Università degli Studi della Basilicata

Dipartimento di Matematica, Informatica ed Economia

COURSE: **Object-Oriented Programming I**	
ACADEMIC YEAR: **2019-2020**	
TYPE OF EDUCATIONAL ACTIVITY: **Characterizing**	
TEACHER: Giansalvatore Mecca, Donatello Santoro	
e-mail: giansalvatore.mecca@gmail.com donatello.santoro@gmail.com	website: http://informatica.unibas.it/moodle/
phone: 0971205809	
Language: Italian	

ECTS: 9	n. of hours: 76	Campus: Potenza Dept.: DiMIE Program: Scienze e Tecnologie Informatiche	Semester: Second

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

Students may achieve the following skills and ability:
Basic and Intermediate Level to pass the final exam
The minimum knowledge level to be acquired in order to pass the final exam regards both theory and practice concepts related to the following topics:
- Integrated Development Environment (IDE) tools and build automation software
- Programming techniques (i.e. date, collections, threads, DAO)
- GUI programming and Model-View-Controller pattern
- Having basic competences and the ability to apply the aforementioned concepts in Java
- DBMS programming
- REST API programming
- Knowlede of a client-server architecture
- a deeper knowledge of the course topics
- good knowledge of the Android platform
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Advanced Level
Achieving the advanced level means that students have all the competences and the skills, in theory and in practice, to design and develop a comprehensive desktop and mobile application with advanced business logic.

PRE-REQUIREMENTS
The course requires the knowledge of the Java platform

SYLLABUS
o Development Tools: Integrated Development Envirnment (IDE) tools, Build automation software, Logging, Java tools and .NET tools
o Programming Techniques: Introduction, Collections, Inner classes, Persistence and DAO, Serialization and Cloning, Threads
o GUI Programming: Introduction, Components, Events, Listeners, Java Swing, The MVC Pattern
o XML Programming: Json,
o DBMS Programming: Network principles, The HTTP protocol, DBMS Programming technologies and methologies

TEACHING METHODS
The course will offer 76 teaching hours. In particular, there will be 64h theoretical lessons and 12 hour of laboratory tutorials.

EVALUATION METHODS
Students must take both a multiple choice test and a practical test on the computer; the latter test is provided according to the three learning levels described before (basic, intermediate, advanced).

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In addition, students could take the inter-course tests (multiple choice tests) to be done at the end of each semester. Passing such inter-course tests will allow students to directly access to the practical test on the computer (within the September session), also having 2 extra bonus points

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TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL
Lecture notes available on the web site of the course

INTERACTION WITH STUDENTS
Consulting hours
Prof. Giansalvatore Mecca: 12:30 – 13:30   https://goo.gl/P32yUo
Dott. Donatello Santoro: 12:30 – 13:30 https://book.donatellosantoro.com/

EXAMINATION SESSIONS (FORECAST)[1]

- I intermediate test – 4 May 2020
- II intermediate test - 18 May2020
- III intermediate test – 29-30 June 2020

- I Session - 6-7 July 2020
- II Session - 20-21 July 2020
- III Session - 10-11 September 2020
- IV Session - 17-18 December 2020
- V Session - 8-9 Feburary 2021
- VI Session - 10-11 May 2021

SEMINARS BY EXTERNAL EXPERTS   YES □   NO X

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[1] Subject to possible changes: check the web site of the Teacher or the Department/School for updates.