AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH (AIUB)
Faculty of Science and Technology (FST)
Department of Computer Science
Undergraduate Program

COURSE OUTLINE

I - Course Code and Title: CSC4125: Software Development Project Management
II - Credit: 3 credit hours
III - Nature: Major Course for BSc. in CSSE, SE, CIS.
IV- Prerequisite: CSC3114: Software Engineering

V - Course Description:

This course introduces a number of aspects of software projects including software requirements specifications, software life-cycle models, software project scheduling, and risk management. Other topics include teamwork, software testing, and software configuration management.

VI – Objectives:

A basic knowledge of software project management principles. The ability to come up with a project schedule and assign resources. Choose an appropriate project development methodology (e.g. waterfall, spiral, etc.) Identify project risks, monitor and track project deadlines. The capability to work in a team environment and be aware of different modes of communications. Examine the software project management principles in real life scenarios. Be able to independently evaluate a particular topic of research interest and critically analyze the issues.

VII – Topics to be covered

TOPICS	Specific Objective(s)	Time Frame	Suggested Activities	Teaching Strategy(s)
Mission & Vision of AIUB and Faculty of Science & IT	Make the student understand about how this course adjust with the mission and vision of AIUB and the corresponding Faculty	Week 1	Introductory Lecture	Interactive session
Foundational Concepts	Basic Concept of Software Project, Understanding the difference between Software Projects and Other type of Projects, Project Stakeholders	Week 1	Lecture	Lecture Delivery & Interactive session including Problem solving
Type of organizations and constraints	Types of organizations, Roles of Project managers in different type of organizations, Constraints of decision making	Week 2	Lecture	Lecture Delivery & Interactive session including Problem solving

Process Framework	Process, Phases, Process Groups, Knowledge Area	Week 3	Lecture	Lecture Delivery & Interactive session including Problem solving
Project Evaluation	Strategies, Cost-Benefit Analysis, Risk Impacts	Week 4	Lecture	Lecture Delivery & Interactive session including Problem solving
Approach Selection	Software Development Life Cycle	Week 5	Lecture	Lecture Delivery & Interactive session including Problem solving
Review & Project	Lecture Reviews	Week 6	Lecture	Quizzes & Interactive session including Problem solving
Midterm Week Week 7				

Software Effort Estimation	Constraints of estimation, Estimation techniques & models	Week 8	Lecture	Lecture Delivery & Interactive session including Problem solving
Activity Planning	Work Breakdown Structure, Scheduling, Network models	Week 9	Lecture	Lecture Delivery & Interactive session including Problem solving
Resource Allocation	Nature of Resources, Requirements, Scheduling, Costing	Week 10	Lecture	Lecture Delivery & Interactive session including Problem solving
Risk Analysis & management	Risk Categories, Risk Management, Impact Assessment, Risk Exposure, Risk Mitigation	Week 11&12	Lecture	Lecture Delivery & Interactive session including Problem solving
Monitoring & Control	Framework, Tracking, Control	Week 13	Lecture	Lecture Delivery & Interactive session including Problem solving
Review & Project	Lecture Reviews Project Presentation	Week 13	Lecture	Quizzes & Interactive session including Problem solving
Final term Week Week 14				

VIII- Course Requirements

1. **Student Attendance**
   All students are expected to attend all scheduled classes as well as mandatory counselling, and to read all assigned chapters / materials before coming to class. 80% Attendance is mandatory to pass the course.
2. **Class Participation & Peer Evaluation**
   Students are expected to participate actively in the class. Your contribution towards your team will be counted too.
3. **Quiz & Exam**
   For both terms, there will be more than 2 quizzes of which only the best 2 quizzes will be counted for grading. The details will be announced in due time.
4. **Assignments**
   For both terms, there will be assignments based on the given project proposal. Groups will be created, and members will be assigned by the instructor.
5. **Final Project**
   Software Project Management Plan (SPMP) Document on the Assigned Projects and Presentation after the final weeks of the semester.
   Submission Date: During the final weeks of the semester.

IX– Evaluation

Mid Term	Class Attendance and Performance	10
	Quiz (Best Two)	40
	Term Exam	50
	Total	**100**
Final Term	Class Attendance and Performance	10
	Quiz (Best One)	20
	Project	20
	Term Exam	50
	Total	**100**
Grand Total	50% of Midterm + 50% of Final Term	

X – Textbook/ References

1. Software Project Management, Bob Hughes and Mike Cottrell
2. Software Engineering, Pressman
3. Software Engineering, Ian Somerville
4. Applied Software Project Management, Jennifer Greene and Andrew Stellman
5. Peopleware: Productive Projects and Teams, Tom DeMarco
6. Code Leader: Using People, Tools, and Processes to Build Successful Software, Patrick Cauldwell
7. Project Management Lite, Juana Clark Craig
8. Strategic Project Management Made Simple, Terry Schmidt
9. Project Management Absolute Beginner's Guide (Third Edition), Gregory Horine
10. PMBOK, http://www.pmi.org/PMBOK-Guide-and-Standards.aspx