

FIT4005 IT research methods

Unit Guide

Semester 1, 2012

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.

Last updated: 24 Feb 2012

Table of Contents

| FIT4005 IT research methods - Semester 1, 2012 | 1 |
|--|----|
| Mode of Delivery | |
| Contact Hours | |
| Workload | |
| Unit Relationships | 1 |
| Prohibitions | 1 |
| Prereguisites. | 1 |
| Chief Examiner. | 1 |
| Campus Lecturer | 1 |
| Clayton | 1 |
| South Africa. | 2 |
| Academic Overview | |
| Outcomes | |
| Graduate Attributes | |
| Assessment Summary | |
| Teaching Approach | |
| Feedback | |
| Our feedback to You | 4 |
| Your feedback to Us | |
| Previous Student Evaluations of this unit. | 4 |
| Required Resources | 5 |
| Unit Schedule | 6 |
| | 0 |
| Assessment Requirements | 7 |
| Assessment Policy | 7 |
| Assessment Tasks | 7 |
| Participation | 7 |
| Examinations | 8 |
| Assignment submission | |
| Online submission | 8 |
| Extensions and penalties | |
| Returning assignments | 8 |
| Referencing requirements | 9 |
| Other Information | |
| Policies | |
| Student services | 10 |
| <u>Other</u> | 11 |

FIT4005 IT research methods - Semester 1, 2012

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

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 Geoff Webb

Campus Lecturer

Clayton

Geoff Webb

South Africa

Jacques Steyn

Academic Overview

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.

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

Academic Overview

Assessment Summary

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

| Assessment Task | Value | Due Date |
|-----------------|-------|------------------|
| Assignment 1 | 30% | 16 April 2012 |
| Assignment 2 | 30% | 18 May 2012 |
| Assignment 3 | 40% | 4 June 2012 |

Teaching Approach

Lecture and tutorials or problem classes

This teaching and learning approach provides facilitated learning, practical exploration and peer learning. **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
- 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: http://www.monash.edu.au/about/monash-directions/directions.html http://www.monash.edu.au/about/monash-directions/directions.html http://www.policy.monash.edu/policy-bank/academic/education/directions.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 <u>https://emuapps.monash.edu.au/unitevaluations/index.jsp</u>

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.

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

These are available in University computer labs.

Unit Schedule

| Week | Activities | Assessment |
|------|------------------------------------|--|
| 0 | | No formal assessment or activities are undertaken in week 0 |
| 1 | The Nature of Research | |
| 2 | Research in Information Technology | |
| 3 | Design Science | |
| 4 | Experiments | |
| 5 | Surveys | |
| 6 | Case Studies | |
| 7 | Introduction to Data Analysis | Assignment 1 due 16 April 2012 |
| 8 | Analysis of Quantitative Data 1 | |
| 9 | Analysis of Quantitative Data 2 | |
| 10 | Analysis of Qualitative Data | |
| 11 | Literature Analysis | Assignment 2 due 18 May 2012 |
| 12 | Communication of Research | |
| | SWOT VAC | No formal assessment is undertaken in SWOT VAC. Assignment 3 due 4 June 2012 |
| | Examination period | LINK to Assessment Policy: http://policy.monash.edu.au/policy-bank/ academic/education/assessment/ assessment-in-coursework-policy.html |

*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 (http://www.infotech.monash.edu.au/resources/staff/edgov/policies/assessment-examinations/unit-assessment-hu

Assessment Tasks

Participation

Assessment task 1

Title:

Assignment 1

Description:

In this assignment the students will provide an analysis of the research objectives and methods for an information technology research project (usually their own research project).

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 quality of conclusions.

Due date:

16 April 2012

Assessment task 2

Title:

Assignment 2

Description:

In this assignment the students will have to perform a number of detailed statistical analyses.

Weighting:

30%

Criteria for assessment:

Each of the tasks in this assignment will be awarded marks based on the ability to correctly perform the analysis/test, and interpret the findings (what do the findings indicate).

Due date:

18 May 2012

Assessment task 3

Title:

Assignment 3

Description:

In this assignment the students will provide a detailed design for the evaluation stage of a research project (usually their own project).

Weighting:

40%

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 quality of conclusions.

Due date:

4 June 2012

Examinations

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.

You must negotiate any extensions formally with your campus unit leader via the in-semester special consideration process: http://www.infotech.monash.edu.au/resources/student/equity/special-consideration.html.

Returning assignments

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

Assessment Requirements

Referencing requirements

All assignments should use APA style for referencing.

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 (<u>http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-policy.html</u>)
- Assessment (<u>http://www.policy.monash.edu/policy-bank/academic/education/assessment/assessment-in-coursework-policy-bank/academic/education/assessment/assessment-in-coursework-policy-bank/academic/education/assessment/assessment-in-coursework-policy-bank/academic/education/assessment/assessment-in-coursework-policy-bank/academic/education/assessment/assessment-in-coursework-policy-bank/academic/education/assessment/assessment-in-coursework-policy-bank/academic/education/assessment-in-coursework-policy-bank/academic/education/assessment/assessment-in-coursework-policy-bank/academic/education/assessment/assessment-in-coursework-policy-bank/academic/education/assessment-in-coursework</u>
- Special Consideration
 (<u>http://www.policy.monash.edu/policy-bank/academic/education/assessment/special-consideration-policy.h</u>
 Grading Scale
- (<u>http://www.policy.monash.edu/policy-bank/academic/education/assessment/grading-scale-policy.html</u>) • Discipline: Student Policy
- (http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-discipline-policy.html)
- Academic Calendar and Semesters (<u>http://www.monash.edu.au/students/key-dates/</u>);
- Orientation and Transition (<u>http://www.infotech.monash.edu.au/resources/student/orientation/</u>); and
- Academic and Administrative Complaints and Grievances Policy
 (<u>http://www.policy.monash.edu/policy-bank/academic/education/management/complaints-grievance-policy</u>
- Codes of Practice for Teaching and Learning (http://www.policy.monash.edu.au/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 <u>www.monash.edu.au/students</u>. For Sunway see <u>http://www.monash.edu.my/Student-services</u>, and for South Africa see <u>http://www.monash.ac.za/current/</u>

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 <u>http://www.lib.monash.edu.au</u> or the library tab in my.monash portal for more information. At Sunway, visit the Library and Learning Commons at <u>http://www.lib.monash.edu.my/</u>. At South Africa visit <u>http://www.lib.monash.ac.za/</u>.

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 Commuity Services at 03 55146018 at Sunway

Other

READING LIST:

Zikmund, WG, Babin BJ, Carr JC, Griffin M. (2010). *Business Research Methods* (8th edition) South-Western (Cengage Learning). ISBN-13: 978-0-324-32062-6

Creswell, John W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd Edition). ISBN: 9781412965576

Neuman, W. Lawrence Neuman (2006). *Social Research Methods: Quantitative and Qualitative Approaches*, Pearson.

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