Sustainability Skills Course Guide

Leading companies across a variety of industries were surveyed on their sustainability roles and the top skills they look for in applicants. This guide highlights the top skills indicated by industry leaders and the UC Berkeley courses that support development of those skills. The full results of the industry report may be requested by UC Berkeley students at serenpk@berkeley.edu

Top Five Skills Across Industries

- Impact Measurement & Management
- Sustainability Measuring & Reporting
- Carbon Footprint Analysis
- Coalition Building & Internal Selling
- Systems Thinking & Mapping

Top Skills By Industry

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Sustainability Skills Course Map

Course Skill Depth Key

The color coding system indicates the course depth related to the development of the specific sustainability skill. It is not necessarily reflective of the depth or objective of the course content.

- **Exposure & Theory**: Course introduces the concept and provides a theoretical framework for skill application.
- **Theory & Methods**: Course covers theory and introduces some skill-building tools/methods.
- **Deep Dive Skills**: Course covers theory and provides opportunities to build and practice the skill.

*Courses are subject to availability and offerings may vary from year to year*
Benefit Cost Analysis

PUBPOL259 / PUB AFF W290-001 Cost Benefit Analysis

- Deep Dive Skills • 3 Units • Fall & Spring Semester

Prerequisites: Calculus and Intermediate Microeconomics or consent of instructor.

This course discusses and criticizes the conceptual foundations of cost-benefit analysis, and analyzes in depth some important applied aspects such as endogenous prices of other commodities, methods to infer willingness to pay, valuation of life, uncertainty and the rate of discount.

MBA212.1 Energy and Environmental Markets

- Exposure & Theory • 3 Units • Spring Semester

Prerequisites: Microeconomics (MBA201A) or its equivalent.

This course is about the economics of energy and environmental markets. Energy industries are strongly driven by fundamental economic forces, which means that strategy-setting and decision-making in energy industries relies on having a good understanding of how energy markets work. While the course will cover various energy industries, the main emphasis will be on microeconomic tools of analysis that are useful across multiple industries.

Carbon Footprint Analysis

EW/MBA247.11 Business and Sustainable Supply Chains

- Exposure & Theory • 1 Unit • Spring Semester

This course builds on other core courses such as Operations Management. The objective is to find the best ways to match supply and demand as we focus on two important components: social and environmental issues. Students will learn tools to identify and measure these impacts, and understand the main initiatives and opportunities to design and successfully operate sustainable supply chains.

MBA292J.1 Sustainable Investment Fund

- Exposure & Theory • 2 Units • Fall & Spring Semester

Prerequisites: Financial Information Analysis and Sustainable Portfolio Construction. More info here.

This is an experiential course with highly engaged student Principals making decisions on the Sustainable Investment Fund’s $3 million corpus. Faculty will provide some instruction on integrating ESG considerations into fundamental investment decisions, there will be guest speakers and treks to visit companies and fund managers, and the bulk of the work will be student led discovery on compelling, values aligned investments for the Fund’s short, medium and long term objectives.

Coalition Building & Internal Selling

ESPM169 International Environmental Politics

- Exposure & Theory • 4 Units • Fall Semester

The dynamics of international politics are examined over the last 25 years. Attention is paid to different perspectives in global environmental politics, the actors involved, how well international agreements address the problems they are supposed to solve, and the main debates in the field, including
trade-environmental conflicts, security, and environmental justice issues. Issues covered vary, but may include climate change, biodiversity, population, and toxics.

**MBA257.2 Leading High Impact Teams**
**Theory & Methods • 2 Units • Spring Semester**
This comprehensive course is focused on developing a team leadership toolkit that includes the knowledge, frameworks, skills, and awareness needed to effectively lead complex global teams.

**EW/MBA290T.4 Corporate LaunchPad**
**Theory & Methods • 3 Units • Fall Semester**
In this course, we describe how it is that new, innovative products/services are developed, and why established firms are often disrupted by these innovations. In the process, we will learn about consistent patterns that presage innovation success. We focus on organic growth driven by new product development within a corporate structure.

**EW/MBA212A-1 Cleantech to Market**
**Course Entry By Application (Opens in the Spring). More info here.**
Cleantech to Market is a cross-disciplinary, capstone project course in which graduate students apply their core courses as well as business, engineering, scientific, and legal knowledge to help define and improve pathways to market for cleantech research. C2M provides commercialization support for clean tech from cutting edge startups, leading universities, and government programs. The course culminates in teams presenting their findings (1) at an all-day, public seminar for 200+ energy industry professionals and (2) privately to their technology partners.

**MBA292N.1 Large-Scale Social Change: Social Movements**
**Exposure & Theory • 2 Units • Fall Semester (On sabbatical Fall 2020)**
In this course, we will move beyond the walls of traditional institutions, building an understanding of the key levers available to those seeking to create major social change. Rising business leaders also have much to learn from social movements. This course will teach us to think big, look beyond traditional institutional change, and challenge ourselves as we learn to apply different levers to diverse issues and constituencies.

**Human Rights Assessment**

**MBA292T.3 Managing Human Rights in Business**
**Deep Dive • 2 Units • Fall Semester (on sabbatical Fall 2020)**
Through cases, interactive exercises, class debates, and guest lectures from experts, we will put you in the shoes of a fast-growing community of business managers whose job it is to make sure that their companies and business partners do not violate human rights. We will provide you with the knowledge, skills, and tools to identify and address a company’s human rights risks and to leverage the power of business to advance respect for human rights around the world.

**Impact Measurement & Management**
MBA292N.2 Social Impact Metrics
Theory & Methods • 2 Units • Fall Semester
This course provides an overview of the challenges in measuring impact in social programs, and highlights ways to use metrics to improve organizational performance in real-world settings. It exposes students interested in social impact to a set of frameworks that can help social sector organizations track and improve their performance.

MBA296.1 Applied Impact Evaluation
Theory & Methods • 3 Units • Spring Semester
This course will review methods for the design and analysis of impact evaluations relevant to business and policy professionals, especially those working in low and middle-income countries. The class will emphasize the challenges involved in identifying the causal relationship between a program or project and its outcomes while providing students with experience in drafting a for an impact evaluation.

PUBPOL249 Statistics for Program Evaluation
Theory & Methods • 4 Units • Spring Semester
How do we know whether a program or policy is having its intended impact? This course will cover the methods used to answer this question. The focus will be on quantitative studies, with an emphasis on the econometric techniques used in experimental and non-experimental evaluations.

Life Cycle Assessment

CIVENG268E Civil Systems and the Environment
Deep Dive Skills • 3 Units • Fall Semester
Methods and tools for economic and environmental analysis of civil engineering systems. Focus on construction, transportation, and operation, and maintenance of the built infrastructure. Life-cycle planning, design, costing, financing, and environmental assessment. Industrial ecology, design for environment, pollution prevention, external costs. Models and software tools for life-cycle economic and environmental inventory, impact, and improvement analysis of civil engineering systems.

Supply Chain Mapping & Analysis

ESPM260 Governance of Global Production
Exposure & Theory • 3 Unit • Spring Semester
This course explores critical policy and theoretical questions in the governance of global production. Current trends in the restructuring of industrial production; distributions of environmental, labor, and social impacts from this production; and new strategies for democratic governance are analyzed, including corporate self-regulation, monitoring, certification and labeling, fair trade programs, legal strategies, and international accords and agreements.

EW/MBA247.11 Business and Sustainable Supply Chains
Exposure & Theory • 1 Unit • Spring Semester
This course builds on other core courses such as Operations Management. The objective is to find the best ways to match supply and demand as we focus on two important components: social and environmental
issues. Students will learn tools to identify and measure these impacts, and understand the main initiatives and opportunities to design and successfully operate sustainable supply chains.

**EW/MBA292C.1 Strategic and Sustainable Business Solutions**
- Theory & Methods • 3 Units • Spring Semester
- This course explores the practical and strategic application of sustainability, corporate social responsibility (CSR), and creating shared value (CSV) through readings and discussions, and team-based student consulting projects with industry clients.

**MBA292J.1 Sustainable Investment Fund**
- Theory & Methods • 2 Units • Fall & Spring Semester
- Course Entry By Application (Opens in the Fall).
- Prerequisites: Financial Information Analysis and Sustainable Portfolio Construction. More info here.
- This is an experiential course with highly engaged student Principals making decisions on the Sustainable Investment Fund's $3 million corpus. Faculty will provide some instruction on integrating ESG considerations into fundamental investment decisions, there will be guest speakers and treks to visit companies and fund managers, and the bulk of the work will be student led discovery on compelling, values aligned investments for the Fund’s short, medium and long term objectives.

**Sustainability Measuring & Reporting**

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**Systems Thinking & Mapping**
Stay tuned for 1 unit course taught in conjunction with Executive Education.

**Theory of Change / Logic Models**

**ESPM260 Governance of Global Production**
- **Exposure & Theory • 3 Unit • Spring Semester**
This course explores critical policy and theoretical questions in the governance of global production. Current trends in the restructuring of industrial production; distributions of environmental, labor, and social impacts from this production; and new strategies for democratic governance are analyzed, including corporate self-regulation, monitoring, certification and labeling, fair trade programs, legal strategies, and international accords and agreements.

**MBA292A.1 Strategy and Leadership for Social Impact**
- **Exposure & Theory • 2 Units • Spring Semester**
This course serves as a core introduction to social impact classes at Haas. Using a wide range of US and international cases, the class prepares students to manage the complexity of social and economic problems that leaders face. Students are also trained in how to develop strategy in highly complex operating environments – including the overlapping landscapes of NGOs, social ventures, business and government.

**MBA292N.2 Social Impact Metrics**
- **Theory & Methods • 2 Units • Fall Semester**
This course provides an overview of the challenges in measuring impact in social programs, and highlights ways to use metrics to improve organizational performance in real-world settings. It exposes students interested in social impact to a set of frameworks that can help social sector organizations track and improve their performance.

**EW/MBA292S.1 Social Sector Solutions: Nonprofit Consulting Projects**
- **Theory & Methods • 3 Units • Spring Semester**
Social Sector Solutions (S3) develops students’ skills in management consulting, problem solving, persuasion, and project management, while increasing their knowledge of the entrepreneurial challenges of leading nonprofit, public or social enterprise organizations. Students tackle complex projects for real clients on teams, receiving coaching from experienced faculty and McKinsey consultants.