Unit Outline 2012
Faculty of Information Sciences and Engineering

Information Technology for the Workplace
6587
This Unit Outline must be read in conjunction with:

a) **UC Student Guide to Policies**, which sets out University-wide policies and procedures, including information on matters such as plagiarism, grade descriptors, moderation, feedback and deferred exams, and is available at *(scroll to bottom of page)*

b) **UC Guide to Student Services**, and is available at *(scroll to bottom of page)*

c) Any additional information specified in section 6h.

1: **General Information**

<table>
<thead>
<tr>
<th>1a</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Information Technology for the Workplace</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1b</th>
<th>Unit number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6587</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1c</th>
<th>Teaching period and year offered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WIL 2012</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1d</th>
<th>Credit point value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1e</th>
<th>Unit level: Level 1 UG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For students enrolled in a UG course at the Faculty of Information Sciences and Engineering, this unit can be taken as an open elective at level 1. For students from other Faculties at the University, this unit can be taken as an open-elective at any UG level deemed appropriate by their course convener</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1f</th>
<th>Name of Unit Convener and contact details (including telephone and email)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr. Girija Chetty, T 6201-2512, E <a href="mailto:girija.chetty@canberra.edu.au">girija.chetty@canberra.edu.au</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Unit Moderator and contact details (including telephone and email)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Roland Goecke, 11C10, ph 6201 2114, <a href="mailto:roland.goecke@canberra.edu.au">roland.goecke@canberra.edu.au</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1g</th>
<th>Administrative contact details (including name, location, telephone and email)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Faculty Office, 11B14, T 6201-2417, E <a href="mailto:ise@canberra.edu.au">ise@canberra.edu.au</a></td>
</tr>
</tbody>
</table>
2: Academic Content

2a Unit description and learning outcomes

Syllabus:

This unit provides a gentle introduction to the usage of modern information and communications technology in the workplace. Through specific examples, taken from real-world problems, the unit explores how Information and Communications Technology (ICT) can enable service-oriented aspects in different domains. These include the basics of how computer systems and network systems work, a contextualization of the provision and receiving of ICT-enabled services, the use of office software including advanced features, an understanding of aspects of computer security and computer administration, the use of Web 2.0 technology and multimedia, the application of mobile computing and communications technology, and a comparison of open source and proprietary IT solutions.

The unit has a strong focus on developing both an understanding of modern ICT and practical hands-on skills relevant to the student.

Learning Outcomes:

On successfully completing the unit, students will have a sound understanding of and will have gained hands-on experience in:

1. how computer systems work
2. how they connect to the network at the workplace and the internet
3. understanding day-to-day aspects of computer security
4. using advanced features (e.g. macros, templates, layouts) in office products
5. performing basic image/photo/sound editing
6. setting up a website using a contemporary content management system
7. using Web 2.0 technology (blogs, wiki, file/data sharing, virtual worlds)
8. using contemporary mobile computing and communication platforms.
9. performing basic computer administration tasks.
10. understanding the role of support services.
11. understanding the difference between proprietary and open source IT solutions.

2b Generic skills


Those which are addressed by ITW are:

1. Communication

Graduates are expected to be able to:
- express knowledge, ideas and opinions in their professional field, both orally and in written form, with confidence and clarity;
- actively listen and respond to the ideas of other people;

2. Information Literacy and Numeracy

Graduates are expected to be able to locate, identify, collate, analyse, manipulate, evaluate, interpret and present information and numerical data.
3. **Information and Communication Technology**

   Graduates are expected to be able to select and use appropriate information and communication technology to retrieve, manipulate and present information.

4. **Problem Solving**

   Graduates are expected to be able to:
   - identify problems and analyse the main features of problems relevant to their professional field;
   - apply appropriate problem solving processes, arguments, critical and creative thinking;
   - implement and evaluate strategies for the resolution of problems;
   - anticipate and define new problems; and
   - identify and resolve new problems in new fields.

5. **Working With Others**

   Graduates are expected to be able to:
   - respect the rights of others irrespective of their cultural background, race or gender.

6. **Professional Ethics**

   Graduates are expected to:
   - act responsibly, ethically and with integrity in the context of their profession and their obligations to society; and
   - appreciate the social and cultural context of their profession.

7. **Lifelong Learning**

   Graduates are expected to:
   - be independent self-directed learners with the capacity and motivation for lifelong learning;
   - be aware of how they best learn;
   - possess self-knowledge and the ability to assess their own performance critically and accurately; and
   - have an understanding of how to apply their knowledge and abilities to many different contexts and fields.

8. **Personal Attributes**

   - Graduates are expected to:
     - show commitment to ongoing self-development;
     - value and respect differing views;
     - be confident in themselves and their own skills and knowledge.

2c **Prerequisites and/or co-requisites**

   None
3: Delivery of Unit and Timetable

3a Delivery mode

Lectures, tutorials and computer labs face-to-face

3b Timetable of activities, such as lectures/ tutorials/ practicals/ field classes, showing key dates and topics (Information might be provided in the form of a table)

The unit will be delivered online with no lectures per week and one 2-hour supervised tutorial / laboratory every week. Tutorials and laboratories are in pairs – a one hour tutorial followed by a two hour laboratory – and start in Week 2 of the term. A student who enrols in a tutorial is automatically enrolled in the associated laboratory.


Note:

The following topic overview is subject to change. Particularly, there may be guest lectures on specialist topics. Any changes will be posted on the subject’s Moodle (LearnOnline) homepage.

<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture</th>
</tr>
</thead>
</table>
| 1    | Introduction to unit:  
|      | - Admin  
|      | - Academic integrity  
|      | - Academic Skills Program  
|      | - General introduction  
|      | - Exploring Computers and Their Uses  
|      | - What is Information and Communication Technology (ICT)?  
|      | - Why is ICT important in the workplace?  
|      | Looking Inside the Computer System  
|      | - How do computer systems work  
|      | - Basic computer architecture  
|      | - How does a computer connect to the peripherals?  
|      | - How does my computer connect to the network at work or the internet? |
| 2    | Internet and World Wide Web  
|      | - E-Mail and Other Internet Services  
|      | - What are FTP and SSH?  
|      | Basic photo, image and sound editing  
|      | - How computers store images; colour representation  
|      | - Cropping and merging images  
|      | - Image Layers  
|      | - Image tools (Adobe Photoshop, Microsoft tools, freeware tools)  
|      | - How computers store sounds; digitisation and coding  
|      | - Sound tools (Microsoft tools, Audacity, Acoustica, etc.) |
| 3    | Advanced MS Office features (Word, Excel, Powerpoint)  
|      | - Creating templates / layouts in MS Word  
|      | - Creating macros in MS Word  
|      | - Creating master documents / working with multiple documents  
|      | Advanced MS Office features cont.  
|      | - Creating templates / layouts in MS Powerpoint  
|      | - Creating macros in MS Excel  
<p>|      | - Statistics in Excel |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 4 | Introduction to Web Technology  
- How do I set up a website?  
- How do I create a webpage?  
- Basic HTML tags  
- HTML Metadata  
- HTML Editors  
- Content Management Systems (CMS)  
Web 2.0, Online collaboration, Virtual Worlds  
- What is it?  
- What is user-centred design?  
- Information + data sharing  
- Online collaboration, wikis, blogs  
- Social networking  
- Virtual worlds |
| 5 | Mobile computing and communications  
- Mobile phone / PDA applications  
- Instant messaging  
- Audio/Video conferencing tools (Skype, Pidgin, etc.)  
Basic computer administration tasks  
- How to create / delete a user  
- Checking the performance of your computer  
- Troubleshooting  
The Role of Support Services  
- Where can I get help?  
- What are SLAs? |
| 6 | Computer security  
- What are common threats?  
- What is a virus, worm, Trojan horse?  
- How can I protect my computer system?  
- How do I run a virus scan?  
Comparison of proprietary and open-source software  
- What is open-source software?  
- What is freeware?  
- Can I trust open-source software? |
| 7 | Review and exam preparation |

### 4: Unit Resources

#### 4a Lists of required texts/readings

There are no required books for this unit. However, it is recommended that students read at least one of the following books to broaden and deepen their knowledge:


A limited number of copies of these books are available from the library. Students wishing to purchase a copy can do so, for example, from the Co-op Bookshop on campus.

4b  Materials and equipment

Software:

The software used in the computer laboratories for working on different assessment tasks in this unit will be provided in the computer laboratories of Building 11, Faculty of Information Sciences and Engineering. As far as assignments are concerned, this unit uses the Microsoft Office 2007 suite as well as the WordPress Content Management System under the Windows 7 operating system.

Note:

Students are permitted to use their own computer equipment, but must ensure that their assignment submissions adhere to the requirements listed above. It is the responsibility of users of the Windows Vista or Windows XP operating systems to ensure that their assignment submissions, and in particular the executable files, run on the Windows 7 operating system environment provided at the Faculty of Information Sciences and Engineering.

4c  Unit website

The unit website will be accessible through [http://learnonline.canberra.edu.au/](http://learnonline.canberra.edu.au/).

<table>
<thead>
<tr>
<th>Grade</th>
<th>Assignments + Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pass</strong></td>
<td>Minimum 50% of combined weighted score of all assessment items, conditional upon:</td>
</tr>
<tr>
<td></td>
<td>- minimum of 50% on combined weighted score from the assignments, <strong>and</strong></td>
</tr>
<tr>
<td></td>
<td>- minimum 50% on exam paper</td>
</tr>
<tr>
<td><strong>Credit</strong></td>
<td>Minimum 65% combined weighted score of all assessment item, conditional upon:</td>
</tr>
<tr>
<td></td>
<td>- minimum of 60% on combined weighted score from the assignments, <strong>and</strong></td>
</tr>
<tr>
<td></td>
<td>- minimum 60% on exam paper</td>
</tr>
<tr>
<td><strong>Distinction</strong></td>
<td>Minimum 75% combined weighted score of all assessment item, conditional upon:</td>
</tr>
<tr>
<td></td>
<td>- minimum of 70% on combined weighted score from the assignments, <strong>and</strong></td>
</tr>
<tr>
<td></td>
<td>- minimum 70% on exam paper</td>
</tr>
<tr>
<td><strong>High Distinction</strong></td>
<td>Minimum 85% combined weighted score of all assessment item, conditional upon:</td>
</tr>
<tr>
<td></td>
<td>- minimum of 80% on combined weighted score from the assignments, <strong>and</strong></td>
</tr>
<tr>
<td></td>
<td>- minimum 80% on exam paper</td>
</tr>
</tbody>
</table>
5: Assessment

5a Assessment overview

Assessment in this unit is based on the Assessment Policy at UC, which can be found at https://guard.canberra.edu.au/policy/policy.php?pol_id=2900.

In ITW, students are required to satisfactorily complete two assignments (i.e. minimum 50% combined total marks in the two assignments) and to perform satisfactorily in a final written exam. The two assignments have an equal weighting of 25% each, while the final written exam has a weighting of 50%.

To be awarded a particular grade in ITW, students must meet the combined assignment and exam requirements set out in the table below.

<table>
<thead>
<tr>
<th>Assessment item (including exams held in the exam period)</th>
<th>Due date of assignments</th>
<th>Weighting (total to equal 100%)</th>
<th>Addresses learning outcome(s)</th>
<th>Addresses generic skill(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1 Office</td>
<td>Week 4</td>
<td>25%</td>
<td>1, 2, 4, 5</td>
<td>1-8</td>
</tr>
<tr>
<td>Assignment 2 Website</td>
<td>Week 7</td>
<td>25%</td>
<td>1, 2, 5, 6, 7</td>
<td>1-8</td>
</tr>
<tr>
<td>Final exam</td>
<td>Exam Period</td>
<td>50%</td>
<td>1-11</td>
<td></td>
</tr>
</tbody>
</table>

5b Details of each assessment item

Specifications for the assignments and requirements for satisfactory completion will be given later on the ITW unit website on Moodle (LearnOnline).

Assignments are meant to be individual work, although talking a problem over with another student or tutor is considered one reasonable way of learning. However, the actual implementation must be the student’s own work. Students are expected to familiarise themselves with the University’s Student Academic Integrity Policy https://guard.canberra.edu.au/policy/policy.php?pol_id=3175. Experience has shown that students who do not do their own work are unlikely to pass the exam (and therefore the unit).

Assignments will be submitted electronically through the Unit Website interface on Moodle (LearnOnline). For the Website assignment, students need to submit the HTML code and any additional files, such as media files, images, etc. to the ITW web server. For the Office assignment, students need to submit all documents that form part of the total set of documents for the assignment.

Submissions for the Office assignment have to be in zipped format, containing the entire folder/directory of your assignment, with the ZIP file uploaded to the unit’s Moodle (LearnOnline) site. Submissions for the Website assignment will be via the ISE Student CMS server – link TBA. For each assignment, submit the signed ITW Assignment Cover Sheet as part of the electronic submission on Moodle, completing the self-assessment section. The cover sheet can be downloaded from the unit Moodle site. Assignments will not be marked until a cover sheet has been submitted. Where a student is unable to submit a scanned copy of a hand-signed cover sheet, a cover sheet with an electronic
signature is acceptable and will be deemed to be equivalent to the student signing the cover sheet by hand.

Assignment submissions will be assessed for addressing the specific requirements of each assignment, as stated in the assignment handouts, as well as for employing good ICT usage principles. Assignment submissions will receive a numerical mark, which together in their entirety with the other assessment item (exam) define a student’s final grade as outlined in section 5a.

Late assignments will attract a penalty of 5% of the mark for up to 24 hours; assignments that are between 24 and 48 hours late will attract a penalty of 10% of the mark and so on until after 19 days the assignment will attract a 100% penalty.

**Office**

**Purpose:**

- This assignment introduces the student to a number of advanced features commonly found in office software, such as Microsoft Office. These include the creation of templates / layouts and macros, the use of master documents and working with multiple document parts, the inclusion of graphics / images, cross-references, and linking to websites and other online content.
- This assignment assesses learning outcomes 1, 2, 4, and 5.

**Guidelines:**

- Students are to write a Microsoft Office Word document containing a number of advanced features as outlined in the following.
- Students are to show their knowledge of setting up a master document and a minimum of four subdocuments that are linked into the master document.
- Students are to actively demonstrate their understanding and skills of including graphics and/or images in their document, by including at least one graphics item / image in at least one of the documents.
- Students are to show their knowledge of image editing techniques by using a graphics or image file that has been edited in size and resolution. Both the original image file and the edited image file must be submitted.
- Students are to show their understanding of how to create a new template / layout by developing their own template for the document(s), using the functionality provided by Microsoft Office Word.
- Students are to demonstrate their understanding of including cross-references within the documents and to a table of contents, as well as linking to websites and other online content, for example by providing a link in their document to their own website, created in the Website assignment.
- Students are to show their understanding of macros by developing and using a new macro in Microsoft Office Word to simplify a repetitive task.
- Students must describe the actions of their macro in a separate document.
- Students should choose the same example topic as for the Website assignment.
Students need to submit all files required and used for their Office assignment, including the master and sub documents, image/graphics files, and the template file.

Assessment criteria:

The following criteria will be used in marking this assignment:

- Correct set up of a master document with at least four subdocuments.
- Inclusion of edited graphics and/or images in at least one document.
- Creation and use of a new Microsoft Office Word template for their own document layout.
- Use of cross-references from the table of contents to the various parts in the complete document.
- Use of at least one link to an online resource, such as the website created in the Website assignment.
- Creation and use of a new Microsoft Office Word macro in the document.
- Originality of topic, content and document layout.
- Demonstration of advanced techniques.

Website:

Purpose:

- This assignment gently introduces the student to designing and developing a multi-page website using the WordPress content management system (CMS). This includes the use of textual, graphical, multimedia, blogs and file content.
- This assignment assesses learning outcomes 1, 2, 5, 6, and 7.

Guidelines:

- Students are to design and develop a simple multi-page website in the WordPress CMS that enables a user to easily add contents in a variety of formats to webpages. There needs to be a minimum of five webpages (one front / main page and at least four subpages).
- Students are to demonstrate an understanding of the appropriate use of the CMS to design a website hierarchy (front page linking to multiple subpages) and to fill the webpages with content of different formats (text, graphics / images, multimedia files, files for download, blogs).
- Students are to demonstrate their knowledge of using different design layouts and their implications for usability. Students need to describe, in a separate document, why they chose a particular design layout and why it is suitable for their website.
- Students are to show their understanding of good website design principles, such as a consistent layout, easy navigation between webpages, a clear hierarchy and structure.
- Students are asked to choose an example topic from their own study, work or private life, so as to make the topic particularly relevant to their personal circumstances.
- Students need to submit all files required for their assignment, including HTML files, other web content, image/graphics files, multimedia files, etc. to the ITW webserver and notify the lecturer upon completion.

Assessment criteria:

- The following criteria will be used in marking this assignment:
  - Understanding of good website design principles, effective website layout design
  - Clear hierarchy of webpages with a main front page and multiple subpages
  - Clear, easy to use navigation between pages.
Examination:

3 hour written examination. Permitted materials:

- 2 Sides, 1 A4 page of handwritten notes,
- Unannotated non-electronic language dictionary (English/Foreign)

5c Special assessment requirements

To obtain a particular grade in this subject, it is necessary that all minimum requirements as outlined in Section 5a have been met.

The lecturer reserves the right to question students orally on any of their submitted work.

5d Supplementary assessment

There will be no supplementary tests or exam.

Students who miss the final exam due to illness may be able to sit for a deferred examination. A doctor's certificate stating why the student was not able to sit for the exam should be given to central Student Administration (Bldg. 1, room 1B150) as soon as possible - generally within 3 days of the examination. See Deferred Examination Policy https://guard.canberra.edu.au/policy/policy.php?pol_id=3176 and Deferred Examination Procedures document https://guard.canberra.edu.au/policy/policy.php?pol_id=3177 for more details.

Students will only be allowed to sit for a deferred examination if there are no outstanding submissions or resubmissions for the assignments required to pass the subject as specified above.

5e Academic Integrity

Students have a responsibility to uphold University standards on ethical scholarship. Good scholarship involves building on the work of others and use of others work must be acknowledged with proper attribution made. Cheating, plagiarism, and falsification of data are dishonest practices which contravene academic values. Students are expected to familiarise themselves with the University’s Student Academic Integrity Policy https://guard.canberra.edu.au/policy/policy.php?pol_id=3175.

5f Text-matching software

Your electronic submissions are retained and may be compared with other students’ if the need arises. The unit convener reserves the right to use text-matching software to this end.
6: **Student Responsibility**

### 6a Workload

The amount of time you will need to spend on study in this unit will depend on a number of factors including your prior knowledge, learning skill level and learning style. Nevertheless, in planning your time commitments you should note that for a 3cp unit the total notional workload over the semester or term is assumed to be 150 hours. These hours include time spent in classes. The total workload for units of different credit point value should vary proportionally. For example, for a 6cp unit the total notional workload over a semester or term is assumed to be 300 hours.

**Expected Average Student Workload:** *denotes an assessable item*

- a) Lectures (unsupervised /self study): 6.5x2 x 1.5h = 20.5h
- b) Tutorials / Computer labs (supervised): 3x2 x 2h = 12h
- c) Homework exercises: 3x2 x 2h = 12h
- d) Preparation (lectures, tutorials, computer labs, reading) 6.5x2 x 2h = 26h
- e) Assignment 1 - Office = 30h
- f) Assignment 2 - Website = 29.5h
- g) Final Exam (incl. preparation) = 20h

**Total 150 hours**

### 6b Special needs

Students who need assistance in undertaking the unit because of disability or other circumstances should inform their Unit Convener or UC AccessAbility (formerly the Disabilities Office) as soon as possible so the necessary arrangements can be made.

### 6c Attendance requirements

Attendance at lectures, tutorials and practicals is highly recommended.

### 6d Withdrawal

If you are planning to withdraw please discuss with your unit convener. Please see [this link](#) for further information on deadlines.

### 6e Required IT skills

Basic familiarity with Windows operating systems.

### 6f Costs

**Consumables**

### 6g Work Integrated Learning

The Faculty of ISE is committed to providing an environment that enables work integrated learning. Lecture theatre permitting, the lectures of this unit will be recorded and be made available online. Further information will be made available on the unit’s Moodle site.

### 6h Additional information
It is important that students refer to Unit Website (through Moodle (LearnOnline) – UC’s online learning environment) on a regular basis for any variations in the schedule and deadlines for the assessment tasks, which will be announced on the Unit Website. It is also the student’s responsibility to ensure that they regularly check their UC email account, as electronic messages (whether via the unit’s Moodle site or directly) will be sent to this account.

The online discussion forum on the unit’s Moodle site is as very useful place for posting questions and students are strongly encouraged to make use of it.

7: Student Feedback

All students enrolled in this unit will have an opportunity to provide anonymous feedback on the unit at the end of the Semester via the Unit Satisfaction Survey (USS) which will be presented to you on OSIS. Your lecturer or tutor may also invite you to provide more detailed feedback on their teaching through an anonymous in-class questionnaire administered through the University’s Teaching and Learning Centre (TLC).

8: Authority of this Unit Outline

Any change to the information contained in Section 2 (Academic content), and Section 5 (Assessment) of this document, will only be made by the Unit Convener if the written agreement of Head of Discipline and a majority of students has been obtained; and if written advice of the change is then provided on the unit site in the learning management system. If this is not possible, written advice of the change must be forwarded to each student enrolled in the unit at their registered term address. Any individual student who believes him/herself to be disadvantaged by a change is encouraged to discuss the matter with the Unit Convener.