

Academic Year 2020/2021

PROGRAMMING TECHNIQUES

Presentation

- Professor
- Objectives
- Program
- Bibliography
- Evaluation rules



Instructor



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Tuesday - 17:00 - 19:00

Learning Goals

- 1. Introduce the basic concepts of procedural Programming
- 2. Introduce the basic concepts of Object-Oriented Programming;
- 3. Familiarize students with the use of scientific calculus libraries to solve mathematical problems.

Course Syllabus

- 1. Introduction
- 2. Language Programming Basics
- 3. Data Structures
- 4. Programming Fundamentals: Control Structures
- **5. Programming Fundamentals: Objects and Classes**
- **6. Main libraries and Applications**
- 7. Case Study 1
- 8. Case Study 2



Assessment

- 40% Project (presented last week)
- 20% Laboratory and Quiz (once a week)
- 40% test
- During tests:
 - Students should also not retain or refer to any books or papers during any test except with the express permission of the instructor or teaching staff.
 - Personal belongings should be put away and all mobile phones and other electronic devices should be turned off.
 - or
- Exam 1 (If student choose this option and has possibility of passing, will loose the previous marks from test1 and test2)
- Exam 2



Deadlines

- 1. Team registration (15th October)
- 2. Project Statement (28rd October)
- 3. Small presentations of project (19th November)
- 4. Exam (9th/10th December)
- 5. Project Presentation (16/17th December)



Bibliography

Martins J. P. (2015) Programação em PYTHON: Introdução à Programação Utilizando Múltiplos Paradigmas, IST Press.

Downey, A. (2015) Think Python. (2nd Edition) O'Reilly Media, Inc.

Guttag, J. (2016) Introduction to computation and programming using Python: With application to understanding data. MIT Press, 2016.

Fraud in the evaluation process

- 1. In line with n. 2 of RGAC (Evaluation Regulations) 2007-08:
- 2. All confirmed frauds in the evaluation process, such as copied written tests or other works, imply failure in the course and must be reported by the Director to the Admin Services.
- 3. The transgressor will not be allowed to the next three opportunities.
- 4. Any appeal will be decided by the President of Pedagogical Council along with the students' elected Vice-President.

