

# Syllabus

## Software Requirements Engineering

Prof.	Name	Seok-Won Lee	Sub.	Student	Department	Computer Engineering
	Position	Professor			Major	Computer Engineering
	Group	Software and Computer Engineering				

### 1. Course Description

Topics include:

Requirements elicitation, specification, and validation; structural, informational, behavioral, security, privacy, and computer user interface requirements; scenario analysis; application of object-oriented methodologies in requirements gathering; spiral development models; risk management models; software engineering maturity model.

### 2. Teaching Methods

Topics include:

Requirements elicitation, specification, and validation; structural, informational, behavioral, security, privacy, and computer user interface requirements; scenario analysis; application of object-oriented methodologies in requirements gathering; spiral development models; risk management models; software engineering maturity model.

Project based RE practice:

A student or a group of students will work on a RE project throughout the semester.  
The final report and the presentation (or a demo) are required.

### 3. Evaluation

Grading Policies:

Midterm: 30%

Final exam: 30%

Attendance and Class Discussion: 10%

Team Project: 30%

– Project Proposal/ Literature Survey

– Final Project Report/ Presentation/ Demonstration

Ph.D. students will have additional assignment requirements.

#### 4. TextBooks

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#### 5. Lecture Schedule

Week	Lecture contents	Lesson type	Remark
1	Course Orientation & Introduction to Requirements Engineering	lecture	
2	Introduction to Requirements Engineering	lecture	
3	Requirements Engineering Process & Basics	lecture	
4	RE Process Part 1 – Requirements Elicitation and Analysis	lecture	
5	RE Process Part 2 – Methods for Requirements Engineering – Modeling and Analyzing Requirements (modeling, communications, agreement, verification & validation)	lecture	
6	Goal-based Requirements Methods	lecture	
7	Scenario based Methods	lecture	
8	Viewpoints-oriented Requirements Methods	lecture	
9	Midterm		
10	Non-functional Requirements	lecture	
11	Interactive System Specification	lecture	
12	Requirements Management – Managing change and inconsistency	lecture	
13	Ontologies in Requirements Engineering	lecture	
14	Early Aspects in Requirements Engineering	lecture	
15	Security Requirements Engineering	lecture	
16	Project presentation		
17	Project presentation		

## 6. Others

### Online Resources:

- Requirements Engineering Journal, Springer-Verlag
- Requirements Engineering books reviews by I. Alexander
- Requirements Engineering Specialist Group in UK
- IFIP Working Group 2.9 on Requirements Engineering
- INCOSE Requirements Engineering Group
- Requirements Engineering resources from the IEEE Task Force on RE
- RE On-line mailing list

### Special Notes:

1. Academic dishonesty, in any form, will not be tolerated. Cheating, copying parts or whole papers/programs, or complicity in any violations of the student academic integrity code will result in prompt action on my part in accordance with the procedures outlined in the Ajou Univ. Code of Student Academic Integrity. See a more detailed statement at the end of this syllabus.
2. You are responsible for class absences. Attendance is mandatory for all class meetings. Three to four unexcused absences results in the loss of a letter grade; more than four unexcused absences will result in the automatic failure of the course.
3. Please let instructor know the need, when feasible, to flexibly accommodate student observances of the holy days of all religious denominations.
4. Late policy: Any assignments should be submitted BEFORE the class on the due dates. In case of late submission due to unavoidable circumstances, students should obtain permission from the instructor ahead of the deadline. Late submissions will result in a 10% penalty per day.
5. No early or make-up exams. No exception