



East West University

Department of Computer Science and Engineering

CSE 512: Software Engineering Tools

Course Outline

Course Information

Course Code: CSE 512

Course Title: Software Engineering Tools

Credit: 3 Credits

Class Times: Section 1: 06.00 pm – 09:00 pm (S), Room: 108

Instructor Information

Instructor: Md. Shamsujjoha
M.S. and B.Sc.in Computer Science and Engineering (University of Dhaka, Dhaka-1000, Bangladesh)
Senior Lecturer, Department of Computer Science & Engineering (East West University, Dhaka-1212, Bangladesh) and
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Per. Web: <http://www.ewubd.edu/~msj>

Course Files: http://groups.yahoo.com/group/cse_msj/files
❖ CSE-512

Office Hour

Day	Time
Sunday	08:00am – 10:00am
Monday	08:00am – 10:00am
Tuesday	08:00am – 10:00am
Wednesday	08:00am – 10:00am
Thursday	11:50am – 01:20pm, 02:20pm – 04:50pm

Course Syllabus

Fundamental areas of software engineering including life-cycle paradigm, metrics, and tools. Information hiding architecture, modular languages, design methodologies, incremental programming, and very high level languages.

Software engineering paradigm- classic water fall model, prototyping, Boehm's spiral model, dynamic system development method (DSDM).

Measuring software- requirement analysis and estimation, size oriented (KLOC) and function (FP) oriented metrics, empirical estimation model -COCOMO, metrics for software quality.

Automation tools- computer aided software engineering, building blocks for CASE. Project management tools, support tools, analysis and design tools, programming tools, integration and testing tools, prototyping tools, CASE and AI.

Teaching Materials/ Online Resources/ Equipments

Main Reference (Text book)

- ❖ Software Engineering- A Practitioner's Approach, Roger S. Pressman, McGraw-Hill
- ❖ Software Engineering, Ian Sommerville, Addison-Wesley.
- ❖ Software Engineering- Practice, Management, Improvement, Philip Sallis, Graham Tate, Stephen MacDonell, Addison-Wesley.

Teaching Materials: Lecture Notes*, Lab Exercises/Notes*, Reference Book, and Computer & Software C#.

Teaching-Learning Method: Lecture Notes*, PDF Documents, Lab Exercises*, Assignments.

*Lecture and Lab Notes that are required for the course will be delivered during class.

Software tools to build necessary software

Assessment Weightage (Evaluation and Grading Policy)

The relative contributions of exams, assignment, and lab work are as follows[†]:

❖ Class Participation	10%	❖ Term I Exam	20%
❖ Assignments	20%	❖ Term II Term Exam	20%
❖ Quiz (Average of Best Two)	10%	❖ Final Exam	20%

[†]The above mark distribution can change up to $\pm 5\%$ (for each field).

Student Learning Time (SLT)

Student Learning Time (SLT) can be divided into: Face to Face (36 hours), Guided Learning (24 hours), Independent Learning (93 hours) and Assessment (7 hours). The detailed breakdown is as follows:

No.	Teaching And Learning Activities	Student Learning Time (SLT)
1.	Lecture	36 hours (3 x 12 weeks)
2.	Assignment and Case Study	22 hours (2 x 11 weeks)
3.	Review lesson after lecture (includes preparation for final exams)	48 hours (32 hours x 1.5 hour study time)
5	Carry out Home Work	7.5 hours (3 Assignments x 2.5 hours)
6.	Carry out Mid Term and Final Exams	4.5 hours
7.	Carry out Quiz	2.0 hours
TOTAL SLT		120 hours
CREDIT = SLT/40		4.0

Details:

- ❖ Homework/Assignment: must be done in group not more than 3 (the same group as the lab works), **STRICTLY NO COPY-PASTING** from other groups.
- ❖ **Late assignments suffer a penalty rate of 20% per day, up to 5 days (weekends count towards the 5 days).** Assignments that are more than 5 days late are penalized by 100%.
- ❖ Submit the signed **Expectations of Originality form** with each homework assignment.
- ❖ **Failing Grade:** Plagiarism, absenteeism, lack of preparation, and lack of effort will result it.

Grading System:

Marks (%)	Letter Grade	Grade Point	Marks (%)	Letter Grade	Grade Point
97-100	A+	4.00	73-76	C+	2.30
90-96	A	4.00	70-72	C	2.00
87-89	A-	3.70	67-69	C-	1.70
83-86	B+	3.30	63-66	D+	1.30
80-82	B	3.00	60-62	D	1.00
77-79	B-	2.70	Below 60	F	0.00

Academic Code of Conduct

Academic Integrity

Any form of cheating, plagiarism, personation, falsification of a document as well as any other form of dishonest behavior related to obtaining academic gain or the avoidance of evaluative exercises committed by a student is an academic offence under the Academic Code of Conduct and **may lead to severe penalties up to and including suspension and expulsion.**

Special Instructions

- ❖ Students **MUST WEAR dresses** in conformity with the **dress code of EWU** within the lecture/lab classes and examination hall.
- ❖ Class Lectures and Lab works are believed to be the most effective and reliable source of knowledge for this course. Therefore, students are **strongly encouraged to participate in all the classes** attentively.
- ❖ Students will not be allowed to enter into the classroom after 20 minutes of the starting time. Moreover, **You MUST have at least 80% class attendance to sit for the final exam.** All mobile phones **MUST** be turned to silent.
- ❖ There is zero tolerance for cheating at EWU. Students caught with cheat sheets in their possession, whether used or not used, &/or copying from cheat sheets, writing on the palm of hand, back of calculators, chairs or nearby walls, etc. would be treated as cheating in the exam hall. **The only penalty for cheating is expulsion from EWU.** For plagiarism, the grade will be automatically become zero for that exam/assignment.
- ❖ There will be **NO make-up examinations for Quiz & Lab Exam in any case.** Make up exam can only be considered for the midterms in case of emergency, you **MUST** either inform me or the department chairperson/your advisor/secretary within 24 hours of the exam time. Failure to do so will mean that you are trying to take **UNFAIR** advantage and you will be automatically disqualified.