COMP3610/6361 Principles of Programming Languages

Oral Examination – Guidelines (ver 1.1)

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Oral assessments gauge students' knowledge and skills based on the spoken word, typically guided by questions or small tasks. The final exam of COMP3610/6361 (Principles of Programming Languages) will be oral on a 1-1 basis, with an observer (teaching assistant or academic) being present to take notes. This document lays out the details for the final (oral) exam for COMP3610/6361.

1 Motivation & Justification

The decision to hold an oral exam was made for the following reasons:
- complement written assessments (homework)
- assess higher-order thinking and synthesis
- test the depth of knowledge (rather than breadth)
- assess students' ability to think on their feet
- practice interpersonal competence and professionalism

It is my belief that oral exams are a more authentic form of assessment if students are solving problems, demonstrating skills, and communicating using disciplinary language and scenarios.

I acknowledge that oral exams can be more stressful for some students compared to written exams, which can interfere with their performance. Students may be unfamiliar with the format, leading to fear and anxiety. This document tries to sketch format and expectations of the final exam for COMP3610/6361.

2 What to Expect

Before I explain the technical and procedural structure of oral exams, I share my own experience regarding oral exams. This includes my experience as examiner, as examinee, and as observer.

First and foremost: while an oral exam may be an unfamiliar format, the golden rule is

Do Not Panic

During the examination I will ask you questions or will give you simple tasks to solve (25-30 min). Usually 3–6 different topics are covered.

While a one-to-one with an academic may be stressful and may feel intimidating, there are many advantages offered by oral exams.

- If one does not understand the question, one can ask for clarification.

- If one gets stuck, the examiner can (and will) provide clues to the examinee to get back on track – one may not get full marks but definitely more than 0 if the answer is given with the help of some little pushes.

- If the examiner is not entirely satisfied with the answer they can ask further questions.

While it is expected to provide answers in a timely manner, this does not mean one has to provide an answer immediately.

- Take a couple of seconds to sort your thoughts. A well-presented answer is better than meandering.

- I will provide a glass of water; having a sip calms the brain and gives you a couple of seconds to sort your thoughts.

- When you get nervous, take a couple of deep breaths.

In all my years I have never seen an oral examination where the examiner's aim was to fail student. In contrast, examiners and observers try to help examinees to pass the exam. There is one mistake students occasionally make, that is not sharing their thoughts. My most important recommendation is

<div align="center">**Speak**</div>

Only if I and the observer hear your thoughts we can evaluate you and help you when you get stuck. It does not matter if the answer is not perfect. Everybody involved is aware of the stress an (oral) exam puts on students and I will try to do my best to make the exam less stressful for you.
Last but not least, another recommendation is to **be honest**.

- If you do not understand the question, ask.

- If you need some time to think about the solution, say so.
  ("Give me a bit of time to think about it")

- If you do not know an answer, say it – do not waste your time with guessing. This gives the examiner the option to push you in the right direction. Alternatively it may give you more time to answer (and shine) in forthcoming questions.

3   Format & Organisation

For COMP3610/6361 (Principles of Programming Languages) the format will be a 30-minute interview/discussion to assess the student's knowledge. There will be no presentation on any prepared topic. The oral exam will be set in a 1-1 basis, with an observer (teaching assistant or academic) being present to take notes.

Pre-Exam Organisation

The exams will take place in the second week of the exam period.

<div align="center">6 – 10 November 2023, between 8am and 6pm (AEDT)</div>

By end of October the examinee will receive an email from student services. The email will provide

- the exact date and time of the exam;
- the location of the exam.

If no email is received by end of October, or the examinee is not available for the allocated time slot, the student needs to contact the course convenor as soon as possible.[1] For more details see *Rights & Obligations for Students* (Section 6). I will try to run some survey to get a sense of your availability.

Any student participating in the final exam must fill out and sign a statement regarding academic integrity, see *Academic Integrity* (Section 4).

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[1]Non-availability must be grounded on significant reasons and need to be proven.

The Day of the Oral Exam

- The student should arrive at the exam location venue 3–10 minutes before the official start of the examination to allow a timely start.
- Please wait in front of the room, we will let you in.
- There will be three participants: the student, the examiner (course convenor), and an observer (teaching assistant or academic). The role of the observer is to witness the examination and to take notes; they usually remain silent. They can, however, speak up to clarify matters or to avoid miscommunication.
- Before the examination starts the examiner will ask the student to present a form of identification.
- The examination is guided by questions or small tasks given by the examiner. The student should answer these questions in a timely manner and as precise as possible.
- Questions and small tasks are mainly asked verbally.
- Students are allowed to use pen and paper (provided) to support their spoken word; one could for example write a formula.
- The question time is 25-35 minutes. During this time, 3–6 topics are usually discussed. Covering fewer topics does not mean a lower mark, the discussion may just go into more depth.
- **Important:** During the examination, the examiner may provide some clues to the students or steer them in the right direction in case they have the feeling the examinee is lost. It can also happen that the examiner stops an argument or an explanation to proceed to another topic. The latter is no indication that the examinee did answer the question incorrectly.
- The language of the exam is English.
- Students must not record the oral exam.
- Marks are not released before all students had their oral examination; as for written exams marks will be released via official channels, following ANU policies.

(Dis)Allowed Material

Students are only allowed to use a pen and paper (provided). However, everything written needs to be orally explained. No other material is allowed.

4 Academic Integrity

Students, who want to take part in the exam, must follow the standards of academic integrity. To verify that students understand the expectations, they **must understand and sign the statement provided on the last page of this document.** The signed document has to be sent to the course convenor at least 72 hours before the exam.

For an (oral) exam academic integrity means in a nutshell

<div align="center">

do not cheat and do not help others to cheat

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I believe that there is a common understanding what constitutes as cheating. Among others this includes

- providing questions to fellow students (in any form).

If the examinee is not sure whether an activity violates academic integrity, they should avoid the activity, or seek approval from the course convenor, before the examination.

5   Marking the Exam

The oral exam will be marked according to the rubric given on Page 5 of this document.

Remember, the exam is a hurdle and a minimum of 40% is required.

- If a student does not show up the exam will be marked as 0%; unless the student applies (and gets granted) a deferred examination according to ANU policies.

- If a student shows up late, the question time is reduced accordingly, leading to a lower mark even if all questions are answered correctly.

- Any attempt of cheating will be handled according to ANU Policies, independent of the severity and the time of discovery. This could potentially result in a mark of 0%.

- If the signed academic integrity statement is not received before the exam, the exam will be marked as 0%.

6   Rights & Obligations for Students

The rules outlined in this document are binding, unless all parties agree on an alteration **at least 72 hours before the exam**. Alterations are at the discretion of the course convenor.

If extenuating circumstances require the alteration of these rules the examinee must contact the course convenor in writing (email) by October 30, 5pm AEDT, or at most 48 hours after the circumstances occurred.

A possible reason is for example that the examinee is registered with Access&Inclusion and has an Eduction Access Plan (EAP) in place.

Students must inform the course convenor within 48 hours if they have not received an email stating the exact date of the oral exam by end of October.

7 Marking Rubric[2]

	Content/Overall Understanding	Comprehensibility/Argument/Logic	Structure	Vocabulary	Prompting
high HD 9 – 10	deep/robust understanding of the topics, including all details (side conditions, proofs, theorems ...)	clearly articulates all aspects of a topic, logical arguments and proofs; presents sufficient evidence that is relevant and accurate	excellent structure when presenting a theorem/proof	only uses correct language/vocabulary/technical terms	did not have to prompt with probing questions at all
low HD 8	deep/robust understanding of the topics, including most details	clearly articulates most aspects, logical arguments and proofs; presents sufficient evidence that is relevant and accurate	good structure when presenting a theorem/proof	mostly uses correct language/vocabulary/technical terms	minimally (one or two probing questions)
D 7	good understanding of the topics, including some details	articulates most aspects; logical arguments and proofs are incomplete or incorrect; presents some evidence that is relevant and accurate	a few areas of disjointedness or intermittent lack of logical progression of ideas	occasionally uses incorrect terms	majority of questions/tasks answered without probing
C 6	reasonable understanding of the topics, with some details in one topic	articulates most aspects; logical arguments and proofs unfocussed; presents barely any evidence that is relevant and accurate	most topics include disjointedness or intermittent lack of logical progression of ideas	uses technical terms regularly	one topic needed lots of probing, or 50% of topics needed a bit
P 5	limited understanding of the topic	leaves out major aspects of a topic; logical arguments and proofs unfocussed; presents barely any evidence for those that is relevant and accurate	some structure for most arguments	uses some technical terms	> 50% of questions/tasks need probing
3 – 4	superficial understanding of the topic	all argumentation with regards to a topic, logical argument or proof are flawed	minimal structure for some arguments	uses barely any technical terms	nearly all questions/tasks need probing
0 – 2	no understanding of the topic	does not articulate a aspect of a topic, logical argument or proof	no structure observable	uses no technical terms	every question/task needs probing
weight	3	2.5	1.5	1	2
total					

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[2]Based on
https://www.cmu.edu/teaching/resources/Teaching/CourseDesign/Assessment-Grading/Rubrics/OralExamRubric.doc, and
https://mast.queensu.ca/~ggsmith/Math314/rubricExam.pdf

8   Alterations of this Document

This document is likely to be changed slightly; please check for an update regularly. Updates to this document will be announced on the course webpage and during the lecture. The alterations will be minor, such as fixing typos or add clarifications. All changes will be listed in this section.

Academic Integrity

At its heart, academic integrity is about behaving ethically. This means that all members of the community commit to honest and responsible scholarly practice and to upholding these values with respect and fairness.

I declare that I will uphold the principles of academic integrity during the oral exam for

COMP3610/COMP6361 Principles of Programming Languages

as defined by the Australian National University in the University Academic Misconduct Rule and other rules regarding academic integrity.

In particular I acknowledge that I will not cheat or help others to cheat.

I acknowledge that I have read and understood the content of the document *Oral Examination – Guidelines*.

_____
Date

_____
Signature