

Course Code:	1004ITF
Course Name:	Information Technology Fundamentals
Semester:	Trimester 2, 2019
Program:	Diploma of IT
Credit Points:	10
Course Coordinator:	Dr Andrew Wixted
Document modified:	19 June 2019

# **Teaching Team**

Your lecturer/tutor can be contacted via the email system on the portal.

Dr Andrew Wixted: <a href="mailto:andrew.wixted@staff.griffithcollege.edu.au">andrew.wixted@staff.griffithcollege.edu.au</a>

## **Staff Consultation**

Your lecturer/tutor is available each week for consultation outside of normal class times. Times that your lecturer/tutor will be available for consultation will be given in the first week of lectures. A list of times and rooms will be published on the Griffith College Portal under the "myTimetable" link.

# **Prerequisites**

There are no prerequisites for this course.

# **Brief Course Description**

This course provides students with the opportunity to develop core professional skills required to complete their IT degree, gain practical experience and develop insights into the IT industry. The course guides students using several modes including: Problem-, Project- and Experiential-Based Learning. Students learn by undertaking a project

using commercial methods and practices. The course provides basic techniques in the use of software tools for preparation of documentation needed for their project. Preparations for oral and written communications also form major components of the course.

The course also contains generic skills required for tertiary study of IT including: ethics, sustainability and project management theory. The course is intended to equip students with the generic IT skills and professional responsibility to others that should be integral to their University studies and later professional practice.

## **Aims**

Information Technology Fundamentals is designed to assist the beginning student in developing the skills and knowledge areas common to all IT professional occupations, namely:

- Problem solving, abstraction, design
- Ethics and Professionalism
- Teamwork concepts and issues
- Interpersonal communication

(paraphrased from the ACS Core Body of Knowledge for ICT Professionals, Australian Computer Society Inc. 2015)

While developing these foundational skills and knowledge the course will help students situate themselves within the broader IT discipline by exploring the three knowledge areas (or streams) within the IT discipline: Information Systems, Networks and Security and Software Development. This will guide them in making informed decisions when they subsequently choose their major area of study.

The course aims to develop writing, research and teamwork skills through a number of ongoing practical exercises where the students develop projects, write CVs and Professional Development Plans and present reports. These exercises require the students to build understanding of the terminology, standards and core skills associated with professional IT practice.

# **Learning Outcomes**

Upon successful completion of this course you will

- 1. Demonstrate knowledge and understanding of the core skills in the IT industry and understand how they affect employability.
- 2. Demonstrate understanding of the past, present and future of IT and related disciplines.
- 3. Demonstrate understanding of creativity, innovation, problem solving and analytical skills in the IT industry.
- 4. Communicate effectively as an IT Professional
- 5. Demonstrate an understating of the issues and benefits of teamwork
- 6. Demonstrate an understanding of one or more design or development processes

# **Texts and Supporting Materials**

# **Recommended Resources**

Students will be provided with readings via the Learning@Griffith College website throughout the semester, which can be accessed online or downloaded and printed by the students. In addition, students are strongly encouraged to access the following textbooks for further reading:

- Dowling, D., Carew, A., & Hadgraft, R., (2016) Engineering your future: an Australasian guide, (3rd ed.), Milton, Qld.: John Wiley & Sons
- Fowler.J., Guddmundsson.A., Whicker.L (2011) groups work! A guide for working in groups,

(2nd ed.). Palmer Higgs Books Online

Note: Copies of this text are available from the Griffith University library.

# **Organisation and Teaching Strategies**

The course consists of a two-hour lecture and a two hour combined tutorial / workshop each week. Students should also engage in at least two hours of group activities each week. Maximum benefit will be gained from attendance at all of these classes as this course is based on a combination of practice and theory together with development of personal awareness of the field.

**Lectures:** These are interactive to encourage maximum learning. You are encouraged to participate through focusing questions, making comments and doing short relevant written and oral exercises. These will be based on the readings and other stimulus materials provided in class.

Workshops and tutorials are designed to encourage you to make meaning of your learning through the use of practical exercises and experiences. This will involve you in both individual and group work. You will need to allocate about 10 hours per week (including the lecture/tutorial time) to this course. reading and analysis of the course materials which accompany this course are essential requirements of this course. Some tutorial and workshop time is used for preparing and presenting assessable material.

# Class Contact Summary

## **Content Schedule**

# Weekly Teaching Schedule

Week	Торіс	Activity	Relevant Learning Outcomes
1	Course Introduction Introduction to IT Teaming	Lecture	1,5
	Writing skills #1	Workshop	
2	Project Management	Lecture	1,4 ,5
	Project Introduction & using Google Drive.	Workshop	
3	The Engineering Method	Lecture	1,4
	Writing skills #2	Workshop	
4	Enabling Skills Technical Communications	Lecture	4
	Project: Project Concept Plan due CV Writing and Jobs Skills Cluster	Workshop	
5	Information Technology Evolution	Lecture	2,4
	Project: presentations	Workshop	
6	Agile Development	Lecture	3,5,6
	PDP#1 due. Project Management	Workshop	

7	Project Solving Information Skills	Lecture	1,3,4,5
	Project: all alternate individual designs and Project Management Plan (to date) due. Professional Development Planning	Workshop	
8	Design Processes	Lecture	4, 6
	Project: presentations	Workshop	
9	Systems	Lecture	6
	Writing skills #3	Workshop	
10	Ethics & Professional Responsibility	Lecture	1, 4
	Project: presentations	Workshop	
11	Sustainability	Lecture	1, 2, 3
	PDP#2 due.	Workshop	
12	IT Futures	Lecture	1, 2, 3, 4
	Final Project File due Project Presentations	Workshop	

# Assessment

This section sets out the assessment requirements for this course. The assessment tasks form the core of the subject where the learning activities are intended to provide the scaffolding so that students incrementally develop their work as the semester progresses. The two most significant tasks are a group project that includes individual presentations through the different phases of the project and an individual ePortfolio comprising a CV, a jobs' skills cluster analysis and a Professional Development Plan. A third assessment thread that runs through the semester involves a short writing task where students write on a theme, then improve that initial writing and then later reflect on their learning journey with relation to their earlier writing.

# Summary of Assessment

Item	Assessment Task	Weighting	Relevant Learning Outcomes	<b>Due Date</b>
1	Writing Skills	15%	2,4	1, 3, 9
2	Individual Project Presentations	10%	4	5, 8,10,12
3	ePortfolioProfessional Development Plan	25%	1,2,3,4,5	6, 11
4	Project Reporting	50%	1,3,4,5,6	4,7,12

#### Assessment Details

# Item 1:

# **Writing Skills**

Three short writing exercises are required for Writing Skills assessment. The three short writing exercises are worth 5% each for a total of 15% of the final trimester mark. Students will write on a topic related to Critical, Systems, Creative and Design thinking and Reflective Practice as detailed in the class by the tutor. Students are expected to use a technical writing methodology and format.

This is an individual submission.

## Item 2:

# **Individual Project Presentations**

The project involves you working together with other students as a team. As your project progresses, you will be required to report to the class on your team progress using PowerPoint slides to guide the audience through the presentation. A 1-2 page executive summary, at least 11 PowerPoint slides and a seven [7] to ten [10] minute talk will be required from each student for assessment worth 10% of the final trimester marks. A hardcopy of the presentation and any handouts are to be presented to the tutor BEFORE the presentation begins. Each team member will have an opportunity to present in one of the four tutorial classes reserved for presentations. The schedule is to be coordinated by the team.

This is an individual submission within the context of the group project.

# Item 3: ePortfolio Professional Development Plan (PDP)

PDP consists of two separate pieces of assessment. The first involves completing a CV (5%), reflecting your current skills and abilities, and producing a job-cluster skills summary analysis (10%). This assessment item is due in Wk06. It will then be updated as the trimester progresses and will act as a base for the remaining PDP item. This is an individual submission worth 15/25%.

The second PDP assessment item is to complete a Professional Development Plan. This item is to provide the student with initial guidance, a path to follow through their academic and professional careers and use in future subjects.

This is an individual submission worth 10/25%.

#### **Item 4:**

## **Project Reporting**

The Project will become a comprehensive written report, which will include a critique on the project product and the strengths of your project, as well as on your team dynamics and team and peer assessments. Peer assessments of individual contributions are also collected and peer assessment factors are applied to determine an individual team member's Project results. The Design Projects must be available for inspection by your tutor upon request in Weeks 3-11. Details and specifications for the Project will be provided by your lecturer.

A professional report is required. The use of a word processor is mandatory. You will be required to use:

- \* Times New Roman or Arial 12 pt font
- \* All four margins 20mm
- \* A4 page size
- \* Single or 1.1-1.15 line spacing
- \* Correct page orientation in a 3-4 ring binder

Reports that do not comply with this format will not be accepted. The report will not be marked and will attract the specified late penalty until a correctly formatted report is submitted.

The Project is partitioned into 3 phases for assessment purposes including: Project Concept Planning (due Week 4), Draft Individual Alternate Designs and Project Management Planning (due Week 7) and the final Project File which includes: Project Plan, Design File and all customer deliverables (due week 12). The sections will be submitted both as a softcopy and as a hardcopy at the beginning of the project tutorial class in the week due.

This is both individual and group submission. Contribution to the teamwork assessed through peer assessment and individual project workbooks will affect final individual marks.

#### **Submission and Return of Assessment Items**

Normally you will be able to collect your assignments in class within fourteen [14] days of the due date for submission of the assignment.

## **Retention of Originals**

You must be able to produce a copy of all work submitted if so requested. Copies should be retained until after the release of final results for the course.

#### **Extensions**

To apply for an extension of time for an assignment, you must submit an Application for Extension of Assignment form to your teacher at least 24 hours before the date the assignment is due. Grounds for extensions are usually: serious illness, accident, disability, bereavement or other compassionate circumstances and must be able to be substantiated with relevant documentation [e.g. Griffith College Medical Certificate]. Please refer to the Griffith College website - Policy Library - for guidelines regarding extensions and deferred assessment.

## Penalties for late submission without an approved extension

Penalties apply to assignments that are submitted after the due date without an approved extension. Assessment submitted after the due date will be penalised 10% of the TOTAL marks available for assessment (not the mark awarded) for each day the assessment is late. For example:

- $\cdot$  > 5 minutes and <= 24 hours 10%
- $\cdot$  > 24 hours and <= 48 hours 20%
- $\cdot$  > 48 hours and  $\leq$  72 hours 30%

- $\cdot$  > 72 hours and <= 96 hours 40%
- > 96 hours and <= 120 hours 50%</p>
- $\cdot > 120 \text{ hours } 100\%$

Assessment submitted more than five days late will be awarded a mark of zero (0) Note that:

- · Two-day weekends will count as one day in the calculation of a penalty for late submission.
- · When a public holiday falls immediately before or after a weekend, the three days will count as one day in the calculation of a penalty for late submission.
- · When two public holidays (e.g. Easter), fall immediately before or after, or one day either side of a weekend, the four days will count as two days in the calculation of a penalty for late submission .
- $\cdot$  When a single public holiday falls mid-week, the day will not be counted towards the calculation of a penalty.

Please refer to the Griffith College website - Policy Library > Assessment Policy for guidelines and penalties for late submission.

## **Assessment Feedback**

Marks awarded for assessment items will also be available on the on-line grades system on the Student Website within fourteen [14] days of the due date.

## **Generic Skills**

Griffith College aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunities to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

Generic Skills	Taught	Practised	Assessed
Written Communication	Yes	Yes	Yes
Oral Communication	Yes	Yes	Yes
Information Literacy	Yes	Yes	Yes
Secondary Research	Yes	Yes	Yes
Critical and Innovative Thinking	Yes	Yes	Yes
Academic Integrity	Yes	Yes	Yes

Self Directed Learning	Yes	Yes	Yes
Team Work	Yes	Yes	Yes
Cultural Intelligence			
English Language Proficiency		Yes	Yes

## **Additional Course Generic Skills**

Specific Skills	Taught	Practised	Assessed
Creativity & Innovation	Yes	Yes	Yes
Responsible, effective citizenship	Yes	Yes	Yes

#### **Additional Course Information**

## Teacher and Course Evaluations

Your feedback is respected and valued by your lecturers and tutors. You are encouraged to provide your thoughts on the course and teaching, both positive and critical, directly to your lecturer and tutor or by completing course and lecturer evaluations on the Griffith College portal whenever these are available.

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# **Academic Integrity**

Griffith College is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual's and the College's reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, pre-meditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, Griffith College also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at Griffith College, your lecturers, tutors and academic advisors will provide you with guidance to understand and maintain academic integrity; however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

In the case of any allegation of academic misconduct made against a student he or she may request the guidance and support of a Griffith College Student Learning Advisor or Student Counsellor.

Please ensure that you are familiar with the <u>Griffith College Academic Integrity Policy</u>; this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information, please refer to the Academic Integrity Policy on the Griffith College website – Policy Library.

## Risk Assessment Statement

There are no out of the ordinary risks associated with this course.

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