



Enterprise and Business Process Modelling

Barbara Re

Contacts

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Who am I?

Education

- Bachelor and Master Degree in Computer Science
- PhD in Information Science and Complex System

Some Experiences

- I was visiting PhD at the Information School of University of Washington working with Dr. Hans J (Jochen) Scholl
- I was visiting Phd at the School of Business of University of Applied Sciences North-western Switzerland FHNW working with Prof. Knut Hinkelmann

Current Position

- Assistant Professor at University of Camerino

My Research Interests

- Applied Formal Methods
- Business Process Management: from Modelling to Analysis
- Flexibility in Process Aware Information Systems
- Methodologies and Technologies for Smart Government and Ambient Assisted Living development



<http://pros.unicam.it/>



What about you?



Enterprise and Business Process Modelling

Barbara Re

Course Objectives

- This course focuses on **modelling activity** that allows **abstracting** and **reasoning** on how an enterprise is organized and how the work is structured within complex organizations. In particular, **business process models** represent blueprints that can serve different purposes for a variety of stakeholder
 - **Business analysts** can use these models to better understand how the organization works
 - **Employees** playing a role in the process can use them to learn the tasks that they are supposed to perform
 - **Software analysts/developers** can refer to the models to understand the system-as-is before designing the system-to-be
- Given the variety of **stakeholders** that need to interpret these models, and considering the pivotal function that models play within organizations, models quality becomes fundamental

Learning Outcomes

- At the end of the course, the students will gain some familiarity with **enterprise** and **business process** terminology, with different **frameworks, models** and **languages** for the **representation** of enterprise and business processes
- Be able to model **business processes** in static and dynamic environment and to apply the most common techniques for **business process analysis**
- The students will also **experiment with some tools**

Focus

Different educational background and interests are in place



Consider business goal and organizational regulations as terms that do not deserve much thought, but require the appropriate level of abstraction

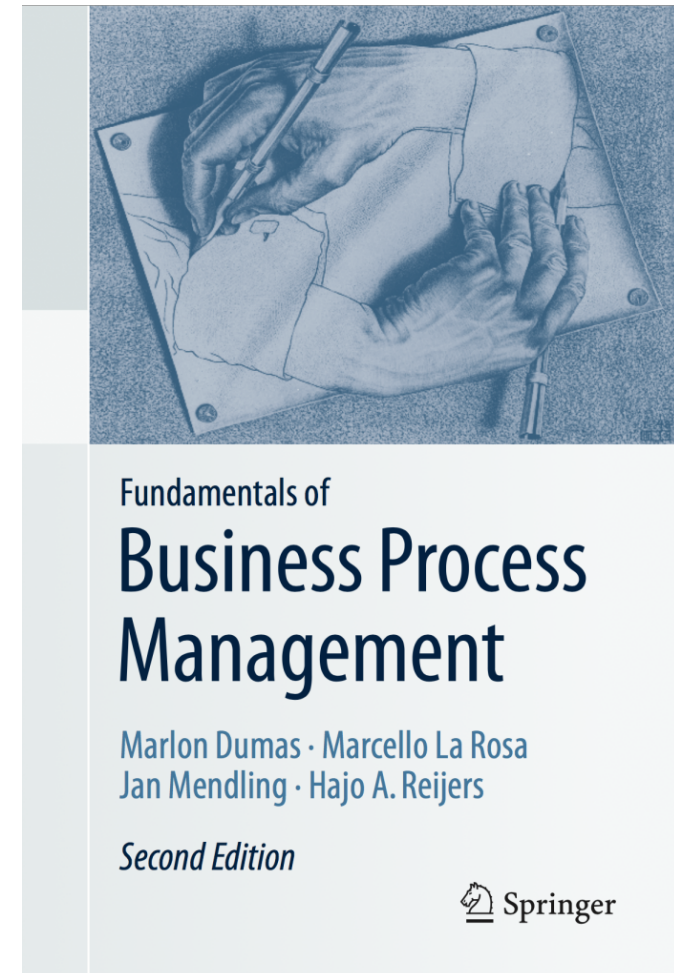
Syllabus

- **Introduction to Enterprise Architecture and Enterprise Modelling**
 - Enterprise Architecture Frameworks: Alter, Zachman, ...
 - Modelling an Enterprise Architecture with ArchiMate
- **Introduction to Business Process Management**
 - Process Everywhere
 - Business Process Model and Instances
 - Business Process Life-Cycle
 - Classification of Business Process
- **Business Process Modelling**
 - Conceptual models and abstraction mechanisms
 - Business Process Modelling Notation 2.0 (collaboration and choreography diagram)
 - From basic elements to advance modelling of multi-instance and data
- **Business Process Analysis**
 - Process Model Formalization
 - Models Quality dimensions syntactic, semantic and pragmatic quality
 - Understandability Guidelines and Soundness
 - Compliance Rule Specification and Verification
 - Verification into practice

Reference books

- Dumas M, La Rosa M, Mendling J., Reijers H: Fundamentals of Business Process Management, [Springer](https://www.springer.com) 2018.

<http://fundamentals-of-bpm.org/>



Further materials

- ArchiMate® specification an open group standard
<http://www.opengroup.org/>
- Business Process Model And Notation (BPMN) Version 2.0 -
<http://www.omg.org/spec/BPMN/2.0/>
- BPMN 2.0 by example - <http://www.omg.org/spec/BPMN/20100601/10-06-02.pdf>
- Research papers selected during the course (all of them are already/will be available on the web-site)

Tools

- ArchiMate® → <https://www.archimatetool.com/download/>
- Business Process Model And Notation (BPMN) → <https://bpmn.io/>
- Pros Tools → <http://pros.unicam.it/>

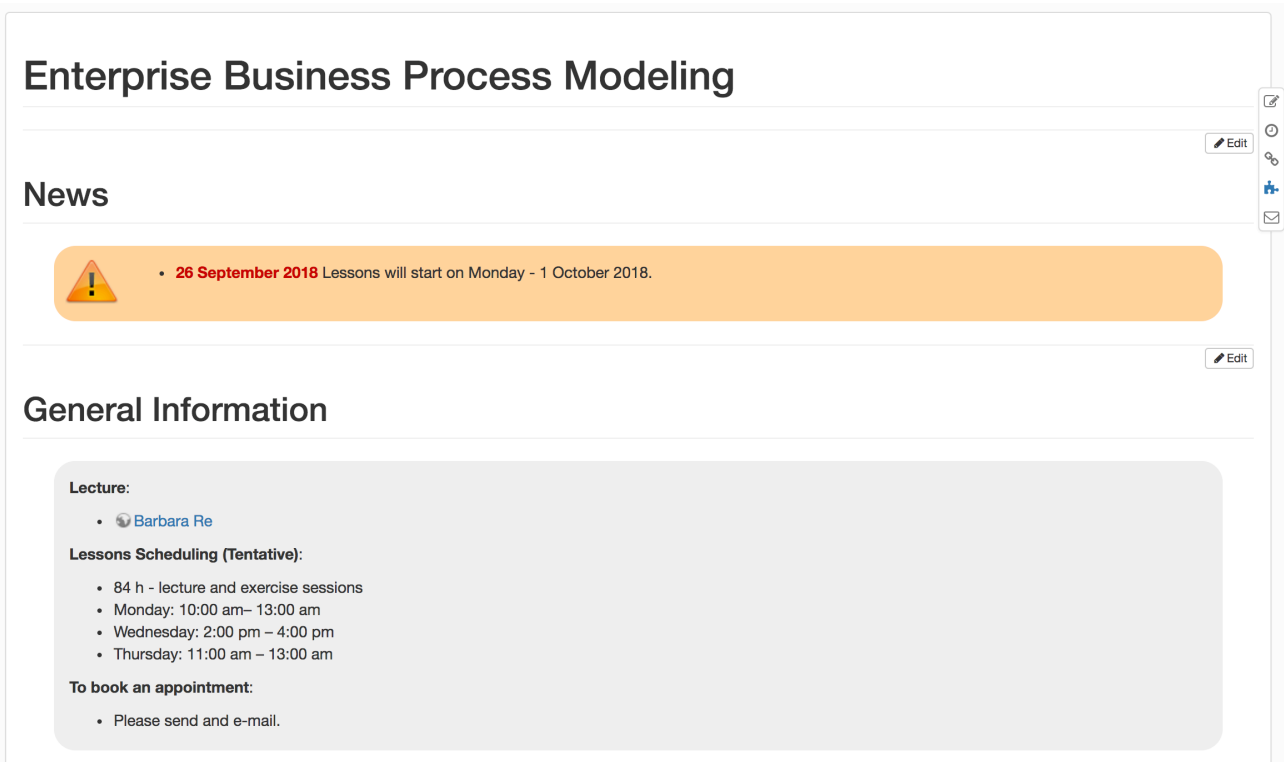
Teaching and Learning Methods

- 84 h - Lectures and class exercises
 - Monday: 10:00 am – 13:00 am
 - Wednesday: 2:00 pm – 4:00 pm
 - Thursday: 11:00 am – 13:00 am
- Private study: reading and exploring

WIKI CS

All Relevant Information Available on the Wiki CS

http://didattica.cs.unicam.it/doku.php?id=didattica:magistrale:ebpm:ay_1819:main#general_information



The screenshot shows a Wiki CS page titled "Enterprise Business Process Modeling". The page has a header with the title and an "Edit" button. Below the header is a "News" section with a yellow warning banner that reads: "26 September 2018 Lessons will start on Monday - 1 October 2018." Below the news section is a "General Information" section with a grey background. It contains the following information:

- Lecture:**
 - [Barbara Re](#)
- Lessons Scheduling (Tentative):**
 - 84 h - lecture and exercise sessions
 - Monday: 10:00 am – 13:00 am
 - Wednesday: 2:00 pm – 4:00 pm
 - Thursday: 11:00 am – 13:00 am
- To book an appointment:**
 - Please send an e-mail.

Exams

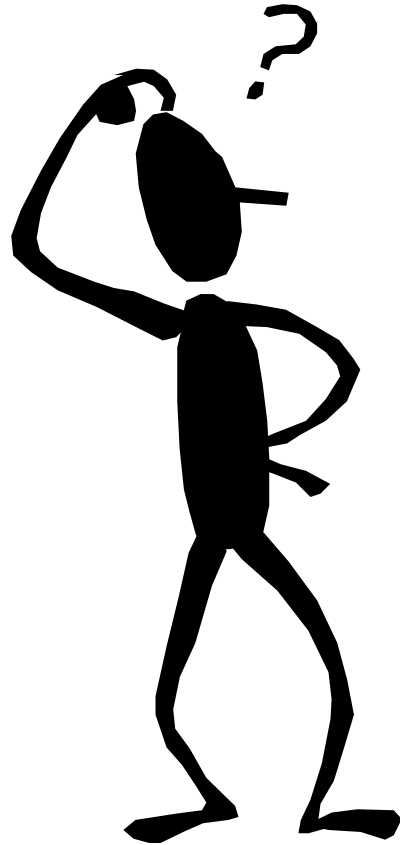
- Writing Examination on the topics of the syllabus
 - Open or multiple-choice questions + Exercise
 - 2 h

- **Dates** (<https://didattica.unicam.it/Home.do>)

Students Communications



<https://t.me/essunicam>



Questions?