

A decorative graphic consisting of a large, thin, gold-colored bracket on the left side, spanning the height of the 'Course Overview' section. A thin, gold-colored circle is positioned behind the bracket, partially obscured by it.

Course Overview

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[Course Language



- Slides are (mostly) in English
 - Speaking in Portuguese
- Exams are in Portuguese
 - You may answer in Portuguese or English as you wish
- Exercise, papers, final project, etc. might be in English or in Portuguese
 - You can choose either English or Portuguese as you wish

[Literature]

- C. Wohlin et al. **Experimentation in Software Engineering**, Springer. 2012.
 - Chapters 1 to 11 (Part I and Part II)
- Others
 - M. Fowler. **Refactoring: Improving the Design of Existing Code**. Addison-Wesley, 2000.
 - M. Lanza, R. Marinescu. **Object-Oriented Metrics in Practice**. Springer, 2006.
 - Other Software Engineering books.
 - Software Engineering research papers.

[Course Website]

- Slides and agenda are available in the course website
 - Link “Teaching (pt)” in my webpage
 - “Empirical Software Engineering”

<http://www.dcc.ufmg.br/~figueiredo/disciplinas>

- Email: **ese.dcc@gmail.com**

[Assessment Method]

- Two Exams: 10 points each
 - 1st Exam: 14 September
 - 2nd Exam: 04 November
- Exercises: 20 points
- Papers: 30 points
- Team Work: 30 points

[Exercises]

- We expect to have some exercises in this course
 - The deadline of an exercise is often 23:59 h of the appointed day
- *Late-delivery penalty policy*
 - 20% for up to one day late
 - 50% for up to one week late

[Paper Presentation]

- Each student has to present a paper
 - Each presentation should last between 20 to 25 minutes
- The list of papers is in the course website
 - Allocation criteria is FIFO
 - Deadline for choosing your paper is **14/09**
- You *may* present a paper not in the list
 - You have to sent it to me by email
 - I have to approve it

[Group Work (GW)]

- Students are going to be divided into groups of two members (or individually)
- Design and conduct an empirical study
 - Plan the study
 - Design and run it
 - Present its results
 - Report it in a 10-page document

[Topics for the 1st Exam]

- Introduction to ESE
 - Measurement
 - Bad Smells and Detection Strategies
- Empirical Strategies
 - Surveys, case studies, experiments
- Systematic Literature Reviews
- Case Studies

[Topics for the 2nd Exam]

- Experiment
 - Scoping
 - Planning
 - Design
 - Operation
 - Analysis
 - Presentation
- Papers

[Next Lecture]

- Review about measurements and software metrics
- Literature
 - C. Wohlin et al. **Experimentation in Software Engineering**, Springer. 2012. (Chapter 3)
 - Ian Sommerville. **Software Engineering**, 9th Edition. Pearson Education, 2010. (Sections 24.4 and 24.5)