Webster UNIVERSITY

Course Syllabus

Course	Fall 1 2008 **BUSN 6110/PROC 5820 Operations Management**
Instructor	Name: Prasert Nakcharoen Phone: 661-528-6776 Email: Prasert@earthlink.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	This is a course in Operations Management. Course work will include the analysis, planning, and design. Background in basic algebra and statistics.

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.	
	4. Students know both the SQC and non-SQC approaches to the management of quality.	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.	
	5. Students understand both the strategic and plant level capacity planning issues.	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.	
	6. Students understand the major determinants of facility location decisions and will know how to use factor rating models to assist in the decision.	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.	
	7. Students understand the basic issues involved in facility layout with an emphasis on assembly line-type manufacturing.	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.	
	8. Students understand the basic issues involved in inventory management to include MRP.	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.	
	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.	
Textbook	*Operations Management for Competitive Advantage,* ISBN 0073121665, Richard B. Chase, Nicholas Aguilano and Robert Jacobs, McGraw Hill, 11th edition.		

	You can call MBS Direct at 800-325-3252 and give your school name, site or program, and course number or access the Virtual Bookstore at http://bookstore.mbsdirect.net/WEBSTER.HTM.
Grading	Project report (written and oral) 20% Homework 20% Mid term examination 30% Final examination 30% Grading: A = 93-100 A- = 92-90 B+ = 87-89 B = 84-86 B- = 80-83 C = 79-70 F = 69 and below
Activities	We will spend majority of our class time on lecture. Discussion and questions are encouraged. Student will present the final term paper at the end of this course. Written homework is expected to be turned in at the beginning of each class.
Policy Statements: University Policies	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: **Academic Honesty** 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. **Drops and Withdrawals** 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. **Special Services** If you need accommodations for a disability, please let the instructor know at the beginning of the course so that they can be provided.

	Disturbances 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. **Attendance Policy** The University reserves the right to drop students who do not attend class the first week of the term/semester. Students are expected to attend all class sessions of every course. In the case of unavoidable absence, the student must contact the instructor directly. The instructor may give ample warning to the student and then recommend that the student withdraw from the course. 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 from the instructor should withdraw from the class. Instructor contact information is available on all syllabi. Please make sure to contact your instructors directly regarding an absence. Masters degree courses meet for nine weeks.
Course Policies	**Diligence** Students are expected to complete all written and reading assignments prior to the class meeting. Written work should be in APA format and meet university-level quality standards. A set of specific expectations will be distributed and discussed at the first class meeting.
Weekly Schedule	Week 1 (August 22) Introduction to the Field and Operations Strategy and Competitiveness. Home work to be assigned. Week 2 (August 29) Learning Curve and Project Management. Week 3 (September 5) Job Design and Work Measurement and Process Capability and Statistical Quality Control Week 4 (September 12) Mid Term (Cover week 1, 2, and 3 material) Week 5 (September 19) Supply Chain Strategy, Just In Time and

	Lean System Week 6 (September 26) Inventory Control and Material Requirement Planning Week 7 (October 3) Forecasting Week 8 (October 10) Term Paper and Presentation Week 9 (October 17) Final Exam (Cover material from week 5, 6 and 7)
Additional Information	Students must have the assigned course textbook and an approved syllabus in their possession at the first class meeting. All assignments and exams are to be typewritten in APA format. The case project will require a minimum of seven cited academic-grade reference sources. The best way to accomplish this requirement is through the use of the Webster Eden Library PASSPORTS system. You are encouraged to make use of the Webster On-Line Writing Center. All assignments are due at the beginning of class for the week under which they are listed. This includes the assignments due the first week. A grade penalty will be assessed on late submissions. The term project will, and other written submissions may, be submitted to www.turnitin.com and other plagiarism detection services. The *Turnitin* class ID for this term is 1419542, and the password is "albert". The settings are such that you may view your results prior to submitting for grade, and it is strongly suggested that you do so.