# Table of Contents

### FIT5157 Services science - Semester 1, 2012

- **Mode of Delivery** ............................................................................................................................ 1
- **Contact Hours** ................................................................................................................................. 1
- **Workload** .......................................................................................................................................... 1
- **Unit Relationships** ............................................................................................................................ 1
- **Prerequisites** ...................................................................................................................................... 1
- **Chief Examiner** ............................................................................................................................... 1
- **Campus Lecturer** ............................................................................................................................ 1
- **Caulfield** ........................................................................................................................................ 1

### Academic Overview

- **Outcomes** ......................................................................................................................................... 2
- **Graduate Attributes** ......................................................................................................................... 2
- **Assessment Summary** ...................................................................................................................... 2
- **Teaching Approach** ......................................................................................................................... 2
- **Feedback** .......................................................................................................................................... 3
  - Our feedback to You ......................................................................................................................... 3
  - Your feedback to Us .......................................................................................................................... 3
- **Previous Student Evaluations of this unit** ....................................................................................... 3
- **Required Resources** ........................................................................................................................ 3
- **Recommended text(s)** .................................................................................................................. 4

### Unit Schedule ..................................................................................................................................... 5

### Assessment Requirements

- **Assessment Policy** ........................................................................................................................... 6
- **Assessment Tasks** ............................................................................................................................ 6
  - Participation ....................................................................................................................................... 6
- **Examinations** .................................................................................................................................... 7
  - Examination 1 ................................................................................................................................... 7
- **Assignment submission** ................................................................................................................ 7
- **Online submission** .......................................................................................................................... 7
- **Extensions and penalties** ............................................................................................................... 7
- **Returning assignments** ................................................................................................................. 8
- **Referencing requirements** ............................................................................................................. 8

### Other Information

- **Policies** ............................................................................................................................................ 9
- **Student services** ............................................................................................................................. 9
- **Other** .............................................................................................................................................. 10
FIT5157 Services science - Semester 1, 2012

Services science draws from the social sciences, business, and engineering technology and applies scientific methods to the design and management of services. The use of IT is a crucial and essential part of services science and an understanding this area is of major importance to IT students. In the current business environment IT techniques and skills have become essential to successfully manage operations, services and projects. The focus of this unit is to provide students with sufficient knowledge of modern services science and business operations, concepts, and modern software, to work effectively in service operations roles in industry and government.

Mode of Delivery

Caulfield (Evening)

Contact Hours

2 hrs lectures/wk, 2 hrs laboratories/wk

Workload

Students will be expected to spend a total of 12 hours per week during semester on this unit. This includes:

- two-hour lecture
- two-hour tutorial
- a minimum of 2-3 hours of personal study per one hour of contact time in order to satisfy the reading and assignment expectations.
- You will need to allocate up to 5 hours per week in some weeks, for use of a computer, including time for newsgroups/discussion groups.

Unit Relationships

Prerequisites

Students are expected to have a background in IT, Engineering or Science.

Chief Examiner

Dr Rodney Martin

Campus Lecturer

Caulfield

Lecturer: Dr Suttisak Jantavongso
Academic Overview

Outcomes

At the completion of this unit students will:

• understand how service businesses operate and evolve;
• understand the management principles, concepts and standards that guide service operations and project management practices;
• be able to specify the organisational capabilities to support service operations management;
• have the skills to design and develop an appropriate management structure for service operations and the management of service projects.

Graduate Attributes

Monash prepares its graduates to be:

1. responsible and effective global citizens who:
   a. engage in an internationalised world
   b. exhibit cross-cultural competence
   c. demonstrate ethical values

critical and creative scholars who:

   a. produce innovative solutions to problems
   b. apply research skills to a range of challenges
   c. communicate perceptively and effectively

Assessment Summary

Examination (2 hours): 50%; In-semester assessment: 50%

<table>
<thead>
<tr>
<th>Assessment Task</th>
<th>Value</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Study</td>
<td>20%</td>
<td>27 April 2012</td>
</tr>
<tr>
<td>Numerical Questions</td>
<td>20% total (5% per topic)</td>
<td>4 May 2012 (Mathematical Optimization), 11 May 2012 (Inventory Control), 18 May 2012 (Project Management), 25 May 2012 (Accounting)</td>
</tr>
<tr>
<td>Assignment</td>
<td>10%</td>
<td>Assessed during each tutorial</td>
</tr>
<tr>
<td>Examination 1</td>
<td>50%</td>
<td>To be advised</td>
</tr>
</tbody>
</table>

Teaching Approach

Lecture and tutorials or problem classes

This teaching and learning approach provides facilitated learning, practical exploration and peer learning.
Lectures will present the concepts and include examples of each concept.

Tutorials will concentrate on software examples of the concepts taught in lectures and where appropriate, particular topics will be taught in tutorials rather than in lectures.

Feedback

Our feedback to You

Types of feedback you can expect to receive in this unit are:

- Informal feedback on progress in labs/tutes
- Graded assignments with comments
- Graded assignments without comments
- Solutions to tutes, labs and assignments

Your feedback to Us

Monash is committed to excellence in education and regularly seeks feedback from students, employers and staff. One of the key formal ways students have to provide feedback is through SETU, Student Evaluation of Teacher and Unit. The University’s student evaluation policy requires that every unit is evaluated each year. Students are strongly encouraged to complete the surveys. The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

For more information on Monash’s educational strategy, and on student evaluations, see:

Previous Student Evaluations of this unit

Previous feedback has highlighted the following strength(s) in this unit:
Learning objectives are consistently met, intellectually stimulating and the learning resources support the student’s studies.
Student feedback has shown that there is a high level of satisfaction and that the feedback provided was useful.

The teaching materials have been revised based on student feedback.

If you wish to view how previous students rated this unit, please go to https://emuapps.monash.edu.au/unitevaluations/index.jsp

Required Resources

Please check with your lecturer before purchasing any Required Resources. Prescribed texts are available for you to borrow in the library, and prescribed software is available in student labs.

IBM ILOG CPLEX.
Recommended text(s)

## Unit Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Activities</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>No formal assessment or activities are undertaken in week 0</td>
</tr>
<tr>
<td>1</td>
<td>Introduction - Role and Nature of Services</td>
<td>Tutorial Participation assessed during each tutorial</td>
</tr>
<tr>
<td>2</td>
<td>Service Strategy</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Service Blueprint and Process Design</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Service Quality &amp; Benchmarking</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Mathematical Optimization (1)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Service Facility Location - Marketing</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Mathematical Optimization (2)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Managing Service Inventory</td>
<td>Submit Case Study Assignment 1 (Group) due 27 April 2012</td>
</tr>
<tr>
<td>9</td>
<td>Managing Service Projects</td>
<td>Submit Assignment 2a: Mathematical Optimization due 4 May 2012</td>
</tr>
<tr>
<td>10</td>
<td>Service Supply and Accounting</td>
<td>Submit Assignment 2b: Inventory Control due 11 May 2012</td>
</tr>
<tr>
<td>11</td>
<td>Technology in Service</td>
<td>Submit Assignment 2c: Project Management due 18 May 2012</td>
</tr>
<tr>
<td>12</td>
<td>Globalisation of Services &amp; Legal Issues</td>
<td>Submit Assignment 2d: Accounting due 25 May 2012</td>
</tr>
<tr>
<td>SWOT</td>
<td>VAC</td>
<td>No formal assessment is undertaken SWOT VAC</td>
</tr>
</tbody>
</table>

*Unit Schedule details will be maintained and communicated to you via your MUSO (Blackboard or Moodle) learning system.*
Assessment Requirements

Assessment Policy

Faculty Policy - Unit Assessment Hurdles

Assessment Tasks

Participation

Tutorial Participation:
Students are expected to complete the tasks assigned during tutorials and actively participate in discussions.

• Assessment task 1

Title:
Case Study

Description:
A case study of a service business. Groups of 3 students. The case study will involve planning out the operations of a service business, estimating financial aspects, and preparing a project plan and marketing plan to build and start the business. Variations on this description are invited.

Weighting:
20%

Criteria for assessment:
The criteria for assessment will be a subjective assessment of your case study.

The members listed for the group will receive equal marks.
The tutor will monitor individual contributions to the group when allocating marks to members of the group

Due date:
27 April 2012

• Assessment task 2

Title:
Numerical Questions Assignment

Description:
A small exercise on each of the numerical topics: (1) Mathematical Optimization, (2) Inventory Control, (3) Project Management, (4) Accounting

Weighting:
20% total (5% per topic)

Criteria for assessment:
Assessment will be based on about 50% correct answers and 50% on the method and logical approach to each question.

Due date:
4 May 2012 (Mathematical Optimization), 11 May 2012 (Inventory Control), 18 May 2012 (Project Management), 25 May 2012 (Accounting)
Assessment Requirements

- **Assessment task 3**

  **Title:**
  Tutorial Participation

  **Description:**
  Students are expected to complete the tasks assigned during tutorials and actively participate in discussion.

  **Weighting:**
  10%

  **Criteria for assessment:**
  Tutor's observation.

  **Due date:**
  Assessed during each tutorial

**Examinations**

- **Examination 1**

  **Weighting:**
  50%

  **Length:**
  2 hours

  **Type (open/closed book):**
  Closed book

  **Electronic devices allowed in the exam:**
  None

**Assignment submission**

It is a University requirement (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-procedures.html) for students to submit an assignment coversheet for each assessment item. Faculty Assignment coversheets can be found at http://www.infotech.monash.edu.au/resources/student/forms/. Please check with your Lecturer on the submission method for your assignment coversheet (e.g. attach a file to the online assignment submission, hand-in a hard copy, or use an online quiz).

**Online submission**

If Electronic Submission has been approved for your unit, please submit your work via the VLE site for this unit, which you can access via links in the my.monash portal.

**Extensions and penalties**

Submission must be made by the due date otherwise penalties will be enforced.

Assessment Requirements

Returning assignments

Students can expect assignments to be returned within two weeks of the submission date or after receipt, whichever is later.

Referencing requirements

Referencing internet and electronic sources, Harvard reference style:

IEEE referencing:
http://www.lib.monash.edu/tutorials/citing/ieee.html
Other Information

Policies

Monash has educational policies, procedures and guidelines, which are designed to ensure that staff and students are aware of the University’s academic standards, and to provide advice on how they might uphold them. You can find Monash's Education Policies at: http://policy.monash.edu.au/policy-bank/academic/education/index.html

Key educational policies include:

- Plagiarism (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-policy.html)
- Special Consideration (http://www.policy.monash.edu/policy-bank/academic/education/assessment/special-consideration-policy.html)
- Grading Scale (http://www.policy.monash.edu/policy-bank/academic/education/assessment/grading-scale-policy.html)
- Discipline: Student Policy (http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-discipline-policy.html)
- Academic Calendar and Semesters (http://www.monash.edu.au/students/key-dates/)
- Orientation and Transition (http://www.infotech.monash.edu.au/resources/student/orientation/)
- and
- Codes of Practice for Teaching and Learning (http://www.policy.monash.edu/policy-bank/academic/education/conduct/suppdocs/code-of-practice-tea)

Student services

The University provides many different kinds of support services for you. Contact your tutor if you need advice and see the range of services available at www.monash.edu.au/students. For Sunway see http://www.monash.edu.my/Student-services, and for South Africa see http://www.monash.ac.za/current/

The Monash University Library provides a range of services and resources that enable you to save time and be more effective in your learning and research. Go to http://www.lib.monash.edu.au or the library tab in my.monash portal for more information. At Sunway, visit the Library and Learning Commons at http://www.lib.monash.edu.my/. At South Africa visit http://www.lib.monash.ac.za/.

Academic support services may be available for students who have a disability or medical condition. Registration with the Disability Liaison Unit is required. Further information is available as follows:

- Website: http://monash.edu/equity-diversity/disability/index.html
- Email: dlu@monash.edu
- Drop In: Equity and Diversity Centre, Level 1 Gallery Building (Building 55), Monash University, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Sunway Campus
- Telephone: 03 9905 5704, or contact the Student Advisor, Student Community Services at 03 55146018 at Sunway
Lecture notes, tutorial exercises and worked examples will be available on Blackboard.