

# ISYS100 IT & Society

S2 Day 2015

Dept of Computing

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#### Disclaimer

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# **General Information**

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Credit points

3

Prerequisites

Corequisites

Co-badged status

#### Unit description

This unit introduces students to the role of technology, particularly information technology, for the individual, organisations, society and the wider environment. The unit provides literacy of key terms, ideas and issues related to technology and technological advancement. Issues to be explored in relation to technology include: environment and sustainability; privacy and information access; ethics and politics; digital divide; globalisation; the information society; and the knowledge economy. Students consider the relevance and ramifications of current applications and research in a range of diverse fields including: artificial intelligence; games technology; human-to-computer speech and interaction; social software; and mobile computing. Students gain basic computer literacy and competence through practical activities and exploration of applications relevant to each topic.

### Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <a href="https://www.mq.edu.au/study/calendar-of-dates">https://www.mq.edu.au/study/calendar-of-dates</a>

# Learning Outcomes

On successful completion of this unit, you will be able to:

An introductory understanding of a range of important and/or current IT & IS issues, such as: - Hardware (including basic principles and which platform is right for me) - The importance of Social Networks Analysis - Networks and Telecommunication Systems -

Multimedia - Privacy - Security - Ethics - Electronic Commerce - Productivity Applications - Social Aspects of Information Technology - Green IT.

A competence with basic information technology applications, including basic computer management, e-mail, web browsers, web-page creators and productivity software and an understanding of how such applications work, to a level where students can learn new material without requiring formal training.

The ability to orally communicate clearly and effectively about information technology applications.

Describe the key trends of information technology and the implications for individuals, organisations and society.

# **Assessment Tasks**

| Name           | Weighting | Due                      |
|----------------|-----------|--------------------------|
| Assignments    | 17%       | Varies: Wk6, Wk10 & Wk12 |
| Quizzes        | 24%       | Varies: Wk 5 & 8 & 11    |
| Practical Exam | 26%       | Week 13                  |
| Research paper | 33%       | ТВА                      |

### Assignments

#### Due: Varies: Wk6, Wk10 & Wk12 Weighting: 17%

There will be two assignments. Students will be expected to attend the classes in which the assignments are due, as the assignments will be marked in class.

Assignment 1: Individual HTML/JS/CSS (8%) - due Week 6

Assignment 2: has two deliveries with different due dates:

Group Blog will be due Week 10 (Worth 6% out of the 9% for Assignment 2)

Group Video will be due Week 12 (Worth 3% out of the 9% for Assignment 2)

#### NB. All details of each assignment will be available via iLearn.

You are encouraged to:

- set your personal deadline earlier than the actual one;
- · keep backups of all your important files;
- ensure that no-one else picks up your printouts.

Late work for the workshops, quizzes and assignment will not be accepted. If you cannot submit on time because of illness or other circumstances, please contact the lecturer **as soon as possible** so that appropriate measures (such as arriving at an indicative mark from other work in the same category) can be taken.

NB: You will notice that each student will need to create a Twitter account; this will be an essential part of how assignments will be marked and also commented on. Please talk to your teachers about how to create an account. It will also be a useful way for you to communicate within your groups for workshops. Your lecturer will also send updates via Twitter.

On successful completion you will be able to:

• The ability to orally communicate clearly and effectively about information technology applications.

# Quizzes

Due: Varies: Wk 5 & 8 & 11 Weighting: 24%

### Quizzes

In weeks 5, 8 and 11 there will be a short test in the workshops. Each quiz is worth 8% towards your final grade (i.e 24% in total). These quizzes will cover important parts of the unit material and, as well as assessing your current level of mastery of it, give you and your tutor an opportunity to address any problem areas before the final research paper. The quizzes will normally not take the whole class and will be followed by in-class problems. Please be on time to these classes, as the quiz will be the first thing in the class.

On successful completion you will be able to:

- An introductory understanding of a range of important and/or current IT & IS issues, such as: - Hardware (including basic principles and which platform is right for me) - The importance of Social Networks Analysis - Networks and Telecommunication Systems -Multimedia - Privacy - Security - Ethics - Electronic Commerce - Productivity Applications - Social Aspects of Information Technology - Green IT.
- Describe the key trends of information technology and the implications for individuals, organisations and society.

# Practical Exam

Due: Week 13 Weighting: 26%

In week 13 a practical examination will be held in your designated workshop. This will cover the material from the assignments. It will be closed book and require students to work at a computer.

It will last 40 minutes. Further details will be given in lectures as we near closer to the end of the semester.

On successful completion you will be able to:

 A competence with basic information technology applications, including basic computer management, e-mail, web browsers, web-page creators and productivity software and an understanding of how such applications work, to a level where students can learn new material without requiring formal training.

### Research paper

Due: **TBA** Weighting: **33%** 

### **Research Paper**

You will be provided in week 11 with several candidate questions that you can use for your Research Paper. The paper will be approximately 2400 words. You will need to create the paper in an essay format. The paper will be due at the end of the semester. (Date: TBA ) It is sometimes also known as a take-home examination. With any original work you will need to demonstrate an understanding of how to reference all materials that you have used. Your workshop teacher can also give you guidance on this.

#### NB. Specific time cutoffs etc will be confirmed when released in week 11

On successful completion you will be able to:

- An introductory understanding of a range of important and/or current IT & IS issues, such as: - Hardware (including basic principles and which platform is right for me) - The importance of Social Networks Analysis - Networks and Telecommunication Systems -Multimedia - Privacy - Security - Ethics - Electronic Commerce - Productivity Applications - Social Aspects of Information Technology - Green IT.
- A competence with basic information technology applications, including basic computer management, e-mail, web browsers, web-page creators and productivity software and an understanding of how such applications work, to a level where students can learn new material without requiring formal training.
- Describe the key trends of information technology and the implications for individuals, organisations and society.

### **Delivery and Resources**

#### **Teaching and Learning Strategy**

Mode of delivery is face-to-face. ISYS100 is taught via lectures and workshop sessions in the

laboratory. Lectures are used to introduce new material and discuss the use of information technology within society. While lectures are largely one-to-many presentations, you are encouraged to ask questions of the lecturer to clarify anything you might not be sure of. Workshops are small group classes, which give you the opportunity to interact with your peers and with a tutor who has a sound knowledge of the subject.

When you have workshop sessions you have an opportunity to practice your technical skills under the supervision of a workshop tutor. Each week you will be working on the current assignment material; it is important that you keep up with this work in order to successfully complete the assignments. In some weeks you will be having your quizzes.

Each week you should:

- Attend lectures, take notes, ask questions.
- Be available for your group via Twitter.
- Attend your workshop, seek feedback from your tutor on your work. See them in consultation times!
- Read appropriate sections of the text, add to your notes and prepare questions for your lecturer or tutor.
- Prepare answers to possible workshop questions.

Lecture notes will be made available each week but these notes are intended as an outline of the lecture only and are not a substitute for your own notes and discussions in the lecture itself.

#### Classes

Each week you should attend two hours of lectures, a one hour workshop. (For details of days, times and rooms consult the timetables webpage.)

#### Note that both lecture and workshops commence in week 1.

Please note that you are **required** to submit a certain number of assessments. Failure to do so may result in you failing the unit (see the precise Standard and Grading section) or being excluded from the exam/research paper.

#### What has changed from previous semesters?

Being a unit that has been very successful in the past few years the key change has been moving to a 1 hour workshop model which streamlines the unit.

#### Textbook

The recommended textbook for ISYS100 used this semester is:

ISYS100 Information Technology and Society 4e ISBN: 9781486022106

- Author: Turban, Beekman et al.
- Approx RRP \$126.95 (before bookshop discount)
- E-Book available on pearson.com.au

#### Technology used and required

iLecture/echo

Digital recordings of lectures are available.

ISYS100 makes use of the following software/technologies:

- Microsoft Windows 8
- Microsoft Office 2010 / 2013
- Internet Explorer and Mozilla Firefox
- Notepad ++
- · Windows Movie Maker
- Blogger (For Assignment 2)
- Twitter
  - NB. Twitter has never been a replacement for traditional connections to students. That being ilearn forum, email, consultation etc. We merely want you the students to have a way of being connected to convenor and the teaching team. Most interactions will happen to be private messaging (known as Direct Messages). This means you will actually be following your workshop teacher(s) and the teachers will be following you so they can send direct messages to you. The "tweeting" part is completely optional. For example, you could tweet about something that was relevant to the lecture topic for a particular week. Say for example; an article on cyber bullying that is in the press this week.

#### Website

The web page for this unit can be found at: http://ilearn.mq.edu.au.

**Discussion Boards** 

The discussion board for this unit can be accessed through http://ilearn.mq.edu.au.

Macquarie University provides a range of Academic Student Support Services. Details of these services can accessed at <u>http://www.student.mq.edu.au</u>.

#### Assumed knowledge

Basic computer use skills.

# **Unit Schedule**

| Week | Торіс | Reading |
|------|-------|---------|
|      |       |         |
|      |       |         |
|      |       |         |

#### Unit guide ISYS100 IT & Society

| 1  | Introduction to information technology and society<br>WEB 1.0 vs. 2.0 vs. 3.0?  | Readings provided by your lecturer                         |
|----|---|--|
| 2  | Social networks - will they help me move house?   | Chapter 7 Turban<br>Readings provided by your lecturer     |
| 3  | Blogs, internet journalism, the internet and democracy<br>Pornography, gambling and censorship  | Chapter 1 Evans & Coyle                                    |
| 4  | The weird, the wired and wireless - how the internet is accessed.   | Chapter 8 Beekman  |
| 5  | Graphics, digital media, and multimedia Music, photos and videos  | Chapter 6 Beekman  |
| 6  | Hackers spam and phishing - Just how much viagra do I need?   | Chapters 11 Valacich                                       |
| 7  | The digital divide - Just whose internet is it? (gender, race, socio-economic factors affecting internet use, business vs personal use) | Chapter 9 Quinn  |
| 8  | Googlemania (Google applications, Wikipedia and beyond)<br>Computers at work, school and home   | Chapter 9 & 10 Conti<br>Readings provided by your lecturer |
| 9  | How do I know what computer to buy?<br>Prac Exam Discussion   | Chapter 2 & 4 Evans  |
| 10 | Green IT – Making IT eco friendly (Ethics and the Internet)   | Readings provided by your lecturer                         |
| 11 | Evolving internet, evolving software  | Chapter 13 Beekman   |
| 12 | Robotics and artificial intelligence – Can computers really think?<br>Discussion for research paper                                     | Chapter 15 Beekman   |
| 13 | Final chance for quick help on Research Paper   | N/A  |

# **Policies and Procedures**

Macquarie University policies and procedures are accessible from <u>Policy Central</u>. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic\_honesty/policy.html

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy http://mq.edu.au/policy/docs/grading/policy.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Grievance Management Policy http://mq.edu.au/policy/docs/grievance\_management/policy.html

Disruption to Studies Policy <u>http://www.mq.edu.au/policy/docs/disruption\_studies/policy.html</u> The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.

In addition, a number of other policies can be found in the Learning and Teaching Category of Policy Central.

### **Student Code of Conduct**

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student\_conduct/

#### Results

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in <u>eStudent</u>. For more information visit <u>ask.m</u> <u>q.edu.au</u>.

### Student Support

Macquarie University provides a range of support services for students. For details, visit <u>http://stu</u> dents.mq.edu.au/support/

### **Learning Skills**

Learning Skills (<u>mq.edu.au/learningskills</u>) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

# Student Services and Support

Students with a disability are encouraged to contact the **Disability Service** who can provide appropriate help with any issues that arise during their studies.

### **Student Enquiries**

For all student enquiries, visit Student Connect at ask.mq.edu.au

# IT Help

For help with University computer systems and technology, visit <u>http://informatics.mq.edu.au/hel</u>p/.

When using the University's IT, you must adhere to the <u>Acceptable Use Policy</u>. The policy applies to all who connect to the MQ network including students.

# **Graduate Capabilities**

# Creative and Innovative

Our graduates will also be capable of creative thinking and of creating knowledge. They will be imaginative and open to experience and capable of innovation at work and in the community. We want them to be engaged in applying their critical, creative thinking.

This graduate capability is supported by:

#### Learning outcomes

- An introductory understanding of a range of important and/or current IT & amp; IS issues, such as: Hardware (including basic principles and which platform is right for me) The importance of Social Networks Analysis Networks and Telecommunication Systems Multimedia Privacy Security Ethics Electronic Commerce Productivity Applications Social Aspects of Information Technology Green IT.
- The ability to orally communicate clearly and effectively about information technology applications.
- Describe the key trends of information technology and the implications for individuals, organisations and society.

#### **Assessment task**

• Assignments

# Capable of Professional and Personal Judgement and Initiative

We want our graduates to have emotional intelligence and sound interpersonal skills and to demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:

#### Learning outcomes

- An introductory understanding of a range of important and/or current IT & amp; IS issues, such as: Hardware (including basic principles and which platform is right for me) The importance of Social Networks Analysis Networks and Telecommunication Systems Multimedia Privacy Security Ethics Electronic Commerce Productivity Applications Social Aspects of Information Technology Green IT.
- A competence with basic information technology applications, including basic computer management, e-mail, web browsers, web-page creators and productivity software and an

understanding of how such applications work, to a level where students can learn new material without requiring formal training.

### Assessment task

Research paper

# Discipline Specific Knowledge and Skills

Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:

#### Learning outcomes

- An introductory understanding of a range of important and/or current IT & IS issues, such as: Hardware (including basic principles and which platform is right for me) The importance of Social Networks Analysis Networks and Telecommunication Systems Multimedia Privacy Security Ethics Electronic Commerce Productivity Applications Social Aspects of Information Technology Green IT.
- A competence with basic information technology applications, including basic computer management, e-mail, web browsers, web-page creators and productivity software and an understanding of how such applications work, to a level where students can learn new material without requiring formal training.
- The ability to orally communicate clearly and effectively about information technology applications.
- Describe the key trends of information technology and the implications for individuals, organisations and society.

#### Assessment tasks

- Assignments
- Quizzes
- Practical Exam
- Research paper

# Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate

and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

#### Learning outcomes

- An introductory understanding of a range of important and/or current IT & amp; IS issues, such as: Hardware (including basic principles and which platform is right for me) The importance of Social Networks Analysis Networks and Telecommunication Systems Multimedia Privacy Security Ethics Electronic Commerce Productivity Applications Social Aspects of Information Technology Green IT.
- Describe the key trends of information technology and the implications for individuals, organisations and society.

#### Assessment tasks

- Assignments
- Quizzes

### Problem Solving and Research Capability

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

#### Learning outcomes

- An introductory understanding of a range of important and/or current IT & amp; IS issues, such as: Hardware (including basic principles and which platform is right for me) The importance of Social Networks Analysis Networks and Telecommunication Systems Multimedia Privacy Security Ethics Electronic Commerce Productivity Applications Social Aspects of Information Technology Green IT.
- A competence with basic information technology applications, including basic computer management, e-mail, web browsers, web-page creators and productivity software and an understanding of how such applications work, to a level where students can learn new material without requiring formal training.

#### Assessment tasks

- Practical Exam
- Research paper

# Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

#### Learning outcomes

- An introductory understanding of a range of important and/or current IT & amp; IS issues, such as: Hardware (including basic principles and which platform is right for me) The importance of Social Networks Analysis Networks and Telecommunication Systems Multimedia Privacy Security Ethics Electronic Commerce Productivity Applications Social Aspects of Information Technology Green IT.
- The ability to orally communicate clearly and effectively about information technology applications.
- Describe the key trends of information technology and the implications for individuals, organisations and society.

### Engaged and Ethical Local and Global citizens

As local citizens our graduates will be aware of indigenous perspectives and of the nation's historical context. They will be engaged with the challenges of contemporary society and with knowledge and ideas. We want our graduates to have respect for diversity, to be open-minded, sensitive to others and inclusive, and to be open to other cultures and perspectives: they should have a level of cultural literacy. Our graduates should be aware of disadvantage and social justice, and be willing to participate to help create a wiser and better society.

This graduate capability is supported by:

#### Learning outcomes

- An introductory understanding of a range of important and/or current IT & amp; IS issues, such as: Hardware (including basic principles and which platform is right for me) The importance of Social Networks Analysis Networks and Telecommunication Systems Multimedia Privacy Security Ethics Electronic Commerce Productivity Applications
  - Social Aspects of Information Technology Green IT.

• The ability to orally communicate clearly and effectively about information technology applications.

### Socially and Environmentally Active and Responsible

We want our graduates to be aware of and have respect for self and others; to be able to work with others as a leader and a team player; to have a sense of connectedness with others and country; and to have a sense of mutual obligation. Our graduates should be informed and active participants in moving society towards sustainability.

This graduate capability is supported by:

#### Learning outcomes

- An introductory understanding of a range of important and/or current IT & amp; IS issues, such as: Hardware (including basic principles and which platform is right for me) The importance of Social Networks Analysis Networks and Telecommunication Systems Multimedia Privacy Security Ethics Electronic Commerce Productivity Applications Social Aspects of Information Technology Green IT.
- The ability to orally communicate clearly and effectively about information technology applications.

# **Changes from Previous Offering**

The unit is now running workshops as apposed to practicals and tutorials. We have also reduced the number of assessments to correspond with this change.

The textbook is now regarded as recommended and not prescribed.

# **Standards and Grading**

Unlike many units, ISYS100 covers a wide range of areas, but at limited depth. Therefore it is not appropriate to identify core knowledge and assess each student's mastery of that at increasing levels of complexity. Instead, the assessment of Learning Outcome #1 is based in large part on the amount of knowledge the student gains across the range of the unit, as assessed by performance in the tutorials, quizzes and final research paper.

Your final grade will depend on your performance in each part of the assessment of the unit. In particular, you will obtain a grade of Pass (P) or higher in this unit if you satisfy the following:

- obtain a mark of at least 8/17 overall for the two assignments;
- obtain a mark of at least 45% in the practical examination;
- obtain a mark of at least 45% in the final research paper; and
- obtain an overall mark of at least 50% (calculated according to the weightings given above).

Obtaining a higher grade than a Pass (P) in this unit will require a student to obtain (in addition to

the above):

- the required total number of marks (Credit 65, Distinction 75, High Distinction 85);
- obtain a mark of at least 65% in the workshop quizzes overall;
- the following minimal results in both the practical exam and final research paper for grades higher than a pass:
  - 65% in the practical exam;
  - 65% in the final research paper.

For the assignments, which are much more narrowly focused, assessment is based on a progression of attainment, as indicated below.

| L.O 1   | Pass   | Credit  | Distinction   | High Distinction   |
|---|--|---|---|--|
| Knowledge<br>development                                      | Reproduce<br>definitions and<br>ideas, show some<br>breadth of<br>understanding  | Show breadth of<br>understanding across<br>most of the unit material  | Apply terminology and ideas in some<br>new contexts, show breadth of<br>understanding across most of the unit<br>material   | Apply terminology and ideas<br>in new contexts, show breadth<br>of understanding   |
| L.O. 2  | Pass   | Credit  | Distinction   | High Distinction   |
| Application<br>Literacy                                       | Able to use most<br>of the application<br>functionality<br>specified in the<br>assignments   | Able to use almost all of<br>the application<br>functionality specified in<br>the assignments for one<br>of the applications<br>covered, and most of<br>the functionality for the<br>remainder. | Able to use almost all of the<br>application functionality specified in<br>the assignments for half of the<br>applications covered, and most of the<br>functionality for the other half.  | Able to use almost all of the application functionality specified in the assignments   |
| L.O. 3  | Pass   | Credit  | Distinction   | High Distinction   |
| Ability to<br>communicate<br>with and<br>explain to<br>others | Able to describe<br>and explain<br>almost all of the<br>functionality of<br>some applications<br>covered and most<br>of the functionality<br>of the others | Able to clearly<br>communicate about,<br>describe and explain<br>almost all of the<br>functionality of the<br>applications covered  | Able to clearly communicate about,<br>describe and explain almost all of the<br>functionality of the applications<br>covered and, for some of the<br>applications, material within the<br>general area of the assignment, but<br>outside that explicitly in the<br>assignment description | Able to fluently communicate<br>about, describe and explain<br>the applications covered,<br>within the general area of the<br>assignment, but including<br>material outside that explicitly<br>in the assignment description |
| L.O.4   | Pass   | Credit  | Distinction   | High Distinction   |

Describe the key trends of information technology and the implications for individuals, organisations and society

Understands the basic idea of the key trends of information technology and the implications for individuals, organisations and society.

Able to understand and communicate on more than a surface level the key trends of information technology and the implications for individuals, organisations and society. Exemplifies critcal analysis of the subject matter on a more than surface level by investingating and analysing key trends of information technology and the implications for individuals, organisations and society. Has a complete command of the subject matter on a deeper level by investingating researching and analysing key trends of information technology and the implications for individuals, organisations and society.

# **Changes since First Published**

 Date
 Description

 29/07/2015
 Removed a section that was an orphan from an old unit guide about policies