CSCI3100 Software Engineering Tutorial Procedure

1. TUTORIAL OVERVIEW

CSCI3100 is a large class with more than 270 students. The tutorial sessions are designed to allow close contact between the students and the course contents, which include software engineering lectures and practice in a hands-on software engineering project. To achieve a better learning experience for this large class, every tutor is assigned to supervise all students in particularly designated tutorial sessions. Each tutor has the responsibility to help students in two major aspects of the course: (1) a team-based software engineering project, and (2) the course homework.

2. TUTORIALS

Tutorials are often overlooked by students, but they are important to this class. To achieve better learning outcome in the whole CSCI3100 Software Engineering subject, tutorials are designed in two types: (P) project-oriented tutorials which teach you the necessary technologies in your group project, and (H) homework-oriented tutorials where relevant questions from previous years' homework and/or final exam will be presented by tutors. Each type of tutorial (i.e., P and H) contains two large sessions (one on Monday and one on Wednesday, both at 5:30pm-6:15pm). Students should join either of the two tutorial sessions. These tutorial sessions and Zoom links are shown in the Appendix A.

There are five topics in (P) tutorial and six topics in (H) tutorial. Students are required to attend these tutorials as they are related to your project and homework, respectively. The details are described below.

The (P) project-oriented tutorials are designed to teach students the most updated client-server techniques which are either required or helpful in the group project. The detailed topics for tutorial sessions of type (P) are listed in Appendix B and on the course website. You are required to participate in the (P) tutorial session of either day (Monday or Wednesday). During each session, you can learn some useful web-development technologies (on both client site and server site) for your project, and you are encouraged to discuss your project (e.g., ideas, technical details) with the tutors as well as your group members. Particularly, each group will be assigned with n advisory tutor, who is responsible for answering your questions related to the project (Note: advisory tutors will not help debugging). The detailed project assignment will be announced later on the course website.

In (H) homework-oriented tutorials, relevant questions from previous years' homework and/or final will be selected and presented to students. The homework tutorials will be conducted in a homework-responsible manner. In each week, two tutors are in charge of the homework design, hosting of the tutorial, and evaluation of students' attendance (Note: homework takes up 25% of the total grade). Since tutors are making efforts to design new homework problems, the problems may not be perfectly described; students are therefore encouraged to enquire the responsible tutors about any ambiguity of the homework problems through *Piazza newsgroup*. Each student has to sign up one of the two tutorial sessions (most of you should have signed up the sessions; some sessions are still under adjustment). The tutors responsible for each session on various weeks will be announced later on the website.

During type (H) tutorial, the homework responsible tutors will prepare relevant questions from previous years. The questions will be posted on course website before the tutorial, and one tutor will present the solutions during the tutorial. You are highly encouraged to finish the questions before the tutorials, but it is NOT MANDATORY. Note the solutions to these prepared questions will NOT be posted on course website even after the tutorial. Therefore, you are also encouraged to join the tutorials.

Your tutorial attendance will be counted towards the final grading of this course.

3. ASSIGNMENTS

There will be six course assignments, each with four questions. Students should answer all the questions. The tentative homework contents are:

[Homework 1] Topics 1-3: Software Engineering Fundamentals

[Homework 2] Topic 4: Software Specification (DFD, FSM)

[Homework 3] Topic 4: Software Specification (PN & Logic Specification & ER Diagram)

[Homework 4] Topic 5: Software Design (Principle, TDN, GDN)

[Homework 5] Topic 5: Software Design (UML), Programming Techniques

[Homework 6] Topic 6: Testing and Verification

You should submit your solutions to the corresponding homework entry on the Blackboard. Wrong submission may result in zero marks. The deadline of each assignment is the midnight (11:59p.m.) of Sunday (three weeks after the homework has been released in general). If you submit your homework late for one day, you will receive 50% mark deduction for that assignment as the late penalty. The homework will not be accepted one day after the deadline.

The tutorial schedule, homework assignment deadline, and relevant contents are in the Appendix B. Details are also shown on the course website. As there may be schedule changes, please consider course website information as the most updated.

Note only top five marks of the six homework assignments would be counted for a student's total homework mark. This hopefully is a relief to you in your busy schedule, particularly later in the term ③.

It is important to note that we will not tolerate cheating in the homework. Don't plagiarize your homework! Remember your homework submission needs to go through Veriguide checking before the submission.

4. PROJECTS

There is a phase-based software engineering project which you will participate, and you can seek your advisory tutor's help when necessary. Specifically, the project is composed of the following phases, and your advisory tutor and a few other tutors are responsible for project marking of your project deliverables:

- (1) Design (due on Feb. 19, Fri.): Your project design report.
- (2) Coding (due on Mar. 19, Fri.): Your project initial code check-in.
- (3) Project Demo Day (Apr. 15 and 16, Thu. and Fri.): Your project demo (note your code should be checked in on Apr. 14).
- (4) Project Final Report and Code (due on Apr. 30, Fri.): Your final report and commented code.

All the above deadlines end at 23:59:59pm on that day. If you have any questions about the project, you can discuss with your tutor(s) during or outside the tutorials. They should also be available during their office hours to discuss the project with you.

Note that for the course evaluation on tutors, you need to evaluate <u>at least your project advisory tutor.</u> You are certainly welcome to evaluate other tutors as well.

APPENDIX

A. Tutorial Sessions: (Check the most updated schedule on the course website.)

Zoom links for Homework (H) and Project (P) Tutorials:

Tut 01 (Mon.): 5:30pm-6:15pm [<u>zoom link</u>] Tut 02 (Wed.): 5:30pm-6:15pm [<u>zoom link</u>]

B. Tentative Tutorial Schedule: (Check the most updated schedule on the course website.)

☆ Tutorial Schedule

Week	Date	Tutorial	Topics	Work
1	1/11~1/13		Tutorial policies, schedule, and session assignment (on Web)	Read tutorial procedure
2	1/18~1/20	P	PJ1: CSCI3100 Project introduction, requirement, and demonstration.	Project assigned (1/18), HW1 assigned
3	1/25~1/27	P	PJ2: Client side technologies (HTML5, JavaScript)	
4	2/1~2/3	Н	HW1 demo (Lecture Topic 1-3)	HW2 assigned
5	2/8~2/10	Р	PJ3: Server side technologies (Node.js, AWS, Database)	HW1 due (2/7)
6	2/15~2/17		No Class/Tutorial	Lunar New Year vacation Project design document due (2/19)
7	2/22~2/24	Н	HW2 demo (Topic 4 Software Spec – Data Flow Diagram, FSM)	HW3 assigned
8	3/1~3/3	Р	PJ4: Advanced technologies I (Vue.js, Angular)	HW2 due (2/28)
9	3/8~3/10	Н	HW3 demo (Topic 4 Software Spec – Petri Net, ER Diagram, and Logic Specification)	HW4 assigned
10	3/15~3/17	Р	PJ5: Advanced technologies II (Android)	HW3 due (3/14) Initial code due (3/19)
11	3/22~3/24	Н	HW4 demo (Topic 5 Software Design – TDN, GDN, and Refinement)	HW5 assigned
12	3/29~3/31		No Class/Tutorial	HW4 due (3/28) Reading Week & Easter Holiday
13	4/5~4/7		No Class/Tutorial	Reading Week & Easter Holiday
14	4/12~4/14	Н	HW5 demo (Topic 5 Software Design – UML, Programming Technique)	Completed Code due (4/14) Demo day (4/15 and 4/16) HW6 assigned
15	4/19~4/21	Н	HW6 demo (Topic 6 Software Verification)	HW5 due (4/18)
				Final Report due (4/30) HW6 due (5/2)