



| | |
|---|------------------------|
| Faculty: Information Technology | |
| Department: Software Engineering | Program: Master |
| Academic Year: | Semester: |

Course Plan

First: Course Information

| | | | | |
|------------------------------------|--|------------------------|-----------------------|---------------------|
| Course No.: 1503731 | Course Title <i>Software Project Management</i> | Credit Hours: 3 | Theoretical: 3 | Practical: 0 |
| Prerequisite No. and Title: | | Section No.: | Lecture Time: | |
| Level in JNQF | 9 | | | |
| Type Of Course: | <input type="checkbox"/> <i>Obligatory University Requirement</i> <input type="checkbox"/> <i>Elective University Requirement</i> <input type="checkbox"/> <i>Obligatory Faculty Requirement</i> <input type="checkbox"/> <i>Elective Faculty Requirement</i> <input checked="" type="checkbox"/> <i>Obligatory Specialization Requirement</i> <input type="checkbox"/> <i>Elective Specialization Requirement</i> <input type="checkbox"/> <i>Ancillary course</i> | | | |
| Type of Learning: | <input type="checkbox"/> <i>Face-to-Face Learning</i> <input checked="" type="checkbox"/> <i>Blended Learning (2 Face-to-Face + 1 Asynchronous)</i> <input type="checkbox"/> <i>Online Learning (2 Synchronous+ 1 Asynchronous)</i> | | | |

Second: Instructor's Information

| | | | | | |
|---------------------------|---------------|------------------------------|-----------------------|------------------|-----------------|
| Course Coordinator | | | | | |
| Name: | | | Academic Rank: | | |
| Office Number: | | Extension Number: | | Email: | |
| Course Instructor: | | | | | |
| Name: | | | Academic Rank: | | |
| Office Number: | | Extension Number: | | Email: | |
| Office Hours: | <i>Sunday</i> | <i>Monday</i> 10:00-11:00 | <i>Tuesday</i> | <i>Wednesday</i> | <i>Thursday</i> |

Third: Course Description

Skills necessary to lead a project team, understand the relationship of software development to overall product engineering, estimate time and costs, and understand the software process. Advanced topics related to life cycle models, requirements elicitation, configuration, to control environments, quality assurance, and leadership, advanced issues of risk analysis, schedule, costs, team organization, resources, monitoring, and technical approach, Capability Maturity Model and the technology and practices associated with each and a variety of software standards.

Fourth: Course Objectives

1. Introducing the student to the fundamental of concept of projects, management, and planning.
2. Developing the student's ability to write advanced activity planning and scheduling for a project.
3. Introducing the student to the fundamental concepts of risk management.
4. Introducing the student to the fundamental concepts of resource allocation.
5. Expanding the student's skills for monitoring and control projects.
6. Providing the student with the skills for writing and dealing with contracts.
7. Providing the student with the skills for managing people.

Fifth: Learning Outcomes

| <i>Level descriptor according to (JNQF)</i> | <i>CILOs Code</i> | <i>CILOs</i> If any CLO will not be assessed in the course, mark NA. | <i>Associated PILOs Code</i> <i>Choose one PILO for each CILO*</i> | <i>Assessment method</i> <i>Choose at least two methods</i> |
|---|-------------------|---|---|--|
| Knowledge | K1 | Understand A wide range of principles of software engineer and software manager, such as planning, organization, and monitoring of all software life-cycle phases | PK1 | <ul style="list-style-type: none"> • Mid-term Exam • Final Exam |
| | K2 | Understand the professional and ethical responsibilities of the practicing computer professional including understanding the need for quality. | PK4 | <ul style="list-style-type: none"> • Mid-term Exam • Final Exam |
| | K3 | Understand the application of computing in a business context | PK4 | <ul style="list-style-type: none"> • Quizzes • Mid-term Exam • Final Exam |
| Skills | S1 | Plan, schedule, control, and monitoring software projects. | PS1 | <ul style="list-style-type: none"> • Mid-term Exam • Final Exam |
| | S2 | Manage people, manage contract, and allocate resources.. | PS3 | <ul style="list-style-type: none"> • Mid-term Exam • Final Exam |
| Competencies | C1 | Effectively communicate both orally and in writing plans and reports using appropriate tools. | PC1 | <ul style="list-style-type: none"> • Participation |
| | C2 | Employ scientific methods in the solution of problems. | PC3 | <ul style="list-style-type: none"> • Participation |

*CILOs: Course Intended Learning Outcomes; PILOs: Program Intended Learning Outcomes; For each CILO, the PILO could be the same or different.

Sixth: Learning Resources

| | | | | |
|--|--|---------------|--------------------------------------|--|
| Main Reference: | <i>Software Project management</i> | | | |
| Author: <i>B. Hughes and M. Cotterell</i> | Issue No.: <i>5th</i> | Print: | Publication Year: <i>2017</i> | |
| Additional Sources and Websites: | <ul style="list-style-type: none"> <i>Software Project Management, K. Sutha, T. Jebula, 2015</i> | | | |
| Teaching Type: | <input checked="" type="checkbox"/> <i>Classroom</i> <input type="checkbox"/> <i>Laboratory</i> <input type="checkbox"/> <i>Workshop</i> <input checked="" type="checkbox"/> <i>MS Teams</i> <input checked="" type="checkbox"/> <i>Moodle</i> | | | |

Seventh: Course Structure

| Week no. | Course Intended Teaching Outcomes (CILOs) | Topics | Teaching Procedures* | Teaching Methods** | References*** |
|----------|---|---|----------------------|-----------------------|---------------|
| 1 | K1,S1,C1 | Introduction To Software Project Management | Face-to-face | Lecturing | Chapter 1-5 |
| | K1,S1,C1 | - what is a project - Assignment | Asynchronous | -Video -Assignment | Moodle |
| 2 | K1,S1,C1 | Introduction To Software Project Management | Face-to-face | Lecturing | Chapter 1-5 |
| | K1,S1,C1 | -project planning | Asynchronous | -Video | Moodle |
| 3 | K1,S1,C1 | Introduction To Software Project Management | Face-to-face | Lecturing | Chapter 1-5 |

| | | | | | |
|---------------------|-----------------|---|---------------------|-------------------------------|------------------|
| | K1,S1,C1 | -Software project management -Assignment | Asynchronous | -Video | Moodle |
| 4 | K1,S1,C1 | Advanced activity planning Advanced Project schedule Advanced Network planning model | Face-to-face | Lecturing | Chapter 6 |
| | K1,S1,C1 | Stepwise project planning | Asynchronous | -Video | Moodle |
| 5 | K1,S1,C1 | Advanced activity planning Advanced Project schedule Advanced Network planning model | Face-to-face | Lecturing | Chapter 6 |
| | K1,S1,C1 | PRINCE2 project planning | Asynchronous | -Video | Moodle |
| 6 | K1,S1,C1 | Advanced activity planning Advanced Project schedule Advanced Network planning model | Face-to-face | Lecturing | Chapter6 |
| | K1,S1,C1 | -Agile model (video) - Assignment | Asynchronous | -Video -Assignment | Moodle |
| 7 | K1,C2 | Project risk management Risk prioritization Risk reduction leverage Using PERT to evaluate risks | Face-to-face | Lecturing | Chapter 7 |
| | K1,C2 | -Risk management (video) -Assignment | Asynchronous | -Video -Assignment | Moodle |
| Midterm Exam | | | | | |
| 8 | K1,C2 | - Project risk management Risk prioritization Risk reduction leverage Using PERT to evaluate risks | Face-to-face | Lecturing | Chapter 7 |

| | | | | | |
|----|-----------------|---|--------------|------------------------|-----------|
| | K1,C2 | --Risk management (video) - Assignment | Asynchronous | -Video -Assignment | Moodle |
| 9 | K1,C2 | Project risk management Risk prioritization Risk reduction leverage Using PERT to evaluate risks | Face-to-face | Lecturing | Chapter 7 |
| | K1,C2 | Risk management (video) | Asynchronous | -Video | Moodle |
| 10 | K1,S2 | Resource allocation Resource histogram Critical path Allocating individual Cost schedule | Face-to-face | Lecturing | Chapter 8 |
| | K1,S2 | - Resource allocation (video) -Assignment | Asynchronous | -video -Assignment | Moodle |
| 11 | K1,k3,S2 | - Resource allocation Resource histogram Critical path Allocating individual Cost schedule | Face-to-face | Lecturing | Chapter 8 |
| | K1,k3,S2 | -Resource allocation (video) -Assignment | Asynchronous | - Video -Assignment | Moodle |
| 12 | K2,K3 | Monitoring and control | Face-to-face | Lecturing | Chapter 9 |
| | K2,K3 | - Monitoring and control (video) -Assignment | Asynchronous | -video -Assignment | Moodle |

| | | | | | |
|-------------------|-------------|--|--------------|-----------|------------|
| 13 | K2,K3,S1,S2 | Types of contracts Time and Material Contract management | Face-to-face | Lecturing | Chapter 10 |
| | K2,K3,S1,S2 | - Types of contracts (video) | Asynchronous | -Video | Moodle |
| 14 | K2,K3,S1,S2 | Managing people and organizing teams | Face-to-face | Lecturing | Chapter 11 |
| | K2,K3,S1,S2 | - Managing people (video) | Asynchronous | -Video | Moodle |
| Final Exam | | | | | |

*Teaching procedures: (Face-to-Face, synchronous, asynchronous).

** Teaching methods: (Lecture, video....).

*** Reference: (Pages of the book, recorded lecture, video....)

Eighth: Assessment Methods

| Methods | Online Learning | Blended Learning | Face-To-Face Learning | Specific Course Output to be assessed | | | | | | |
|-------------------------|-----------------|------------------|-----------------------|--|----|----|----|----|----|----|
| | | | | **If any CILO will not be assessed in the course, mark NA. | | | | | | |
| | | | | K1 | K2 | K3 | S1 | S2 | C1 | C2 |
| First Exam | | | | | | | | | | |
| Second Exam | | | | | | | | | | |
| Mid-term Exam | | 30 | | ✓ | ✓ | | ✓ | | ✓ | ✓ |
| Participation | | 5 | | ✓ | | | | | | |
| Asynchronous Activities | | | | | | | | | | |
| Quizzes | | 5 | | ✓ | | | ✓ | | | ✓ |
| Assignments | | | | | | | | | | |
| Group presentation | | 20 | | ✓ | | | ✓ | | | |
| Final Exam | | 40 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Total out of 100 | | 100 | | | | | | | | |

Ninth: Course Policies

- All course policies are applied to all teaching patterns (online, blended, and face-to-face Learning) as follows:
 - a. Punctuality.
 - b. Participation and interaction.
 - c. Attendance and exams.
- Academic integrity: (cheating and plagiarism are prohibited).