



The University of Southern Queensland

## Course Specification

### Description: Production and Operations Management

| Subject | Cat-Nbr | Class | Term    | Mode | Units | Campus |
|---------|---------|-------|---------|------|-------|--------|
| MGT     | 3101    | 20165 | 1, 2003 | EXT  | 1.00  | TWMBA  |

|                        |        |
|------------------------|--------|
| <b>Academic Group:</b> | FOBUS  |
| <b>Academic Org:</b>   | FOB002 |
| <b>HECS Band:</b>      | 2      |
| <b>ASCED Code:</b>     | 030705 |

### STAFFING

Examiner: Latif Al-Hakim

Moderator: Tom Rafferty

### PRE-REQUISITES

Pre-requisite: MGT 2103

### SYNOPSIS

This course relates the operations function to other functions of the firm. The student will be able to put the management of operations into perspective for the organisation and will apply the principles of efficient location, layout and materials handling design in the workplace; apply method study and work measurement principles to business; design effective planning, scheduling and control systems for various types of manufacturing and service-oriented business; be aware of the modern and state-of-the-art concepts and technologies used in industry. Computers will be utilised where possible.

### OBJECTIVES

Completion of this course will enable students to:

- Understand the concept of an 'Operating System' in general, its structure, processes and objectives; and identify different types of operating systems and their structures and processes.
- Understand the principles of Method Study and Work Measurement and apply their various techniques to different applications.
- Understand the principles of Facility Layout and Location and apply the quantitative and heuristic techniques of Facility Layout and Facility Locations to different applications.
- Fully understand the philosophy of Just-in-Time (JIT) and its application to business.
- Fully understand the principles and applications of quantitative and qualitative techniques of scheduling in allocating resources and managing capacity.

- Understand and be aware of the modern and state-of-the-art concepts and technologies used in industry.

## TOPICS

| Description                                                                                                                          | Weighting (%) |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1. Operations management and classification of operating systems.                                                                    | 10.00         |
| 2. Work study: Method study techniques and applications; Work measurement techniques and applications.                               | 15.00         |
| 3. Location and arrangement of facilities; Facility Layout Techniques and Application; Facility Location Techniques and Application. | 35.00         |
| 4. The Just-In-Time philosophy and its applications.                                                                                 | 15.00         |
| 5. Resource allocation and scheduling.                                                                                               | 15.00         |
| 6. Application of computers in production and operations management.                                                                 | 10.00         |

### **TEXT and MATERIALS required to be PURCHASED or ACCESSED:**

Books can be ordered by fax or telephone. For costs and further details use the 'Book Search' facility at <http://bookshop.usq.edu.au> by entering the author or title of the text.

Heizer, J & Render, B 2001, *Operations management*, 6th edition, Prentice Hall, Upper Saddle River, New Jersey.

Summers, J & Smith, B 2003, *Communication skills handbook: How to succeed in written and oral communication*, 5th edition, John Wiley & Sons, Brisbane.

(revised edition)

### **REFERENCE MATERIALS**

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

Nooriafshar, M 1994, *Heuristics: Expert systems and scheduling*, Toowoomba, Queensland (Available from the USQ Bookshop).

### **STUDENT WORKLOAD REQUIREMENTS**

| ACTIVITY       | HOURS |
|----------------|-------|
| Assessment     | 15    |
| Directed Study | 74    |
| Private Study  | 76    |

## ASSESSMENT DETAILS

| Description             | Marks Out of | Wtg(%) | Required | Due Date              |
|-------------------------|--------------|--------|----------|-----------------------|
| ASSIGNMENT (CASE STUDY) | 50.00        | 50.00  | Y        | 07 May 2003           |
| 3 HOUR EXAMINATION      | 100.00       | 50.00  | Y        | END S1<br>(see note ) |

### NOTES:

The examination is scheduled to be held in the end-of-semester examination period. Students will be advised of the official examination date after the timetable has been finalised.

## IMPORTANT ASSESSMENT INFORMATION

- Attendance requirements:**  
If you are an International student in Australia it is a requirement of your student visa that you attend all classes at your campus. For all other students, there are no attendance requirements for this course. However, it is the students' responsibility to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.
- Requirements for students to complete each assessment item satisfactorily:**  
To complete each of the assessment items satisfactorily, students must obtain at least 50% of the marks available for each assessment item.
- Penalties for late submission of required work:**  
If students submit assignments after the due date without prior approval then a penalty of 10% of the total marks available for the assignment will apply for each working day late.
- Requirements for student to be awarded a passing grade in the course:**  
To be assured of receiving a passing grade a student must submit all of the summative assessment items and achieve at least 50% of the available weighted marks for those items.
- Method used to combine assessment results to attain final grade:**  
The final grades for students will be assigned on the basis of the weighted aggregate of the marks (or grades) obtained for each of the summative assessment items in the course.
- Examination information:**  
This is a restricted examination. Candidates are allowed access to specific materials during the examination. The only materials that candidates may use in the restricted examination for this course are: writing materials (non-electronic and free from material which could give the student an unfair advantage in the examination); calculators which cannot hold textual information (students must indicate on their examination paper the make and model of any calculator(s) they use during the examination); formula sheets; translation dictionary.
- Examination period when Deferred/Supplementary examinations will be held:**

Any Deferred or Supplementary examinations for this course will be held during the next examination period.

8 University Regulations:

Students should read USQ Regulations 5.1 Definitions, 5.6 Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL: <http://www.usq.edu.au/SECARIAT/calendar/Part5/> or in the printed version of the current USQ Handbook. Students should also read The Guide to Policies and Procedures of the Faculty which can be found at the URL: <http://www.usq.edu.au/handbook/2003/business/polproc/index.htm> or in the printed version of the current USQ Handbook.

### **ASSESSMENT NOTES**

- 1 Assignments: (i) The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner. (ii) Students must retain a copy of each item submitted for assessment. This must be produced within five days if required by the Examiner. (iii) The Examiner may grant an extension of the due date of an assignment in extenuating circumstances. Students may apply for an extension through the DEC before the due date or by including an application with the submitted assignment after the due date. Such applications should be in writing and include supporting documentary evidence. The authority for granting extensions rests with the relevant Examiner.
- 2 Course Weightings: Course weightings of topics should not be interpreted as applying to the number of marks allocated to questions testing those topics in an examination paper.
- 3 Deferred Work: Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment or to sit for an examination at the scheduled time may apply to defer an assessment in a course. Such a request must be accompanied by appropriate supporting documentation. One of the following temporary grades may be awarded: IDS (Incomplete - Deferred Examination); IDM (Incomplete Deferred Make-up); IDB (Incomplete - Both Deferred Examination and Deferred Make-up).