



Course Introduction

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[Course Language]

- Slides are in English
 - Speaking in Portuguese
- Exams are in Portuguese
 - You may answer in English if you wish
- Exercise, group work, final project, etc. might be in English or in Portuguese
 - You can answer either in English or in Portuguese as you wish

[Bibliography (many)]

- P. Clements, L. Northrop. **Software Product Lines: Practices and Patterns**. Addison-Wesley, 2001.
- I. Sommerville. **Software Engineering**, 9a. Ed., 2011.
- R. Laddad. **AspectJ in Action**. 2nd Ed. Manning, 2010.
- S. Mellor, K. Scott, A. Uhl, D. Weise. **MDA Distilled**. Addison-Wesley, 2004.
- K. Pohl, G. Bockle, F. Linden. **Software Product Line Engineering: Foundations, Principles and Techniques**. Springer, 2005.
- C. Szyperski, **Component Software: Beyond Object-Oriented Programming**, Addison-Wesley, 1998.
- Research papers... etc.

Course Website and Email

- All course material and agenda are available in the course website
 - Link “Teaching (pt)” in my webpage

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

- Email: **reuso.software@gmail.com**

[Assessment Criteria]

- Undergraduate Students
 - 1st exam: 30 points
 - 2nd exam: 30 points
 - Group Work: 20 points
 - Exercises: 10 points
 - Participation in papers: 10 points

Assessment Criteria

- Graduate Students
 - 1st exam: 15 points
 - 2nd exam: 15 points
 - Group Work: 10 points
 - Exercises: 10 points
 - Paper presentation: 5 points
 - Participation in papers: 5 points
 - Final Project: 40 points

[Tentative Dates]

- 1st Exam
 - 03 of October
- 2nd Exam
 - 14 of November
- Team Work (TW)
 - Oral Presentation: 05/11 and 07/11
 - Final Submission: 09/11 (by email)
- Final Project (Graduate Students)
 - Final Submission: 16/11 (by email)
 - Oral Presentation: 26/11 and 28/11

**Dates may
change**

[3rd Exam (optional)]

- The 3rd exam is allowed to students with at least 40 points (sum of all activities)
 - It replaces 1st or 2nd exam
 - 15 pts (Graduate) or 30 pts (Under)
 - Expected Date: 21/11
- Which lectures to study?
 - If it replaces 1st exam: Lectures 1 to 14
 - If it replaces 2nd exam: Lectures 16 to 26

[Team Work (TW)]

- Groups of up to 5 members
 - No more than two graduate students per group
- Tasks
 - To implement a software system applying reuse strategies (we will see in the course)
 - To write a short report about the work
 - To present the results for your classmates

[Final Project (Graduate only)]

- Graduate students have to do it alone
- Tasks
 - To investigate a topic related to software reuse (research)
 - To write a short report with up to 15 pages (similar to a paper; i.e., it does **not** need cover, table of contents, list of figures, etc.)
 - To present the results for your classmates

[Paper Presentation]

- Each graduate student has to present a paper in the course
 - Each presentation should last between 20 to 30 minutes
- The list of papers is in the website
 - Allocation criteria is FIFO
 - Deadline for choosing your paper is 05/09
- If you want to present a paper not in the list
 - You have to sent it to me by email
 - I have to approve it

[Laboratory]

- Sometimes, we may have lectures in laboratory
 - Booked: ICEX 2011 and 2012
- The first time we expect to go to lab is 19 of September
 - If you arrive in class and nobody shows up, go to the laboratory

[Topics for the 1st Exam]

- Introduction to Software Reuse
- Patterns: design patterns, architecture, and idioms
- Component-based Software Engineering
- Aspect-Oriented Software Development (AOSD)
- Software Product Lines (SPL)

[Topics for the 2nd Exam]

- Software Product Line Process
- Model-driven Development
- Feature-Oriented Programming
- Delta-Oriented Programming

[Next Lecture]

- Introduction to Software Reuse
- Bibliography
 - Ian Sommerville. Software Engineering, 9th Edition. 2011. (Chapter 16)