Douglas College

EFFECTIVE: SEPTEMBER 2002

CURRICULUM GUIDELINES

| A: | Division: | Instruction | Date: | November 2001 | | |
|----|---|---|---|--|--|--|
| В: | Department/ Program Area: | Commerce & Business Admin. Business Management | New Course | Revision X | | |
| | | | If Revision, Section(s) Revised: | Н | | |
| | | | Date Last Revised: | 2000-06: P 1998-01: H 1996-12: new | | |
| C: | BUSN 3 | 80 D: | Operations Management | E: 3 | | |
| | Subject & Course No. | | Descriptive Title | Semester Credits | | |
| F: | Calendar Description: This course will provide students with a generalized approach to designing, operating, and improving the activities of service and manufacturing businesses. Students will compare theory with actual operating businesses, and develop solutions to real-world problems. Topics include: flowcharting, processes, quality, forecasting, capacity planning, layout and job design, inventory systems, scheduling, logistics, and process reengineering. | | | | | |
| G: | Allocation of Contact Hours to Types of Instruction/Learning Settings Primary Methods of Instructional Delivery and/or Learning Settings: | | H: Course Prerequisites: BUSN 210 and BUSN 330 and CISY 110 and effective September 2002, English 12 with a grade of "C" or better or equivalent. | | | |
| | Lectures and Seminars | | L Course Corequisites: | | | |
| | Number of Contact H for each descriptor) | act Hours: (per week / semester cor) | IIII | | | |
| | Lecture: 3 Hrs. Seminar: 1 Hr. Total: 4 Hrs. Number of Weeks per Semester: | 3 Hrs. | J. Course for which this Course is | a Prerequisite: | | |
| | | 1 Hr. 4 Hrs. | nil | | | |
| | | ss per Semester: | K. Maximum Class Size: | | | |
| | 15 Weeks X 4 Hrs per week = 60 Hrs. | | 35 | | | |
| L: | PLEASE INDICATE: | | | | | |
| | Non-Credit | | | | | |
| | College Credit Non-Transfer | | | | | |
| | X College Cree | dit Transfer: Request | ed Granted | | | |
| | SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bccat.bc.ca) | | | | | |

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M: Course Objectives/Learning Outcomes

At the end of the course, the successful student should be able to:

- 1. describe and contrast service and manufacturing operations;
- 2. describe the information and materials flow in a business;
- 3. conduct a simple forecast and estimate capacity for a small business;
- 4. propose a facility location, design a layout, and design jobs for a small business;
- 5. plan and manage a simple project using basic Project Management tools;
- 6. describe and contrast several inventory systems;
- 7. describe the Logistics concept;
- 8. propose a materials management and purchasing system for a small business;
- 9. analyze the operations of a small business and propose improvements;
- 10. use a computer to solve problems.

N: Course Content

- Information and Material Flow
 - C using flowcharts to describe and analyze the flow of information, people, and materials within a business.
- 2. Product Design and Process Selection
 - c nature of service and manufacturing, design of the system, process selection.
- 3. Total Quality Management
 - C cost of quality, quality specification, W.E. Deming, continuous improvement, statistical quality control.
- 4. Forecasting and Capacity Planning
 - simple forecasting methods, time series analysis, volume versus capacity, economies of scale, experience curve.
- 5. Facility Location and Layout
 - issues, factor-rating, center-of-gravity, process / product / group technology / fixed position / retail / office layouts.
- 6. Job Design, Work Measurement, Learning Curves, Just-In-Time Systems
 - behavioural and physical considerations, methods, measurement, incentives, plotting learning curves, command-driven systems versus Just-In-Time.
- 7. Project Management
 - defining a project, organization, critical path method, Gantt charts.
- 8. Aggregate Planning and Inventory Systems
 - production planning, methods, independent versus dependent demand, ABC, Master Production Schedule, MRP, MRP 2 and ERP, Fixed-order-Quantity, Order Quantity, Lot-sizing.
- 9. Scheduling
 - by job shop scheduling, priority, shop-floor control, personnel scheduling.
- 10. Logistics, Materials Management and Purchasing
 - C integrated management, purchasing and sourcing, materials handling.
- 11. Business Process Reengineering
 - C improving a business.
- 12. Problem-solving with Computers
 - C use of spreadsheets and other software.

O: Methods of Instruction

Lecture and discussion, computer seminars and plant tours.

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| P: | Textbooks and Materials to be Purchased by Students: | | | | | | |
|-------------------------------------|---|-----|--|--|--|--|--|
| | W.J. Stevenson, Production/Operations Management, Latest Edition. Irwin McGraw-Hill Publishers. | | | | | | |
| | W.S. Stevenson, <u>Froduction/Operations Management</u> , Latest Edition. If will MeGraw-find Fublishers. | | | | | | |
| | | | | | | | |
| Q: | Means of Assessment | | | | | | |
| | Assigned Work: | | | | | | |
| | Assignments (6) | 12% | | | | | |
| | Term Projects (3) | 30% | | | | | |
| | Computing Test | 03% | | | | | |
| | Class Participation | 05 | % | | | | |
| | Midterm Examination | 20 | 9% | | | | |
| | Final Examination | 30 | 1% | | | | |
| | | 10 | 00% | | | | |
| | | = | | | | | |
| R: | Prior Learning Assessment and Recognition: specify whether course is open for PLAR | | | | | | |
| | No. | | | | | | |
| | 110. | | | | | | |
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| Course Designer(s): Dave Waddington | | | Education Council/Curriculum Committee Representative: | | | | |
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| | | | | | | | |
| Dean/Director: Jim Sator | | | Registrar: Trish Angus | | | | |

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