COM 421, Software Engineering

American University of Central Asia
Software Engineering Department

1 Course Information

Course ID
COM 421, 3705

Course Repository
https://github.com/auca/com.421

Place
AUCA new campus, room G30

Time
Monday 12:45
Wednesday 12:45

2 Prerequisites

COM 112, Programming II. Object Oriented Design and GUI Programming COM 324, Algorithm Analysis

3 Contact Information

Instructor
Toksaitov Dmitrii Alexandrovich
toksaitov_d@auca.kg

Office
AUCA new campus, room 315

Office Hours

- Monday 10:40–12:45
- Wednesday 14:00–15:00

4 Course Overview

This course introduces students to software engineering, teaching each of the individual steps of the software life cycle: requirements, design, coding, testing and software delivery. The course also covers estimating man months to complete a project and writing project proposals. Along with the theory, students will go through all the stages of software development on their own project. This is a two-semester course designed for Software Engineering majors and minors.

5 Topics Covered

- Software Engineering Concepts

- Software Development Methodologies

- Agile Software Development

- Requirements Engineering

- System Design and Modeling

- System Implementation

- Software Testing

- Software Evolution

6 Practice Tasks

Students are required to finish 10 practice tasks during the course. These tasks are based on topics discussed during lectures. Each task should be finished during the class to receive a grade.

7 Course Project

The main course project is team development of a software product for an imaginary customer. Small teams of 4 people will compete to deliver solutions to a customer's problem. Teams will go through all steps of software production such as requirements specification, software design, construction, testing, deployment, and maintenance.

8 Reading

Software Engineering (9'th Edition) by Ian Sommerville (AUCA Library Call Number: QA76.758.S657 2011, ISBN: 978-0137035151)

9 Grading

- Practice tasks (40%)

- Course project (several parts)

    - Major part of the final grade (60%)

- 90%–100%: A
- 80%–89%: A-
- 70%–79%: B+
- 65%–69%: B
- 60%–64%: B-
- 56%–59%: C+
- 53%–55%: C
- 50%–52%: C-
- 46%–49%: D+
- 43%–45%: D
- 40%–42%: D-
- Less than 39%: F

10 Rules

Students are required to follow the rules of conduct of the Software Engineering Department and American University of Central Asia.