

Course	BUSN 6110 Operations Management	
Term	Spring II, 2008	
Instructor	Dr. J. B. STILTNER, DBA Phone: (843) 421-3460 Email: jstiltner41@webster.edu	
Catalog Description	This is a course that focuses on the major managerial issues in manufacturing management and the tools that can be used to manage them. Special attention will be given to project management, including PERT, critical path scheduling, and time-cost models, in operations management and other business settings. The major operations management issues are quality management and control, capacity management, plant location, layout and design, production planning and scheduling, supply chain management, and inventory management. The analytical tools covered include queuing theory, statistical quality control, linear programming, and learning curves. Where appropriate, the use of operations management techniques in service and distribution organizations will be demonstrated.	
Prerequisites	BUSN 5760 Applied Statistics	
Course Level Learning Outcomes	Outcome	Expectation
	1. Students understand the role of Operations Management (OM) in the firm and how the OM function must be integrated with other functions to ensure organizational success.	Students can describe the appropriate relationship between the goals of other functional areas (i.e. marketing) and analyze operational level conflicts between the goals of functional areas and recommend a constructive response.
	2. Students can utilize (PERT) analysis to plan, manage, and evaluate a large project.	Students can develop a (PERT) diagram, calculate the critical path, decide whether or not an activity should be crashed, and estimate the probability that the project will be completed on time.

	<p>3. Students understand new product development processes.</p>	<p>Students can read the description of a new product development process and determine if it is up-to-date. If it is not up-to-date the student can recommend changes that will bring it up to date.</p>
	<p>4. Students know both the Statistical Quality Control (SQC) and non-SQC approaches to the management of quality.</p>	<p>Students can develop an SQC chart and use it to evaluate the quality performance of an ongoing production process. The student can also describe how to use Quality Function Deployment (QFD), Vendor Analysis and Value Engineering (VA/VE) in the managing of quality.</p>
	<p>5. Students understand both the strategic and plant level capacity planning issues.</p>	<p>Students can discuss the major determinants of long term production capacity. The students can also determine bottlenecks in the process and make recommendations for dealing with the bottlenecks. This will include determining if the capacity expansion of the bottleneck makes good profitability sense.</p>
	<p>6. Students understand the major determinants of facility location decisions and will know how to use factor rating models to assist in the decision.</p>	<p>Students can discuss the facility location decision process to include the major variables. The student will be able to explain these variables given the necessary information. Also, be able to use factor rating to assist in the location decision.</p>
	<p>7. Students understand the basic issues involved in facility layout with an emphasis on assembly line-type manufacturing.</p>	<p>Students can balance factors of the assembly line to meet the expected production volume and will be able to determine the maximum output of the assembly line. Students can also explain the impact of cycle time on production capacity.</p>
	<p>8. Students understand the basic issues involved in inventory management to include Material Requirements Planning (MRP).</p>	<p>Students can determine the general nature of the inventory management task once the basic competitive posture of the firm has been determined. Students can also use Economic Order Quantity (EOQ) calculations to assist in the inventory decisions.</p>

	9. Students understand the general process of production planning to include aggregate planning and plant scheduling.	Students can describe the production planning process from the initial sales estimate to the plant floor. Student can also apply Johnson's rule in scheduling the n -job on two machines problem.																								
Materials	Chase, Richard B., F. Robert Jacobs, and Nicholas J. Aquilano, 2006, <i>Operations Management for Competitive Advantage</i> 11 th Edition, McGraw-Hill/Irwin.																									
Grading	<p>ACTIVITIES</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="text-align: right; border-bottom: 1px solid black;">% of Grade</th> </tr> </thead> <tbody> <tr> <td>1. Projects</td> <td style="text-align: right;">25</td> </tr> <tr> <td>2. Case Studies</td> <td style="text-align: right;">25</td> </tr> <tr> <td>3. Articles</td> <td style="text-align: right;">15</td> </tr> <tr> <td>4. Exams</td> <td style="text-align: right;">35</td> </tr> </tbody> </table> <p>Grading:</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="padding-left: 40px;">A</td> <td>96-100</td> </tr> <tr> <td style="padding-left: 40px;">A-</td> <td>90-95</td> </tr> <tr> <td style="padding-left: 40px;">B+</td> <td>87-89</td> </tr> <tr> <td style="padding-left: 40px;">B</td> <td>84-86</td> </tr> <tr> <td style="padding-left: 40px;">B-</td> <td>80-83</td> </tr> <tr> <td style="padding-left: 40px;">C</td> <td>70-79</td> </tr> <tr> <td style="padding-left: 40px;">F</td> <td>Below 70</td> </tr> </tbody> </table>			% of Grade	1. Projects	25	2. Case Studies	25	3. Articles	15	4. Exams	35	A	96-100	A-	90-95	B+	87-89	B	84-86	B-	80-83	C	70-79	F	Below 70
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Policy Statements: University Policies	<p>University policies are provided in the current course catalog and course schedules. They are also available on the university website. This class is governed by the university's published policies. The following policies are of particular interest:</p> <p>Academic Honesty</p> <p>The university is committed to high standards of academic honesty. Students will be held responsible for violations of these standards. Please refer to the university's academic honesty policies for a definition of academic dishonesty and potential disciplinary actions associated with it.</p>																									

	<p><i>Drops and Withdrawals</i></p> <p>Please be aware that, should you choose to drop or withdraw from this course, the date on which you notify the university of your decision will determine the amount of tuition refund you receive. Please refer to the university policies on drops and withdrawals (published elsewhere) to find out what the deadlines are for dropping a course with a full refund and for withdrawing from a course with a partial refund.</p> <p><i>Special Services</i></p> <p>If you have registered as a student with a documented disability and are entitled to classroom or testing accommodations, please inform the instructor at the beginning of the course of the accommodations you will require in this class so that these can be provided.</p> <p><i>Disturbances</i></p> <p>Since every student is entitled to full participation in class without interruption, disruption of class by inconsiderate behavior is not acceptable. Students are expected to treat the instructor and other students with dignity and respect, especially in cases where a diversity of opinion arises. Students who engage in disruptive behavior are subject to disciplinary action, including removal from the course.</p>
<p>Course Policies</p>	<p>This syllabus may be revised at the discretion of the instructor without the prior notification or consent of the student.</p> <p>Class meetings are to be treated as important business appointments. Because so much of the value of this course comes from class discussion, attendance is required. There are, of course, excusable absences. However, they will always be for reasons that are beyond your ability to control. Please talk to me about any absences.</p>
<p>Weekly Schedule</p>	<p>WEEK ONE: Course orientation. Discussion of project requirements, case methodology, and course overview; Chapters 1-4</p> <p>WEEK TWO: Chapters 5-9; case studies; Exam I</p> <p>WEEK THREE: Chapters 10-14; case studies; article reviews; Exam II</p> <p>WEEK FOUR: Chapters 15-18 and 17TN; project presentations; Exam III</p>

Additional Information	Individual handouts will be distributed during the first class meeting as to specifics about article reviews and class project.

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