FIT4005
IT research methods

Unit Guide

Semester 1, 2013

The information contained in this unit guide is correct at time of publication. The University has the right to change any of the elements contained in this document at any time.

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FIT4005 IT research methods - Semester 1, 2013

This unit introduces students to a variety of issues, concepts, methods and techniques associated with IT research. Skills developed and knowledge acquired from this unit will prepare students to conduct their own research, as well as to be knowledgeable consumers of others research.

Mode of Delivery

- Clayton (Day)
- South Africa (Day)

Contact Hours

2 hrs lectures/wk, 2 hrs laboratories/wk

Workload requirements

The workload commitment for on campus students for this unit is 12 hours per week. This includes:

- 2 hour lecture
- 2 hour workshop/tutorial
- and a minimum of 2-3 hours of personal study per one hour of contact time in order to satisfy the reading and assignment expectations.

Unit Relationships

Prohibitions

ITW4001, IMS5036, IMS4036, BUS5000, CSE4910, GCO4010, CSE4650

Prerequisites

Students must be enrolled in an FIT Honours degree, Masters degree or Research degree. Foundation knowledge in computer science, business information systems or information technology and systems fundamentals is assumed.

Chief Examiner

Professor David Green

Campus Lecturer

Clayton

David Green

Consultation hours: After lecture or by appointment David.green@monash.edu
Reza Haffari
Consultation hours: TBA

South Africa
Trish Alexander
Consultation hours: TBA
Academic Overview

Learning Outcomes

At the completion of this unit students will have -A knowledge and understanding of:

- basic research concepts, major philosophical foundations (theory, framework, paradigm, scientific method and methodologies in general);
- research methods and techniques relevant to IT research;
- key issues in IT research;
- methods of argument analysis;
- how to design research;
- how to evaluate research and peer review procedures;
- the process of reviewing research literature on a specific topic;
- ethical research practices.

Developed attitudes that enable them to:

- have confidence in themselves as informed consumers of published research, able to critically evaluate the relative quality and merits of reported research findings;
- have confidence in their ability to undertake independent research and to complete a thesis;
- have an awareness of the ethical issues that arise in the design and implementation of research.

Developed the skills to:

- match research tools and methods with research needs;
- write effective research papers;
- evaluate research ideas and designs;
- collect and analyse relevant data.

Demonstrated the communication skills necessary to:

- communicate research ideas effectively in oral and written form;
- assess research ideas and designs.
# Unit Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Activities</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No formal assessment or activities are undertaken in week 0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>The Nature of Research / workshop on literature search</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Setting the context. Literature survey and analysis</td>
<td>Assignment 2: Portfolio of practical work from Week 2 to Week 11</td>
</tr>
<tr>
<td>3</td>
<td>Posing research questions - major methods in IT research / Workshop on formulating research questions in Information Technology</td>
<td></td>
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<tr>
<td>4</td>
<td>Research Design / Workshop: Writing a research proposal</td>
<td></td>
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<tr>
<td>5</td>
<td>Evidence - Surveys</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Evidence - Introduction to Data Analysis</td>
<td>Assignment 1 due by Friday 5pm, Melbourne time</td>
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<tr>
<td>7</td>
<td>Evidence - Experiments</td>
<td></td>
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<tr>
<td>8</td>
<td>Interpretation - Quantitative Data Analysis</td>
<td></td>
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<tr>
<td>9</td>
<td>Interpretation - Correlation and Regression</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Interpretation - Qualitative Data</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Issues in research / workshop on oral presentations</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Communication of Research</td>
<td>Assignment 3 - presentations; report due Friday 5pm - Week 14</td>
</tr>
<tr>
<td></td>
<td>SWOT VAC</td>
<td>No formal assessment is undertaken in SWOT VAC.</td>
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</table>

*Unit Schedule details will be maintained and communicated to you via your learning system.

## Assessment Summary

In-semester assessment (assignments and class tests): 100%

<table>
<thead>
<tr>
<th>Assessment Task</th>
<th>Value</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research project proposal and literature mini review</td>
<td>30%</td>
<td>Week 6, Friday, 5pm</td>
</tr>
<tr>
<td>Assignment 2: Portfolio of practical work</td>
<td>30%</td>
<td>Complete all by week 11, Friday 5pm</td>
</tr>
<tr>
<td>Assignment 3: Mini-research</td>
<td>40%</td>
<td>Week 14, Friday 5pm</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.
Assessment Requirements

Assessment Policy

Faculty Policy - Unit Assessment Hurdles

Academic Integrity - Please see the Demystifying Citing and Referencing tutorial at http://lib.monash.edu/tutorials/citing/

Assessment Tasks

Participation

Full participation in the tutorials is expected and will be formally assessed via Assignment 2, in which students submit a portfolio of their practical work.

Working in groups is encouraged, both during practical classes, and in the project assignment. The aim is both to facilitate learning and to expose students to team research, which is a common feature of most modern research. When working in groups, each member is expected to participate fully and contribute to the work of the group. As part of the assessment in each assignment, each student will be required to name and acknowledge their collaborators, to submit a statement about group management and contribution.

• Assessment task 1

  Title: Research project proposal and literature mini review
  Description: In this assignment the students will provide a critical analysis of the research objectives and methods for an information technology research based on published material.
  Weighting: 30%
  Criteria for assessment: The assignment will be assessed by:
  ♦ clarity and logic of the structure,
  ♦ level of critical analysis,
  ♦ referencing,
  ♦ standard of English expression,
  ♦ and evidence of independent thought and ideas.
  Due date: Week 6, Friday, 5pm

• Assessment task 2

  Title: Assignment 2: Portfolio of practical work
  Description: In this assignment the students will have to perform a number of detailed exercises with data on statistical and qualitative analyses.
  Weighting:
Learning resources

Reading list


Lists of additional readings will be provided for each lecture. See Moodle for further details.

Monash Library Unit Reading List
http://readinglists.lib.monash.edu/index.html
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
- Solutions to tutes, labs and assignments
- Other: peer-assessment for tutorial contribution

Extensions and penalties

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

You must negotiate any extensions formally with your campus unit leader via the in-semester special consideration process:

Returning assignments

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

Referencing requirements

All assignments should use APA style for referencing.

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 MOODLE site for this unit, which you can access via links in the my.monash portal. Standard assignment cover sheet has to be signed and submitted with each written assignment to confirm the proper acknowledgement of the resources used in the text.

Required Resources

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

Students may be required to use Web browsers, text processing, spread sheets and slide presentation packages to complete their assignments.
Assessment Requirements

These are available in University computer labs.
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: www.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/dates/
- Orientation and Transition; http://intranet.monash.edu.au/infotech/resources/students/orientation/

Graduate Attributes Policy

http://www.policy.monash.edu/policy-bank/academic/education/management/monash-graduate-attributes-policy.html

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 http://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/.

Monash University Library

The Monash University Library provides a range of services, resources and programs that enable you to save time and be more effective in your learning and research. Go to 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/.
Disability Liaison Unit

Students who have a disability or medical condition are welcome to contact the Disability Liaison Unit to discuss academic support services. Disability Liaison Officers (DLOs) visit all Victorian campuses on a regular basis.

Website: http://www.monash.edu/equity-diversity/disability/index.html
Telephone: 03 9905 5704 to book an appointment with a DLO; or contact the Student Advisor, Student Community Services at 03 55146018 at Sunway
Email: dlu@monash.edu
Drop In: Equity and Diversity Centre, Level 1, Building 55, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Sunway Campus

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 the Student Evaluation of Teaching and Units (SETU) survey. 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, see:

www.monash.edu.au/about/monash-directions and on student evaluations, see:
www.policy.monash.edu/policy-bank/academic/education/quality/student-evaluation-policy.html

Previous Student Evaluations of this Unit

The sequence and arrangement of topics has been changed from last semester. The aim is to more clearly identify the major research strategies. The objectives and assessment strategy of the unit have not been changed.

If you wish to view how previous students rated this unit, please go to