



# Course Introduction

Andrea Polini

Software Project Management  
MSc in Computer Science  
University of Camerino

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# Course Responsible, Lessons, Exams

- Andrea Polini
  - e-mail: [andrea.polini@unicam.it](mailto:andrea.polini@unicam.it)
  - web: <http://www.cs.unicam.it/polini/>
- Software Project Management
  - lessons:
    - Tuesday 9am to 11am – 4pm to 6pm
    - Wednesday 9pm to 11am
    - Thursday 11am to 1pm (**only when explicitly stated**)
  - web: <http://didattica.cs.unicam.it/...>
- Exam dates:
  - February 7th and 28th, 2018
  - April 4th, 2018
  - June 13th, 2018
  - July 4th and 18th, 2018
  - September 12th and 26th, 2018
  - February 8th and 28th, 2019

# Course Organization

The course is structured over three different parts:

- Software Project Management (6CFU + 3CFU Lab)
- Certified Associate in Project Management (CAPM<sup>©</sup>) – **PMI certification** (3CFU) – *agreement pending*
  - intensive course in December/January
  - teachers from the PMI Italian chapter b
  - the course is preparatory and permit to take the certification exam

# Course Objectives

The course intends to provide to the students basic knowledge on the subject of project management with a particular emphasis on the production of complex software systems. At the end of the course you should be able to understand the complexities of project planning and executions, as well as to apply techniques and methods to handle such a complexity.

# Study material - SPM Part

## ● Reference books:



Bob Hughes, Mike Cotterell

*Software Project Management, 5th Ed.*

McGraw-Hill, 2009



Andrew Stellman and Jennifer Greene

*Learning Agile Understanding Scrum, XP, Lean, and Kanban*

O'Reilly 2015.

## ● Additional textbooks:



Roger Pressman and Bruce Maxim

*Software Engineering a Practioner's Approach 8<sup>th</sup> Ed.*

McGraw-Hill 2015.



Ian Sommerville

*Software Engineering 10<sup>th</sup> Ed.*

Addison Wesley 2016.

## ● PMI Certification



*PMBOK Guide*

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*PMBOK Guide*

# Visual Paradigm



Visual Paradigm supports Università di Camerino with UML tools and ERD tools under the Visual Paradigm Academic Training Partner Program.

UNICAM students can download and install the enterprise version of Visual Paradigm at the following link:

- <https://ap.visual-paradigm.com/universita-di-camerino>

# Contents

- Software Development Processes
- Agile Project Management
  - Scrum
  - eXtreme Programming
  - Lean
  - Kanban
- Principles of Software Project Management
- Project Planning
- Risk Assessment
- Cost Estimation
- Staffing
- Configuration management
- Project Monitoring



# Final Exam!!!

1. **Group project** (3-4 members – under “negotiation”)
  - You will be asked to develop a project over the duration of the semester with intermediate checkpoints (meeting with the teacher). The group will have to simulate the techniques typical of Agile approaches.
  - the project requires to deliver a working prototype that will be illustrated to the teacher. The date for the discussion meeting has to be agreed in advance, and one week before the meeting a report has to be sent via e-mail in pdf format
2. **Written paper** – date fixed for the exam
  - The paper will include questions and exercises on the three main topics of the course (in case students can cover the PMI part getting the certification)

The mark is structured according to a “50-50” balance considering the project, and the written paper. Students willing to improve their final mark can ask for an additional oral examination.

**Any order to respect?**

The project has to be delivered before taking part to the written paper.

# Software Development Processes

- What do we mean for software life-cycle?
- Can you clearly state the differences between activities vs. phases?
- Can you list relevant perspectives for a software development process?
- Can you mention at least one software development process model?