Enterprise Architecture

AW 20140110 (v3)

Prof. Alain Wegmann
http://lams.epfl.ch

WWW:

Goal

The goal of this course is to:

- Operationalize Ross’s advices and concepts (continuation of first lectures)
- Practice business and IT analysis and design using SEAM
- Understand the fundamental principles underlying business and IT analysis using SEAM principles as reference
- Have a knowledge of the main EA frameworks
- Some practice of Zachman, Urba-EA
- Practice the application of the fundamental principles to compare EA frameworks
- Practice of SEAM on EHL case study
Before class readings:

Wednesday:
Popescu G., Regev G., Gopal A., Tapandjieva G., Wegmann A.
EPFL Ph.D. Hiring Process Description
November 22, 2013
PDF to be provided

Tuesday:
Wegmann A.
On the Systemic Enterprise Architecture Methodology
Proceedings of the 5th International Conference on Enterprise
http://infoscience.epfl.ch/record/89690?ln=en

Zachman J.A.
A framework for Information System Architecture

Friday:
Wegmann A.
Business and IT Alignment at the Ecole Hôtelière de Lausanne
2010
PDF to be provided

IT doesn't matter
Nicolas G. Carr
HBR 2003
Lectures

Wednesday January 8 (9h – 12h)

Introduction and expectations

Topic:
- Operationalization of Ross’s framework (students recap)

Practice:
- Application to EPFL overall organization

Reference:
Ross J. W., Weill P., Robertson D.
Enterprise Architecture As Strategy: Creating a Foundation for Business Execution

Wednesday January 8 (14h – 17h)

Practice:
- Modeling of PhD hiring process (as-is)
- As-is (behavior model)
- Issue identification
- Relation to Ross models
- Solution design

Theory:
- Business and IT alignment
- SEAM modeling principles (system, behavior and goal/belief models)
Thursday January 9 (9h – 12h)

Practice:
- Modeling of PhD hiring process (as-is)
- Issue identification (goal-belief)
- Solution design (to-be)
- Relations to Ross’s model

Theory:
- Systemic paradigm

Practice:
- Explanation of SEAM using the systemic paradigm

Thursday January 9 (14h – 17h)

Theory:
- From business / IT alignment to enterprise architecture
  - Zachman
  - Urba-EA
  - (TOGAF)

Practice:
- Zachman model of PhD hiring process
- Urba-EA model of PhD hiring process

Friday January 10 (9h – 12h)

Practice:
- application to systemic paradigm to compare SEAM, Zachman, Urba-EA

Practice:
- how to practically use the course’s contents in your job

Friday January 12 (14h – 17h)

Practice:
- EHL case study & relation to IT doesn’t matter paper

Course debrief
Post-class readings:
Regev G., Bajic-Bizumic B., Golnam A., Popescu G.,
Tapandjieva G., Saxena A.B., Wegmann A.
Business and IT Design with SEAM: an Illustration with the PhD Hiring Process at École Polytechnique Fédérale de Lausanne
BMSD 2014

Exam

Date and time official announcement by administration

Total 20 points.

These three days lecture will account for 12 points.
Two to three questions:
- one model to draw and analyze based on a small case (7 points)
- 5 QCM questions (3 points)
- 1 theory questions (2 points)

or
- one model to draw and analyze based on a small case (5 points)
- one model to draw and explain to represent your mission or thesis (4 points)
- 1 theory questions (3 points)

The 8 remaining points will provided by questions from Prof. Irina Rychkova

Closed book exam.
References

Urba-EA:
Christophe Longépé
Le projet d'urbanisation du SI: Cas concret d'architecture d'entreprise
Dunod
http://www.amazon.fr/Le-projet-durbanisation-darchitecture-dentreprise/dp/2100528831/ref=sr_1_1?ie=UTF8&qid=1389088484&sr=8-1&keywords=longépé

TOGAF:
http://www.opengroup.org/togaf/

Archimate:
Mark Lankhorst
Enterprise Architecture at Work: Modelling, Communication and Analysis
Springer
http://www.amazon.com/Enterprise-Architecture-Work-Communication-Engineering-ebook/dp/B00A9YH01Y/ref=sr_1_1?ie=UTF8&qid=1389088571&sr=8-1&keywords=lankhorst