YASAR UNIVERSITY- FACULTY OF ENGINEERING

DEPARTMENT OF SOFTWARE ENGINEERING

COURSE DESCRIPTION

Fall Semester 2017-2018

Course Code and Title	: SE 217 Principles of Software Engineering
Credit	: 3 (2 + 2) YÜ, 8 ECTS
Class Schedule and Classroom	: Tuesday 13:30 – 15:20 Room: Y-216 (Group 1) Monday 12:30 – 14:20 Room: Y-216 (Group 2) Thursday 14:30 – 16:20 Room: Y-314 (Group 1 Lab) Tuesday 10:30 – 12:20 Room: Y-314 (Group 2 Lab)
Instructor	: Korhan Karabulut (korhan.karabulut@yasar.edu.tr)
Assistants	: Ali Mert Ceylan alimrtcyln@gmail.com, Sencer Doğan mehmet.dogan@yasar.edu.tr
Text Book	: Software Engineering, Ian Sommerville, 10th edition, 2016, Pearson
Reference Books	:1) Software Engineering: Modern Approaches , 2nd Edition by Eric J. Braude, Michael E. Bernstein, 2010, Wiley 2) Object-Oriented Software Engineering, Stephen R. Schach, 2008, McGraw-Hill 3) Software Engineering: A Practitioner's Approach, 8th Edition, Roger S. Pressman, 2015, McGraw Hill

COURSE OBJECTIVES

- To introduce basic concepts and principles of software engineering
- To introduce software process
- To introduce software development life cycle (SDLC)
- To introduce SDLC models
- To introduce agile software development
- An ability to select an appropriate and effective software process for a given project
- An ability to recognize the importance of abstraction and modeling
- To introduce UML
- To able to use a CASE tool

COURSE OUTLINE (TENTATIVE)

Week	Topics
01	Introduction, history and overview
02	Introduction to Software Engineering
03	Ethics - Systems, SLC and SDLC
04	Software Process Models
05	Software Process Models
06	Agile Software Development
07	Agile Software Development
08	Project Initiation
09	Project Management
10	Project Management

11 Requirements Engineering
12 System Modeling
13 Software Evolution
14 Process Improvements

LAB OUTLINE (TENTATIVE)

Week	Topics
01	Introduction to UML & SysML & Modeling
02	Activity Diagrams
03	Activity Diagrams
04	Use Case Diagrams
05	Use Case Diagrams & Descriptions
06	Use Case Descriptions
07	Data Flow Diagrams
08	Data Flow Diagrams
09	Textual Analysis
10	CRC Cards
11	Class Diagrams
12	Class Diagrams
13	Sequence Diagrams
14	Sequence Diagrams

GRADING (TENTATIVE)

Midterm Exam	25%
Final Exam	35%
Quizzes	10%
Homeworks	20%
Labwork	10%

IMPORTANT NOTES

- Attendance is compulsory. Any student who has poor attendance and/or misses an exam without a valid excuse will receive an R grade.
- Students who are taking this course second time have to attend the labs, do the quizzes and home works and take the exams. They can only be excused from the theory lectures.
- Additional information and course material will be available on the Internet site http://lectures.yasar.edu.tr
- Cheating and Plagiarism will not be tolerated at any stage during your studies at Yasar University. These are serious violation of academic ethical standards and are unfair to other students. Moreover, plagiarism and cheating defeat the main purpose of course work, which is to assist students in learning the course material.