Course Title:	*Software Project Management*
Course Code:	SEN 413
Credit Hours Theory:	Three (3)
Credit Hours Lab (If Applicable):	0
Instructor Name with Qualification:	Tamim Ahmed Khan, PhD
Course Objectives:	This course introduces main concepts of software project management and prepares the students to undertake projects in a planned manner.
Course Learning Outcomes:	**Professional and reflective practitioner skills** 1. An understanding of the importance of a structured approach to project management for IT projects 2. An understanding of the principles of the project lifecycle and how to identify opportunities to work with learners on relevant and appropriate project scenarios to share this understanding 3. The ability to critically consider and discuss the issues around project management and its application in the real world with course participants and learners. **Practical skills** 4. To use project management tools and techniques to initiate, plan, execute and evaluate a project 5. To work in teams to create a project plan for a project scenario that includes key tasks, critical path, dependencies and a realistic timeline **Cognitive skills** 6. To critically evaluate how project scenarios can be adapted for use within IT sector. 7. To discuss strategies for gaining confidence in managing projects through simple project planning examples
Contents (Catalog Description):	This course aims to provide students with an understanding of the principles, processes, and practices associated with the management of software-intensive projects. This course is designed to equip and prepare the students work in software industry on software development project such that they have an insight into specific knowledge of the application domain, project management domain, and software engineering practices at the same time.

<table>
<tr><td>Recommended Text Books:</td><td>

“Rapid Development”, Steve McConnell
“Information Technology Project Management”, Kathy Schwalbe

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<tr><td>Reference Books:</td><td>

“Quality Software Project Management”, D. Shafer
“Software Project Survival Guide”, Steve McConnell

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<tr><td>Helping Web Sites:</td><td>

PMI related websites
SCRUM related websites
PRINCE2 related websites

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<tr><td>General Instructions for students:</td><td>
<u>Home Works and Assignments</u>

Attendance is mandatory. Every class is important. All deadlines are hard. Under normal circumstances late work will not be accepted. Students are required to take all the tests. No make-up tests will be given under normal circumstances. Any form of cheating on exams/assignments/quizzes is subject to serious penalty

<u>Attendance</u>

75% attendance is mandatory. Latecomers will be marked as absent.

<u>Evaluation Criteria</u>

Assignments/projects 20%
Quizzes 10%
Mid-Term 20%
Final 50%

<u>Quizzes Schedule</u>

<table>
<tr><td>Quiz # 1</td><td>Week # 4</td></tr>
<tr><td>Quiz # 2</td><td>Week # 7</td></tr>
<tr><td>Quiz # 3</td><td>Week # 11</td></tr>
<tr><td>Quiz # 4</td><td>Week # 14</td></tr>
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<u>Assignments Schedule</u>

<table>
<tr><th>Assignment</th><th>Delivery date</th><th>Submission Date</th></tr>
<tr><td>Assignment # 1</td><td>Week # 2</td><td>Week # 4</td></tr>
<tr><td>Assignment # 2</td><td>Week # 5</td><td>Week # 6</td></tr>
<tr><td>Assignment # 3</td><td>Week # 9</td><td>Week # 10</td></tr>
<tr><td>Assignment # 4</td><td>Week #11</td><td>Week #12</td></tr>
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<tr><td></td><td>
1.0 <u>Introduction to project management</u>
1.1 Introduction to software crisis for motivation.
1.2 Basic software project management concepts.
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Sixteen Week Lesson Plan	2.0 Software Lifecycle processes and models 2.1 Waterfall model 2.2 Spiral model 2.3 Incremental delivery model 2.4 Agile Methods and basics of SCRUM. 3.0 Project Management Methods and tools 3.1 Methods 3.2 Tools 4.0 Processes and process groups 4.1 Processes 4.2 Groups 5.0 Software Projects Processes and Mappings 5.1 General Processes 5.2 Specific Processes 6.0 Software Estimation 6.1 Software Size 6.2 Software estimation methods 7.0 Software Project planning and control 7.1 Project Planning 7.2 Project Control 7.3 Earned value analysis. 7.4 Change management. 7.5 Project Plan 8.0 Project Risk Management 8.1 Introduction. 8.2 Planning 8.3 Identification 8.4 Prioritization 8.5 Treatment and monitoring 9.0 Software Measurements 9.1 Introduction 9.2 Practical software and system measurement 9.3 Implement base and child classes. 10.0 Software Requirements Management 10.1 Introduction 10.2 Requirements Development and evaluation architecture 11.0 Software Architectures 11.1 Introduction 11.2 Documenting architecture 12.0 Software Quality Assurance and reviews 12.1 Management/technical reviews. 12.2 Walkthroughs 12.3 Inspections 13.0 Software configuration management

	13.1 Introduction 13.2 SCM activities and planning 14.0 Software test management 14.1 Introduction. 14.2 Verification and validation process 14.3 Test phases types and management issues 15.0 SCRUM 15.1 Introduction. 15.2 Process improvement with standards: introduction 16.0 Overview and comparison of PRINCE2 and PMI 16.1 Introduction. 16.2 Process improvement with standards: introduction

Course Learning Outcomes mapping to Program Learning Objectives

CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME LEARNING OUTCOMES													
SOFTWARE ENGINEERING		SOFTWARE PROJECT MANAGEMENT											
No.	Program Outcomes	Course Learning Outcomes											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Engineering Knowledge												
2	Problem analysis			√									
3	Design/Development of solutions												
4	Investigation												
5	Modern tool usage				√								
6	Engineer and society												
7	Environment and sustainability												
8	Ethics												
9	Individual and Team work					√							
10	Communication							√					
11	Project Management	√	√										
12	Lifelong learning						√						