

Configuration Management Course Outline

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Introductions

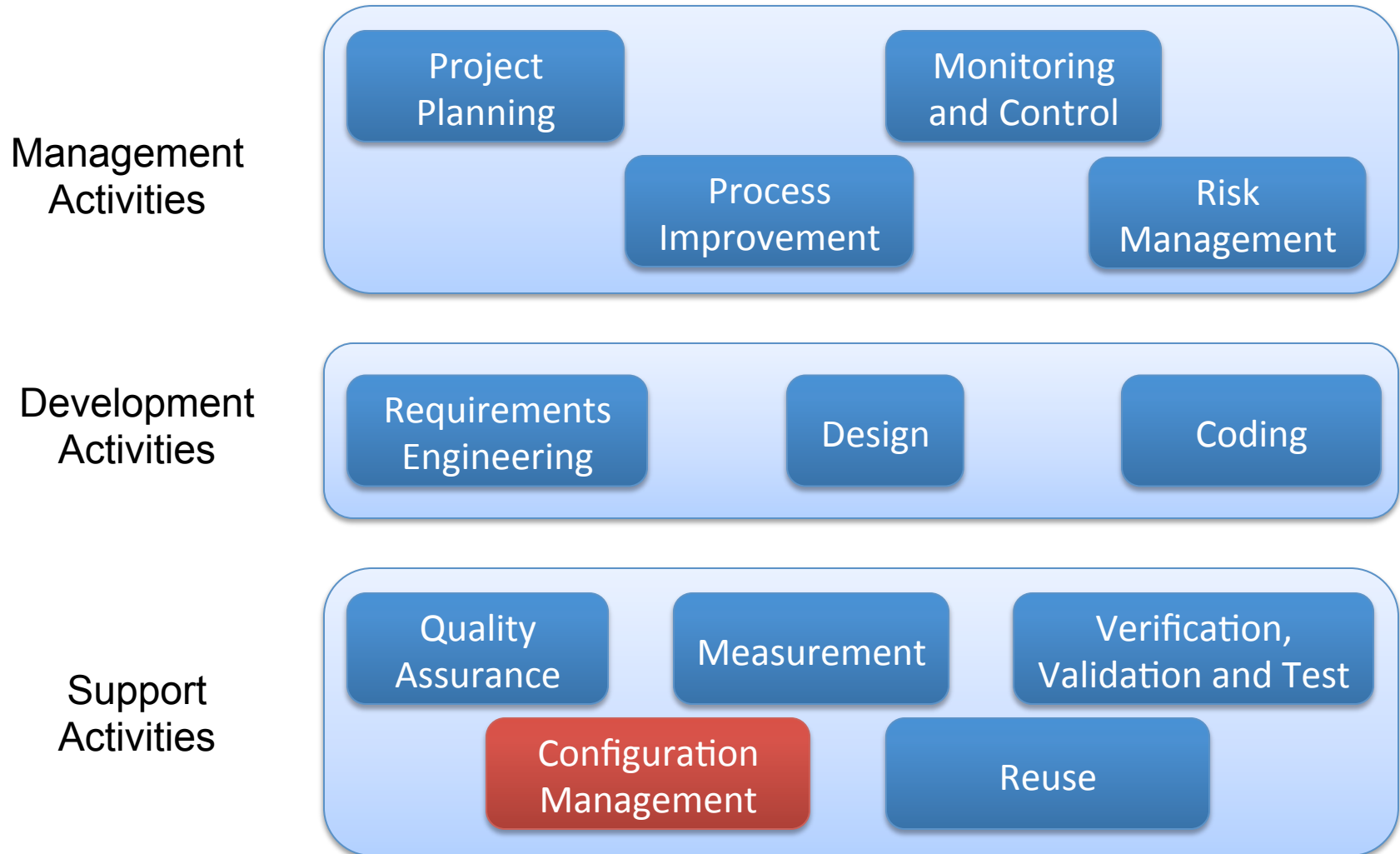
- Who am I?
 - Leonardo Murta
 - <http://www.ic.uff.br/~leomurta>
- Who are you?
 - Name? Level (BSc, MSc, DSc)?
 - Job? Internship?
 - Research Area? Thesis topic? Advisor?
 - Previous experience with Configuration Management?
 - What you expect for this course?

What is Configuration Management?

“CM is a discipline for **controlling the evolution** of software systems”

Susan Dart (1991)

CM and Software Engineering



Groups

- Undergrad and MS students **may** perform all activities in groups of two
 - Groups should be defined in the first weeks and kept the same until the end of the course
- PhD students should perform all activities individually

Course Dynamics

- Usual week
 - Wednesdays: paper presentation and discussions (you)
 - Fridays: lecture (me)
- Term project presentation weeks
 - Presentations about the ongoing work of the term project
 - Three presentation weeks during the course

Tentative Schedule

Data	Atividade	Entrega
22/03/2017	Aula - Apresentação do Curso	
24/03/2017	Aula	
29/03/2017	Apresentações de Artigos (1a. leitura)	
31/03/2017	Aula	
05/04/2017	Apresentações de Artigos (2a. leitura)	
07/04/2017	Aula	
12/04/2017	Apresentações de Artigos (3a. leitura)	
14/04/2017	Sem aula (Semana Santa)	
19/04/2017	Apresentações de Artigos (4a. leitura)	
21/04/2017	Sem aula (Tiradentes)	
26/04/2017	Apresentações de trabalho	
28/04/2017	Apresentações de trabalho	
03/05/2017	Apresentações de Artigos (5a. leitura)	
05/05/2017	Aula	
10/05/2017	Apresentações de Artigos (6a. leitura)	
12/05/2017	Aula	
17/05/2017	Apresentações de Artigos (7a. leitura)	
19/05/2017	Aula	
24/05/2017	Sem aula (ICSE)	
26/05/2017	Sem aula (ICSE)	
31/05/2017	Apresentações de trabalho	
02/06/2017	Apresentações de trabalho	
07/06/2017	Apresentações de Artigos (8a. leitura)	
09/06/2017	Aula	
14/06/2017	Apresentações de Artigos (9a. leitura)	
16/06/2017	Sem aula (Corpus Christi)	
21/06/2017	Apresentações de Artigos (10a. leitura)	
23/06/2017	Aula	
28/06/2017	Apresentações de trabalho	Trabalho
30/06/2017	Apresentações de trabalho	
05/07/2017	Sem aula (CSBC)	
07/07/2017	Sem aula (CSBC)	Avaliações
12/07/2017	Vista de avaliações	
14/07/2017	Verificação Suplementar	
19/07/2017	Vista de VS	

Reading topics

(one or two papers per topic)

- CM Introduction
- Version Control System (Git)
- Versioning Models
- Diff
- Merge
- Branching Strategies
- Non-source-code Versioning
- Research vs. Practice

Paper Presentation

- Each student/group will be in charge of presenting some papers
 - Send me ASAP 5 papers from the list (see the course webpage) sorted by preference
 - Around 30 minutes
 - Using slides
- The remaining students/groups are supposed to ask questions and discuss about the papers
 - All students/groups should read all papers

Term Project

- Goal:
 - Apply CM over some other area
 - Apply some technique to support CM
 - Mine/Visualize CM repositories
 - Study some advanced CM technique
- Try to align the course project with your thesis theme
- It is important to define the term project theme in the first weeks
 - The first term project presentation will occur in about one month!

Term project presentation

- 1st round
 - Context/Goal
 - Methodology
- 2nd round
 - Work progress
 - Partial results
- Final round
 - Final results
 - Experience report

Term Paper

- Types of projects
 - Theoretical: focus on related works and formal definitions
 - Implementation: focus on a tool and its evaluation
- Format:
 - 8 pages
 - SBC Style
- Content
 - Introduction: motivation and goal
 - Related work
 - Approach
 - Evaluation
 - Conclusion: contribution, limitation, and future work

Paper Reviews

- Papers will be submitted through a real conference management system, simulating a conference
- Each student will be a member of the program committee in this simulated conference, and will receive 3 papers to review
- All authors will receive 3 anonymous reviews of their papers by the end of the course
- The reviews will not influence the score of the term papers

Grading

$$\textit{Score} = \frac{(2 \times \text{Paper Presentations} + 2 \times \text{Seminars} + 2 \times \text{Term Paper} + \text{Paper Reviews})}{7}$$

Grading

- Approved

Presence $\geq 75\%$

AND

Score ≥ 6

- Supplementary Test

Undergrad Student

AND

Presence $\geq 75\%$

AND

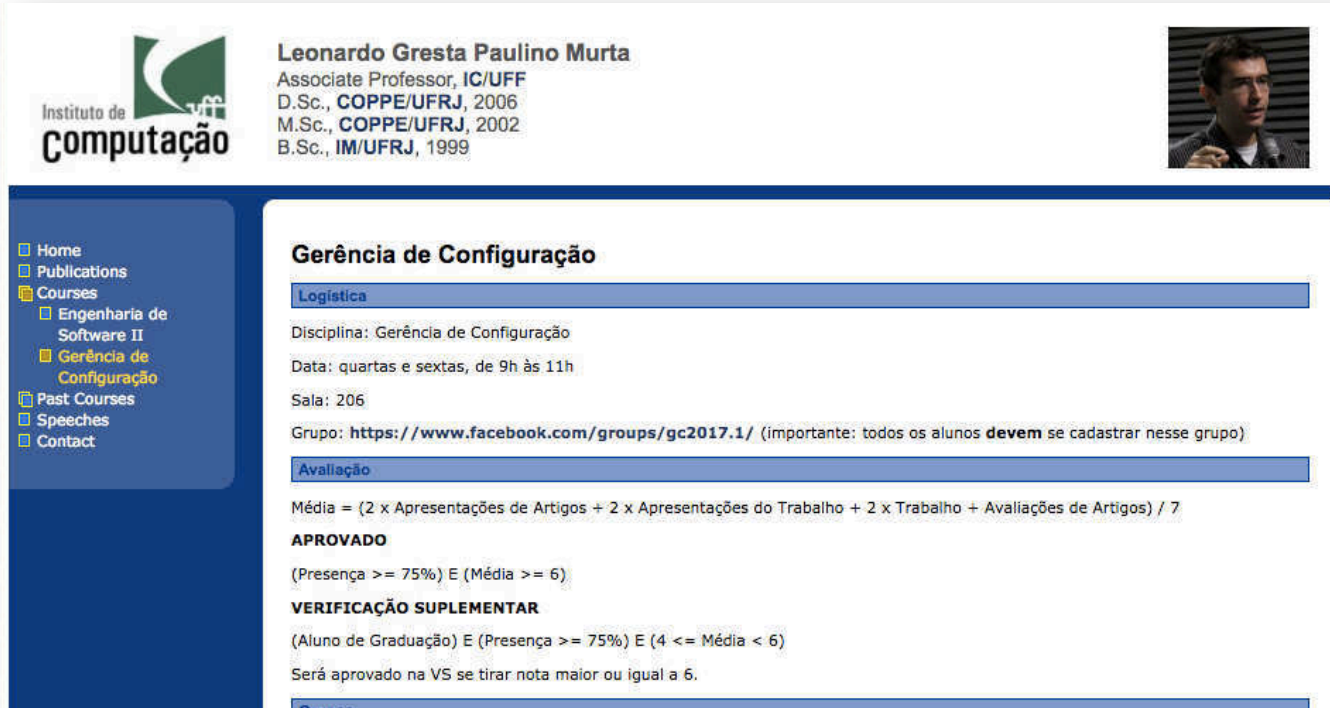
$4 \leq \textit{Score} < 6$

Important research tools...

- <http://scholar.google.com.br>
- <http://www.informatik.uni-trier.de/~ley/db>
- <http://www.scopus.com>
- <http://ieeexplore.ieee.org>
- <http://portal.acm.org>
- <http://citeseer.ist.psu.edu>

- Reference management: <http://www.zotero.org>

Course homepage



Instituto de Computação

Leonardo Gresta Paulino Murta
Associate Professor, IC/UFF
D.Sc., COPPE/UF RJ, 2006
M.Sc., COPPE/UF RJ, 2002
B.Sc., IM/UF RJ, 1999

Gerência de Configuração

Logística

Disciplina: Gerência de Configuração
Data: quartas e sextas, de 9h às 11h
Sala: 206
Grupo: <https://www.facebook.com/groups/gc2017.1/> (importante: todos os alunos **devem** se cadastrar nesse grupo)

Avaliação

Média = (2 x Apresentações de Artigos + 2 x Apresentações do Trabalho + 2 x Trabalho + Avaliações de Artigos) / 7

APROVADO
(Presença $\geq 75\%$) E (Média ≥ 6)

VERIFICAÇÃO SUPLEMENTAR
(Aluno de Graduação) E (Presença $\geq 75\%$) E (4 \leq Média < 6)
Será aprovado na VS se tirar nota maior ou igual a 6.

Read the course rules!!!

<http://www.ic.uff.br/~leomurta>

(hint: monitor changes with <http://www.changedetection.com>)

Important: subscribe to our group at Facebook!
(all readings are available in the group)

Fair Play!



<http://www.claybennett.com/pages/ethics.html>

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