



MGMT-410 – Managing Sustainable Operations

Business

Effective Term & Year: Fall 2022

Course Outline Review Date: 2024-09-01

Program Area: Business Management

Description:

This course develops students' ability to strategically implement sustainable business practices within the value chain of a business and to strategically implement more sustainable business practices. Building on the theory and metrics of sustainability, this course examines how implementation works at the level of operations management. Students review existing practices and consider new challenges that operations managers face when integrating sustainability within their organizations and traditional ways of doing business. Case studies help students analyze how businesses face challenges to be more accountable for the environment and resource consequences of their products, services, and processes; and to integrate environmental, safety, and health concerns with leaner, greener operations, green-product design, and closed-loop supply chains. Case studies also help us explore how new tools of operations management reporting are being applied. An overarching theme in this course is developing leadership to guide change initiatives and future challenges in sustainable operations management.

Program Information:

This course is a required course for the Bachelor in Business Administration (Sustainable Business Practices). It is also a required course in the Post Degree Diploma program in Sustainable Business Practices.

Delivery Methods: Online, On-campus (Face-to-Face), Hybrid – On-campus (Face-to-Face) and Online

Credit Type: College of the Rockies Credits

Credits: 3

Course type/s: Business Management

Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	45
Seminar/Tutorials	
Laboratory/Studio	
Practicum/Field Experience	
Co-op/Work Experience	
Other	
Total	45

Course Requisites:

- Earned a minimum grade of C (60%) in each of the following:
 - [MGMT310](#) – Sustainability Theory and Metrics (3)

Flexible Assessment: Yes

In some cases students may be able to apply for recognition of prior learning outside the classroom. This flexible assessment process provides equivalent course credit. It is a rigorous process that may include external evaluation, worksite assessment, demonstration, standardized test, self-assessment, interview, products/portfolio, and challenge exam, or other measures as appropriate. Tuition fees apply. Contact an education advisor for more information.

Course Transfer Credit:

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see <https://www.bctransferguide.ca/> or <https://transferalberta.alberta.ca> . For more transfer credit information, please visit <https://www.cotr.bc.ca/Transfer>

All requests for course transfer credit from institutions in British Columbia or elsewhere should go to the College of the Rockies Enrolment Services office.

Textbook Resources:

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date the following textbooks were in use:

Required texts:

Doppelt, Bob (2010). *Leading Change Toward Sustainability*, 2nd edition. Greenleaf Publishing Limited, 2010

Reading package – available on the Moodle site

Recommended Reading:

Blackburn, William R. (2007), *The Sustainability Handbook: The Complete Management Guide to Achieving Social, Economic and Environmental Responsibility*. Environmental Law Institute of Washington, D.C.

Please see the instructor's syllabus or check COTR's online text calculator <https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.

Learning Outcomes:

Upon the successful completion of this course, students will be able to:

- appreciate the value of strong, effective leadership in change initiatives;
- understand key principles in operations management;
- select appropriate operations management models for sustainability initiatives;
- analyze case studies involving new environmentally – or sustainability-friendly products or services;
- evaluate case studies from the perspective of the value chain;
- examine human resource factors which enable employees/members to engage in sustainability activities;
- evaluate how well organizations have managed product life-cycle, production process management or supply chains to enhance sustainability;
- contrast successful versus failed sustainability initiatives, considering marketing, operations, leadership and strategy;
- synthesize business processes for sustainability, addressing risk, quality control, reporting, and innovation;
- use research and other data to recommend improvements to products and/or processes, metrics and performance; and
- identify and promote leadership qualities which are essential for implementing a sustainability initiative in business.

Course Topics:

Leading the change initiative for sustainable operations: the Big Picture

- The importance of vision in achieving real change towards sustainability
- Working as an agent of change
- Developing leadership through operations management

Overview of Operations Management

- Review of systematic frameworks for operations management
- Coverage of key operations management principles and issues
- Selection of operations management models
- Overview of the value chain model: origins, evolution, globalization
- Role of sustainability in integrated supply chain management

Strategic Planning in Operations Management

- Integrating business processes for sustainability through leadership (vision, performance management) to ensure that effective, principled decisions are made
- Promoting management-level commitment to sustainability
- Minimizing risk and maximizing opportunity
- Quality control: approaches and measures
- Reporting: transparency and accountability
- Analysis of balance between quality, efficiency, and productivity
- Innovation (integrated and long term approaches)

Sustainability and Operations Management: Principles and Best Practices

- Research and development of sustainable products and services
- 3P's (profit, people, planet) in product and process design
- Internal and external process improvements related to sustainability
- Production process management
 - Procurement and green supply chain management (lean vs green)
 - Operations, inventory models, off-shoring
 - Materials management planning, distribution, integration
 - Industrial ecology and eco-efficiency
- Marketing
 - Creating competitive advantage by embedding sustainability in the supply chain
 - Distribution and logistics
 - Packaging
 - Service to customers
- Human Resources
 - Engaging employees in sustainability learning and innovation
 - Job evaluation and job redesign

- Incentive systems
- Outsourcing

- Disposal – obsolescence, recycling, hazardous materials

Implementing Leadership in Sustainable Business Operations

- Leadership skills for change: communicating and advocating, initiating, integrating and evaluating sustainability in the organization
- Managing stakeholder relationships
- Connecting managerial policy and operational implementation of sustainability initiatives
- Implementing strategies for the future of sustainability in the business
- Celebrating the vision of embedded sustainability within the business organization

See instructor’s syllabus for the detailed outline of weekly readings, activities and assignments.

Evaluation and Assessments

Assessment Type: On-Campus (face-to-face) and Online, or Hybrid

Assessment Type	% of Total Grade
Case Studies: Analyze selected case studies, detailing how sustainability has been integrated into operations management in terms of the value chain, strategy, production, marketing, and human resources. Discuss the role of leadership in the outcome of the case.	35%
Essay: Research and report on a current issue in operations management with a focus on sustainability, incorporating history and evolution of the issue; current environmental, financial and societal influences; leadership and potential trends and impacts.	25%
Product or Service Adaptation: Create or adapt a product or a service for a business or organization, demonstrating at least some of the following aspects: internal and external process improvements related to sustainability, green product and process development, developing lean and green operations, closed loop supply chains.	40%
Total	100%

Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	<50

Pass requirements: None

Exam Attendance:

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a “0” on the exam.

Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.4.3 Students with Documented Disabilities
 - Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
 - Policy 2.5.8 Academic Performance
 - Policy 2.5.3 Grade Appeal
 - Policy 2.4.9 Student Concerns Re Faculty
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Course Changes:

The College of the Rockies updates course outlines regularly to meet changing educational, employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete material while meeting the learning outcomes of this course outline.