

**ASE 285-001: Software Engineering and Security Fundamentals**

**TENTATIVE Course Schedule**

# **Spring Semester 2023**

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| Week (MW) | Topics (Theory) | Topics (Practice) | HW | HW Due |
| Week1 (1/9, 1/11) | Introduction to ASE 285 | Tools installations |  |  |
| Week 2 (~~1/17~~, **1/18**) | Introduction to the  SE rules and tools | Team setup |  |  |
| Week 3 (1/23, 1/25) | SE Process | SE Tools | HW1 (Tools installation, 25 points) | 1/27 23:59 |
| Week 4 (1/30, 2/1) | SE Tools 1: DocTools |  |  |  |
| Week 5 (2/6, 2/8) | SE Tools 1: IDE and CLI Tools |  |  |  |
| Week 6 (2/13, 2/15) | SE Tools 1: JavaScript/Node.js |  | HW2 (Programming, 40 points) | 2/17 23:59 |
| Week 7 (2/20, 2/22) | SE Tools 1: MongoDB/Web |  |  |  |
| Week 8 (2/27, **3/1**)  ***3/1 Midterm (no class)*** | Graded quiz on ***2/27*** for the preparation of the midterm  **Midterm 1 (3/1) Canvas**  *No class on 3/1* |  | HW3 (Tools/Rules part, 40 points) | 3/3 23:59 |
| Week 9 (~~3/6, 3/8~~)  Spring Break | **Spring Break** | |  |  |
| Week 10 (3/13, 3/15) |  | Toy Project Discussion |  |  |
| Week 11 (3/20, 3/22) | SE Tools 2: Git | Project Discussion | ***HW4 (Project Plan submission, 25 points)***  ***Team submission*** | 3/24 23:59 |
| Week 12 (3/27, 3/29) | SE Tools 2: Git | **Sprint 1** |  |  |
| Week 13 (4/3, 4/5) | SE Tools 2: Git | HW5 (Git/GitHub, 40 points) | 4/7 23:59 |
| Week 14 (4/10, **4/12**)  **4/12 2nd Midterm (no class)** | SE Tools 2: Security | **Sprint 2** | HW6 (Design, 40 points) | 4/14 23:59 |
| Week 15 (4/17, 4/19) | SE Tools 2: Security |  |  |
| Week 16 (4/24, 4/26) | SE Tools 2: Security | Presentation (4/26)  Project deadline (4/25) | HW7 (Security, 40 points) | 4/28 23:59 |
| **No final examination** |  |  | **HW8 (Assessment, 100 points)** | **5/3** 23:59  (Hard deadline) |

Homework and their corresponding modules (chapters)

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| --- | --- | --- |
| Module (Chapter) | PDF | HW # 50 points per each HW |
| Module 1: Introduction to SE | SE\_rules\_and\_tools.pdf  SE\_process.pdf  SE\_tools.pdf | HW1 (Tools Installation)  HW8 (Wrapping up) |
| Module 2: Programming | SE\_programming-\*.pdf | HW2 (Programming) |
| Module 3: SE Tools Part 1 | SE\_Tools1\_\*.pdf | HW3 (Tools Part 1) |
| Module 4: Project Implementations | SE\_project.pdf | HW4 (Project Plan submission) |
| Module 5: SE Tools Part 2 | SE\_Tools2\_\*.pdf | HW5,6,7(Tools Part 2) |

## Grading (1000 points in total)

Homework (350 points)

* Students are required to start all the homework assignments as early as possible.
  + Students are required to do HW8 (100 points) over the semester.
  + Students are required to start the HW4 (25 points) as soon as they join a team.

Quiz (100 points)

* Students should submit their daily quiz answers to the instructor during the class meeting time to earn five quiz points (the answers are not graded; students will earn points as long as they send the instructor any answers, including the empty one).
* We will have one graded quiz on Canvas just before the midterm to make it ready for the midterm. Students can take the Canvas graded quiz multiple times.
* All the quiz points are added to normalized to have maximum 100 points.

Midterm (300 points)

* The midterm will cover everything we discuss in the class
  + Module 1,2, and 3 topics
* Students will use Canvas/Lockdown browser to take the test.
* Students can take the midterm (only once) between 08:00 am and 08:00 pm.
* Students will have two hours to finish the midterm.

Project (250 points)

* Peer review: 50 points (individual assessment)
  + Team leader evaluates team members
  + Team members evaluate team leader (other team members)
* Project submission: 200 points
  + Project documentation: 100 points (group assessment)
    - Report (50 points)
    - Presentation slides (25 points)
    - Schedule and progress: 25 points (group assessment) - Checks if each team sets up the schedule and follow it
  + Quality of results: 100 points (individual assessment)
    - Checks if each team members writes code (40 points) and tests (20 points)
    - Requirements and Design (15 + 15 = 30 points)
    - Manual (10 points)
    - The results will be uploaded to each team member’s GitHub Repository

Bonus Points (up to 50 points)

* Help the professor to make the course better - finding bugs, typos, or any suggestions.
* Sending the professor an email to make the course better at the end of this class.
* Team leaders will earn bonus points (based on team members’ evaluation