

Project Management (Gestão de projectos) 2014 / 2015

- Offered to all PhD Programs of the School of Engineering (UMinho)
- One Semester Course (5 ects)
- Runs February - July

Instructors

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Learning outcomes

- To understand and explain the importance of project management in organizations.
- To understand the project life cycle and to develop the capacity to define projects and to manage them.
- To understand techniques and to use tools for effectively monitoring and controlling a project.
- To apply project management tools and techniques.

Program

- Project Management
- Project Management Growth: Concepts and Definitions.
- Organizational Structures.
- Management Functions.
- Planning.
- Network Scheduling Techniques.
- Project Graphics.
- Pricing and Estimating.
- Cost Control.
- Risk Management.
- Quality Management.

Seminars

- Two talks by people involved in project management in portuguese companies.
- In 2013/14:
 - Rafael Almeida, Iber-Oleff – Componentes Técnicos em Plástico, SA {Polymer Components Co.}
 - António Cândido, Efacec {Power Electronics Co.}

Bibliography

- Harold Kerzner, Project Management: A Systems Approach to Planning, Scheduling, and Controlling, 9th Edition, 2006, ISBN: 978-0-471-74187-9.
- There are several copies in the UMinho Library.
- PMBOK (Project Management Body of Knowledge), Third Edition, 2004
- Material at the e-learning site (address provided in a different slide)

Assessment

- one individual assignment: analysis of a case, with written report.
- one group (4 to 5 students) assignment: Ipsolve models for project planning, with written report.
- one group (4 to 5 students) assignment: development of a project plan (to be defined by the students) using Microsoft Project, with written report, presentation and discussion.
- Exam: multiple choice questions.

Grading

- Group assignments 40 %
 - Lpsolve (10%) and Project (30%)
- Individual assignments 20 %
- Written exam 40 %

Analysis of case

- Check file assignment_of_cases_to_students.pdf to find out which case you should address.
- You should upload a written report, with:
 - a synopsis of the case (with half to one page A4) and
 - the answers to the questions posed at the end of the text of the case.
- There is no oral presentation, nor discussion of the report.
- Moodle will accept a submission of ONE file with a maximum size of 16 Mb.

Group assignment: Ip models

- **Scope of project:**
- Develop a model for the analysis of a project:
 - Duration of a project
 - Crashing times
 - Planning under resource constraints
 - Outsourcing activities
- Use mathematical programming software (Ipsolve).
- Lpsolve is freeware.

Group assignment: project

- **General requirements:**
 - Each group must put in practice project management concepts in the planning of a project, chosen and defined by students.
 - Each student should play a different (well identified) role in the project definition.
 - Use Microsoft Project.
 - Only planning part should be considered, and not the execution of the project.

Group assignment: project (cont.)

- **Basic requirements for written report:**
- Scope of project
- Project planning
 - · Statement of work
 - · Project specifications
 - · Milestone schedule
 - · Work Breakdown Structure (WBS)
- Management plans
- Reporting requirements
- Project quality management (identify project quality requirements and use at least one quality tool).
- Project risk management (project risk identification and risk analysis must be performed).

e-learning platform

- moodle.dps.uminho.pt
- PDEEUM – Programas Doutorais da EEUM 2014/2015
- Gestão de Projectos
- Enrollment key (chave de inscrição):
gp_pdeelum_2015

e-learning platform (cont.)

- In case of difficulties in enrolling or in using moodle, send an email to:
 - coutinho@dps.uminho.pt

Software

- Microsoft Project 2007: supplied as part of a Microsoft /UMinho agreement.
- Download from the following DPS MSDNAA site:
 - <http://dreamspark.dps.uminho.pt>
 - to get a password to sign in, send email shown.

Getting Microsoft Project 2007

- Send email:
- to: coutinho@dps.uminho.pt
- c.c.: acosta@dps.uminho.pt
- subject: GP - MSDNAA
- text:
 - <student name>
 - <student number>
 - <email address>

Getting Ipsolve

- reference guide available at:
<http://lpsolve.sourceforge.net/5.1/>
- Download from:
http://sourceforge.net/project/showfiles.php?group_id=145213&package_id=159735
- setup in your computer.

Lectures (T classes)

- Presentation of material.
- Presentation of examples.
- Discussion of cases (text of case indicated in the calendar should be read before class).
- Discussion of assignments.

Lab (TP) classes

- Use of software.
- Solution of proposed exercises.
- Support / guidance of individual / group assignments.

Schedule

- To be confirmed:
 - Lecture: Thursday, 10:00-12:00, room ee0.022 (english)
 - LabClass 1: Thursday, 13:00-14:00, lab. CAD, DPS (english)
 - Lab Class 2: Thursday, 14:00-15:00, lab. CAD, DPS (portuguese)

End