SA.510 (INTERNATIONAL ECONOMICS, & FINANCE)

SA.510.100. Advanced Topics in Trade Theory. 4 Credits.
A rigorous seminar on international trade and commercial policy covering a broad set of policy-oriented topics. Covers both theory and applications, but emphasizes tools and analytical techniques rather than case studies. Overall goal is to develop a broad conceptual understanding of ongoing issues in international trade and familiarity with the analytical techniques used by economists in developing policy recommendations. Prerequisite: International Trade Theory or Accelerated International Trade Theory.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.300.743[C];SA.100.303[C] OR SA.300.699[C] OR SA.300.700[C] OR SA.999.699[C] OR SA.999.700[C]

The objective of the course is for students to learn about the global financial services industry and to equip them with the content and skills necessary to obtain professional employment in financial services, industry in general, or the public sector. The course combines academic teachings with business school cases in "traditional" global financial services, as well as "Fintech". It emphasizes three areas: Gaining fundamental knowledge of corporate business strategy; Understanding how global financial institutions execute (or fail to execute) their strategies; Developing students' commercial skills, such as communications, presentation skills and teaming. The class is highly participatory. The work is demanding. Students are urged to review the syllabus in detail. Corporate finance or Financial Decision-Making is recommended as a prerequisite. Please contact me (jkocjan@deloitteretired.com) if you have questions.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.390.101[C];SA.380.760[C] OR SA.510.102[C]

SA.510.102. Corporate Finance. 4 Credits.
Introduces quantitative tools and framework of financial decision-making. Examines present-value techniques, pricing of financial instruments, trade-off between risk and return, portfolio theory, capital budgeting, financial ratio analysis, behavior of financial markets, capital structure decisions, corporate cost of capital issues, option theory and risk management. Approach is rigorous and analytical, and goal is to provide students with conceptual understanding of the ideas of financial theory as well as the quantitative methods necessary to pursue careers involving financial decision-making. Students without a background in finance/business should consider taking the online Introduction to Accounting course prior to enrollment or concurrently. In addition, students should take International Economics I concurrently with this course.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.380.760[C];SA.100.303[C] OR SA.300.699[C] OR SA.300.700[C] OR SA.999.699[C] OR SA.999.700[C]

SA.510.103. Development Finance. 4 Credits.
"Basically, the 19th century was the age of return (the main question being, how much will the investment bring me?), the 20th century was the age of risk-return (will the return on my investment be enough to justify the risk I take?); and the 21st century appears to be the age of risk-return-impact (how much am I risking, how much can I earn, and what is my impact?)" - Bertrand Badre, Can Finance Save the World? (2018). Bertrand wrote this in the context of the challenge facing the financial system post the 2007-2009 financial crisis; and the recognition by governments across the world that the attainment of the SDGs will only be possible with innovation in financial markets, and a massive partnership with the sources of private capital. The financial consequences of the Covid 19 pandemic are still unfolding, but it is clear that limited public resources will be stretched further. Governments, especially in developing countries, need closer collaboration with private and international capital to explore nontraditional mechanisms to finance crucial development projects. This course explores the role that Development Finance Institutions (DFIs) have today. To be effective in mobilizing capital requires that DFIs fully understand what providers of capital are looking for, and the fiduciary responsibility they have towards those whose savings they manage. The course will enable students to understand key mechanisms and instruments used by DFIs, the role of governments, private capital providers and different institutions and emerging trends in international development finance. The course will build on theoretical foundations of corporate finance and project finance to help students unpack the approaches to development financing design and structuring. The course takes a mixed approach of teaching concepts, case studies and hands-on assignments to help students build analytical skills required to launch a career in International Development Finance.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.380.710[C];( SA.380.760[C] OR SA.510.102[C] ) AND ( SA.380.834[C] OR SA.510.110[C] )

SA.510.104. Economic Development. 4 Credits.
This course introduces students to the study of economic development. Different disciplines have different methods -- this class uses the tools of economics to examine the reasons why some places are so much more prosperous than others. Specifically, we will use mathematical modeling and econometrics to develop and test theories of economic growth, structural transformation and poverty alleviation. While the core questions in economic development could be examined anywhere in the world, we will focus on low- and middle-income countries, with some references to the historical literature in richer countries like the United States. This class is targeted at anyone considering a career in research or policymaking in developing countries, but will also provide useful skills and insights to those working on issues of poverty and growth in more developed countries as well.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.320.744[C];( SA.100.304[C] OR SA.300.701[C] OR SA.300.706[C] OR SA.999.701[C] ) AND ( SA.100.303[C] OR SA.300.699[C] OR SA.300.700[C] OR SA.999.699[C] OR SA.999.700[C] ) AND ( SA.100.501[C] OR SA.340.709[C] )
SA.510.105. Game Theory. 4 Credits.
Traditional economic theory tends to avoid interactive influences among decision-makers. Game theory focuses on analyzing the effects of interaction among individuals and groups with competing and conflicting goals. The course covers cooperative and noncooperative game theory, explaining the nature and selection of pure and mixed strategies, the various equilibrium concepts used and the theory’s relationship to traditional optimization analysis. Draws examples from microeconomic theory, international trade and trade policy, arms control, international relations as well as other fields. The course is self-contained with respect to mathematics content.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.320.724[C];SA.100.304[C] OR SA.300.699[C] OR SA.300.700[C] OR SA.999.699[C] OR SA.999.700[C]

SA.510.106. Global Risk Management and Valuation. 4 Credits.
Covers issues related to both international financial markets and financial decision-making within the international environment. Focuses on understanding and forecasting financial conditions in international markets; identifying, measuring and managing exchange-rate risk; taxation of international income; implications of political risk on project valuation; and cost of capital for international projects. Prerequisite: Corporate Finance.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.510.102[C]

SA.510.107. Impact Evaluation in Development. 4 Credits.
The goal of this course is to provide students with an introduction to key methods of quantitative policy analysis and impact evaluation used to analyze policy relevant questions in developing countries. We develop the statistical toolkit of regression analysis, reviewing the bivariate regression model and then continuing with multiple regression, and explore how these methods are applied to policy analysis in five benchmark techniques: randomized trials, direct regression analysis, instrumental variables, regression discontinuity, and difference in differences. We emphasize the distinction between regression as a statistical tool and the additional context knowledge (and occasionally assumptions) that are required to address causal policy questions. We will rely on empirical microeconomic studies (mostly in developing countries) to analyze behavior under different types of market failures and to evaluate the impacts of policy interventions.Prerequisites: Statistics, econometrics, and microeconomics. Previous knowledge of STATA will be helpful.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.320.731[C];SA.100.401[C] OR SA.340.710[C]

SA.510.108. International Financial Markets. 4 Credits.
This is a survey course covering issues in international financial markets. We will cover various markets and financial instruments, including bonds and bond markets, an introduction to derivatives and structured financial products. We also cover the theory of investment, including modern portfolio theory, behavioral finance, fat-tailed distributions/Black Swans and efficient market theory. Finally, we close the course with a selective history of financial crises, which also introduce basic issues related to financial intermediation (banking and shadow banking). There is a strong emphasis on real world financial instruments, institutions and issues. There are no prerequisites, though International Monetary Theory or Accelerated International Monetary Theory will be helpful. Limited to 50 students.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.380.722[C]

SA.510.109. Introduction to Economic Development. 4 Credits.
This course is designed to familiarize students with the key economic challenges facing developing countries. It will combine theoretical with empirical analysis and use specific examples from the developing world to deepen understanding of the drivers of economic development and the obstacles that stand in their way. This is an introductory course, without prerequisites, and is appropriate for students without prior course work in development.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.320.724[C]

SA.510.110. Project Finance. 4 Credits.
Provides a practical and quantitative approach to understanding project finance transactions. Focuses on energy transactions in emerging markets. Integrates principles of corporate finance with an understanding of specific technologies, industrial organization, regulatory framework and country-specific policies. Examines foreign exchange issues, taxation, risk evaluation and mitigation and key contractual structures. Discusses typical loan structures and inter-creditor issues. Goal is to understand how the financial structure for a project finance transaction is analytically determined. Students build and apply detailed quantitative financial models. Prerequisite: Corporate Finance. Cannot take if you have already passed Infrastructure Finance and Modeling.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.380.834[C];SA.380.760[C] OR SA.510.102[C]

SA.510.111. Public Finance. 4 Credits.
Introduces the key concepts in public finance that underpin most discussions of public policy regarding the role of the government sector, including public goods (both national and global), externalities and market failure, tax policy, macrofiscal policy and fiscal federalism. Using these concepts, seeks to highlight some of the challenging real-world public policy issues confronting the government sector in different parts of the world and how these are evolving in a globalizing world. Prerequisites: Microeconomics or Accelerated Microeconomics and Macroeconomics or Accelerated Macroeconomics.
Prerequisite(s): Students may not register for this class if they have already received credit for SA.300.754[C];SA.100.303[C] OR SA.300.699[C] OR SA.300.700[C] OR SA.999.699[C] OR SA.999.700[C]

SA.510.112. Quantitative Global Economics. 4 Credits.
Focuses on issues relevant to understanding the world economy: modeling and forecasting of exchange rates, modeling the sustainability of external imbalances, determining the importance of international capital flows and implementing monetary-policy rules. Examines empirical studies in each of these areas by looking at their assumptions, weaknesses and strengths and considering whether there are alternative methods of addressing a given issue. Students learn to develop an independent opinion of how theoretical ideas are applied to policy questions by asking: How much? Does it matter? How do you know?
Prerequisite(s): Students may not register for this class if they have already received credit for SA.340.734[C];SA.100.304[C] OR SA.300.701[C] OR SA.300.706[C] OR SA.999.701[C]
SA.510.113. Microfinance and Development. 4 Credits.
Designed for those who wish to gain a deeper understanding of the financial, operational, and public policy aspects of microfinance, this course is ideal for students interested in careers in microfinance analysis, advisory, or investing and in the wider spheres of ethical banking, fintech, and impact investing. The early weeks of the course will explore the foundations of the microfinance movement, dive deep into the products and services associated with financial services for the poor, and ground students in the structure, operations, and technologies used in microfinance institutions. Next, students will take an investor’s perspective on microfinance, looking at the application of commercial investment to the sector and its implications, teaching students how to perform financial analysis of microfinance institutions, and discussing how government policies can impact a country’s microfinance sector. Finally, we explore the literature on the impact of microfinance, analysis using randomized controlled trials and other research methodologies, and review the criticisms of the modern microfinance movement. The course concludes with a capstone reading and discussion of where the microfinance industry is headed over the next decade, and how to prepare for career opportunities in the field. Prerequisite or Corequisite: Financial Decision-Making.
Prerequisite(s): SA.380.760[C] OR SA.510.102[C]

SA.510.114. Sustainable Finance: Application and Methods. 4 Credits.
This course aims to provide students with a set of quantitative tools and reasoning abilities that mirror those used by professional financial analysts, portfolio managers, and policymakers. While many of these skills will be universally applicable, this course grounds them in the application of addressing issues of sustainable finance from a global perspective. The course will focus on using the R programming language and Excel, to a lesser extent, as tools for transforming real-world data into actionable insights and conveying those insights in a manner consistent with the real-world job responsibilities of sustainable finance analysts.
Prerequisite(s): SA.380.760[C] OR SA.510.102[C]

SA.510.115. Public Sector Economics. 4 Credits.
The course analyzes both the role of the state in the economy, including its manifestation as a Welfare State, and the role played in the public sphere by civil society organizations. The first part deals with the theory of market failures and government failures, the theory of collective economic action, the economic theory of democracy, the analysis of tax systems. The second part of the course uses the concepts developed in the first part to analyze specific governmental institutions, expenditure programs and taxes in a comparative international perspective. These include health care (special attention will be devoted to the Covid-19 pandemic), social insurance, redistribution programs, education, the politics of institutional choice, government decentralization (federalism), political capitalism, the digital revolution and the labor market.

SA.510.116. Evolution of the World Economy. 4 Credits.
This course offers a very long-run view of the evolution of the world economy over the past five centuries, selecting the aspects which have contributed most to change over time and to the present day situation.

SA.510.117. Asian Economic Development. 4 Credits.
This course gives a survey of the Asian economic development experience over the past half-century, with a focus on its international dimensions. In addition to evaluating the source of the remarkable growth and development of the region, the course considers the many challenges that the region has and will continue to face, from the Asian Financial Crisis in 1997-98 to the Covid-19 pandemic shock. It also looks at conflict and cooperation in the region in the 21st century.

SA.510.118. Cryptocurrencies and FinTech. 4 Credits.
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