

Course Name	Pts	Professor	Time
SUMA PS5700 Ethics for Sustainability Management and Finance	3	Adela Gondek	Thursday, 6:10-8:00 p.m. HYBRID – some classes will be in person and some online
SUMA PS5150 Energy and Sustainable Development	3	Phillip LaRocco	Wednesday, 6:10-8:00 p.m. ONLINE
SUMA PS5020 Cost Benefit Analysis (Online)	3	Satyajit Bose	Friday, 6:10-8:00 p.m. ONLINE
SUMA PS4190 Economics for Sustainability Management	3	Graciela Chichilnisky	Monday, 6:10-8:00 p.m. ONLINE
SUMA PS5195 Accounting, Finance, and Modeling of Sustainable Investments	3	Brad Schwartz	Wednesday, 6:10-8:00 p.m. IN PERSON
SUMA PS5650 Solar Project Development	3	Dan Giuffrida	Thursday, 6:10-8:00 pm. ONLINE
SUMA PS5142 Sustainable Finance (Online)	3	Bruce Kahn	Thursday, 8:10-10:00 p.m. ONLINE
SUMA PS5197 Financing the Clean Energy Economy (Online)	3	Scott Fisher	Thursday, 6:10-8:00 p.m. ONLINE

Courses offered by the MS in Sustainability Management and Certification in Sustainable Finance programs.

SUMA PS5150 Energy and Sustainable Development
Offered by MS in Sustainability Management Program
Call Number: 12259
Points: 3
Instructor: Philip LaRocco
Day/Time: Wednesdays, 6:10pm-8:00pm

Course Description: This course explores the tension and ambiguity that characterizes energy and development issues in the world's most marginal markets; the inadequacies of "business-as-usual" energy planning and implementation in these markets; and, the potential of non-traditional energy businesses, projects and programs to reach beyond "business as usual" approaches. It mixes the topics of cleaner energy production & use, energy efficiency & waste reduction and energy access & energy poverty in a way that points participants to a different framework for analyzing options to combat climate change, reduce waste and reach un-served and under-served populations. Its entry point and theme is "energy through enterprise". It uses individual enterprise examples to examine resources & technologies, business & program models, policies & institutional approaches and the analysis of macro (country), meso (sector) and micro (transactions). Participants learn and use a set of "frameworks" to achieve a more balanced view of activities at all three of the levels. Students work individually on country analysis and propose a relevant enterprise for the assigned country. Students work in groups to compare similarities and differences among the assigned countries and to collaborate on enterprise development ideas and issues.

SUMA PS5700 Ethics of Sustainability Management and Finance

Offered by MS in Sustainability Management Program

Call Number: 12273

Points: 3

Instructor: Adela Gondek

Day/Time: Thursdays, 6:10pm-8:00pm

Course Description: Today we see many new sustainability ethics propounded by organizations such as the UN, EU, OECD, and others, including many start-up organizations. What are these ethics, and how can they be applied in the form of ethics initiatives within other non-profit and governmental organizations, in addition to business organizations, with the aim of including stakeholders and combating corruption? In this course, we will examine the new ethics and discover how they can be implemented as ethics initiatives by sustainability managers, whose decisions typically have global, ecosystem, regional, organizational, workplace and personal dimensions. The course is divided into six sections corresponding to the various dimensions of sustainability and addressing the ethics associated with each. The first section addresses eco-justice and environmental justice; the second, ecological integrity and the land ethic; the third, regional equity and social sector (e.g. food, water, energy) justice; the fourth, social responsibility and responsible leadership; the fifth, transparency and inclusivity; and the sixth, the ethics of care and sensitivity coupled with rationality. The course readings include relevant cases in which the outcomes are shaped by ethical considerations or a deficiency of them. The course also addresses a growing movement towards global standardization of sustainability ethics, which increasingly entails the development of metrics serving as indicators of attentiveness or inattentiveness to ethics.

SUMA PS5020 Cost-Benefit Analysis (Online)

Offered by MS in Sustainability Management Program

Call Number: 12557

Points: 3

Instructor: Satyajit Bose

Day/Time: Friday, 6:10pm-8:00pm

Course Description: This course is about cost-benefit analysis and the economic evaluations of policies and projects. Cost benefit analysis (CBA) consists of a comprehensive set of techniques used to evaluate government programs. It is now routinely applied in such program areas as transportation, water projects, health, training and education, criminal justice, environmental protection, urban policy and even in the international arena such as foreign direct investment. Many of the techniques of CBA can

also be applied to private sector decision-making. The objective of CBA is to determine whether the benefits of a particular program, policy or decision outweigh its costs. The techniques used to determine this are sometimes quite simple, but on other, increasingly frequent occasions are highly sophisticated. Sophisticated cost benefit studies are based on a framework that utilizes the basic concepts of economic theory. In addition, statistical and econometric analyses are often needed to estimate program effects from diverse available data. The course has two parts: methodology and practice. The goal is for students to be practically adept to undertake an independent cost-benefit analysis.

SUMA PS4190 Economics for Sustainability Management

Offered by MS in Sustainability Management Program

Call Number: 12252

Points: 3

Instructor: Graciela Chichilnisky

Day/Time: Monday 6:10 – 8:00 pm

Course Description: This course builds on core economics courses and addresses issues of environmental, resource and sustainable economics. It focuses on the interaction between markets and the environment; policy issues related to optimal extraction and pricing; property rights in industrial and developing countries and how they affect international trade in goods such as timber, wood pulp, and oil. An important goal of the class is to have students work in groups to apply economic concepts to current public policy issues having to do with urban environmental and earth systems. The use of the world's water bodies and the atmosphere as economic inputs to production are also examined. The economics of renewable resources is described and sustainable economic development models are discussed and analyzed. Some time will also be devoted to international trade and regulation, and industrial organization issues. Students not only learn economic concepts, but they will also learn how to explain them to decision-makers.

SUMA PS5195 Accounting, Finance, and Modeling of Sustainable Investments*

Offered by MS in Sustainability Management Program

Area 2: Economics/ Area 5: General and Financial Management

Call Number: 12261

Points: 3

Instructor: Brad Schwartz

Day/Time: Wednesday 6:10 – 8:00 pm

***Note:** The course was formerly title “Green Accounting.” If you previously took the “Green Accounting” course, you are not eligible to take this course.

Course Description: This course examines traditional and emerging financial and cost accounting practices, non-financial sustainability performance metrics, their interdependencies and influence on corporate management, corporate reporting, and other systems. Students begin learning how financial performance is presented within traditional financial reports and analyzed using benchmarks, ratios and through interconnections with real world trends. They obtain critical insights and an appreciation of how financial and non-financial accounting data and sustainability performance metrics influence shareholder and corporate management investment decisions, strategic priorities, budget allocations and capital investments.

SUMA PS5650 Solar Project Development

Offered by the MS in Sustainability Management Program

Area 2: Economics/ Area 5: General and Financial Management

Points: 3

Call Number: 12272

Instructor: Dan Giuffrida

Day/Time: Thursday, 6:10-8:00 PM

Course Description: At the end of this course, students will be prepared to fully evaluate the technical and financial aspects of a solar project. They will be equipped with skills allowing them to either develop or rigorously vet solar project proposals. The course introduces and provides students with a holistic understanding of the end-to-end solar development process. The course has two goals: A) To provide students a deep understanding of the dozens of critical interrelated steps critical to developing a successful operating solar project. B) To equip the students with the tools and understanding of the skills necessary to develop a solar project beginning with site selection encompassing the entire process to commissioning and operations. We begin the course providing the students with an understanding of the different segments of the solar industry; covering the upstream business, the main players both upstream and downstream and then outlining the different downstream markets: utility, commercial, and residential. We will then hone in on the distributed generation segment of the market; commercial, and residential. To begin, we will cover the critical value drivers of solar: sunlight resource, grid energy cost, tax credits, state and utility incentives including renewable energy credit markets. Energy consumption and production, despite what critics will say about renewables, is the main value driver of the move to renewables. In that light, we will cover in detail, net metering, national and local electricity markets, and electric utility tariff structure to understand how value is generated and measured. We will conduct energy consumption analysis for different end-users to see how solar can and will be deployed and valued across different geographic and utility tariff classes.

SUMA PS5142 Sustainable Finance (Online)

Offered by MS in Sustainability Management Program

Area 5: General and Financial Management

Call Number: 12559

Points: 3

Instructor: Bruce Kahn

Day/Time: Thursday, 8:10-10:00pm

Course Description: This course is an introduction to how sustainability/ESG (economic, environmental, social & governance) issues have become financially material to the global credit, underwriting, insurance, risk management, venture capital and asset management capital markets. These issues have a direct impact on risk exposure and the quality of public, private and government debt/equity investments. By the end of the course, students should understand how these issues affect investment decisions made by institutional investors, corporate lenders, insurance companies, asset management funds, hedge funds, venture capitalists and retail investors, as well as business decisions made by corporate managers. They will be exposed to the global sources of environmental/sustainability corporate performance information, how “best-in-class” environmental investment relates to, and is different from, socially-responsible investing (SRI), and differences between European, North American and Asian markets. Risk management aspects of sustainable finance will be addressed, especially in regards to emerging finance areas such as carbon finance, corporate governance, sustainable development and agriculture/water development projects. SEC Reporting requirements for sustainability risks and opportunities, and the prospect of the issuance of “Integrated Corporate Reports” that combine financial and sustainability reporting will be discussed. The ethics of sustainability issues and their impact on management & finance will also be addressed.

SUMA PS5197 Financing the Clean Energy Economy (Online)

Offered by MS in Sustainability Management Program

Area 5: General and Financial Management

Call Number: 12262

Points: 3

Instructor: Scott Fisher

Day/Time: Thursdays, 6:10-8:00 PM

Course Description: The green economy has grown significantly in the past several years. This course focuses on one aspect of that growth: the generation of clean energy. The course integrates finance, technology, and policy to provide an understanding of what has propelled the growth of clean energy, and what will be required to continue that growth in the context of the broader energy markets. The course will include a background on the existing electricity sector (nuclear, coal, natural gas) and how newer technologies (solar, wind, distributed generation) find a role. The course will cover some macro-issues (the role of government, for example), but will focus more on micro-level issues faced by companies developing and investing in clean energy projects. These issues include how existing electricity markets function and how individual plants function within those markets; how firms model the profitability of their clean energy investments; the role of new technologies; and how policies affect individual clean energy investments. Course assignments will include problem sets, writing, a team project, and financial modeling. The financial modeling will be designed to take into account the varying levels of student experience.