

LABORATORY SCHEDULE

Week	Course --- Lecture Topic	Laboratory activities	Project activities	Lab & Project Deliverables
W1	OO Concepts Review	Revision exercises (OOP, UML)	Discuss projects / choose project	lab 01.03
W2	Class design principles (SOLID, GRASP) Package Design Principles	Revision exercises 2 (OOP, UML) Class design/package design principles Database modeling exercises	Final deadline for choosing the project Project Deliverable 1 – presentation and discussion - Inception: Software Requirements, Vision, Use Case Model, Supplementary Specification, Glossary	L1_Revision Homework: all problems resolved deadline 07.03 20:00 sent on email lab 08.03
W3	Architectural Patterns (Layers, Client-server, Broker, MVC)	Architectural patterns and styles – Assignment A1 presentation and discussion	Project Deliverable 1 – progress and discussion	lab 15.03
W4	Architectural Patterns (Microkernel, Service-based, Cloud?)	Architectural patterns and styles Assignment A1 – progress and discussion	Project Deliverable 2 – presentation and discussion Elaboration – Iteration 1.1: Domain Models, Architectural Design (architectural patterns and styles, package design, component diagrams, deployment diagrams)	Project Deliverable 1: Vision, Use Case Model, Supplementary Specification, Glossary documents Assignment A1 - documentation deadline 21.03 20:00 on github lab 22.03
W5	Architectural Patterns (Mobile, Onion?)	Architectural patterns and styles	Project Deliverable 2 – progress and discussion	Assignment A1 – final doc + implementation deadline 28.03 20:00 on github lab 29.03
W6	Live coding	ORM exercises Assignment A2 – presentation and discussion		Project Deliverable 2: Domain Model, Architectural Design, Component and Deployment diagrams deadline 4.04 20:00 on github lab 05.04
W7	Patterns for Enterprise Application Architecture [Fowler] Intro, Business Logic (Transaction Script, Domain Model), Concurrency	*discuss creational patterns (course 8) Assignment A2 – progress and discussion	Project Deliverable 3 – presentation and discussion Elaboration – Iteration 1.2: Design Model (UML sequence, collaboration diagrams, UML class diagrams, design patterns), Data Model	Assignment A1 - documentation deadline 11.04 20:00 on github lab 12.04
W8	Patterns for Enterprise Application Architecture [Fowler] Presentation Patterns, Design Patterns (Creational - Factory method, prototype, abstract factory, singleton, builder)		Project Deliverable 3 – progress and discussion	Assignment A2 - final doc + implementation deadline 18.04 20:00 on github lab 19.04

W9	Structural DP (Composite, Decorator, Proxy, Bridge),	Assignment A3 – presentation and discussion		Project Deliverable 3: Design Model, Data Model deadline 25.04 20:00 on github <i>lab 26.04</i>
W10	Behavioral DP (Strategy, State, Command, Chain of Responsibility)	Assignment A3 – progress and discussion Design patterns – exercises	Project – presentation and discussion Elaboration – Iteration 2: Package design refinement, Design model refinement (class design principles, more GoF patterns)	Assignment A1 - documentation deadline 02.05 20:00 on github <i>lab 03.05</i>
W11	Service Oriented Design (SOAP, REST)		Project – presentation and discussion	Assignment A3 - final doc + implementation deadline 09.05 20:00 <i>lab 10.05</i>
W12	Quality Attributes, Basic SD metrics	SOA – exercises		Project Final Presentation: Design and Implementation deadline 1st full project commit: 16.05 on github (minimum 80% complete (doc + code)) <i>lab 17.05</i>
W13	Exam Review			Project Final Presentation: Design and Implementation deadline 2nd full project commit: 23.05 on github <i>lab 24.05</i>
W14				Late Assignments and Projects deadline for closing situation 30.05 20:00 github FINAL date – no exceptions <i>lab 31.05</i>

- **Laboratory policy**

- o Laboratory sessions are compulsory – **no more than 3 absences are allowed**. Absences have to be caught up by the end of the semester.
- o Assignments and project deliverables must be presented when established. A delay of max 2 weeks is allowed with a penalty of 1 point/week.
- o A single assignment and/or project deliverable can be presented during a laboratory session.
- o No migration between groups is allowed
- o Only one assignment and/or project deliverable can be submitted in the make-up session

- **Grading**

- o Assignment grading: $0.4 * \text{Documentation_grade} + 0.6 * \text{Implementation_grade}$
- o Project grading: $0.1 * \text{Deliverable1} + 0.1 * \text{Deliverable2} + 0.1 * \text{Deliverable3} + 0.3 * \text{Final Design} + 0.4 * \text{Implementation}$
- o Bonus & Malus points will be given based on activity

Attendance & grading available for group 30432 at

https://docs.google.com/spreadsheets/d/1ApGptGUDw5_2XexFEp67ymz8_GobG8YynoDnl13Cx8c/edit?usp=sharing