KUTZTOWN UNIVERSITY Department of Computer Science and Information Technology

Course Title: CPSC 354 (Sec 010 & 020-29H) – Software Engineering I (Fall 2025)

Instructor: Dr. Charlie Y. Shim

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Office: OM 262

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Office Hours: M, W 1:00PM – 3:00PM (OM 262)

T, TH 9:00AM – 9:30AM (OM 262)

or by appointment

Meeting Time: (Sec 010) M, W, F 11:00AM – 11:50AM, OM 299

(Sec 020 & 29H) M, W, F 12:00PM – 12:50PM, OM 299

Course Description: This is the first course in a two-semester capstone sequence. This course introduces the fundamental principles of software engineering. Coverage will include the System Development Lifecycle (SDLC) methodologies, capturing requirements, design modeling, project management, risk management, and quality assurance. Students will learn techniques for requirements elicitation, prioritization, validation, and specification. They also will be introduced to various design models that are used to capture requirements.

Prerequisite: Completion of 6 CPSC credits, numbered 300 or higher AND Junior status

Course Objectives: Upon satisfactory completion of this course, the student will be able to:

- A. Describe the software requirements specification process.
- B. Identify the various SDLC methodologies that are commonly followed.
- C. Discuss problems involved in software project management.
- D. Explain the problems and issues involved with project risk management.
- E. Outline the process of requirements elicitation.
- F. Create a requirements specification.
- G. Create a functional specification.
- H. Create appropriate models used in software design.
- I. Demonstrate the ability to work in a team environment.

Textbook: Essentials of Software Engineering (5th Edition)

By Frank Tsui, Orlando Karam, Barbara Bernal (Publisher: Jones & Bartlett Learning)

(ISBN: 978-1-284-22899-1)

Grading: Midterm Exam 20 %

Final Exam 25 % Quiz 10% Assignments 45 % Total Points 100 %

Your final grade in the course will be given according to the following scale:

 $A \ge 90\%$.

 $B \ge 80\%$.

 $C \geq 70\%$

 $D \ge 60\%$,

F < 60%

Attendance: Lecture attendance is strongly encouraged. You are responsible for all material covered during lectures whether you are present or not. You are also expected to have read the appropriate sections of the text prior to the lecture.

Exams: There will be a 100-point midterm exam and a 100-point comprehensive final exam. All exams must be taken at **the scheduled time** unless I have approved an alternative time **PRIOR** to the scheduled time. Make up exams will be given to those students, who have official University functions or other well-documented circumstances, such as hospital confinement. Please inform instructor well in advance of such circumstances. Makeup should be completed within one week of the exam date or you will receive a grade of zero.

Assignments: An essential part of your assignments is a **team project**, and additional assignments may be assigned as needed. You are required to produce many different **documents** (Requirements Specification, System Specification, Test Plan, etc.) from your team project and give a final **team presentation** of the project. Details about the team project will be discussed in the class.

Accreditation: Assignments and exams may be photo-copied and retained for program accreditation.

E-Mail Correspondence: Students are **REQUIRED to use their Kutztown University e-mail account** for all e-mail correspondence with the course instructor. Please indicate the course number (enclosed in square brackets) in the subject line.

Course Etiquette and Behavior: Students will demonstrate respect for the instructor and other students in the classroom and lab. This includes unacceptable language usage in the classroom and laboratory. The course instructor will report behavior that is disruptive to the positive learning environment. A warning will be issued on the **first instance** and will be reported to the department chairperson. On a **second instance**, the student will be referred to the Provost's Office.

Academic Dishonesty: Plagiarism and cheating are serious offences and may be punished by failure on exam, paper or project; failure in the course; and/or expulsion from the University. Academic dishonesty includes the following actions, as well as other similar conduct aimed at making false representation with respect to the student's academic performance:

- (1) Cheating on an exam or quiz,
- (2) Collaborating with other students on work to be presented, if contrary to the stated rules of the course,
- (3) Submitting, if contrary to the rules of the course, work previously submitted in another course,
- (4) Copying or changing programs done by other students and submitting it as their own,
- (5) Plagiarism.

For more information, visit the Computer Science department's academic integrity policy, located at: https://www.kutztown.edu/Departments-Offices/A-F/ComputerScienceInformationTechnology/Documents/Student%20Resources/AcademicIntegrityPolicy.pdf.

Accommodations: Persons with a disability, and who require accommodation, should notify the Disability Services Office two weeks prior to the event at 610-683-4108 or email DSO@kutztown.edu in order to discuss accommodations. Every effort will be made to provide reasonable accommodations. Please note: Kutztown University does not provide wheelchairs or other mobility devices.

Non-discrimination statement: Kutztown University does not discriminate in employment or educational opportunities on the basis of sex, race, ethnicity, national origin, age, disability, religion, sexual orientation, gender identity or veteran status. To discuss a complaint of discrimination, please contact the University's Title IX Coordinator located in the Office of Social Equity, Old Main A-Wing, Room 02, by phone at 610-683-4700 or by

email at pena@kutztown.edu.