UNSW Course Outline

ZEIT3191 Computing and Cyber Security Research 3B - 2024

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General Course Information

Course Code : ZEIT3191
Year : 2024
Term : Semester 2
Teaching Period : Z2
Is a multi-term course? : No
Faculty : UNSW Canberra
Academic Unit : School of Systems and Computing
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : UNSW Canberra at ADFA
Campus : UNSW Canberra
Study Level : Undergraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

This course is restricted to those students undertaking the BCCS (CDF) program. Students undertake problem-based learning or a research project on a nominated topic approved by the course authority in a specific discipline area that is commensurate with study at Year 3 level.

As one of the aims of the program is to further develop critical thinking and independent research skills, the project will involve "hands on" research experience in collaboration with a staff member and their research team. A supervisor, who will work closely with the student, will manage each project. Final assessment will be based on a written paper and an oral presentation, with appropriate weighting.

Course Aims

Students undertake problem-based learning or a research project on a nominated topic approved by the course authority in a specific discipline area that is commensurate with study at Year 3 level. The primary aim of the course is to further develop the critical thinking and independent research skills of the student, as well as for the student to develop particular technical skills in a specific area within their discipline.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : CLO1: produce a survey of peer-reviewed background research literature
CLO2 : CLO2: apply computing and cyber security theory to work towards achieving a project's specific technical goals. It is more important to demonstrate a logical approach than to achieve the specific goals
CLO3 : CLO3: demonstrate independent self-directed learning and critical thinking in approaching your research problem
CLO4 : CLO4: prepare a substantial and logical discussion of your research project's results and conclusions
CLO5 : CLO5: critically assess novel engineering theory and research projects

Course Learning Outcomes	Assessment Item
CLO1 : CLO1: produce a survey of peer-reviewed background research literature	• Seminar 1 • Report
CLO2 : CLO2: apply computing and cyber security theory to work towards achieving a project's specific technical goals. It is more important to demonstrate a logical approach than to achieve the specific goals	• Seminar 2 • Report
CLO3 : CLO3: demonstrate independent self-directed learning and critical thinking in approaching your research problem	• Seminar 2 • Report
CLO4 : CLO4: prepare a substantial and logical discussion of your research project's results and conclusions	• Seminar 1 • Seminar 2 • Report
CLO5 : CLO5: critically assess novel engineering theory and research projects	• Journal • Report

Learning and Teaching Technologies

Moodle - Learning Management System

Other Professional Outcomes

This course contributes to the Program Learning Outcomes for the BCCS (CDF) program. In particular it contributes to the outcomes:

2. Graduates will be able to competently demonstrate critical problem-solving and design skills, together with modern project management techniques, in the context of ICT projects.

3. Graduates will be able to work in a productive, ethical, and professional manner – either independently or in teams – applying life-long learning to remain contemporary and competent in the ICT discipline.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Seminar 1 Assessment Format: Individual	5%	Due Date: 04/08/2024 11:59 PM
Seminar 2 Assessment Format: Individual	10%	Due Date: 08/09/2024 11:59 PM
Journal Assessment Format: Individual Short Extension: Yes (2 days)	10%	Due Date: 18/10/2024 12:00 AM
Report Assessment Format: Individual	75%	Due Date: 03/11/2024 11:59 PM

Assessment Details

Seminar 1

Assessment Overview

Students present a short introductory seminar on their individual research project (10 mins seminars, 2 mins questions). These seminars are intended to give students practice in preparing and presenting their work, and to stimulate discussion between the student and their peers in an informal and collegial atmosphere. They receive a grade worth 5%, and written feedback.

Course Learning Outcomes

- CLO1 : CLO1: produce a survey of peer-reviewed background research literature
- CLO4 : CLO4: prepare a substantial and logical discussion of your research project's results and conclusions

Seminar 2

Assessment Overview

Students present a more comprehensive seminar on their individual research project (15 mins seminars, 5 mins questions). These seminars are intended to give students practice in preparing and presenting their work, and to stimulate discussion between the student and their peers in an informal and collegial atmosphere. They receive a grade worth 10%, and written feedback.

Course Learning Outcomes

- CLO2 : CLO2: apply computing and cyber security theory to work towards achieving a project’s specific technical goals. It is more important to demonstrate a logical approach than to achieve the specific goals
- CLO3 : CLO3: demonstrate independent self-directed learning and critical thinking in approaching your research problem
- CLO4 : CLO4: prepare a substantial and logical discussion of your research project's results and conclusions

Journal

Assessment Overview

An electronic seminar journal must be kept, to be handed in with the final report. Students’ marks will be downgraded if they have not attended a particular seminar without a valid reason. This journal should include entries of ~250 words per week. These entries should answer the question what did they learn during the seminar. Include their own reflections, such as comments and questions on the material, and attempt to relate the material to what they already know

Course Learning Outcomes

- CLO5 : CLO5: critically assess novel engineering theory and research projects

Report

Assessment Overview

A 3000 to 5000 word final report is to be submitted electronically. The format of the report may be chosen by the student, though as a guide, your report may include the following sections: abstract, aim, background, method, results, and conclusions.

The report will be assessed by both your individual supervisor and the CDF coordinator. You will

receive written feedback primarily from your individual supervisor, augmented with feedback from your supervisor.

50% of your course grade will be awarded based on how you approached your research project. 25% of your course grade will be awarded based on the quality of your final report on your project. These grades will be determined by the CDF coordinator, in consultation with the individual project supervisors.

Course Learning Outcomes

- CLO1 : CLO1: produce a survey of peer-reviewed background research literature
- CLO2 : CLO2: apply computing and cyber security theory to work towards achieving a project's specific technical goals. It is more important to demonstrate a logical approach than to achieve the specific goals
- CLO3 : CLO3: demonstrate independent self-directed learning and critical thinking in approaching your research problem
- CLO4 : CLO4: prepare a substantial and logical discussion of your research project's results and conclusions
- CLO5 : CLO5: critically assess novel engineering theory and research projects

General Assessment Information

Use of Generative AI in Assessments

FULL ASSISTANCE WITH ATTRIBUTION

You can use generative AI software in this assessment to the extent specified in the assessment instructions. Any output of generative software within you assessment must be attributed with full referencing.

If the outputs of generative AI such as ChatGPT form part of your submission and is not appropriately attributed, it will be regarded as serious academic misconduct and subject to the standard penalties, which may include 00FL, suspension and exclusion.

- *To cite: OpenAI (Year Accessed). ChatGPT. OpenAI. https://openai.com/models/chatgpt/*
- *Please note that the outputs from these tools are not always accurate, appropriate, nor properly reference. You should ensure that you have moderated and critically evaluated the outputs from generative AI tools such as ChatGPT before submission.*

Grading Basis

Standard

Requirements to pass course

Assessment Criteria: Compulsory components or minimum performance standards

All assessment items must be submitted to pass this course.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 15 July - 19 July	Presentation	Research Methods and/or Invited Presentations
Week 2 : 22 July - 26 July	Seminar	
Week 3 : 29 July - 2 August	Seminar	
Week 4 : 5 August - 9 August	Assessment	Seminar 1
Week 5 : 12 August - 16 August	Seminar	
Week 6 : 19 August - 23 August	Seminar	
Week 7 : 9 September - 13 September	Group Activity	Projects Progress Review
Week 8 : 16 September - 20 September	Presentation	Research Methods and/or Invited Presentations
Week 9 : 23 September - 27 September	Seminar	
Week 10 : 30 September - 4 October	Seminar	
Week 12 : 14 October - 18 October	Assessment	Seminar 2
Week 13 : 21 October - 25 October	Assessment	Seminar Journal

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Course Resources

Prescribed Resources

There are no required resources for students. Recommended resources will be specified by students' individual project supervisors.

Recommended Resources

The following search engines are useful for identifying relevant literature

https://scholar.google.com.au/

https://ieeexplore.ieee.org/Xplore/home.jsp

Course Evaluation and Development

One of the key priorities in the 2025 Strategy for UNSW is a drive for academic excellence in education. One of the ways of determining how well UNSW is progressing towards this goal is by listening to our own students. Students will be asked to complete the myExperience survey towards the end of this course.

Students can also provide feedback during the semester via: direct contact with the lecturer, the "On-going Student Feedback" link in Moodle, Student-Staff Liaison Committee meetings in

schools, informal feedback conducted by staff, and focus groups. Student opinions really do make a difference. Refer to the Moodle site for this course to see how the feedback from previous students has contributed to the course development.

Important note: Students are reminded that any feedback provided should be constructive and professional and that they are bound by the Student Code of Conduct Policy

https://www.unsw.edu.au/planning-assurance/conduct-integrity/conduct-unsw/student-conduct-integrity/student-code-conduct

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Hussein Abbass		Room 161	02 5114 5109	Please email to arrange a meeting time.	No	Yes

Other Useful Information

School-specific Information

The Leaning Management System

Moodle is the Learning Management System used at UNSW Canberra. All courses have a Moodle site which will become available to students at least one week before the start of semester. Please find all help and documentation (including Blackboard Collaborate) at the Moodle Support page.

UNSW Moodle supports the following web browsers:
• Google Chrome 50+
• Safari 10+
Internet Explorer is not recommended. Addons and Toolbars can affect any browser's performance.

Operating systems recommended are:
• Windows 10,
• Mac OSX Sierra,
• iPad IOS10

Further details:

Moodle System Requirements

Moodle Log In

If you need further assistance with Moodle:

For enrolment and login issues please contact:

IT Service Centre

Email: itservicecentre@unsw.edu.au

Phone: (02) 9385-1333

International: +61 2 9385 1333

For all other Moodle issues please contact:

External TELT Support

Email: externalteltsupport@unsw.edu.au

Phone: (02) 9385-3331

International: +61 2 938 53331

Opening hours:

Monday – Friday 7:30am – 9:30 pm

Saturday & Sunday 8:30 am – 4:30pm

Study at UNSW Canberra

Study at UNSW Canberra has lots of useful information regarding:

- Where to get help
- Administrative matters
- Getting your passwords set up
- How to log on to Moodle
- Accessing the Library and other areas.

UNSW Canberra Student Hub

For News and Notices, Student Services and Support, Campus Comminity, Quick Links, Important Dates and Upcoming Events

School Contact Information

Deputy Head of School (Education): Dr Erandi Hene Kankanamge

E: e.henekankanamge@adfa.edu.au

T: 02 5114 5157

Syscom Admin Support: syscom@unsw.edu.au

T: 02 5114 5284

Syscom Admin Office: Building 15, Level 1, Room 101 (open 10am to 4pm, Mon to Fri)