

Course	BUSN 6110 / NL / Operations and Project Management	
Term	Fall 1, 2009 – Thursday – 6:00 pm – 10:00 pm 8/20, 8/27, 9/3, 9/10, 9/17, 9/24, 10/1, 10/8, 10/15	
Instructor	Name: Jeff Peterson Home Phone: 904- 771-6447 Work Phone: 904- 791-6415 E-mail: jnp55555@bellsouth.net	
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 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.
	3. Students understand new product development processes.	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>4. Students know both the 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 QFD, VA, vendor analysis and Value Engineering 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, 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>Student can balance as assembly line to meet the expected production volume 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 MRP.</p>	<p>Student 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 EOQ calculations to assist in the inventory decisions.</p>
	<p>9. Students understand the general process of production planning to include aggregate planning and plant scheduling.</p>	<p>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.</p>
<p>Materials</p>	<p>Chase, Jacobs & Aquilano. (2008). Operations & Supply Management with Student DVD. (12th Edition). McGraw-Hill / Irwin. ISBN# 9780077228934</p> <p>Recommended but not required: Howard Weiss, CD-ROM POM/QM for Windows, Version 3 (ISBN 0131735454) or higher.</p>	

To Order Textbooks go to the local North FL website www.webster.edu/jack and click on Order Textbooks to select a vendor
 (Note: Textbooks must be ordered 2 weeks prior to class to ensure delivery)

Supplemental Reading:

- **Research Paper Guidelines and Sample Paper** – See website @ www.webster.edu/jack and click on the Student Resources category.

Grading

Assignments	Maximum Points
• Case Studies (3 @ 10%)	30 Points
• Final Exam	30 Points
• Term Project Presentation	20 Points
• PassPorts Internet Proficiency	5 Points
• Class Participation/Labs/Attendance	<u>15 Points</u>
TOTAL	100 Points

Letter grades will be assigned pursuant to the following scores based on the percent of the total possible points (weighted according to the scale above) that you earned in the course.

Percentage of Total Points	Grade
95%-100%	A
90%-94%	A-
88%-89%	B+
84%-87%	B
80%-83%	B-
70%-79%	C
Below 70%	F

<p>Activities</p>	<ul style="list-style-type: none"> • Lectures and Discussions about the managerial issues involved in operations management including the tradeoffs that are required. • Problems, cases, and exercises that require the class to use analytical techniques to solve operation-type problems. These could include assembly line balancing problems, product line questions using PERT, queuing theory problems, inventory control problems, bottle neck problems, etc. The problems and cases in most texts are very simple so some harder problems or cases for homework should be useful. <p>Case Studies: (4)</p> <ul style="list-style-type: none"> • Each case is worth 10 points (10% of course grade). Collectively, cases are worth 40% of the final grade. • Students are required to submit 4 cases as directed. One additional case may be submitted in order to drop your lowest score. This one additional case can only be chosen from one of the chapters not identified as a potential case selection. These cases must also be prepared for presentation in class. • Each case must be typewritten, and most cases need only be 2-4 pages in length to satisfactorily answer the questions (not including any tables or attachments). • Each case submission must consist of two parts: (1) an Executive summary of the case that describes the general context; and (2) Questions: write each question and answer them in order, numbering the responses accordingly. • The scoring will consist of two parts: CONTENT and GRAMMAR / STYLE. • 5 of the 10 points will be awarded based on spelling, grammar, sentence structure, punctuation, wordiness and cleanliness. • The other 5 points will be assessed by how well you address the questions at the end of the case. You will not be scored entirely on the correctness of your answer, but rather on how well you support your answer (i.e., is it complete). Just imagine you are a paid consultant who is asked to report on the company in question. A well-written case would not leave a reader asking questions of you to further explain your answer because it should be well supported without going overboard to cite every example in the case. At your discretion, you may provide additional insight beyond the questions asked. <table border="0" style="width: 100%; margin-top: 20px;"> <tr> <td>Ineffective / inadequate</td> <td>(F quality)</td> <td>0 point</td> </tr> <tr> <td>Poor quality/lack of thought</td> <td>(D quality)</td> <td>1-2 points</td> </tr> <tr> <td>Minimally satisfactory</td> <td>(C quality)</td> <td>3 points</td> </tr> <tr> <td>Competent and clear</td> <td>(B quality)</td> <td>4 points</td> </tr> <tr> <td>Elegant and insightful</td> <td>(A quality)</td> <td>5 points</td> </tr> <tr> <td>Exemplary (a show stopper)</td> <td>(A+ quality)</td> <td>6 points*</td> </tr> </table> <p style="margin-top: 20px;">*Note: it is possible to score a 11 out of 10</p> <ul style="list-style-type: none"> • Late submissions will warrant a 25% deduction per week without exception; a case is considered late if not received by the instructor before class ends. • Missed classes will obligate you to submit an extra case per four hours of 	Ineffective / inadequate	(F quality)	0 point	Poor quality/lack of thought	(D quality)	1-2 points	Minimally satisfactory	(C quality)	3 points	Competent and clear	(B quality)	4 points	Elegant and insightful	(A quality)	5 points	Exemplary (a show stopper)	(A+ quality)	6 points*
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class time missed, work the assigned lab problems and present an assigned lesson by the instructor.

Final Exam:

- The exam will consist of a mixture of qualitative and quantitative questions. Students will have a choice of questions / problems to answer. More details will be provided in class.
- Each of the qualitative questions is equally weighted. While some questions have a measure of correctness, most will be assessed on the level of completeness. No response to a question should exceed 1½ pages typed. Note: only one exam per class can receive the maximum score for each qualitative question; all other exams will receive a corresponding lower score based on level of completeness.
- Each problem on the exam is equally weighted.
- The final exam is worth 30% of the entire course grade.
- Use of the textbook, PC and all notes may be permitted.

Term Project Presentation:

Presentation Criteria:

- Linkage to Ops. Mgt. course demonstrated 2 points
- Interesting topic / presentation 2 points
- Background of problem / Problem statement 4 points
- Solution / approach 4 points
- Visual aids / handouts 4 points
- Presentation skills / Q & A 4 points
- TOTAL 20 points (20% of course grade)

Presentation Proposal:

- This one page summary should illustrate a linkage to the operations management course and should highlight the background of a problem/issue.
- Note: the proposal is not assigned a grade, but the presentation grade will be penalized for failure to complete and submit the proposal on time.

Passports Internet Proficiency:

- While no written term paper is required, students must submit at least five (5) citations / references that relate to the topic or companies discussed in the presentation and were used in the development and presentation of the term project. This must be given to the instructor on the day of the presentation.
- The references must be in APA format and should be current (i.e., within the past three years).

Computer Lab Assignments:

- Students will solve quantitative problems in a lab environment.
- Students will receive the letter grade of A for each lab worked with a

graduate level attempt for the entire lab period.

- Students will receive a 100% for labs worked independently or within a small group. Most, if not all, of the problems will be completed during class; however, some lab work may require outside work. Absent students must submit the lab problems at the following class session.

Class Participation and Attendance:

- Students are expected to attend all class sessions of every course for the full 36 contact hours. In the case of unavoidable absence, the student must contact the instructor. The student is subject to appropriate academic penalty for incomplete or unacceptable makeup work, or for excessive or unexcused absences. Generally, a student who misses more than one four-hour course period (per course) without a documented military or medical excuse and advanced permission of the instructor should withdraw from the class. The University reserves the right to involuntarily drop enrolled students from classes, which they do not attend. **PLEASE BE ADVISED:** Students who do not attend the first class session, who have not made prior arrangements with the instructor for being absent, will be dropped from their courses.
- Attendance the last day of class is mandatory to ensure that all work is completed and to be awarded a passing grade. An Incomplete will not be acceptable without documental proof (Death Notice, Doctor's Letter, etc.) as to absence relating to non-completion of class work. These must be faxed 904-262-1459 or dropped off to Webster University by the Monday after the term ends.
- Participants are expected to arrive on time and be actively involved in the learning experience. Each student should desire to learn, participate, and proactively contribute to the learning of others during each discussion and exercise.
- Students are to participate in classroom discussions. The discussions are an opportunity for students to reveal their understanding of the assignments made for the current and previous classes.
- Assignments are given to prepare the student to participate in class discussions; therefore, it is imperative that reading assignments and associated questions for discussion be completed prior to class.
- Lab work is a part of class participation and must be completed independently or within an assigned group. A maximum of 15 points will be awarded for overall class participation based on the level and quality of discussion participation, lab work and preparation for class.
- Failure to turn in an assignment within one week will result in a grade of "0" for that assignment. In addition, failure to submit an assignment will lower the final grade by an additional two points.
- All assignments are due as detailed in the Course Schedule.
- Late assignments will be accepted, if they are turned in **no later** than one week later, but will be penalized one letter grade. Furthermore, late assignments will lower the student's final grade by an additional one point.
- Late assignments will not be accepted for the final assignments the last week of the course to allow timely completion and grades to be submitted.

<p>Policy Statements:</p> <p>University Policies</p>	<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>Drops and Withdrawals</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>Special Services</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>Disturbances</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>Student Assignments Retained</p> <p>From time to time, student assignments or projects will be retained by The Department for the purpose of academic assessment. In every case, should the assignment or project be shared outside the academic Department, the student's name and all identifying information about that student will be redacted from the assignment or project.</p> <p>Contact Hours for this Course</p> <p>It is essential that all classes meet for the full instructional time as scheduled. A class cannot be shortened in length. If a class session is cancelled for any reason, it must be rescheduled.</p>
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<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>Make-Up Requirements</p> <ul style="list-style-type: none"> • For each class hour missed, a one (1) page, double-spaced, typed paper, with one (1) reference will be submitted by the end of the term. The instructor will assign the topic. A four (4) hour class will require four (4) pages supported with (4) references from popular or academic press. • This paper will be graded and incorporated in the class participation grade. If the make-up work is not submitted, the student's final grade will be reduced one (1) letter grade. • Students are responsible for any class material presented during their absence, and any assignments due should be submitted prior to the absence, if possible. 	
<p>Weekly Schedule</p>		<p>Pre-Assignments for Session 1:</p> <ul style="list-style-type: none"> • Read Chapters 1, 2, and 2A
	<p>Session 1</p>	<p>THEME: Operations Strategy and Managing Change</p> <p>Topics:</p> <ul style="list-style-type: none"> • Discuss Course Requirements and Expectations • Introduction to the Field / Overview • Operations Strategy and Competitiveness • Lab: Productivity, Linear Programming and CPM • Video: Chaparral Steel <p>Assignments for Session 2:</p> <ul style="list-style-type: none"> • Read Chapters 3 and 4 • Write 1st Case Study: IKEA: Design and Pricing
	<p>Session 2</p>	<p>THEME: Project Management</p> <p>Topics:</p> <ul style="list-style-type: none"> • Discuss Case Studies • Project Management • Discuss Product & Service Design • Lab: Project Management • Discuss Term Project

		<p>Assignments for Session 3:</p> <ul style="list-style-type: none"> • Read Chapters 5, 5A, 6, and 6A • Write 2nd case study (choose one from: Kriston's Cookie Co, or Circuit Board Fabricators)
	Session 3	<p>THEME: Product Design and Process Selection</p> <p>Topics:</p> <ul style="list-style-type: none"> • Discuss Case Study • Strategic Capacity Management • Process Analysis • In-class Exercises • Lab: Learning Curves and Work Measurement <p>Assignments for Session 4:</p> <ul style="list-style-type: none"> • Read Chapters 7, 7A, 8, and 8A • Write 3rd case study: State Automobile License Renewals
	Session 4	<p>THEME: Process Management</p> <p>Topics</p> <ul style="list-style-type: none"> • Discuss Case Study • Discuss Term Project Proposals • Manufacturing Processes • Services Processes • In-class Exercises • Video: Waiting Lines at First Bank • Lab: Facility Layout and Waiting Lines <p>Assignments for Session 5:</p> <ul style="list-style-type: none"> • Read Chapters 9, 9A, 10, and 11
	Session 5	<p>THEME: Supply Chain Management</p> <p>Topics:</p> <ul style="list-style-type: none"> • Six-Sigma Quality • Supply Chain Design • Supply Chain Exercise • Lab: Process Capability and SPC <p>Assignments for Session 6:</p> <ul style="list-style-type: none"> • Read Chapters 12 and 13 • Prepare for term presentation • Turn in short paper explaining the subject of Term Presentation

	Session 6	THEME: Lean Production and Forecasting Topics: <ul style="list-style-type: none"> • Lean Manufacturing • Operations Consulting • In-class Exercises • Lab: Decision Trees and Decision Preference Matrices Assignments for Session 7: <ul style="list-style-type: none"> • Read Chapters 14, 15, and 16 • Prepare for Final Exam and oral presentation
	Session 7	THEME: Inventory Control Topics: <ul style="list-style-type: none"> • Enterprise Resource Planning • Demand Management and Forecasting • Aggregate Sales and Operations Planning • Inventory Control • In-class Exercises Assignments for Session 8: <ul style="list-style-type: none"> • Read Chapters 17 and 18
	Session 8	THEME: Scheduling Topics: <ul style="list-style-type: none"> • Material Requirements Planning (MRP) • Lab: Inventory and MRP • Video: Service Scheduling and Air New Zealand Assignments for Session 9: <ul style="list-style-type: none"> • Read Chapter 19 and 20 • Finalize oral presentation • Complete Final Exam
	Session 9	THEME: Theory of Constraints Topics: <ul style="list-style-type: none"> • Scheduling • Constraint Management • Oral presentations • Turn in Final Exam
Additional	None	

Information	
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Revised 9/24/08