COMP3610/6361
Principles of Programming Languages

Peter Höfner

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Section 0

Admin

Lecturer

- **A/Prof. Peter Höfner**
  CSIT, Room N234 (Building 108)
  Peter.Hoefner@anu.edu.au
  +61 2 6125 0159

  Consultation
  Thursday 12pm – 1pm, or by appointment

CoLecturer and Tutors

- **Dr Fabian Muelboeck**
  Fabian.Muehlboeck@anu.edu.au

- **Abhaas Goyal**
  Abhaas.Goyal@anu.edu.au

- **Weiyou Wang**
  Weiyou.Wang@anu.edu.au

Lectures

- Wednesday, 3 pm – 5 pm
  Thursday, 11 am – 12 pm
- Rm 5.02 Marie Reay, Bldg 155
- Q/A session in Week 12

- **Etiquette**
  - ▸ engage
  - ▸ feel free to ask questions
  - ▸ we reject behaviour that strays into harassment,
    no matter how mild

Tutorials

- join one of the 2 tutorials
- Thursday, 3pm – 5pm (Rm 5.03 Marie Reay)
  Friday, 1pm – 2pm (Rm 5.03 Marie Reay)
- from Week 2 onwards

- **Summary**
  - ▶ your chance to discuss problems
  - ▶ discuss home work
  - ▶ discuss additional exercises

Plan/Schedule I

Resources
web: `https://cs.anu.edu.au/courses/comp3610/`
wattle: `https://wattlecourses.anu.edu.au/course/view.php?id=41142`
edstem: `https://edstem.org/`
(you will be registered at the end of the week)

Workload
The average student workload is 130 hours for a six unit course.
That is roughly **11 hours/week**.
`https://policies.anu.edu.au/ppl/document/ANUP_000691`

Plan/Schedule II

Assessment criteria

- Quizz: 0% (for feedback only)
- Assignments: 35%, 4 assignments (35marks)
- Oral exam: 65% (65 marks) **[hurdle]**
- **hurdle:** minimum of 40% in the final exam

Assessments (tentative)

No	Hand Out	Hand In	Marks
0	31/07	03/08	0
1	02/08	10/08	5
2	16/08	31/08	10
3	20/09	12/10	10
4	18/10	02/11	10

About the Course I

*This course is an introduction to
the theory and design of programming languages.*

About the Course II

Topics (tentative)

The following schedule is tentative and likely to change.

	Topic
0	Admin
1	introduction
2	IMP and its Operational Semantics
3	Types
4	Derivation and Proofs
5	Functions, Call-by-Value, Call-by-Name
6	Typing for Call-By-Value
7	Data Types and Subtyping
8	Denotational Semantics
9	Axiomatic Semantics
10	Concurrency
11	Formal Verification

About the Course IV

Disclaimer
This is has been redesigned fairly recently.
The material in these notes has been drawn from several different
sources, including the books and similar courses at some other
universities. Any errors are of course all the author's own work.
As it is a newly designed course, changes in timetabling are quite likely.
Feedback (oral, email, survey, . . .) is highly appreciated.

Academic Integrity

- never misrepresent the work of others as your own
- if you take ideas from elsewhere
  you must say so with utmost clarity

Reading Material

- Glynn Winskel. *The Formal Semantics of Programming Languages – An Introduction*. MIT Press, 1993. ISBN 978-0-262-73103-4
- Robert Harper. *Practical Foundations for Programming Languages*. Cambridge University Press, 2016. ISBN 978-1-107-15030-0
- Shriram Krishnamurthi. *Programming Languages: Application and Interpretation (2nd edition)* Open Textbook Library, 2017
- additional reading material can be found online