### Description: Production and Operations Management

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cat-nbr</th>
<th>Class</th>
<th>Term</th>
<th>Mode</th>
<th>Units</th>
<th>Campus</th>
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<tbody>
<tr>
<td>MGT</td>
<td>3101</td>
<td>62125</td>
<td>1, 2007</td>
<td>EXT</td>
<td>1.00</td>
<td>Toowoomba</td>
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**Academic group:** FOBUS  
**Academic org:** FOB002  
**Student contribution band:** 2  
**ASCED code:** 030705

#### STAFFING

Examiner: Mehryar Nooriafshar  
Moderator: Dom Pensiero

#### REQUISITES

Pre-requisite: MGT2103

#### OTHER REQUISITES

Students are required to have access to a personal computer, e-mail capabilities and Internet access to USQConnect. Current details of computer requirements can be found at [http://www.usq.edu.au/handbook/current/busgeninfo.html](http://www.usq.edu.au/handbook/current/busgeninfo.html)

#### 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

The course objectives define the student learning outcomes for a course. The assessment item/s that may be used to assess student achievement of an objective is/are shown in parentheses after each objective. On successful completion of this course, students should be able to:

1. 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 (Assignment 1, Assignment 2, Examination)
2. understand the principles of method study and work measurement and apply their various techniques to different applications (Assignment 1, Assignment 2, Examination)
3. understand the principles of facility layout and location and apply the quantitative and heuristic techniques of facility layout and facility locations to different applications (Assignment 1, Assignment 2, Examination)
4. fully understand the philosophy of just-in-time (JIT) and its application to business (Assignment 1, Assignment 2, Examination)
5. fully understand the principles and applications of quantitative and qualitative techniques of scheduling in allocating resources and managing capacity (Assignment 1, Assignment 2, Examination)
6. understand and be aware of the modern and state-of-the-art concepts and technologies used in industry (Assignment 1, Assignment 2, Examination).

**TOPICS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Operations management and classification of operating systems</td>
<td>10.00</td>
</tr>
<tr>
<td>2. Strategic decisions for operations</td>
<td>15.00</td>
</tr>
<tr>
<td>3. Location and arrangement of facilities; facility layout techniques and application; facility location techniques and application, job design and productivity measurement and management</td>
<td>35.00</td>
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<tr>
<td>4. The role and control of inventories in operations</td>
<td>15.00</td>
</tr>
<tr>
<td>5. Resource allocation and scheduling</td>
<td>15.00</td>
</tr>
<tr>
<td>6. The Just-In-Time philosophy and its applications</td>
<td>10.00</td>
</tr>
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</table>

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

All textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at http://bookshop.usq.edu.au click 'Semester', then enter your 'Course Code' (no spaces).


(Flexi version)


**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.

STUDENT WORKLOAD REQUIREMENTS

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
</tr>
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<tbody>
<tr>
<td>Assessment</td>
<td>15.00</td>
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<tr>
<td>Directed Study</td>
<td>74.00</td>
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<tr>
<td>Private Study</td>
<td>76.00</td>
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ASSESSMENT DETAILS

<table>
<thead>
<tr>
<th>Description</th>
<th>Marks out of</th>
<th>Wtg(%)</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSIGNMENT 1</td>
<td>15.00</td>
<td>15.00</td>
<td>02 Apr 2007</td>
</tr>
<tr>
<td>ASSIGNMENT 2</td>
<td>35.00</td>
<td>35.00</td>
<td>25 May 2007</td>
</tr>
<tr>
<td>3 HOUR EXAMINATION</td>
<td>50.00</td>
<td>50.00</td>
<td>END S1</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>(see note 1)</td>
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</tbody>
</table>

NOTES

1. 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

1. Attendance requirements:
   If you are an international student in Australia, you are advised to 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.

2. Requirements for students to complete each assessment item satisfactorily:
   To satisfactorily complete an individual assessment item a student must achieve at least 50% of the marks. (Depending upon the requirements in Statement 4 below, students may not have to satisfactorily complete each assessment item to receive a passing grade in this course.)

3. 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.

4. 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 assessment items, achieve at least 50% for the examination and at least 50% of the total weighted marks available for the course.

5. Method used to combine assessment results to attain final grade:
   The final grades for students will be assigned on the basis of the aggregate of the weighted marks obtained for each of the summative assessment items in the course.

6. 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.

7 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/corporateservices/calendar/part5.htm. Students should also read
the Faculty of Business Guide to Policies and Procedures of the Faculty which can be

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 24 hours if required by the
examiner. (iii) In accordance with university policy, the examiner may grant an extension
of the due date of an assignment in extenuating circumstances.

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).

OTHER REQUIREMENTS

1 Learning resources: Prescribed texts and materials (see above); recommended reference
materials (see above); printed Introductory Book, Book/s of Selected Readings, and Study
Book/s; and course Website accessible via USQConnect.