

**Management 3600 – 1 (CRN – 30149)
Production & Operations Management
Summer 2012**

Location and Time: Udvar Hazy 203
Tuesday, Wednesday and Thursday 9:00 – 10:50 am

Instructor: Dr. Scott Lindsey
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Office and Hours: Udvar Hazy 343
Tuesday thru Thursday 11 am–12 noon and by appointment

Text: Heizer, Jay & Render, Barry (2011). Operations Management, 10th Edition. Upper Saddle River; Prentice Hall. ISBN 978-0-13-611941-8

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

Course Objectives: The objectives of this course include:

- Develop both quantitative and qualitative skills to recognize, formulate and analyze business problems/issues related to operations management
- Understand the interdependence of operations management and other key functional areas in business organizations
- Provide a knowledge base for conversing with operations personnel
- 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:

- Produce a network diagram for the management of a project
- Demonstrate competence in the use of each of the following analytical techniques: statistical process control charts, quantitative sales forecasts, independent demand inventory models, aggregate planning, material requirements planning and queuing models
- Use the computer to solve selected operations management problems

- Demonstrate an awareness of the principles of location and layout strategies, quality management, and strategic planning
- Effectively express what they have learned, both in oral and written form

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>Case / Project 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.

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.

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.

Case / Project Assignments (15%): The class will be divided into groups of 5-6 members each for a group case analysis or project. Case / Project topics will be selected by each group and should be based on an Operations Management tool / technique covered in class and applied to a real-world business situation. Each group will submit a 5-7 page (double spaced, 12 point font, 1 inch margins) formal write-up of their case / project. This write-up will be graded on proper grammar and punctuation, overview of the topic and problem being addressed, description of the Operations Management tool(s) used to address the problem, 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. The oral presentation should involve the entire group and include a formal presentation using PowerPoint or some other presentation tool.

Course Schedule (Subject to Change)

Week of:	Subject	Reading Due	Assignment Due (Tuesdays)
May 29	Class Overview Intro to Operations Management Operations Strategy Decision Making Tools Project Management	Chapter 1 Chapter 2 Module A Chapter 3	
June 5	Linear Programming Forecasting Design of Goods and Services	Module B Chapter 4 Chapter 5	1.5, 1.11 A.1, A.7, A.15, 3.9a, 3.11, 3.21
June 12	Managing Quality and Statistical Process Control Process Strategy and Capacity Planning Waiting Line Models	Chapters 6, S6 Chapters 7, S7 Module D	B.2, B.5, B.9, B.21, B.23 4.1, 4.13, 4.19, 4.33, 5.15 Group Presentation Topics Due
June 19	Midterm Review (June 19) Location Strategies Layout Strategies MIDTERM (June 21) – In testing center	Chapter 8 Chapter 9	S6.6, S6.23, S6.31 S7.13, S7.23, S7.33, D.1, D.17
June 26	Supply Chain Management and Outsourcing Maintenance and Reliability Inventory Management	Chapters 11, S11 Chapter 17 Chapter 12	8.11, 8.23, 9.5, 9.17
July 3	HOLIDAY – July 4 Simulation Aggregate Planning Material Requirements Planning and ERP	Module F Chapter 13 Chapter 14	11.11, 11.12, S11.5, 17.7, 17.9, 17.17 12.13, 12.17, 12.27
July 10	JIT and Lean Operations Group Presentations (July 11,12)	Chapter 16	F.5, F.9, F.17 13.11, 13.15 14.3, 14.4, 14.5, 14.13 Group Presentations and Write-ups Due
July 17	Final Review (July 17,18)		16.3, 16.9
July 20	FINAL (9 am – 11 am)		

Important Course Information

DSC Academic Calendar: Please refer to <http://www.dixie.edu/reg/?page=calendar> for the Dixie State College 2011-12 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>