

DATA SCIENCES AND OPERATIONS

FALL 2024 SEMESTER

DSO 505 — Sustainable Supply Chain

Section(s) – 16283

Professor

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Email

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When

ONLINE: Thursday, 6:30 PM – 9:30 PM

Office

TBD

Units

1.5



WHY TAKE THIS COURSE?

This is an important course for those supply chain, marketing and finance students interested in consulting, industry, government service or entrepreneurship. Sustainability is a critical topic of the day in boardrooms, government and financial institutions, Supply chains account for 80% of the planet's greenhouse gas emission, a significant portion of its pollution and disposal issues, and a large part of social and worker exploitation. This course provides an understanding of these issues, the consequences, trade-offs and how companies can address them in an end-to-end supply chain given today's environment. The opportunities lie in cost reductions, product innovation, new markets, increase in brand equity, compliance with mandates and cost reductions.

COURSE OBJECTIVES

To provide students with an understanding of the sustainability challenges, risks, trade-offs, trends and opportunities facing global supply chains today.

KEY CONCEPTS

- Sustainability concepts and frameworks
- Unintended and unplanned consequences
- Government and international mandates
- Sustainable design of products
- Supplier management
- Facilities management & location
- Renewable energy
- Transportation
- Strategic sustainability implementation

COURSE DESCRIPTION

We will look at some of the factors that contribute to the adoption of sustainability strategies, such as legislations that are penalizing negative environmental and social impacts, and society's expectations of business in terms of health, human rights, and the environment. In addition to maximizing profit and creating shareholder value, supply chain performance is also measured in terms of social, environmental, and economic impact.