



FISHER

COLLEGE OF BUSINESS

Sustainable Operations Management

Business Management (BUSMGT) 7253

Spring 2019: Feb 27 – April 22

Gerlach Hall Room 315; Mon and Wed 4:30 – 6:00PM

Professor: Dr. Erin McKie

Office: 656 Fisher Hall

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Office hours: To be determined/By appointment

Course Objectives

- Students will gain exposure to strategies that can address common, social and environmental issues
- Students will be able to define and describe the following concepts: circular economy, take-back legislation, lean manufacturing, six-sigma, environmental management systems, ISO 14001, LEED certification, life cycle assessment (LCA), carbon footprint, design for environment (DfE), remanufacturing, recycling, environmental product differentiation, and renewable energy.
- Students will understand tradeoffs between sustainability principles, scale, and profit

Tentative Course Outline

- Week 1: Introduction and Overview of Take-Back Legislation
- Week 2: Lean and Six Sigma – How to Reduce Waste in Current Operations
- Week 3: Eco-Efficiency and Metrics – Life Cycle Assessments & Carbon Footprints
- Week 4: Environmental Management Systems and Certifications
- Week 5: Incorporating Sustainability in the Supply Chain –
 - Biofuels and Sustainable Technologies, Environmental Product Differentiation, and Sustainable Sourcing
- Week 6: Closing the Loop : Approaches and Tactical Considerations –
 - Design for the Environment, Comparing Leasing versus Selling, Remanufacturing and Recycling
- Week 7: Research in Sustainability/Class Project Week

Required Course Materials

- 1) Sustainable Operations and Closed-Loop Supply Chains by C.G. Souza. Business Expert Press, 2017 – *available at Amazon for \$34.95*
- 2) Course packet with select cases