Féidearthachtaí as Cuimse
Infinite Possibilities

Introduction

OLLSCOIL TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH
TU DUBLIN
TECHNOLOGICAL UNIVERSITY DUBLIN

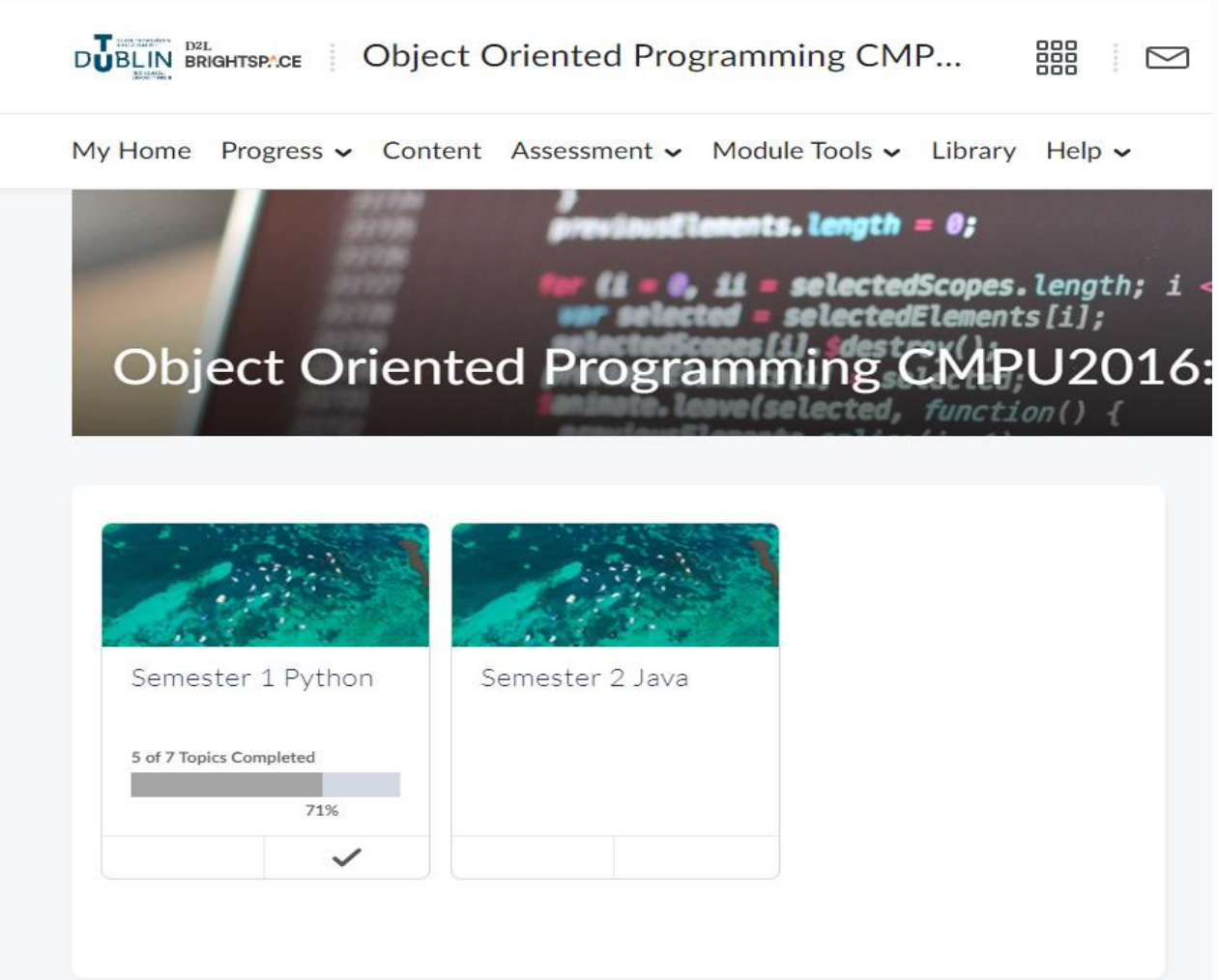
S1-2023-24, Object-Oriented Programming, Week 1

Lesson Outline

- Describe the aim, structure and assessment strategy of this OOP module.
- Know your lecturer.
- Revise C basics.
- Introduce the PyCharm IDE and practice Python basics.

Course Organisation

- All lecture materials will be published on brightspace.
- All continuous assessment is handled via brightspace.
- Select the correct module on brightspace, TU856/8 have a different one.
- Demo of our space on brightspace.



About your Lecturer

- Dr. Sunder Ali Khowaja
- SunderAli.Khowaja@tudublin.ie

- Website
- LinkedIn

Semester Overview

No	Date	Topic	Lab	Assessment
1	16/09/2024	Introduction to Object Oriented Programming and Python	In Person	
2	23/09/2024	Objects in Python	In Person	Lab Submission 5% of CA
3	30/09/2024	Encapsulation and Data Handling	In person	Lab Submission 5% of CA
4	7/10/2024	Inheritance and Method Overriding	In person	Lab Submission 5% of CA
5	14/10/2024	Abstract Classes	In person	Lab Submission 5% of CA
6	21/10/2024	Working with Python objects	In person	Lab Submission 5% of CA
7	28/10/2024	Review Week		
8	4/11/2024	Composition and Dependency Management	In person	Lab Submission 5% of CA
9	11/11/2024	Exception Handling and Error Management	In person	Lab Submission 5% of CA
10	18/11/2024	File Handling and Modules	In person	Lab Submission 5% of CA
11	25/11/2024	Graphical User Interface (GUI) Development	Group work for Assignment	
12	2/12/2024	Testing	Group presentations during the lab	Assignment Submission 60% of CA
13	9/12/2024	Revision	Group presentations during the lab	
	16/12/2024	Winter Break		
	23/12/2024	Winter Break		
	6/1/2025	Assessment/Exams	The OOP exam is in Semester 2	
	13/01/2025	Assessment/Exams	The OOP exam is in Semester 2	
This module is calculated out of 50% CA: 50% exam. Semester 1 + Semester 2 CA achievements count half each.				

How to be Successful as a Student

- Stay organised. Take notes. Be aware of your assessments.
- Actively participate.
- Learn effective study techniques.
- Manage your time well. Self-care. “Work”-life balance.
- Use all the resources that are available to you.
- Build relationships and study groups with your peers. Make friends.

From the Handbook

- You can find your year's handbook in the designated programme information module on brightspace.
- Be aware of the assessment regulations for TU Dublin to learn about your rights, important processes, procedures, forms and deadlines. The student union has good information, too.
- This module has a floor on the exam of 40%. Other modules have a floor on the exam, too; do you know which ones?
- Do you know who your year mentor is?

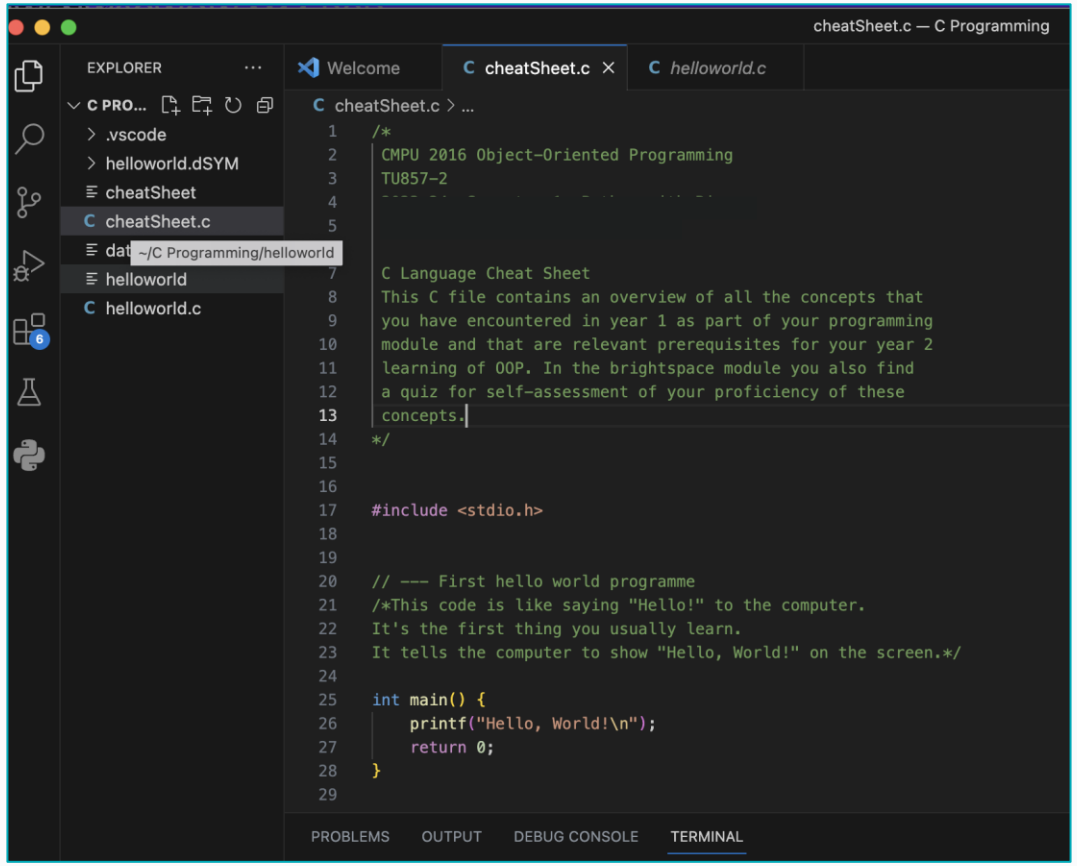
How much Time?

- OOP is a 10 ECTS module. The exam is at the end of semester 2.
- TU Dublin gives a guideline for how much input should be put into your studies.
- ”Each ECTS credit corresponds to 20 learning hours.”
  - 10 ECTS x 20 hours = 200 learning hours.
  - 200 learning hours / 2 semesters = 100 learning hours per semester.
  - 100 learning hours / 13 study weeks = 7.7 learning hours per week.
  - 7.7 learning hours – (2 hours lecture + 2 hours lab + 1 hour tutorial) = 2.7 self-study hours per week!

What to do in Self-Study?

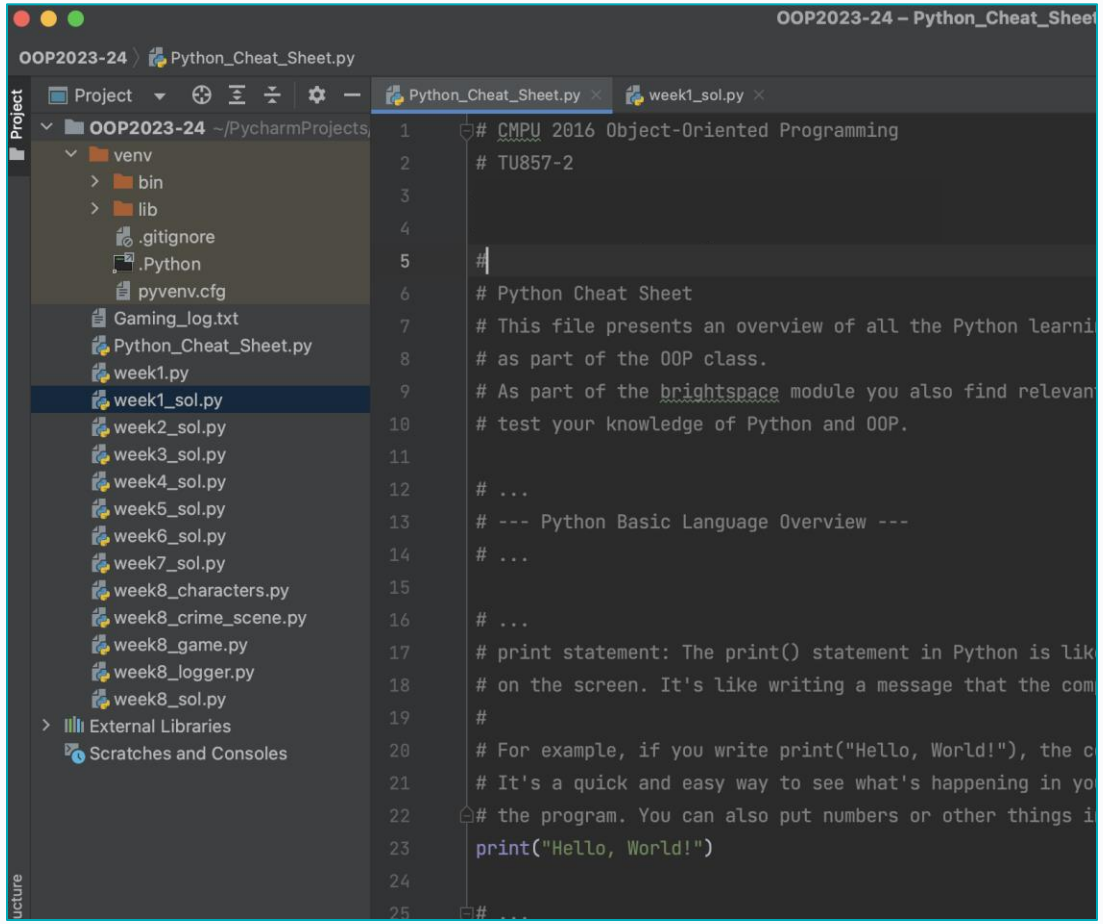
- Review our class notes.
- **Practice all coding examples from class**. Ask questions if something is not working as expected and you have tried to solve it yourself first.
- Read a class related text book.
- Watch topic related videos on YouTube or **LinkedIn Learning**.
- Solve coding problems you come across online.
- Practice debugging code.
- Work on your assignment or review past exam papers.
- Reflect and summarise.

Demo



- Revise important concepts in C.

Demo



- Coding demo using PyCharm and Python.

Summary of Lecture

- Understand the module, its structure, assessment and how much input is required from you.
- Know who to contact about the module (SunderAli.Khowaja@tudublin.ie)
- Be enrolled in the brightspace module.
- Revision of C and first steps in Python and PyCharm.

Contact Me

Via E-Mail

SunderAli.Khowaja@tudublin.ie

Or contact the School Office

school.cs@tudublin.ie