The University of Jordan
School of Engineering
Computer Engineering Department
Summer Term – A.Y. 2022-2023

Course:	Software Engineering – 0917441 (3 Credit Hours)
Catalog Data:	Introduction to Software Engineerng. Essential Software Attributes. Socio-Technical Systems. Dependability. Software Processes. Project Management. Functional and Non-Functional Requirements. Requirements Engineering Processes. System Models, Context Models, Behavioral Models and Object Models. Critical Systems Specification. Architectural Design. Distributed Systems Architecture. Application Architectures. Introduction to Engineering Ethics. Codes of Ethics. Responsibilities to Employers and Society.
Prerequisites by Course:	CPE 0907342
Prerequisites by Topic:	Students are assumed to have had sufficient knowledge pertaining to Java and Object-Oriented Programming (OOP).
Textbook:	I. Sommerville, *Software Engineering*, Addison-Wesley.
References:	• R.S. Pressman, *Software Engineering*, McGraw-Hill. • M. Martin and R. Schinzinger, *Ethics in Engineering*, McGraw-Hill.
Course Website:	MS Teams
Schedule & Duration:	8 weeks, 40 lectures, 75 minutes each (including exams).
Minimum Student Material:	Text book, class handouts, some instructor keynotes, calculator and access to a personal computer and internet.
Minimum College Facilities:	Classroom with whiteboard and projection display facilities, library, and computational facilities.
Course Objectives:	The objectives of this course are: 1. Introduce students to software methodology, development processes, design modeling, and software project management activities. 2. Introduce students to ethical responsibilities towards employers and society.
Course Outcomes and Relation to ILOs:	Upon successful completion of the course, a student should be able to: 1. Implement the various software engineering – based problem solving techniques for specific applications. 2. Conduct software project management activities. 3. Recognize ethical responsibilities to employers and society.
Course Topics:	1. Introduction to Software Engineering 2. Socio-Technical Systems 3. Dependability 4. Software Processes 5. Project Management 6. Software Requirements 7. Requirements Engineering Processes

8. System Models
9. Critical Systems Specification
10. Architectural Design
11. Distributed Systems Architecture
12. Application Architectures
13. Introduction to Engineering Ethics
14. Codes of Ethics
15. Responsibilities to Employers and Society

Computer Usage: Practical aspects of this course are covered in Object-Oriented Programming and Engineering Problem Solving with Java.

Attendance: Class attendance will be taken every class and the university's polices will be enforced in this regard.

Assessments: Coursework and Exams.

Grading policy:

Coursework	20%
Midterm Exam	30%
Final Exam	50%

Instructors:

Prof. Dr. Anas N. Al-Rabadi
E-mail: an321dy@yahoo.com
Office Hours: S. T. Th. 11:00 – 12:00
By Arrangement with Instructor

Class Time and Location: S. M. T. W. Th. 14:45 – 16:00 (online)