

IDS 532: Introduction to Operations Management

Spring 2008, Thursday 6:00 p.m. – 8:30 p.m., Lecture Center E 112

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Objectives

Operations Management focuses on the efficient and effective transformation of resources inputs such as labor and materials into useful outputs such as quality products and services. As a result of increased global competitiveness the practice of operations management, especially in the manufacturing sector, is evolving from a traditional approach of meeting production goals within budget into more strategic function in which design and control of operations are an integral part of the strategic mission of the organization. The purpose of this course is to introduce problems and analysis related to the design, planning, implementation, control and improvement of manufacturing and service operations. In particular, this course looks at operation management from an integrated viewpoint. The course materials integrate marketing strategy, technology, information systems, and organizational issues.

Readings

Textbook: Principles of Operations Management, J. Heizer & B. Render, Prentice-Hall, 7th Edition, 2008. ISBN 978-0-13-234328-2

In addition to the textbook we will be using material that is available on the worldwide web, directly and through the UIC library subscriptions. Students must become familiar with researching the web. Most of these readings will be available electronically through UIC BlackBoard in the Course Documents section. These will include research articles, managerial articles, trade journal articles, industry whitepapers, and newspaper articles. Links to relevant articles with comments will also be posted at the blog site for the course <http://ids532s08.blogspot.com/>, the instructor's Facebook profile, and the group's site on Facebook. The students are encouraged to research on their own and bring to the attention of the instructor and the class interesting articles they find. Contribution of such articles and online discussion will be credited towards class participation.

Pedagogy

The pedagogy will be interactive, both in class and on-line. Active participation of the students will be essential to maximize the learning from the course. The instructor's role will be to create a learning environment and to guide the learning.

Good written and oral communication skills will be necessary for effective interaction. These will be assessed through class discussions, class presentations, online discussions, and written assignments.

The pedagogy will focus on both theory and practice. It will try to develop the ability to abstract knowledge from problems and apply the knowledge to solve other problems. These will be assessed through class discussions, class presentations, online discussions, and the project.

Learning Outcomes

The course is a survey of operating practices, decision models, and information technology for business enterprises to compete in the global economy of the Information Age. It is intended to provide managers in all functional areas with sufficient knowledge to make informed decisions and to introduce standard terms and concepts for communications with operating personnel, especially in the emerging environment of electronic commerce and online business. As supply chains stretch across borders to procure materials, source labor, and deliver goods to developing markets, the ability to manage real-time control and information feedback of strategic partnerships and alliances will be critical success factors.

After the completion of the course the student should be able to do the following:

- Define and describe an operations management problem, its goals and its other characteristics.
- Analyze the problem using different frameworks, tools, and methods.
- Design a solution using different frameworks, tools, and methods.
- Work individually and as a team in performing the above tasks.
- Communicate effectively orally and in writing the definition, the description, the analysis, the design, and the recommendation.

Evaluation

Students will be evaluated on class participation and online discussion, two exams, and one group project. The point-breakdown will be as follows:

Mid-term exam	=	20%
Final exam	=	20%
Group project	=	30%
Class participation and online discussion	=	30%

The grading of all assignments will be on a four-point scale. A+ = 4.3, A = 4.0, A- = 3.7, B+ = 3.3, B = 3.0, B- = 2.7, C+ = 2.3, C = 2.0, C- = 1.7, D+ = 1.3, D = 1.0, D- = 0.7, F+ = 0.3, F = 0.0. In determining the final grade if the average score ≥ 3.5 then it will be an A, if < 3.5 but ≥ 2.5 it will be a B, if < 2.5 but ≥ 1.5 it will be a C, if < 1.5 but ≥ 0.5 it will be a D, else an F.

Examinations

The examinations will be based on the conceptual material, applications, and tools covered in the class. All class lectures and discussions will be recorded and posted on BlackBoard. Students are expected to be able to define key concepts, illustrate them with examples, apply them to a practical problem, and use appropriate analytical tools. The final exam is not cumulative.

For each examination the instructor will post about thirty questions on BlackBoard at least ten days earlier. Five or six of these thirty questions will be administered in the examination. The students will be expected to answer all the questions. Moreover, the answers have to be precise and accurate.

Group Project

Students may work in groups of five or less. The students will be required to solve a real business problem identified by them. They should clearly define the purpose of the system,

analyze it, determine its requirements, and design a solution. After completing the project to the satisfaction of the sponsor and the instructor, the students should be able to feel proud of presenting their project to potential employers as proof of their capability to solve systems analysis and design problems in business.

Each group will be required to submit interim reports on their project during the semester. The quality of these interim reports will be considered in assigning the final grade to the team. Each completed project should be accompanied by appropriate documentation.

There will be a mid-term review of each project at which each team will have to make a short presentation on their project. At the end of the semester there will be a final presentation on each project. Both presentations have to be formal and professional.

For guidelines on presentation and documentation please see “Helpful Hints about Communication Skills” at <http://www.uic.edu/cba/cba-depts/ids/>.

Policies

Assignments must be submitted online on the dates indicated and exams are to be taken on scheduled dates and times. Academic dishonesty and plagiarism are serious academic offenses and will be dealt with per university policy. The College of Business Administration subscribes to turnitin.com. It will be used to check for plagiarism.

Tentative Class Schedule

Date	Tentative Topic	Assignment (Additional readings will be posted on BlackBoard)
01/17/08	Introduction, Discussion of course expectations, Groups formation Course framework	Chapters 1, 2
01/24/08	Project Management	Chapter 3 Project problem statement due
01/31/08	Forecasting	Chapter 4
02/07/08	Design of Goods and Services	Chapter 5
02/14/08	Managing Quality	Chapters 6, S6
02/21/08	Process Strategy and Capacity Planning	Chapter 7, S7 Project problem analysis due
02/28/08	Mid-term exam Location Strategies	Chapter 8
03/06/08	Layout Strategies, Human Resources, Job Design, and Work Measurement	Chapter 9, 10, S10
03/13/08	Supply Chain Management and Outsourcing	Chapters 11, S11
03/20/08	Inventory Management	Chapter 12
03/27/08	SPRING BREAK	
04/03/08	Aggregate Planning	Chapter 13 Project solution due

04/10/08	MRP&ERP	Chapter 14
04/17/08	JIT and Lean Operations	Chapter 16
04/24/08	Maintenance and Reliability	Chapter 17 Project PowerPoint with notes due
05/01/08	Project presentations	
Week of 05/05/08	Final examination and final project reports due	