

Course Last Updated 7/22/2024.



Basic Operations Management

Section I: Course Overview

Course Code: BUS334BCN / MIS334BCN

Subject Area(s): Business, Management Information Systems

Prerequisites: completed one course in: Business and/or Information Systems

Language of Instruction: English

Total Contact Hours: 45

Credits: 3

Course Fees: none

Course Description

This course introduces the field of operations and supply chain management, a key managerial function that encompasses the design, control, and improvement of processes used to produce goods and/or provide services. The course will explore foundational concepts, including forecasting, production planning, master scheduling, material requirements planning, capacity planning, world-class manufacturing principles, and continuous improvement. Using case studies drawn from global companies, students will apply what they are learning to the study of managerial and mathematical techniques the managerial and mathematical techniques—along with information technology resources—used to make goods and services.

Learning Objectives

Upon successful completion of this course, students are able to:

- Explain how operations management can be used as a core function that promotes global companies' success in a competitive marketplace.
- Distinguish between various manufacturing technologies and their purposes.
- Employ mathematical techniques for quantitative approaches to problem solving such as Statistical Models, Forecasting, Linear Programming, and Queuing Theory.
- Explain the importance of quality management and statistical process control.
- Apply fundamental operations management concepts, principles, techniques and tools to real life case studies relevant to both manufacturing and service organizations.

Section II: Instructor & Course Details

Instructor Details

Name: [See term syllabus]

Contact Information: [See term syllabus]

Term: [See term syllabus]

Course Day and Time: [For term syllabus, enter the day and meeting times of the course]

Office Hours: [By appointment, or specified in term syllabus]

Grading & Assessment

The instructor assesses students' mastery of course learning objectives by using the forms of assessment below. Each of these assessments is weighted toward the final grade. The Assessment Overview section provides further details for each.

Engagement – 20%

Quizzes - 10%

Presentation of Case Studies - 20%

Midterm Exam - 25%

Final Exam - 25%

Assessment Overview

This section provides a brief description of each form of assessment listed above. Forms of assessment may be slightly modified in the term syllabus.

Engagement (20%): Students are expected to be engaged in class, to have read the [CEA CAPA Engagement Policy](#), and to understand the [Class Engagement Rubric](#) that outlines how engagement is graded.

Quizzes (10%): Short, in-class quizzes will be administered to test your comprehension of course material to date.

Presentation of Case Studies (20%): You and at least one other student will be assigned one or more cases for analysis, discussion, presentation, and defense. Students will work in their groups to analyse situations outlined in specific case studies and develop their recommendations. The groups will present their conclusions to the assembled class. The assigned grade will depend on the ability of the student to present (33%), analyse the situation described in the case study (33%) and develop an effective plan to resolve the described problem (33%). All work must be ready by the beginning of the class on the date assigned and any late work will result in a zero (0) not just an F.

Midterm Exam (25%) & Final Project (25%): Exams include topics and course material covered up to exam date. The exams include both open questions on concepts and theory as well as practical operational cases and exercises.

Active Learning

Experiential learning is an essential component of education abroad, and participation in field studies is a required part of coursework. In this course, students explore the city in which they are studying using a variety of methods. This provides the opportunity to gain nuance and perspective on the host context and course content, as well as to collect information and resources for assigned papers, projects, and presentations.

Readings and Resources

The below readings and resources are representative of what will be assigned as required in this course, but may vary slightly in the term syllabus.

All students are given access to the online library of the University of New Haven (UNH), accessible [here](#), and are expected to comply with [UNH Policies](#) regarding library usage.

Wherever possible, required readings are made accessible through the online library or Canvas. Students are responsible for obtaining all required readings.

Each course utilizes Canvas as its LMS. Students are expected to check Canvas regularly for updates and deadlines. Canvas is also the primary platform for contacting your instructor in case of questions or concerns about the course.

Required

Stevenson, William J., *Operations Management*, McGraw-Hill 2021, 14th edition

Recommended

Annacchino, M. A., *New Product Development*, Elsevier, 2003, pp. 546.

Blattberg, R. and G. Getz, J. Thomas, *Customer Equity: Building and Managing Relationships*, Harvard Business School Press, 2001, pp. 228.

Brown, T., 'Design Thinking', *Harvard Business Review* 86 (6) 2008, pp. 84-92.

Carroll, S. J. and M. J. Gannon, *Ethical Dimensions of International Management*, Sage Publications, 1997, pp. 224.

Chase, R. B. and N. J. Aquilano, R. F. Jacobs, *Production and Operations Management*, Boston: Irwin McGraw-Hill, 2001, 9th edition, pp. 889.

Crosby, P., *Let's Talk Quality*, McGraw-Hill, 1990, pp. 224.

De Treville, S. and L. Trigeorgis, 'It May Be Cheaper to Manufacture at Home', *Harvard Business Review* 88 (10) 2010, pp. 4-87.

Farrell, D., 'Beyond Offshoring: Assess Your Company's Global Potential', *Harvard Business Review* 82 (12) 2004, pp. 82-90.

Ferdows, K. and M.A. Lewis, J. A. D. Machuca, 'Rapid-Fire Fulfillment', *Harvard Business Review* 82 (11) 2004, pp. 104-110.

Fowler Koehn, N., *Brand New: How Entrepreneurs Earned Consumer's Trust*, HBS Press, 2001, pp. 469.

Goldratt, E. and J. Cox, *The Goal: A Process of Ongoing Improvement*, Croton-on-Hudson: North River Press, 1992, pp. 274.

Guide to business modeling:

https://books.google.com/books/about/Guide_to_Business_Modelling.html?hl=it&id=U2eTwQo-so3wC

Hammer, M., 'Deep Change', *Harvard Business Review* 82 (4) 2004, pp.84-93.

Hill, N., *Think and Grow Rich*, St. Martin's Press, 2001, pp. 238.

Kaplan, R. and D. Norton, *The Strategy-Focused Organization*, Harvard Business School Press, 2000, pp. 416.

Landesberg, P., 'In the Beginning, There Were Deming and Juran', *Journal for Quality & Participation* 22 (6) 1999, pp. 59-61.

Lee, H.L. and V. Padmanabhan, S. Wang, 'The Bullwhip Effect in Supply Chains', *Sloan Management Review* 38 (3) 1997, pp.93-102.

Metersky, J. and J. M. Kilgore, 'How to Improve Your Inventory Deployment', *Supply Chain Management Review* 8 (7) 2004, pp. 26-32.

Nahmias, S., *Production and Operations Analysis*, 6th ed., McGraw-Hill, 2008.

Narayanan, V.G. and A. Raman, 'Aligning Incentives in Supply Chains', *Harvard Business Review* 82 (11) 2004, pp. 94-102.

Pine, I.I.B.J. and J. H. Gilmore, 'Welcome to the Experience Economy', *Harvard Business Review* 76 (4) 1998, pp. 97-105.

Porter, M. E., *The Competitive Advantage of Nations*, The Free Press, 1990, pp. 896.

Skinner, W., 'Manufacturing - Missing Link in Corporate Strategy', *Harvard Business Review* 47 (3) 1969, pp. 136-145.

Slone, R.E. and J.T. Mentzer, J. P. Dittmann, 'Are You the Weakest Link in Your Company's Supply Chain?', *Harvard Business Review* 85 (9) 2007, pp. 116-127.

Spear, S. and H.K. Bowen, 'Decoding the DNA of the Toyota Production System', *Harvard Business Review* 77 (5) 1999, pp. 96-106.

Stalk, G. and P. Evans, L. E. Shulman, 'Competing on Capabilities: The New Rules of Corporate Strategy', *Harvard Business Review* 70 (2) 1992, pp. 57-69.

The Journal of Operations Management, *Sloan Management Review* (MIT), *Industrial Management, Management Science*.

Trent, R.J., 'What Everyone Needs to Know about SCM', *Supply Chain Management Review* 8 (2) 2004, pp. 52-59.

Womack, J.P. and D.T. Jones, 'Lean Consumption', *Harvard Business Review* 83 (3) 2005, pp. 58-68.

Online References

www.apics.org

www.asq.org American Society for Quality

www.baddesigns.com funny website highlighting poorly designed products

www.blackwellpublishing.com/essentialmedstats/004.pdf - clear explanation of st. dev.

www.brint.com for business research in information and technology

www.amstat.org for American Statistical Association

www.hbr.org Harvard Business Review

www.pmi.org Project Management Institute

www.poms.org Production and Operations Management Society

www.sec.gov for public company filings (all U.S. public plus foreign public with U.S. listings)

www.sme.org for the Society of Manufacturing Engineers

www.bls.gov for U.S. Bureau of Labor Statistics

Course Calendar

Session 1	
Topics	Course Overview Introduction to Operations Management
Activity	Lecture & Discussion
Readings & Assignments	Readings: <ul style="list-style-type: none"> • Review syllabus • OM : Chapter 1

Session 2	
Topics	Competitiveness, Strategy & Productivity
Activity	Lecture & Discussion
Readings & Assignments	Reading: <ul style="list-style-type: none"> • OM: Chapter 2

Session 3	
Topics	Budgeting & Forecasting Operations Basics of Microsoft Excel: Designing spreadsheets & using tools
Activity	Lecture & Discussion In-Class Activity: Microsoft Excel
Readings & Assignments	Reading: <ul style="list-style-type: none"> • OM: Chapter 3 • <i>*Case Study group assignment</i>

Session 4	
Topics	Product & Service Design, Development & Pricing
Activity	Lecture & Discussion
Readings & Assignments	Reading: <ul style="list-style-type: none"> • OM: Chapter 4 • Prepare for Quiz I

Session 5	
Topics	Strategic Capacity Planning
Activity	Lecture & Discussion Quiz I
Readings & Assignments	Reading: <ul style="list-style-type: none"> • OM: Chapter 5

Session 6	
Topics	Process Selection and Facility Layout Location Planning and Analysis
Activity	Lecture & Discussion
Readings & Assignments	Reading: <ul style="list-style-type: none"> • OM: Chapter 6 & 8

Session 7	
Topics	Work Design & Measurement
Activity	Lecture & Discussion Midterm Exam Review
Readings & Assignments	Reading: <ul style="list-style-type: none"> • OM: Chapter 7 • Prepare for Midterm Exam

Session 8	
MIDTERM EXAM	

Session 9	
Topics	Aggregate Planning and Master Scheduling
Activity	Lecture & Discussion
Readings & Assignments	Reading: <ul style="list-style-type: none"> • OM: Chapter 11

Session 10	
Topics	Management of Quality Quality Control
Activity	Lecture & Discussion Guest lecture
Readings & Assignments	Readings: <ul style="list-style-type: none"> • OM: Chapter 9 and 10

Session 11	
Topics	Inventory & Supply Chain Management Computer Simulation
Activity	Lecture, Discussion & Simulation
Readings & Assignments	Readings: <ul style="list-style-type: none"> • OM: 12 and 15 • Prepare for Quiz II

Session 12	
Topics	Project Management
Activity	Lecture, Discussion & In-Class Activity Quiz II
Readings & Assignments	Reading: <ul style="list-style-type: none"> • OM: Chapter 16

Session 13	
Topics	Scheduling
Activity	Lecture & Discussion Field Study
Readings & Assignments	Reading: <ul style="list-style-type: none"> • OM: Chapter 16

Session 14	
Topics	Management of Waiting Lines
Activity	Lecture & Discussion Final Exam Review
Readings & Assignments	Assignment: <ul style="list-style-type: none">• OM: Chapter 18• Prepare for Final Exam

Session 15	
FINAL EXAM	

Section III: Academic Policies and Standards

Academic Policies

Students are expected to review and understand all CEA CAPA student policies, including our [Academic Policies](#) and [Engagement Policy](#). CEA CAPA reserves the right to change, update, revise, or amend existing policies and/or procedures at any time. Additional requirements that may be associated with a specific course or program are addressed in the term syllabus.

Student Learning & Development Objectives

CEA CAPA has identified [Student Learning and Development Objectives \(SLDOs\)](#) for all programs in all locations: content in context, navigating differences, power and equity, critical thinking and intellectual curiosity, career and professional development, and sustainability and migration. These are meta-level learning objectives that transcend coursework and are infused across all elements of program delivery, beyond specifics of course offerings, addressing student learning holistically and framing it a larger learning context.