GOVERNORS STATE UNIVERSITY College of Business and Public Administration

Course Title: MGMT 340 C. Production Management

Session: January - April 1994. Winter Trimester, Block 1 Thursday: 7:30-10:20 P.M.

Instructor: Dr. Akkanad M. Isaac

Phone: (708) 534-4951

Units: Three Credits

Target Group: Undergraduate Students Required course for the Business Administration Major

Prerequisites: STAT 361

Description:

Discusses applications of management science and analysis to the production function. Emphasizes operations management as it relates to product development, plant location and layout, product cost analysis, work measurement, work simplification, safety management, and quality control.

The course deals with the broad area of operations management (POM) and covers aspects connected with the planning, coordination and implementation of the activities and tasks that lead to the creation of goods and services. Besides introducing students to the tools, techniques and processes relevant to modern manufacturing management, the course teaches methods and techniques with wide application to a variety of services (health care, banking, hotel management, education, transportation and government). Operations function is responsible for the transformation of inputs (3Ms - men, material & machinery) into outputs (products and services) - a value-added concept. Considerable emphasis is placed on total quality management and customer-orientation. The course is designed to help students plearn the interrelationship of operations function to other major business functions (marketing, finance and personnel).

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"Historically, production and operations management (POM) techniques developed in manufacturing organizations. However, as time went on, it became more and more apparent that nonmanufacturing organizations have to contend with problems similar to those encountered in manufacturing settings. Consequently, the scope of POM has been expanded to cover both manufacturing and service organizations. Moreover, many of the techniques can be directly applied to both areas without modification"-William J Stevenson:POM, 4th ed. Irwin, 1993,p. iii Performance Objectives:

- 1. Develop an understanding of the techniques and tools required for the design, planning, operations and control of the operations function.
- 2. Gain an understanding of the relationship of POM to other business functions (marketing, finance and personnel).
- 3. Learn the concepts of productivity and quality and their significance in the context of U.S. competitiveness.
- 4. Develop an appreciation of the role of an operations manager (OM) and the nature of decisions (under certainty, risk and uncertainty) OM has to make.
- 5. Learn the steps in the "forecasting process" and the effective use of forecasting in the context of capacity, inventory and human resources planning.
- 6. Familiarize with the basic approaches for the design of production systems (facilities layout, work measurement, job design, location planning, etc.)
- 7. Study of modern management tools like MRP, JIT, Linear Programming, Learning Curves, Waitng Line Models, etc.
- 8. Learn the significance of project scheduling and management, including the use of PERT and CPM.

Textbook:

Stevenson, William J., Production/Operations Management. 4th ed. Irwin, 1990.

Evaluation:

| Examination 1 | 20% |
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| Examination 2 | 30% |
| Final Examination | 30% |
| Assignments | 10% |
| Class Preparation/ | |
| Attendance | 10% |

<u>Course Policies:</u>

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- 1. The student is required to attend classes regularly and participate in class discussion and problem solving exercises.
- 2. The student shall complete all assignments by specified due dates. Late submissions, even if accepted, will affect grades.
- 3. Grade of "incomplete" will not be given except under extenuating circumstances.
- 4. Make-up exams will be given only when supported by verifiable medical exigencies.

COURSE OUTLINE

| Ses: Num | sion ber | Date | Topic | Reading | Assignment |
|-------------|-------------|------------------------|---|---|---|
| 1 | 1/20 | Intro Produ | oduction to POM activity, Competitiveness | Ch.1&2 | Pr.2&3 (pg.58&59) |
| 2 | 1/27 | Decis Risk Total | sion Making under Certainty, & & Uncertainty . Quality Management (TQM) | Sup.to Ch.2 Ch.3 | Pr.6,7&12 (pg.89-91) |
| 3 | 2/3 | Forec | asting | Ch.4 | Pr.2,5,10 & 12 (pg.177-180) |
| 4 | 2/10 | Desig | n of Products & Services | Ch.5 | Pr.11-13 (pg.224) |
| 5 | 2/17 | Proce Plan EXAMI | ess Selection & Capacity ning NATION 1 | Ch.6 | Pr.2,6&8 (pg.258-259) |
| 6 | 2/24 | Linea | r Programming Applications | Sup.to Ch.6 (only formul need not sol | Pr.3,5&5 (pg.299-300) Late models; Lve |
| 7 | 3/3 | Facil | ity Layout | Ch.7 | |
| 8 | 3/10 | Work Learn | Design ing Cu rv es | Ch.8 Sup.to Ch.8 | Pr.3,5&13 (pg.399-401) |
| 9 | 3/17 | Stati | stical Process Control | Ch.10 | Pr.3 &6 (pg.523-524) |
| 10 | 3/24 | Aggre EXAMI | gate Planning NATION 2 | Ch.11 | Pr.1&9 (pg.578-579) |
| 11 | 3/31 | Inven | tory Management | Ch.12 | Pr.1,3,5&8 (pg.630-631) |
| 12 | 4/7 | Mater Just- | ials Requirement Planning in-Time Systems | Ch.13&14 | Pr.4&11 (pg.682-684) |
| 13 | 4/14 | Sched Proje | uling ct Management | Ch.15&16 | Pr.1&2 (pg.813&814) |
| 14 | 4/21 | Revie | w of Selected POM Topics | | |
| 15 | 4/28 | FINAL | EXAMINATION | | |

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