#

**Jadara University**

Faculty of Sciences and Information Technology

Department: **Software Engineering**

(Course Syllabus)



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Course Title | Credit Hours | Course No. | Prerequisite |  Year (semester)  |  ***Lec./Lab. Credit***  |
| Introduction to Software Engineering | 3 | 503201 | Programming Language I (C++). | **2014 – 2015****Fall Semester** | **Lecture: 3****Lab : 0** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Coordinator Name | Lecturer  | Room No. | E-mail | Office Hours |
| ***Nouh Alhindawi*** | ***Nouh Alhindawi*** | Lab 9 | **hindawi@jadara.edu.jo** | **11:20 – 12:20****All Week Days** |

**Course Website:** http://www.cs.kent.edu/~nalhinda/SE\_Summer/SE\_Summer.html

**Course Objectives:**

1. Identify and discuss the technical and engineering activities of producing a software product.
2. Discuss the issues, principles, and methods associated with project planning, gathering requirements, analysis, design, coding, and testing.
3. Construct a user-interface prototype to assist with requirements elicitation.
4. Develop clear and testable requirement specifications.
5. Apply a software development process in a team environment.
6. Use source code control systems on team projects.
7. Understand the key components of the Software Engineering Code of Ethics and Professional Practice.
8. Demonstrate an ability to evaluate the professional and ethical implications of workplace issues.

**Course Description:**

An introduction to software engineering principles, including discussions of development methodologies, requirements analysis, project planning, software design, software construction, software management, software quality, and CASE tools. Students gain experience, via a team project, in the life-cycle development of software systems.

**Reading List:**

|  |  |
| --- | --- |
| ***Text Book*** | *An Introduction to Software Engineering*, 9th edition, Ian Sommerville, Addison-Wesley,Supplemental materials will be put in the course share and/or put on the class web site. |
| ***Other******References*** | Software Engineering Modern Approaches, 2”nd Edition , Eric Braude and Michael Bernstein |

|  |
| --- |
| **Course Content** |
| **Week** | **Topics** | **Chapter in****Text** |
| 1 ,2 | **Introduction to software engineering** | Chapter 1 |
| 3, 4 | **Software Processes** | Chapter 2 |
| 5, 6 | **Agile Software Development** | Chapter 3 |
| 6, 7 | **Requirements Engineering** | Chapter 4 |
|  | **First Exam** |  |
| 7, 8 | **System Modeling** | Chapter 5 |
| 9, 10 | **Architectural Design** | Chapter 6 |
| 11 | **Second Exam** |  |
| 11, 12 | **Design and Implementation** | Chapter 7 |
|  12,13 | **Software Testing** | Chapter 8 |
| 14,15 | **Software Evolution** | Chapter 9 |
| 16 | **Final** **Exam** |  |

**Course quality improvement :**

* From the market and new subjects in the field.
* From the monitoring of students feedback (Evaluation sheet).

**Cooperation on Assignments:**

For both homework assignments, I strongly believe that discussion with your peers is an excellent way to learn. If you don’t understand something, discussing it with someone who does can be far more productive than beating your head against the wall.

Having advocated discussion, then, I must be about clear what is allowed, and what is not. In general, students are allowed to cooperate as follows: you are allowed to discuss with other students the assignment, and general methods for solving the assignment. However, you are not allowed to work with someone else to actually *solve* the assignment, or *copy* anyone else’s solution; doing any of these things will be considered cheating, and will constitute grounds for failing the course.

Note that there is a fine line between discussion and cheating. If you are unsure what is allowed and what isn’t, feel free to discuss the distinction with me, but if something feels uncomfortable, it’s probably not allowed.

**Late Policies:**

* *Exams* : no late exams, no make-up exams;
* *Assignments* : no late assignments;
* *Quizzes:* no make-up quizzes. However, if you let me know in advance of an expected absence, we can attempt to schedule some alternative.

Late work will be accepted as stated above. I may waive the late policy conditions only in case of a documented illness or another extraordinary circumstance. In either case you have to contact me immediately. With respect to assignments my decision to grant you a waiver is partially influenced by the degree of completion of the work assigned.

**Grade Distribution :**

|  |  |  |
| --- | --- | --- |
|  **Assessment**  | **Grade** | **Date** |
| - First Exam  | 20% |  |
| - Second Exam  | 20% |  |
| - Assignments ( Reports /Quizzes/ Seminar / Tutorials ….)  | 10% |  |
| - Final Examination  | 50% |  |

* **No Makeup exams are given under any condition. On time attendance of classes is required.**