General Information	A.A. 2018-2019
Academic subject	Project Management
Degree course	Computer Science (second-level degree in Computer Science
Curriculum	
ECTS credits	9
Compulsory attendance	No
Language	English

Subject teacher	Name Surname	Mail address
	Danilo Caivano	danilo.caivano@uniba.it
Office Hours	Location	Day and time
Department of Informatics	VI Floor	Monday 10:30 -12:30
	Room 622	

ECTS credits details		
Basic teaching activities	Lectures (6 credits) Student project (3 cr	

Class schedule	
Period	First semester
Year	First
Type of Class	Lecture (6 ECTS)
	Student Project (3 ECTS)

Time management	
Hours	225
Hours of Lecture	48
Hours of individual study and Project	177 (102 individual study, 75 Project)

Academic calendar	
Class begins	September 26th, 2018
Class ends	January 11th, 2019

Syllabus	
Prerequisites/requirements	There are not mandatory requirements
Expected learning outcomes (according to	Knowledge and understanding
Dublin Descriptors) (it is recommended that they are congruent with the learning outcomes contained in the Didactic Regulation and Prospectus a.a. 2017-2018)	The main expected learning result is the knowledge of the processes, methods and techniques and the main areas of knowledge that characterize the management of a project in order to be able to operate project-oriented management in complex contexts.  The course is structurally inspired by the Project Management Body of Knowledge (PMBOK) of the Project Management Institute (PMI). It is about the issues related to the management of a project. In particular, starting from

the definition of "project" and the substantial differences that this presents with respect to a production process, the issues related to the design constraints are addressed: i.e. time, quality and resources. After the introduction of the main areas of knowledge (Knowledge Areas) related to Project Management, the main management processes are also analyzed, the latter logically included in the five groups of fundamental processes (Project Management Process Group) identified by the PMI: Initiation, Planning Executing, Monitoring & Controlling, Closing.

Students acquire this knowledge both through lectures and possible participation in specific seminars, and through specific exercises, which allow them to put into practice and verify what they have learned, thus acquiring awareness of their ability to understand and how to improve them.

#### Applying knowledge and understanding

In order to enable students to apply the acquired knowledge, they perform both individual and collaborative exercises. In addition, students are required to develop a project in which they apply some of techniques presented in class, having selected the most appropriate ones for the specific case. This project contributes to the student's final assessment and thus to the final grade for the course.

### Making judgements

An important objective of the course is that the student achieves the ability to integrate knowledge, handle complexity and make decisions during the management of a project. The exercises performed during the course, which are discussed by teacher and students, are a means to train students to make judgements. This ability is evaluated by the teacher and contributes to the final grade, which also considers the active participation of the student to the discussions in class and the presentation of the project.

#### Communication

Students are encouraged to work in groups and are often invited to study and present some course topics to the class (Flipped Classroom) or the outcome of exercises carried out individually or in groups, with the goal of developing their communication skills. Students are also required to develop a project in which they apply some of the learned techniques, selecting those ones that they feel most appropriate (based on their ability to make judgments). The presentation of this project is part of the oral examination and allows the student to demonstrate his/her communicative abilities by illustrating the performed work using some slides previously prepared.

### Learning skills

In order to stimulate their own learning skills, students are solicited to deepen some topics not discussed in detail by the teacher, using books and/or other sources different from the textbook. Students will present these topics in class following the Flipped Classroom model.

Students are also invited to attend seminars held by other lecturers, internal to the department or visiting researchers, and they will be asked to discuss in class the content of such seminars

#### Course Program

#### **Introduction to Project Management**

- Introduction
- The current scenario
- Project management and Complexity

## **History and Key Elements**

- Project and Project Management: Definitions
- Project Management from the post-war period until today
- Maturity and Excellence
- Barriers to change and strategies to overcome
- Roles Involved
- Project, Program and Portfolio Management
- Project, Phase and Development Lyfecicle

#### **Project management Standards and Methodologies**

- ISO 21500
- PRINCE 2
- PMI PMBOOK

# The Technical Dimension of Project Management

- The What, When, Who, How Approach: introduction
- What:
  - Work Breakdown Structure
  - Deliverable Breakdown Structure
- When:
  - o Gantt
  - PERT
  - o CPM
- Who:
  - o RACI
- How
  - o Much:
    - Budget Estimation
    - Earned Value Management
  - well:
    - Quality Management
- Transformation algorithms and optimization practices

### **Project Management Knowledge Areas (Flipped Classroom)**

Project Integration

	- Project Scope
	- Project Schedule
	- Project Cost
	- Project Quality
	- Project Resource
	- Project Communications
	- Project Risk
	- Project Procurement
	- Project Stakeholder
	1 Toject Stakenorder
	The environment in which projects operate
	- Project Development Environment
	<ul> <li>Enterprise Environmental Factors</li> </ul>
	<ul> <li>Organizational Process Assets</li> </ul>
	<ul> <li>Organizational Structures</li> </ul>
	- Project Management Office and Project Office
	- The team and the right MIX
	PM Documents and Success
	<ul> <li>Project Management documents</li> </ul>
	- Measures of success
Bibliography	1. A Guide to the Project Management Body of
	Knowledge: (Pmbok Guide), 6° ed, by Project
	Management Institute, ISBN: 978-1628251845
	2. Project Management: A Systems Approach to Planning,
	Scheduling, and Controlling, 11th Edition, Harold
	Kerzner, ISBN: 978-1-118-02227-6
Notes	To deepen the themes of project complexity, refer to the
	following text (in Italian free download)
	- UOMINI 4.0: RITORNO AL FUTURO. CREARE VALORE
	ESPLORANDO LA COMPLESSITÀ, Alberto F. De Toni,
	Enzo Rullani, FRANCO ANGELI
Teaching methods	Lectures in class with the support of slides prepared by the
	teacher.
	practical sessions of Bring-Your-Own-Device (BYOD) type.
	A project to be developed in group, with the supervision of
	the teacher
Assessment methods (indicate at least the	The assessment method used during the final exam
type written, oral, other)	includes:
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	- an oral presentation which illustrates and discusses the
	project developed in a group. The project is assigned during
	the course semester. The project must be delivered 3
	working days before the date of the exam. The positive
	evaluation of a project is valid for the current academic
	year.
	- A written test consisting in answering a questionnaire

	containing closed or open-ended questions.
Evaluation criteria (Explain for each expected learning outcome what a student has to know, or is able to do, and how many levels of achievement there are).	To ascertain the knowledge acquired by the student, and also his/her autonomy of judgment, communication skills and the ability to learn, it is planned to:  - Evaluate, through an oral presentation, the project carried out (in a group) considering how it was structured, how the principles and methodologies were applied, the appropriateness of the techniques used, the originality of the solutions, clarity and of the synthesis capacity that results from the documentation produced (written report, oral and possible presentation through slides). The contribution of the single student to the group work will be evaluated. The evaluation is in thirtieths and is the same for the whole working group. Individual evaluation is therefore obtained with bonus or malus points in relation to: the contribution given to the group in the realization of the project; to the ability to synthesis as well as clarity of exposure, the ability to make meaningful comparisons between different methodologies, techniques and technologies and to report one's own critical judgment, to mastering the technical terms.  - Evaluate through a written test consisting in answering a questionnaire containing closed or open questions, the knowledge acquired during the course. The final mark is is in thirtieths.
	The final grade will be obtained as the weighted average of the grade obtained for the oral presentation of the project (60%) and that of the written test (40%).
Further information	Students who have attended the course assiduously, upon passing the final exam, will receive a "contact hours" certification issued jointly signed by the course teacher and a Project Management Institute Member Southern Italy Chapter. This certification will be valid to access the exams for the achievement of the CAPM and PMP certifications of the project Management Institute