## **Structured Programming**

Your Lecturers Mechanics / Admin Course Goals Resources Assessment

ANU – School of Computing – Structured Programming 1110 / 1140 / 6710

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## Introductions

- Patrik Haslum (co-convenor & lecturer)
  - Research: AI (reasoning, planning, diagnosis); optimisation.
  - Teaching: Introductory programming.
- Darren Li (co-convenor & lecturer)
  - Research interests: Formal verification, security.
- Who are you?
  - 38% COMP1110, 10% COMP1140, 52% COMP6710

## **Mechanics**

- Course web page
  - https://comp.anu.edu.au/courses/comp1110/
  - Schedule, labs, assignment
- Labs
  - Enrol in a lab group by the end of week 1
- gitlab
- ed forum (https://edstem.org/au/courses/12660/)
- Drop-in consultations (from week 2)

#### **First Year Computer Science**





## **CECS Class Representatives**

Class Student Representation is an important component of the teaching and learning quality assurance and quality improvement processes within the ANU College of Engineering and Computer Science (CECS).

The role of Student Representatives is to provide ongoing constructive feedback on behalf of the student cohort to Course Conveners and to Associate Directors (Education) for continuous improvements to the course.

#### **Roles and responsibilities:**

- Act as the liaison between your peers and conveners.
- Be creative, available and proactive in gathering feedback from your classmates.
- Attend regular meetings, and provide reports on course feedback to your course convener
- Close the feedback loop by reporting back to the class the outcomes of your meetings.

# Why become a class representative?

- **Ensure students have a voice** to their course convener, lecturer, tutors, and College.
- **Develop skills sought by employers**, including interpersonal, dispute resolution, leadership and communication skills.
- **Become empowered**. Play an active role in determining the direction of your education.
- Become more aware of issues influencing your University and current issues in higher education.
- **Course design and delivery.** Help shape the delivery of your current courses as well as future improvements for following years.

Note: Class representatives will need to be comfortable with their contact details being made available to all students in the class.

For more information regarding roles and responsibilities, contact: ANUSA CECS representatives: sa.cecs@anu.edu.au

#### **I01** Course Introduction

### Want to be a class representative? Nominate today!

Please nominate yourself to your course convener.





**I01 Course Introduction** 

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*"Essentially, engineering is all about cooperation, collaboration, and empathy for both your colleagues and your customers.* 

If someone told you that engineering was a field where you could get away with not dealing with people or feelings, then I'm very sorry to tell you that you have been lied to. Solitary work is something that only happens at the most junior levels...."

Yonatan Zunger

## Course goals

Introduction to...

- Core Computer Science
  - Object oriented programming
  - Data structures, algorithms
- Software Engineering
  - Working on a large scale software system
  - Testing
- Software Development Skills
  - Modern OO language (Java, including Java FX)

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- IDE (IntelliJ) and SCM (git)

## Resources

- Lectures
  - Slides on course website (updated shortly before each lecture).
  - Future lectures' slides kept from last semester.
  - Recordings on echo360.
  - Lecture code repo on gitlab.
- Oracle Java tutorials, other on-line resources
  - See "Help" section of course web site.



## Assessment

- 5% Lab test (Week 4)
- 5% Individual Assignment 1 (due start of Week 4)
  - Writing small pieces of a larger application.
- 5% Class engagement (labs)
- Lab test, Assn 1 and CE are redeemable via final exam.
- 35% Group Assignment 2
  - Design and implement a large application from scratch.
  - Several deliverables due throughout the semester.
- 50% Final exam

## Hurdle Assessments

- You must **pass** the **basic competency assessment**, in week 5.
  - Students who achieve at least 50% on the lab test in week 4 are *exempt* from the basic competency assessment.

Failing the hurdle will result in automatic failure of the course (you can still drop the course without failure).

Please read the assessment overview page on course web site.



Honesty and integrity are paramount.

They are not at odds with research and collaboration.

**Do** be resourceful, collaborate and engage.

Never represent someone else's work as your own.

**Do** read the ANU's position on academic integrity http://academichonesty.anu.edu.au/

**I01 Course Introduction** 

## Code Assistance and AI

Copilot, ChatGPT, Tabnine, Kite, etc...

- Copyright legal ambiguity.
- Unreliable needs a professional to evaluate output.
- Learn by trying yourself is still the only way to become that professional.
- **Exceptions**: explaining code, helping to debug, suggesting alternatives / improvements.
- If used in assignments **must be cited** and clearly explained how used.
- You will only get marks for what we consider your personal contribution.
- Not allowed in labtest, basic competency test or the final exam.

"You can know the name of a bird in all the languages of the world, but when you're finished, you'll know absolutely nothing whatever about the bird... So let's look at the bird and see what it's doing -- that's what counts. I learned very early the difference between knowing the name of something and knowing something."

**Richard Feynman**