

Management 3600 – 1 (CRN – 40940)
Production & Operations Management
Fall 2013

Location and Time: Udvar Hazy 224
Tuesday and Thursday 9:00 – 10:20 am

Instructor: Dr. Scott Lindsey
Telephone: 435-879-4338 (office)
Email: lindseys@dixie.edu

Office and Hours: Udvar Hazy 343
Monday thru Friday 11:00 am–12 noon and by appointment

Text: Heizer, Jay & Render, Barry (2013). Operations Management – Student Value Edition, 11th Edition. Upper Saddle River; Prentice Hall. ISBN 978-0-13-286330-8

Course Description: Operations Management (OM) is defined as the design, operation, and improvement of the systems that create and deliver products and services. Understanding the role of the operations function and its impact on the competitiveness of the firm is an important part of any business professional's training. As a field, OM largely defines the production of an organization's goods and services and directly impacts organizations' assets, working capital, and human resources. Hence, applying these resources more effectively and efficiently than one's competitors renders OM a vital area of business study.

This course emphasizes the concepts, principles, and analytical techniques used in manufacturing and service operations across various organizational functions. It is intended to provide managers in all functional areas with sufficient knowledge to make informed total-business decisions and to introduce standard terms and concepts for communications with operations personnel. In such a course, it should be recognized that breadth of subject matter, not depth of topic, is the goal.

Prerequisites: STAT 2040 & Advanced standing

Learning Outcomes: This course is intended to address the following Udvar Hazy School of Business - Bachelor of Business program learning outcomes on the introductory and developmental levels:

1. A working level knowledge of the core functional areas of business:
 - A. Students will demonstrate a working level knowledge of core business functions in accounting, economics, finance, information systems, international business, legal and social environment, marketing, and management.
 - B. Students will analyze a complex business situation, identify relevant functional business issues and suggest viable courses of action.
2. The ability to apply higher levels of critical thinking:
 - A. Students will process a complex business situation, utilize qualitative and quantitative analysis and synthesize to develop sound alternatives for action.
3. The interpersonal and communication skills necessary to succeed in business:
 - A. Students will deliver professional quality oral presentations
 - B. Student will prepare professional quality written presentations
 - C. Students will identify the essential elements of successful teamwork and will reflect upon their competency and experiences in applying them

Course Objectives: This course will provide students and introduction to the issues facing practitioners of the Operations function within the modern enterprise. The objectives of this course include:

- Develop both quantitative and qualitative skills to recognize, formulate and analyze business problems/issues related to operations management (LO 2A)
- Understand the interdependence of operations management and other key functional areas in business organizations (LO 1A)
- Provide a knowledge base for communicating with operations personnel (LO 3C)
- Show the similarities between operations issues in the manufacturing and service sectors
- Understand and appreciate the impact of variability on the operations of an organization

By the end of the course, students should be able to:

- Apply capacity management techniques to optimize the performance of both a product- and service-oriented enterprise (LO 1B, 2A)
- Produce a network diagram for the management of a project (LO 1B)
- Demonstrate competence in the use of each of the following analytical techniques: capacity and bottleneck analysis, statistical process control charts, quantitative sales forecasts, independent demand inventory models, aggregate planning, material requirements planning and queuing models (LO 1B, 2A)
- Use computer tools and real-world simulations to solve selected operations management problems (LO 2A)
- Demonstrate an awareness of the principles of location and layout strategies, quality management, and strategic planning (LO 1B, 2A)
- Effectively express what they have learned, both in oral and written form (LO 3A, 3B, 3C)

Attendance: Students are expected to attend every class session and are responsible for material covered and announcements, whether they are in class or not.

Grading and Course Content: Grades will be based on the following:

In-Class Quizzes	10%
Homework	35%
Mid-term Exam	20%
Final Exam	20%
<u>Littlefield Game Group Assignment</u>	<u>15%</u>
Total	100%

Grades will be assigned according to the following scale:

A = 93 – 100%	B+ = 87 – 89.9%	C+ = 77 – 79.9%	D+ = 67 – 69.9%
A- = 90 – 92.9%	B = 83 – 86.9%	C = 73 – 76.9%	D = 63 – 66.9%
	B- = 80 – 82.9%	C- = 70 – 72.9%	D- = 60 – 62.9%

In-Class Quizzes (10%): Quizzes are open-book and open-notes. Most quizzes will be at the end of a class session. These quizzes will be used to evaluate your comprehension for that and previous sessions. Questions in the quiz will come from the assigned chapters, readings and class lectures. Rather than assign class participation grades, quizzes will be used to evaluate your attendance and comprehension of course topics. The lowest two quiz scores during the semester will be dropped.

Homework Assignments (35%): Homework assignments will be turned in at the beginning of class on the date due. ASSIGNMENTS WILL BE TURNED IN ON 8 ½ X 11 INCH, LINED OR

GRAPH PAPER AND WILL BE EASY TO FOLLOW. No late assignments will be accepted. Your LOWEST homework score will be dropped from your grade but I expect ALL homework assignments to be turned in. Only assignments turned in during class will be accepted. Students are encouraged to collaborate on homework assignments, but remember that your performance on the midterm and final examination will require you to understand and practice the homework problems. (LO 1A, 1B)

Midterm Exam (20%): One midterm exam is scheduled. This exam will cover text chapters and quantitative modules covered up to the date of the midterm. No make-up midterm exams will be given. (LO 1A, 1B)

Final Exam (20%): The final will not be comprehensive. This exam will cover text chapters and quantitative modules covered between the midterm and the final exams. The final will be given per the Summer 2012 final exam schedule. No make-up final exams will be given. (LO 1A, 1B)

Littlefield Game Assignment (15%): The class will be divided into groups of 4 members each for a simulation game (Littlefield Technologies). The game is designed to allow students to apply capacity and customer responsiveness techniques learned in class in a real-world situation. Each group will submit a 4-6 page (double spaced, 12 point font, 1 inch margins) write-up for the Customer Responsiveness Littlefield assignment. This write-up will be graded on proper grammar and punctuation, overview of the topic and problem being addressed, and application of the Operation Management tool(s) used to address the problem, and a summary of findings / recommendations. Oral group presentations (15-20 minutes in length) are scheduled near the end of the term, and will provide an overview of the write-up and. The oral presentation should involve the entire group and include a formal presentation using PowerPoint or some other presentation tool. (LO 2A, 2B, 3A, 3B, 3C)

Course Schedule (Subject to Change)

Date	Subject	Reading Due	Assignment Due
Aug 20	Class Overview Intro to Operations Management	Chapter 1	
Aug 22	Operations Strategy	Chapter 2	
Aug 27	Forecasting	Chapter 4	1.5, 1.11
Aug 29	Process Strategy and Capacity Planning	Chapters 7, 7S	
Sep 3	Inventory Management	Chapter 12	4.1, 4.13, 4.19, 4.33 S7.13, S7.23, S7.33
Sep 5	Inventory Management	Chapter 12	
Sep 10	Simulation	Module F	12.13, 12.17, 12.27
Sep 12	Littlefield Game Overview		
Sep 17	Decision Making Tools Littlefield Game – Capacity Team Strategies	Module A	F.5, F.9, F.17
Sep 19	Project Management	Chapter 3	
Sep 24	Linear Programming BEGIN Littlefield Game - Capacity	Module B	A.1, A.7, A.15, 3.9a, 3.11, 3.21, 3.25
Sep 26	Linear Programming	Module B	
Oct 1	Design of Goods and Services END Littlefield Game - Capacity	Chapter 5	B.2, B.5, B.9, B.21, B.23
Oct 3	Midterm Review Session		
Oct 8	Midterm Review Session		
Oct 10	HOLIDAY		
Oct 15	MIDTERM		
Oct 17	Managing Quality and Statistical Process Control	Chapters 6, 6S	
Oct 22	Managing Quality and Statistical Process Control Littlefield Game – Customer Responsiveness Team Strategies	Chapters 6, 6S	5.15
Oct 24	Location Strategies	Chapter 8	
Oct 29	Layout Strategies BEGIN Littlefield Game – Customer Responsiveness	Chapter 9	S6.6, S6.23, S6.31
Oct 31	Supply Chain Management and Outsourcing	Chapters 11, 11S	
Nov 5	Aggregate Planning END Littlefield Game – Customer Responsiveness	Chapter 13	8.11, 8.29, 11.11, S11.5
Nov 7	Material Requirements Planning and ERP	Chapter 14	
Nov 12	NO CLASS – CAREER DAY		
Nov 14	JIT and Lean Operations	Chapter 16	13.11, 13.15, 14.3, 14.4, 14.5, 14.13, 14.23
Nov 19	Waiting Lines	Module D	

Nov 21	Group Presentations – Littlefield		Littlefield Game – Customer Responsiveness Write-ups Due
Nov 26	Group Presentations – Littlefield		
Nov 28	HOLIDAY		
Dec 3	Final Review Session		16.3, 16.9, D.1, D.17
Dec 5	Final Review Session		
Dec 12	FINAL – 8am – 10am		

Important Course Information

DSC Academic Calendar: Please refer to <http://www.dixie.edu/reg/?page=calendar> for the Dixie State College 2013-14 Academic Calendar.

Prerequisites: If you have not completed the prerequisites for the class, please drop this course as soon as possible. If you have questions concerning the prerequisites, please contact the Business Advising Office.

Student Responsibilities: All students are expected to maintain professional behavior in the classroom setting, according to the Student Rights and Responsibilities Code (<http://www.dixie.edu/humanres/policy/sec5/533.html#behave>). Students have specific rights in the classroom as detailed in Section 1 of the Code. The Code also specifies proscribed conduct (Section 2) that involves cheating on tests, plagiarism, and/or collusion, as well as fraud, theft, etc. Students should read the Code carefully and know they are responsible for the content.

Faculty Responsibility: It is the faculty responsibility to enforce responsible classroom behaviors, and I will do so, beginning with verbal warning and progressing to dismissal from class and a failing grade. Students have the right to appeal such action per the Student Rights and Responsibilities Code

Canvas: You are required to frequently check the course Canvas page(s). Important class announcements and materials will be frequently posted to the course Canvas page(s).

Dmail: You are required to frequently check your dmail account. Important class and college information will be sent to your dmail account. This information includes your DSC bill, financial aid/scholarship notices, notification of cancelled classes, reminders of important dates and events, and other information critical to your success in this class and at DSC. All DSC students are automatically assigned a dmail account. If you don't know how to access your dmail account, go to www.dixie.edu and select "Dmail" from the left column. To locate your dmail username and password, go to www.dixie.edu, and click on "Log in to student services" or the "My Dixie" button.

Cell Phone and Computer Etiquette: Cell phones and pagers should be turned off during class. If you must have your phone on during class, please set it to silent mode (e.g., vibrate) and leave the classroom to answer any emergency calls. Computer usage is encouraged to take notes and follow the lecture. Computers should not be used during class to surf the web, answer email, chat, etc. I reserve the right to mark students down on quiz scores if they exhibit poor in-class cell phone and computer etiquette.

Disability: Students with medical, psychological, learning or other disabilities desiring reasonable academic adjustment, accommodations, or auxiliary aids to be successful in this class will need to contact the DISABILITY RESOURCE CENTER Coordinator (Baako Wahabu) for eligibility determination. Proper documentation of impairment is required in order to receive services or accommodations. DRC is located at the ground floor of the Financial Aid Office. Visit or call 652-

7516 to schedule appointment to discuss the process. DRC Coordinator determines eligibility for and authorizes the provision of services.

General Disclaimer: Information contained in this syllabus may be subject to change with advance notice, during class time, as deemed appropriate by the instructor.

DSC Policy Links:

- Reference to "Policy for Absences Related to College Functions":
<http://www.dixie.edu/humanres/policy/sec5/523.html>
- Disruptive behavior policy / classroom expectations, academic dishonesty / academic integrity policy: <http://www.dixie.edu/humanres/policy/sec3/334.html>

DSC Resources:

- Available resources: Library, computer lab, writing center, testing center, tutoring center links
 - Library: <http://library.dixie.edu>
 - Computer labs: Located in the basement of the library, Smith Computer Center, and Udvar-Hazy Building room 200
 - Writing Center: http://dixie.edu/english/dsc_writing_center.php
 - Testing Center: <http://dixie.edu/testing>
 - Tutoring Center: <http://dsc.dixie.edu/tutoring>