
INTRO TO COMPUTER PROGRAMMING II in Spring 2021 (CS2040)

Course Code	CS2040	Professor(s)	Tomer Libal
Prerequisites	None	Office Number	PL
Class Schedule	MW: 13:45-15:05 in Q-604 R: 09:00-10:20 in Q-604	Office Hours	By appointment
Credits	4	Email	tlibal@aup.edu
Semester	Spring 2021	Office Tel. Ext.	

Course Description

This is the second part of the foundation course for the Information and Communication Technologies degree program. Successful students will have a thorough knowledge of the computer language Java, the systematic development of programs, problem-solving and a knowledge of some of the fundamental algorithms of computer science. Essential concepts include inheritance, polymorphism, and error-handling, using exceptions and recursion. We will also learn the basics of graphical user interfaces

Course Learning Outcomes

Students will demonstrate knowledge of the core Java language (including some specialized packages) and the OOP paradigm.

Students will be able to apply their knowledge in order to implement java applications , including the use of GUI, different design patterns, OOP principles and the use of recursion.

Students will be able to clearly communicate and describe programming errors and be able to obtain information regarding them from the CS community. Students will also follow clear documentation principles.

General Education

[PLEASE EDIT OR REMOVE THE FOLLOWING TEXT AS APPLICABLE]

The general education program at AUP consists of four requirements: Speaking the World, Modeling the World, Mapping the World, and Comparing Worlds Past and Present.

This course can be used to fulfill the [INDICATE THE REQUIREMENT(S) FULFILLED BY THE COURSE] requirement and as such has the following learning outcomes:

[INDICATE THE GENERAL EDUCATION LEARNING OUTCOMES]

Course Outline

Week I

TOPICS intro, LFSR

READINGS chapters 1-8

Week II

TOPICS Objects and classes

READINGS chapter 9

Week III

TOPICS OOP thinking

READINGS chapter 10

Week IV

TOPICS Inheritance

READINGS chapter 11

Week V

TOPICS Exceptions

READINGS chapter 12

Week VI

TOPICS abstract classes

READINGS chapter 13

Week VII

TOPICS Midterm exam

READINGS

Week VIII

TOPICS JavaFX basics

READINGS chapter 14

Week IX

TOPICS Event driven programming

READINGS chapter 15

Week X

TOPICS IO

READINGS chapter 17

Week XI

TOPICS Recursion

READINGS chapter 18

Week XII

TOPICS Functional Programming

READINGS

Week XIII

TOPICS Scala

READINGS

Textbooks

Title	Author	Publisher	ISBN	Required
Pearson MyLab Programming -	Y. Daniel Liang	Pearson - Not Available at the	9781292222103	Yes

Instant Access - Introduction to Java Programming, Brief Version, Global Edition		Bookstore		
Introduction to Java Programming, Brief Version, Global Edition E11	Liang	Pearson - Not Available at the Bookstore	9781292222172	Yes

Attendance Policy

Students studying at The American University of Paris are expected to attend ALL scheduled classes, and in case of absence, should contact their professors to explain the situation. It is the student's responsibility to be aware of any specific attendance policy that a faculty member might have set in the course syllabus. The French Department, for example, has its own attendance policy, and students are responsible for compliance. Academic Affairs will excuse an absence for students' participation in study trips related to their courses.

Attendance at all exams is mandatory.

IN ALL CASES OF MISSED COURSE MEETINGS, THE RESPONSIBILITY FOR COMMUNICATION WITH THE PROFESSOR, AND FOR ARRANGING TO MAKE UP MISSED WORK, RESTS SOLELY WITH THE STUDENT.

Whether an absence is excused or not is ALWAYS up to the discretion of the professor or the department. Unexcused absences can result in a low or failing participation grade. In the case of excessive absences, it is up to the professor or the department to decide if the student will receive an "F" for the course. An instructor may recommend that a student withdraw, if absences have made it impossible to continue in the course at a satisfactory level.

Students must be mindful of this policy when making their travel arrangements, and especially during the Drop/Add and Exam Periods.

Grading Policy

Online exercises: 20%

Exercises: 50%

Midterm: 10%

Final: 20%

Other
