COURSE: Advanced Software Engineering
ACADEMIC YEAR: 2018/2019
TYPE OF EDUCATIONAL ACTIVITY: Basic
TEACHER: Giuseppe Scanniello
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Language: Italian

ECTS: 6
n. of hours: 48
Campus: Potenza
Dept./School: Engineering School
Program: second semester
Semester: second

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES
Knowing how to build models of systems with a step by step process. Knowing how to produce documents during the various stages of a software development process and modify them to produce higher part of software processes iterative and incremental. Knowing how to use the UML to model software. Knowing how to use an engineering approach for the advanced design and maintenance of software. Knowing how to deal with software projects.

PRE-REQUIREMENTS
Able to solve problems of simple and complex programming tasks using both procedural approaches and object oriented paradigms with appropriate selection and/or realization of efficient data structures.

SYLLABUS
Advanced concepts related to software engineering tasks. Software management and evolution, organizational and economic aspects of software, Engineering project management, cost estimation, human resource handling, software quality management, Product and process quality, software metrics, process improvement.

TEACHING METHODS
Frontal Lessons and class works for a total of 48. Students will be also asked to carry out home works.

EVALUATION METHODS
To verify the acquired knowledge, there will be written and oral exams. Homework will be given and assessed in order to have a deeper evaluation of the students’ acquired knowledge. Students will be asked to accomplish assignments in class. All the teaching activities will contribute to have a general evaluation of the students’ acquired knowledge.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL
Object Oriented Software Engineering Using UML Patterns and Java;
C. Wholin et al., Experimentation in Software Engineering;
Digital material will be available for the students on Moodle

INTERACTION WITH STUDENTS
In person, while office hours, by email or instant messaging. The lecturer will also use the e-learning platform to share files and to communicate information to the student (e.g., forum and so on).

EXAMINATION SESSIONS (FORECAST)
1. 2019-02-05; 2019-02-26; 2019-07-02; 2019-09-17; 2019-12-17

SEMINARS BY EXTERNAL EXPERTS YES X NO □

FURTHER INFORMATION

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