

# Software Design 236700 - Syllabus

Week	Lectures	Tutorials	Assignments
1	Intro	Declarative vs Imperative code + Java 8	
2	Code structure decisions	Test writing	0 <sup>th</sup> Assignment (10%)
3	Code structure decisions II	Mocks	
4	Code structure: Problem solving techniques	Dependency Injection	1 <sup>st</sup> Assignment (30%)
5	Intro to API	Dependency Injection: Guice	
6	API: Code reuse	Design Patterns I	
7	API: Additional considerations	Design Patterns II	2 <sup>nd</sup> Assignment (30%)
8	Safety and testability	Monads	
9	API: Problem solving techniques	API Design / DSL	
10	Cross cutting concerns		3 <sup>rd</sup> Assignment, API Choosing (30%)
11	Architectural concerns	Frameworks: ORM	
12	Architectural design	Frameworks: MVC	
13	Architecture: Problem solving techniques	Live MVC	

## Grade structure:

### Grading policy

- Final exam (**Must get at least 50 in the exam for the homework to be eligible!**)
- 4 Homework assignments

### Final Grade

If T is the test grade and H is the homework grade, then final grade is:

$$T + |H - T|^{2/3} \cdot \text{sign}(H - T)$$