Resources / Course Outline

# **Course Outline**

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## **Course Details**

Course Code	COMP3900 / COMP9900				
Course Title	Computer Science / Information Technology Project				
Lecturer in Charge	Rachid Hamadi (/users/z2286838)				
Admin	Rachid Hamadi (/users/z2286838)				
Tutors/Mentors	Tatjana Zrimec (https://webcms3.cse.unsw.edu.au/users/z9200513) Iwan Budiman (https://webcms3.cse.unsw.edu.au/users/z3532588) Dominic Wong (https://webcms3.cse.unsw.edu.au/users/z5208437) Xin Li (https://webcms3.cse.unsw.edu.au/users/z5203513) Song Fang (https://webcms3.cse.unsw.edu.au/users/z5165313) Cristian Bernal (https://webcms3.cse.unsw.edu.au/users/z5205896) Peiyu Tang (https://webcms3.cse.unsw.edu.au/users/z5165320) Matthew Immanuel (https://webcms3.cse.unsw.edu.au/users/z5187551) Brandon Nguyen (https://webcms3.cse.unsw.edu.au/users/z5205609) Yu Chen (https://webcms3.cse.unsw.edu.au/users/z525258819)				
Classes	Lectures: Tuesday 12:00 - 14:00 Online in Weeks 1, 2, 3, and 10 Lectures and Labs will be conducted online through Blackboard Collaborate Ultra, which is accessible through Moodle Timetable for all classes (/COMP9900/21T1/timetable)				
Consultations	Contact Lecturer in Charge to arrange for a consultation				
Units of Credit	6				

Course Website	http://cse.unsw.edu.au/~cs3900 (https://webcms3.cse.unsw.edu.au/COMP9900/21T3) http://cse.unsw.edu.au/~cs9900 (https://webcms3.cse.unsw.edu.au/COMP9900/21T3)
Handbook Entry	http://www.handbook.unsw.edu.au/undergraduate/courses/current/COMP3900.html (http://www.handbook.unsw.edu.au/undergraduate/courses/current/COMP3900.html) http://www.handbook.unsw.edu.au/postgraduate/courses/current/COMP9900.html (http://www.handbook.unsw.edu.au/postgraduate/courses/current/COMP9900.html)

# **Course Summary**

This is a software project capstone course. Students work in teams of ideally **five (5) members** to define, implement and evaluate a real-world software system. Most of the work in this course is team-based project work, although there are some introductory lectures on software project management and teamwork strategies. Project teams meet **weekly** starting from **Week 1** with project mentors to report on the progress of the project. Assessment is based on a project proposal, progressive demonstrations and retrospectives, a final project demonstration and report, and on the quality of the software system itself. Students are also required to reflect on their work and to provide peer assessment of their team-mates' contributions to the project.

# **Assumed Knowledge**

Before commencing this course, students should:

- have basic knowledge of database programming, Web programming and/or script programming (such as Python, PHP, and Javascript).
- be able to produce correct software programs in Python, Java or C/C++, i.e., compilation, running, testing, debugging, etc.
- be able to produce readable code with clear documentation.

#### Note:

For COMP9900, students must be in their final semester of study, and have completed at least 66 UOC towards MIT program 8543.

For COMP3900, students must have completed COMP1531, and COMP2521 or COMP1927, and are enrolled in a BSc Computer Science major with completion of 102 UOC.

# **Student Learning Outcomes**

After successfully completing this course, students will be able to:

- 1. work from a set of requirements, elaborate them, and produce a specification
- 2. design and build a correct, efficient and robust software system from specification
- 3. use software development and software project management tools
- 4. validate the correctness and robustness of software
- 5. work effectively in a project team, and lead when required
- 6. manage their time effectively, and make reasoned trade-offs over competing demands
- 7. communicate technical information clearly, both verbally and in writing

This course contributes to the development of the following graduate capabilities:

Graduate Capability	Acquired in
<b>Scholars</b> capable of independent and collaborative enquiry, rigorous in their analysis, critique and reflection, and able to innovate by applying their knowledge and skills to the solution of novel as well as routine problems	Project

<b>Entrepreneurial leaders</b> capable of initiating and embracing innovation and change, as well as engaging and enabling others to contribute to change	Project
Professionals capable of ethical, self- directed practice and independent lifelong learning	Project
Global citizens who are culturally adept and capable of respecting diversity and acting in a socially just and responsible way	Project

# **Teaching Strategies**

- Lectures: the main way to introduce and overview software project management; and discuss various teamwork strategies as well as project management techniques.
- Labs: for the team to weekly meet up and interact with the mentor.
- Project: give students the hands-on experience on a real-world software system, in a teamwork environment.

# **Teaching Rationale**

The learning focus in this course is primarily a team-based software project (for students to practice their skills and knowledge in a real-world, teamwork setup). The course will have an emphasis on the practical software development skills in a teamwork environment. Students will learn the basic concepts of software project management through introductory lectures.

### **Student Conduct**

The **Student Code of Conduct** (Information (https://student.unsw.edu.au/conduct), Policy (https://www.gs.unsw.edu.au/policy/documents/studentcodepolicy.pdf)) sets out what the University expects from students as members of the UNSW community. As well as the learning, teaching and research environment, the University aims to provide an environment that enables students to achieve their full potential and to provide an experience consistent with the University's values and guiding principles. A condition of enrolment is that students *inform themselves* of the University's rules and policies affecting them, and conduct themselves accordingly.

In particular, students have the responsibility to observe standards of equity and respect in dealing with every member of the University community. This applies to all activities on UNSW premises and all external activities related to study and research. This includes behaviour in person as well as behaviour on social media, for example Facebook groups set up for the purpose of discussing UNSW courses or course work. Behaviour that is considered in breach of the Student Code Policy as discriminatory, sexually inappropriate, bullying, harassing, invading another's privacy or causing any person to fear for their personal safety is serious misconduct and can lead to severe penalties, including suspension or exclusion from UNSW.

If you have any concerns, you may raise them with your lecturer, or approach the School Ethics Officer (mailto:ethics-officer@cse.unsw.edu.au), Grievance Officer (mailto:grievance-officer@cse.unsw.edu.au), or one of the student representatives.

**Plagiarism** is defined as (https://student.unsw.edu.au/plagiarism) using the words or ideas of others and presenting them as your own. UNSW and CSE treat plagiarism as academic misconduct, which means that it carries penalties as severe as being excluded from further study at UNSW. There are several on-line sources to help you understand what plagiarism is and how it is dealt with at UNSW:

- Plagiarism and Academic Integrity (https://student.unsw.edu.au/plagiarism)
- UNSW Plagiarism Procedure (https://www.gs.unsw.edu.au/policy/documents/plagiarismprocedure.pdf)

Make sure that you read and understand these. Ignorance is not accepted as an excuse for plagiarism. In particular, you are also responsible that your assignment files are not accessible by anyone but you by setting the correct permissions in your CSE directory and code repository, if using. Note also that plagiarism includes paying or asking another person to do a piece of work for you and then submitting it as your own work.

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW staff and students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own.

If you haven't done so yet, please take the time to read the full text of

UNSW's policy regarding academic honesty and plagiarism (https://student.unsw.edu.au/plagiarism)

The pages below describe the policies and procedures in more detail:

- Student Code Policy (https://www.gs.unsw.edu.au/policy/documents/studentcodepolicy.pdf)
- Student Misconduct Procedure
   (https://www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf)
- Plagiarism Policy Statement (https://www.gs.unsw.edu.au/policy/documents/plagiarismpolicy.pdf)
- Plagiarism Procedure (https://www.gs.unsw.edu.au/policy/documents/plagiarismprocedure.pdf)

You should also read the following page which describes your rights and responsibilities in the CSE context:

Essential Advice for CSE Students (https://www.engineering.unsw.edu.au/computer-science-engineering/about-us/organisational-structure/student-services/policies/essential-advice-for-cse-students)

#### **Assessment**

Item	Topics	Due	Marks	Contributes to
Proposal	Project	Monday Week 4 @ 10am	10%	CLOs 1,3,5-7
Progressive Demo A	Project	Week 5 Lab Time	2.5%	CLOs 2-7
Retrospective A	Project	Week 7 Lab Time	2.5%	CLO 5
Progressive Demo B	Project	Week 8 Lab Time	2.5%	CLOs 2-7
Retrospective B	Project	Week 9 Lab Time	2.5%	CLO 5
Final Project Demo	Project	Week 10 Lab Time	20%	CLOs 2-7
Project Report	Project	Thursday Week 10 @ 9pm	20%	CLOs 1,2,5-7
Software Quality	Project	Thursday Week 10 @ 9pm	20%	CLOs 2-7
Participation & Peer Assessment	Project	Friday Week 10 @ 9pm	20%	CLOs 1-7

### Course Schedule

The following table outlines a **provisional** schedule for this course. The contents of the lectures are described **roughly** and are subject to **adjustments**.

Flexibility Week

Week Lectures Labs Assignments Notes	Week	Lectures	Labs	Assignments	Notes
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1	Course Introduction, Assessment Overview, User Stories	Group formation, project brainstorming	-	-
2	Agile Software Development, Software Management Overview	Work on the project, progress report	-	-
3	Project Management Techniques Overview	Work on the project, progress report	-	-
4	-	Work on the project, progress report	Proposal due Monday @ 10am	-
5	-	Work on the project, Progressive Demo A	Progressive Demo A due in lab	-
6	Flexibility Week	-	-	-
7	-	Work on the project, progress report	Retrospective A Report due in lab	-
8	-	Work on the project, Progressive Demo B	Progressive Demo B due in lab	-
9	-	Work on the project, progress report	Retrospective B Report due in lab	-
10	Final Wrap-up Lecture	Project <b>Final</b> <b>Demo</b>	Final Demo due in lab  Project Report and Software Quality (Final System Code) due Thursday @ 9pm	-
			Participation & Peer Assessment due Friday @ 9pm	

# **Resources for Students**

There are no specific texts and recommended readings for COMP3900/COMP9900. Programming language specific texts may be useful as references, depending on the programming language(s) used in the project. Other online resources and/or documentation related to this term's real-world projects will be provided in the course website during the term.

# **Course Evaluation and Development**

This course is evaluated each term using the myExperience survey system at the end of the term.

In the previous offerings of this course, some students noted the small number and similarity of the projects teams needed to choose from. To address this, the number and diversity of projects on offer has increased.

Your feedback is important and will be considered to improve future offerings of this course. Students are also encouraged to provide informal feedback during the term, and let the lecturer in charge and mentors know of any problems as soon as they arise. Suggestions will be listened to very openly, positively, constructively and thankfully, and every reasonable effort will be made to address them as soon as possible.

Resource created <u>2 months ago (Monday 06 September 2021, 04:20:10 AM)</u>, last modified <u>2 months ago (Thursday 09 September 2021, 12:57:48 PM)</u>.

Comments  Q (/COMP99	00/21T3/forums/search?forum	n_choice=resource/66314)	
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