overall, this course will be a combination of discussion of important issues in health care, learning models that are helpful in explaining various aspects of health care and understanding what is known empirically. By the end of the course, students should be able to use economic reasoning to think critically about health-related policy issues.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1010Q, SOCSC-UH 1111.

- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Required
- Bulletin Categories: Economics: Labor Health Economics Track
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 2921 Law and Economics (4 Credits)***Typically offered occasionally*

This course introduces students to economic thinking about legal topics. The first half focus on property rights and how legal institutions have evolved to settle disputes between property owners and allocate risk between different agents. Historical court cases from the British and American common law system will be used to aid in this discussion. The second half of the course examines law as a system of incentives for promoting pro-social behavior. Participants will expand their analysis to civil law as practiced in much of the world, and compare it with the theory built from the common law experience to see which lessons still apply. The core question participants will be asked to answer is "when is the law efficient?"

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 1111.

- Bulletin Categories: Economics: Economic Theory Track
- Bulletin Categories: Legal Studies: Electives
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics
- Crosslisted with: Legal Studies
- Crosslisted with: No longer in use

**ECON-UH 2922 Industrial Organization (4 Credits)***Typically offered Spring*

Industrial Organization is a branch of applied microeconomics that studies a wide range of issues including market competition, firms' strategic behaviors, effects of firms' decisions on market outcomes (like prices, quantities, the type of products offered, location, innovation and social welfare) and their feedback effects on market structure, anti-competitive practices and regulatory interventions. In particular, Industrial Organization is concerned with the way firms compete with each other, with the way firms acquire and maintain market power, with the way public policies are used to address undesirable implications of market power. This course introduces the students to a range of issues in the field of Industrial Organization with the goal to understand different forms of market structures, of firms' strategic decisions and of regulatory and competition policies. The course combines theoretical concepts and basic models with some noteworthy real-world applications; it also briefly considers some competition laws and regulatory policies. It builds on concepts and methodologies from microeconomics and game theory.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2010 (or BUSOR-UH 2006), and MATH-UH 1013Q.

- Bulletin Categories: BOS: General Business Electives
- Bulletin Categories: Economics: Economic Theory Track
- Bulletin Categories: Economics: Entrepreneurship Finance Track
- Crosslisted with: Business, Organizations, and Society
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 3010 Economics of Imperfect Markets (4 Credits)***Typically offered Fall and Spring*

The market is the main institution for the allocation of economic resources. It operates through a price mechanism that disseminates information to decision-makers – firms, consumers, and regulators – and coordinates their behavior. When it works well, it promotes an efficient allocation of resources. But markets can suffer from several imperfections: some markets can be missing, as for most externalities; they can be incomplete, for example in the financial sector; agents can be price-makers or hide information, and therefore prevent competition from promoting efficiency. The course will review in depth most of the sources of market failures and their consequences.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2010 and, either MATH-UH 1021 or SOCSC-UH 1201.

- Bulletin Categories: Economics Major: Required
- Bulletin Categories: Economics

**ECON-UH 3030 Economic Growth (4 Credits)***Typically offered Fall and Spring*

This course introduces students to the modern analysis of economic growth. This branch of macroeconomics is concerned with questions such as: What explains the considerable growth in incomes per capita that advanced economies have experienced since the late eighteenth century? Why are some countries so much richer than others? Will poor countries close the gap with rich countries? What is the driving force of growth in the long run? Are the benefits of growth equally shared between different social classes? How does government policy affect growth? How do the underlying characteristics of an economy - such as its institutions, skill distribution, and demographic trends - affect its growth rate?

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2010, ECON-UH 2030 and either MATH-UH 1021 or SOCSC-UH 1201.

- Bulletin Categories: Economics Major: Required
- Bulletin Categories: Economics

**ECON-UH 3210 Quantitative Methods and Program Evaluation (4 Credits)***Typically offered Spring*

The purpose of this course is to introduce students to an applied, intermediate level of quantitative and econometric analysis. The first part of the course will focus on multiple regression analysis. The second part covers experimental and non-experimental methods that are often used in empirical research and evaluation. The course is intended to give students hands-on experience with real data and real analysis, helping students become sophisticated consumers of relatively advanced statistical techniques, as well as to provide students practical knowledge to conduct their own empirical analysis. Many applications will use data from developing countries.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** (BUSOR-UH 2004 or ECON-UH 2020 or POLSC-UH 2211 or SOCSC-UH 2211 or SOCSC-UH 2212 or SRPP-UH 3215) AND (pre-req or co-req: SOCSC-UH 3220).

- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Elective
- Bulletin Categories: Econ Conc: Quantitative Econ Analysis Elective
- Bulletin Categories: Economics: Data Science Economics Track
- Bulletin Categories: Political Science: Methods
- Bulletin Categories: SRPP: Methods Electives
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics
- Crosslisted with: Political Science Major: Social Science Required
- Crosslisted with: Political Science
- Crosslisted with: SRPP: Major Soc Sci Required
- Crosslisted with: Social Research Public Policy

**ECON-UH 3300 Topics in Behavioral and Experimental Economics (4 Credits)***Typically offered occasionally*

In this course students work through academic research papers in the area that is closely connected to the research interests of the professor. One of the outcomes is a research proposal that each student prepares. Students can take multiple versions of this course for credit.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2320 or ECON-UH 2310EQ.

- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Elective
- Bulletin Categories: Econ Conc: Quantitative Econ Analysis Elective
- Bulletin Categories: Economics: Behavioral Experimental Track
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics



**ECON-UH 3320 Applied Forecasting: From Linear Models to Data Mining and Deep Learning (4 Credits)***Typically offered Spring*

This class guides you through each step of designing and implementing a real-world forecasting project. Its objective is to give you a working knowledge of the statistical and computational tools that are commonly involved in such exercises. We will examine variable selection, estimation, the role of hyperparameters, combination methods for forecasting models, and how to evaluate the resulting forecasts from both a statistical and a user perspective. We will emphasize the implementation and assessment of forecasting methods, including a philosophical and statistical foundation. We will work with both classical and modern methods, e.g. logistic regression and decision trees for classification tasks like credit risk assessment; or linear and nonlinear prediction models like ARx and feedforward neural networks for high and low frequency time series analysis. Throughout the semester, you will apply your knowledge in a hands-on forecasting project in areas such as business cycles, electoral processes, financial markets, or even sport events. This practical experience will solidify your understanding, prepare you for real-world challenges and elevate your forecasting skills.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2020 and MATH-UH 1021Q **Corequisites:** SOCSC-UH 3220.

- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Elective
- Bulletin Categories: Econ Conc: Finance Market Studies Elective
- Bulletin Categories: Economics Minor: Electives
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 3400 Topics in Development and Economic History (4 Credits)***Typically offered occasionally*

In this course students work through academic research papers in the area that is closely connected to the research interests of the professor. One of the outcomes is a research proposal that each student prepares. Students can take multiple versions of this course for credit.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 3220.

- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Elective
- Bulletin Categories: Econ Conc: Quantitative Econ Analysis Elective
- Bulletin Categories: Economics: Development Economic History Track

**ECON-UH 3511X Islamic Economics and Finance (4 Credits)***Typically offered occasionally*

This course provides a foundational understanding of the principles of Islamic economics and mode, products and procedures of Islamic finance. This course familiarizes students with the roles and functionalities of Islamic finance in the context of the financial services industry today.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2510.

- Bulletin Categories: Arab Crossroads Studies: Society Politics
- Bulletin Categories: BOS: General Business Electives
- Bulletin Categories: Econ Conc: Finance Market Studies Elective
- Bulletin Categories: Economics: Entrepreneurship Finance Track
- Bulletin Categories: Legal Studies: Electives
- Crosslisted with: Arab Crossroads Studies Major: Required
- Crosslisted with: Arab Crossroads Studies
- Crosslisted with: Business, Organizations, and Society
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics
- Crosslisted with: Legal Studies
- Crosslisted with: No longer in use

**ECON-UH 3512 Global Asset Allocation (4 Credits)***Typically offered Fall*

This course analyzes the drivers of asset prices and explains how they impact the investment decision process in diversified global multi-asset portfolios. The students will learn to distinguish between macro-economic fundamentals, technical parameters and valuation parameters and how the overall assessment of these indicators impacts the investment decisions. The course will cover portfolio optimization as well as techniques of risk management based on the utilization of derivative instruments. The students will subsequently analyze how specific macro-economic drivers have historically had differentiated impacts across advanced, emerging and GCC markets, observing market movements across risk-on- and risk-off moments (financial crises). Equipped with the tools of asset allocation in global multi-asset portfolios, students will finally use this historical empirical analysis as a basis for identifying global and local risk factors in today's market context, and discuss ways of how to protect portfolios accordingly. This will be done with a special focus on GCC and Emerging Markets.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2030, ECON-UH 2510 and SOCSC-UH 1010.

- Bulletin Categories: Economics: Entrepreneurship Finance Track

**ECON-UH 3513 Advanced Investments (4 Credits)***Typically offered Spring*

This course presents classical and modern ideas of finance with an applied focus. Students will master the analytic tools and the financial theory for making smart investments by using stocks and bonds but will also get their hands dirty with data. The course starts with an overview of important methods from mathematics and statistics, software tools and financial data. It continues with the pricing of bonds and other fixed-income instruments, discusses the risks associated with fixed-income investments, demonstrates the methods to derive zero-coupon yield curves and shows how to hedge interest rate risk. The course then deals with stocks and covers the following topics: Predictability of stock returns, The cross-section of stock returns, Asset pricing theory (utility, discount factors, expected returns, CAPM, ICAPM, APT), Empirical asset pricing methods (time-series predictive regressions, cross-sectional Fama-MacBeth as well as Fama and French regressions). We also study the performance of Mutual funds and Hedge funds. The final session of the course will be devoted to answering questions related to this course that are frequently asked in the job interviews in investment banks.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2020 or SOCSC-UH 3220.

- Bulletin Categories: Econ Conc: Finance Market Studies Elective
- Bulletin Categories: Economics: Entrepreneurship Finance Track
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 3520 Corporate Finance (4 Credits)***Typically offered Fall and Spring*

This course introduces the student to selected problems and issues in financial management and corporate financial policy. Topics include: capital budgeting (strategy and techniques associated with the analysis and selection of capital projects, financial forecasting, and financial planning) and corporate finance (the cost of capital and issues associated with raising capital, mergers and acquisitions decisions, corporate bankruptcy, managerial control, and compensation strategies). Problem sets and case studies are integral parts of this course.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2510.

- Bulletin Categories: BOS: General Business Electives
- Bulletin Categories: Econ Conc: Finance Market Studies Required
- Bulletin Categories: Economics: Entrepreneurship Finance Track
- Crosslisted with: Business, Organizations, and Society
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 3521 Asset Pricing and Derivatives (4 Credits)***Typically offered Spring*

This course is a strong introduction to the theoretical and practical aspects of financial derivatives including Futures, Options and Swaps. Derivatives have recorded huge growth due to their hedging, speculative and bona fide applications and due to their profound effects in times of crisis. Derivatives are quantitative in nature; however, they also relate to theoretical knowledge and intuitive judgment in structuring and real-life applications. This course will use the quantitative tools learned as a prerequisite. The goal is to develop an understanding of how derivative securities work (pricing, trading, marking to market, hedging...), grow intuition on their application and expand on their basics to engineer innovative and exotic securities that allow tailoring the amount and kind of risk, be it risk associated with changes in interest rates, exchange rates, stock prices, commodity prices, inflation, weather, etc. The course will also explore the emergence of derivatives market and its applications in the local economy.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2510 and MATH-UH 1021.

- Bulletin Categories: Econ Conc: Finance Market Studies Required
- Bulletin Categories: Economics: Entrepreneurship Finance Track
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 3522 Corporate Governance (4 Credits)***Typically offered occasionally*

What do the disastrous IPO of WeWork, the multi-billion 1Malaysia Development Board scandal, and the recent Wirecard AG dramatic bankruptcy have in common? They are all corporate governance failures. Indeed, firms of all stripes are plagued by agency problems whereby performance is threatened by moral hazard, misaligned incentives, and unethical behavior. Corporate governance is the broad set of economic institutions and contractual arrangements designed to balance the conflicting interests among firm's stakeholders, allowing them to get a fair return from their investment. In this course, using the standard tools from microeconomics and finance the student will understand the agency costs associated with different corporate financing choices and the suitable mechanisms to mitigate them. The COVID-19 crisis has sparked the debate whether companies should pursue wider social objectives, embracing purpose rather than profit. The course will also expose the student to the frontier of corporate social responsibility, addressing how companies can foster the transition to a more sustainable, equitable, and socially resilient economic paradigm.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No

- Bulletin Categories: Economics Finance Specialization: Electives
- Bulletin Categories: Economics: Economic Theory Track
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics



**ECON-UH 3600 Topics in International and Macroeconomics (4 Credits)***Typically offered occasionally*

In this course students work through academic research papers in the area that is closely connected to the research interests of the professor. One of the outcomes is a research proposal that each student prepares. Students can take multiple versions of this course for credit.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCS-C-UH 3220.

- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Elective
- Bulletin Categories: Econ Conc: Quantitative Econ Analysis Elective
- Bulletin Categories: Economics: Global Macroeconomics Track
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 3630 Public Economics (4 Credits)***Typically offered Spring*

This course is about the economic activities of government, largely revenue raising and spending, in a global context. The course considers market failures; the evaluation of public expenditures; and the incidence, efficiency, and effects of various taxes. The primary purpose is to use economic tools (mainly microeconomic) to study the impact of government policy on the distribution of resources. Topics include: welfare economics; public goods and externalities; public choice; important issues of government expenditure, taxation, and activity (e.g., international public goods and institutions, tax competition and coordination, education, social security and health care); fiscal federalism (including European integration); and mechanisms of political influence (e.g. elections and lobbying).

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2010 and ECON-UH 2030.

- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Elective
- Bulletin Categories: Economics: Global Macroeconomics Track
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 3900 Topics in Economic Theory (4 Credits)***Typically offered occasionally*

In this course students work through academic research papers in the area that is closely connected to the research interests of the professor. One of the outcomes is a research proposal that each student prepares. Students can take multiple versions of this course for credit.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCS-C-UH 3220.

- Bulletin Categories: Econ Conc: Quantitative Econ Analysis Elective
- Bulletin Categories: Economics: Economic Theory Track
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 3910 Advanced Microeconomics (4 Credits)***Typically offered Fall*

Building on the foundations laid down in courses in Microeconomics at the intermediate level, this course provides a thorough treatment of some more advanced questions. The course starts with a careful study of the functioning of markets, culminating with the first and second theorem of welfare economics. The next topics cover an introduction to strategic behavior and game theory, and subsequently a study of market failures under adverse selection and moral hazard. This course involves a more formal analysis than that used in Intermediate Microeconomics. The course is mathematical, and at times proof-oriented. Students should be familiar and comfortable with multivariable calculus and basic linear algebra.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2010 and MATH-UH 1021, or consent by Program Head.

- Bulletin Categories: Econ Conc: Quantitative Econ Analysis Required
- Bulletin Categories: Economics: Economic Theory Track
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 3912 Economics of Networks (4 Credits)***Typically offered Fall*

Our opportunities and our choices are shaped by our connections. The awareness that connections matter leads us to invest in them. And these investments give rise to networks of friendship, the World Wide Web, supply chains, research alliances, transport links, and many other networks which we see around us. These observations have inspired an exciting new research program which examines the origins and the implications of networks. The lectures in this course provide a rigorous introduction to this research.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** Yes**Prerequisites:** ECON-UH 2010 and MATH-UH 1021.

- Bulletin Categories: Econ Conc: Quantitative Econ Analysis Elective
- Bulletin Categories: Economics: Economic Theory Track
- Bulletin Categories: Political Science: Methods
- Bulletin Categories: SRPP: Methods Electives
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics
- Crosslisted with: Political Science Major: Social Science Required
- Crosslisted with: Political Science
- Crosslisted with: SRPP: Major Soc Sci Required
- Crosslisted with: Social Research Public Policy

**ECON-UH 3913 Market Design (4 Credits)***Typically offered Fall*

Traditional economics studies how markets price and allocate scarce resources, and how prices adjust to equalize supply and demand. While markets may work well, there are many cases where the market mechanism fails and intervention is required. Worse, there are also cases where prices and, hence money transfers, cannot be used to properly allocate resources. Economists are more and more involved in designing markets or institutions. Examples abound nowadays. For institutions where money transfers are possible, economists have been at the forefront of the design of auction mechanisms -e.g. to sell radio spectrum, diamonds, electricity etc. For cases where money transfers are not possible, economists have designed market-like mechanisms to allocate resources -e.g. assigning students to schools, assigning organ transplants such as kidneys, assigning seats to courses in college. The course will illustrate how microeconomic theory is used effectively and practically to solve important resource allocation problems, in instances where there were no good solutions prior to the microeconomist's help.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2010.

- Bulletin Categories: BOS: General Business Electives
- Bulletin Categories: Econ Conc: Quantitative Econ Analysis Elective
- Bulletin Categories: Economics: Economic Theory Track
- Crosslisted with: Business, Organizations, and Society
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 3940 Advanced Macroeconomics (4 Credits)***Typically offered Spring*

The goal of this course is to discuss key issues in macroeconomics at a rigorous yet intuitive level and prepare students to the tools they would need for grad schools. Important concepts that will act as building blocks for later models/courses are presented and developed in simple settings so that we can focus as much as possible on economic insights.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2010, ECON-UH 2030 and MATH-UH 1021 or consent by Program Head.

- Bulletin Categories: Econ Conc: Quantitative Econ Analysis Required
- Bulletin Categories: Economics: Economic Theory Track
- Bulletin Categories: Economics: Global Macroeconomics Track
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 3950 Topics in Financial Econometrics (4 Credits)***Typically offered Spring*

The goal of this course is to introduce students to the Econometrics of Financial Markets, with focus on properties of financial data, risk management and portfolio allocation. Both methodological and empirical aspects will be covered. At the end of the course, the student will be familiar with modelling and estimating volatility models, assessing Value at Risk of a portfolio, choosing among different asset price models, implementing trading rules. The course will prepare students for graduate school in Economics and Finance, or for a profession in the financial sector.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON UH 3220 Econometrics.

- Bulletin Categories: Econ Conc: Appl Economics/Economic Policy Elective
- Bulletin Categories: Econ Conc: Finance Market Studies Elective
- Bulletin Categories: Economics Minor: Electives

**ECON-UH 4000 Economic Policy (4 Credits)***Typically offered Fall and Spring*

Economic policy may be seen as the ultimate goal of economic analysis. How to choose between alternative economic courses in some specific area or at the macroeconomic level? How to tradeoff one policy objective, e.g. equity, versus another, e.g. efficiency? How to take into account political constraints while looking for socially optimal policies? Such is the nature of the questions to be handled in this course, which may be taken as the natural culmination of an economic curriculum. Its aim is to make students familiar with the main contemporary issues in economic policy at national level and to equip them with the analytical instruments to understand what is at stake in policy debates around the world and, ultimately, to form one's opinion about what should be done in particular areas. The course will deal with economic policy issues as applicable to any country, even though special attention will be given to emerging and developing countries. As far as possible, it will also systematically emphasize the distributional consequences of policies and consequent political economy dimension? It will not deal with multilateral issues like trade, migration or environment.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 2020 and ECON-UH 3010.

- Bulletin Categories: Economics Major: Required
- Bulletin Categories: Economics
- Bulletin Categories: Political Science: Breadth Electives
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics
- Crosslisted with: Political Science Major: Social Science Required
- Crosslisted with: Political Science

**ECON-UH 4005 Advanced Mathematics for Economists (4 Credits)***Typically offered Fall*

This course trains the student to think rigorously and systematically at a high level of abstraction. It introduces the fundamental mathematical tools that are central to economic analysis. They pertain to the fields of Set Theory, Linear Algebra, Topology, Convex Analysis and Differential Calculus. The objective is to understand in depth, and practice at a high level of sophistication, two main pillars of economic analysis: optimization and comparative statics.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No

- Bulletin Categories: Category A (Applied Mathematics)
- Bulletin Categories: Econ Conc: Quantitative Econ Analysis Elective

**ECON-UH 4020 Capstone Seminar (4 Credits)***Typically offered Fall*

The Capstone is a year-long project that students work on in their senior year of the Economics major, culminating in the submission of a Capstone thesis at the end of the year. The Capstone provides an opportunity for students to gain first-hand experience of economic research: • Choosing a research topic • Formulating a research question and hypotheses • Evaluating related literature • Formulating a research design • Conducting an empirical/experimental/theoretical analysis • Presenting findings to peers and specialists • Writing a research paper. The Capstone seminar provides a forum to guide and advise students as they work on their Economics Capstone projects. At the end of the Spring, students submit a detailed project proposal and present in a "work-in-progress" event. In the Fall, students give a formal presentation of their work to gain practice communicating their ideas and answering questions about their work. At the end of the Fall semester, students submit a final thesis.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No

**Prerequisites:** Senior standing, any ECON-UH 3xxx course and SOCSC-UH 3220.

- Bulletin Categories: Economics: Capstone
- Crosslisted with: Economics Major: Required
- Crosslisted with: Economics

**ECON-UH 4099 Capstone Project (4 Credits)***Typically offered Fall and Spring*

The sequel to the Capstone seminar is designed to conclude the capstone experience. Students work closely with faculty and fellow students to complete their senior theses.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** ECON-UH 4020.

- Bulletin Categories: Economics: Capstone

**ECON-UH 4210 Advanced Econometrics (4 Credits)***Typically offered Fall*

The course presents advanced econometric methods for cross-sectional, time series and panel data. It introduces estimation methods such as Maximum Likelihood and Generalized Method of Moments for univariate and multivariate linear and nonlinear micro-econometric models, including discrete choice, censored regression and sample selection models. Attention is next turned to time series models, such as stationary ARMA and autoregressive distributed lag models with dynamic causal effects, and issues that arise when nonstationarity is present, such as structural breaks, trends, unit roots and cointegration. The course proceeds to introduce static and dynamic panel data models along with appropriate methodology such as fixed and random effects. It finally considers methods for high-dimensional ("big") data, such as regularization, principal component and factor analysis, and offers an introduction to non-parametric estimation. The students will apply the methods to real data using appropriate econometric packages such as STATA and R.

**Grading:** Ugrd Abu Dhabi Graded**Repeatable for additional credit:** No**Prerequisites:** SOCSC-UH 3220.

- Bulletin Categories: Econ Conc: Quantitative Econ Analysis Required
- Bulletin Categories: Economics: Data Science Economics Track
- Bulletin Categories: Mathematics: Breadth Electives