

Week 1: Course Introduction

Securing Fixed and Wireless Networks, COMP4337/9337

Never Stand Still

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Today's Agenda

Part 1

Introduction to administrative matters

Part 2

- What is this course about?
- Crypto building blocks



Resources

- Course website is on WebCMS3
 - https://webcms3.cse.unsw.edu.au/COMP4337/25T1/
 - Lecture notes
 - Link to Echo360 video recordings
 - Lab schedules, allocations and locations
 - Assignment and Lab exercises
 - Quizzes (Weekly)
 - Exam information
 - Link to Ed discussion forum
- Announcement: Your responsibility to check the announcement/notices on regular basis for important updates/changes to schedule, etc.
- Your active participation and interaction is crucial to ensure that all of us get the most out of this course



Teaching Strategies -1

- Lectures: 2 hours per week
 - Lecture recordings on Echo360
 - We will focus on most important concepts and supplement with discussions
 - Certain material will be left for self study, these will be indicated on the lecture notes
- Labs (20%)
 - 6 Labs in total
 - Best 5 taken for assessment
 - Weeks 2 4, 7 9
 - Hands on sessions aimed at supporting problem-based learning to enhance student experience.



Teaching Strategies -2

- Assignment (20%)
 - Released in Week 3, Due in Week 10
 - Complete an assignment by writing programs, analysing security vulnerabilities, propose solution, report and demonstrate system.
 - Develop a secure real-world application.
- Quizzes (20%)
 - 2 in total
 - Quiz 1: 5th Week, 17th March 2025 (10%)
 - Quiz 2: 9th Week, 14th April 2024 (10%)
 - Inspera-based online non-invigilated
 - 30 min duration, can attempt from anywhere
- Weekly quiz questions (ungraded)
 - Revision and reflection



Labs

Tell me and I forget

Show me and I remember

Involve me and I understand

- Chinese Proverb



- 2 hours hybrid (in-person as well as online) lab sessions starting Week2 (see notice)
 - Equipment to be loaned, must return before exam period.
- Hands-on experiments
- Group formation (max-2) find a partner that you can work with from the same lab group
- Lab tutors will also be available online (MS Teams) during the lab slots





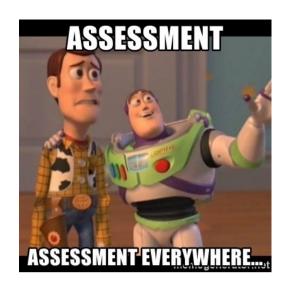
- LIC's Consultations
 - By appointment
 - See notice for special consultation for assignment
 - Hopefully, most of the problems will be sorted out via Ed forum.
 - LIC and Lab Tutors will monitor Ed forum and try to help when possible.
- Basic set of rules
 - Do not post code/program/script fragments
 - Lab Tutors cannot provide final solutions
 - Common courtesy



Assessment

- Lab Assessments (20 marks)
- Assignment (20 marks)
- Quizzes (20 marks)
- Final Exam (40 marks)
- Note: A double pass is applicable to this course where students must achieve 40% in combined quizzes (20%) + final exam (40%) to pass this subject. A student will get UF grade if they fail to clear the double pass hurdle.

No Plagiarism, we are **serious.** Please read policy in course outline. We are using plagiarism tools such as Turnitin for written reports.





Securing Fixed and Wireless Networks

- We assume that you have learnt basics of networking in COMP3331/9331.
 - No prior security course is assumed.
 - We may review a few things to put security in context.
- Read the course outline carefully. If you have learnt most of these topics, please consider taking another elective.
 - We have limited space and there are students in the wait list.



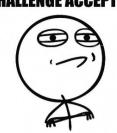
What Is This Course About?

- Threats, vulnerabilities, and security countermeasures of existing and upcoming fixed and wireless networks.
- We will be taking a systems approach; the course is very much PROTOCOL centric.
- Study crypto primitives and protocols applicable to wireless & Wired networks.
- Learn practice of security in networks



CHALLENGE ACCEPTED

Cooperation



- We have good plans, but we expect your cooperation and patience
- Your ideas/feedback on continual improvement is welcome.
 (no need to wait for end of the term survey)

WRONG WAY – Please Exit?

- This is not about "WEB SECURITY"
- This is not about "OS: Android/MacOS Security"
- This is not about "Maths Crypto"
- This is not about "AI Techniques to Security"
 - We do have a lab focusing on ML applied to security
- Please read the course outline and if this doesn't match your expectations, or has substantial overlap with your prior studies, please make room for other students in the waitlist
 - We find it very disappointing to see damaging remarks in myExperience surveys despite this early warning.



