UNSW Course Outline

ZEIT1102 Introduction to Programming - 2024

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General Course Information

Course Code : ZEIT1102
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

Programming Fundamentals builds on Introduction to Computer Science, concentrating on computer programming in an object-oriented paradigm. Students will know how to analyse a problem and design a program and will be able to implement programs in Python. Topics include

algorithms, classes and objects, OO design, control structures, ethics, data structures, searching and sorting, recursion, file handling and graphics.

Course Aims

The course aims to develop an introductory understanding of some critical elements of the IT discipline in students starting their education in IT. The course covers fundamental material in the area of computer programming in an object-oriented paradigm. The student will develop broad foundational knowledge and skills in the discipline as a basis for their further study towards the entry level qualification in their discipline.

Course Learning Outcomes

Course Learning Outcomes	Australian Computing Society (ACS), International Council on Systems Engineering (INCOSE)
CLO1 : Analyse a problem and develop an object-oriented software design	• ACS : Modelling, abstraction, design
CLO2 : Demonstrate an understanding of Python language features.	• ACS : Programming
CLO3 : Construct Python classes and integrate them into Graphical User Interfaces as well as into command line Applications.	• KNOW2.7 : Know the aspects of implementation and integration

Course Learning Outcomes	Assessment Item
CLO1 : Analyse a problem and develop an object-oriented software design	• ASS1: Programming Task • ASS2: Programming Task • Mid-Semester Test • Final Exam
CLO2 : Demonstrate an understanding of Python language features.	• ASS1: Programming Task • ASS2: Programming Task • Mid-Semester Test • Final Exam
CLO3 : Construct Python classes and integrate them into Graphical User Interfaces as well as into command line Applications.	• ASS2: Programming Task • Mid-Semester Test • Final Exam

Learning and Teaching Technologies

Moodle - Learning Management System

Learning and Teaching in this course

Each week, students should read the indicated lecture material, and complete the lab and tute for that week. Details of these requirements, can be found on the course website.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates	Australian Computing Society (ACS)
ASS1: Programming Task Assessment Format: Individual Short Extension: Yes (7 days)	10%	Start Date: Not Applicable Due Date: 02/08/2024 11:55 PM	• ACS : Systems Development
ASS2: Programming Task Assessment Format: Individual	20%	Start Date: Not Applicable Due Date: 25/10/2024 11:55 PM	• ACS : Programming
Mid-Semester Test Assessment Format: Individual	20%	Start Date: Not Applicable Due Date: 26/09/2024 03:00 PM	• ACS : Programming
Final Exam Assessment Format: Individual	50%	Due Date: exam	• ACS : Programming

Assessment Details

ASS1: Programming Task

Assessment Overview

Create a python program using iteration and selection

Course Learning Outcomes

- CLO1 : Analyse a problem and develop an object-oriented software design
- CLO2 : Demonstrate an understanding of Python language features.

Detailed Assessment Description

generative AI may be used with this assignment.

Assessment information

generative AI may be used with this assignment

Assignment submission Turnitin type

This is not a Turnitin assignment

ASS2: Programming Task

Assessment Overview

Create a python program using classes, arrays, methods, exceptions and file handling.

Course Learning Outcomes

- CLO1 : Analyse a problem and develop an object-oriented software design
- CLO2 : Demonstrate an understanding of Python language features.
- CLO3 : Construct Python classes and integrate them into Graphical User Interfaces as well as into command line Applications.

Assessment information

generative AI may be used with this assignment.

Assignment submission Turnitin type

This is not a Turnitin assignment

Mid-Semester Test

Assessment Overview

Test questions on initial python concepts.

Course Learning Outcomes

- CLO1 : Analyse a problem and develop an object-oriented software design
- CLO2 : Demonstrate an understanding of Python language features.
- CLO3 : Construct Python classes and integrate them into Graphical User Interfaces as well as into command line Applications.

Assessment information

generative AI may NOT be used with this assignment.

Assignment submission Turnitin type

This is not a Turnitin assignment

Final Exam

Assessment Overview

Exam questions on course material

Course Learning Outcomes

- CLO1 : Analyse a problem and develop an object-oriented software design
- CLO2 : Demonstrate an understanding of Python language features.
- CLO3 : Construct Python classes and integrate them into Graphical User Interfaces as well as

into command line Applications.

Assessment information

generative AI may NOT be used with this assignment.

Assignment submission Turnitin type

This is not a Turnitin assignment

General Assessment Information

Grading Basis

Standard

Requirements to pass course

overall 50% mark

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 15 July - 19 July	Topic	ch 1,2
Week 2 : 22 July - 26 July	Topic	ch 3
Week 3 : 29 July - 2 August	Topic	ch 4
Week 4 : 5 August - 9 August	Topic	ch 5a
Week 5 : 12 August - 16 August	Topic	ch 5b
Week 6 : 19 August - 23 August	Topic	ch 6a
Week 7 : 9 September - 13 September	Topic	ch 6b
Week 8 : 16 September - 20 September	Topic	ch 7a
Week 9 : 23 September - 27 September	Topic	ch 7b
Week 10 : 30 September - 4 October	Topic	ch 7a
Week 11 : 7 October - 11 October	Topic	ch 7b
Week 12 : 14 October - 18 October	Topic	ethics

Attendance Requirements

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

Course Resources

Prescribed Resources

Introduction to Programming Using Python, An, Global Edition | ISBN 9781292103440 | Programming Logic | Programming - Introductory | Computer Science | Store (pearson.com)

Course Evaluation and Development

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.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
	Daryl Essam		B15 Room 216		11-12 each Tuesday, or by email arrangements	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)