CS 683: Software Project Management

Syllabus

Instructor

Instructor:	William Phillips
Office and Hours:	Fridays 5-6 location KUPF 103
Email:	wop2@njit.edu
Location	KUPF 103
TA	Krisha Shah krs@njit.edu

Course Description

This course focuses on Scheduling, Software Metrics, Software Quality Assurance (SQA), Software Configuration Management (SCM) and Standards. You and your team will be managing a project as it transitions from concept to delivery.

Textbooks

Required: Boyde, Joshua. Adaptive and Proactive SDLC Project Management. Bruegge, et.al. Object Oriented Software Engineering	Other Texts will be referenced in lectures but excerpts will be provided on slides or pdfs. pdf posted

Grading Scheme

Exams	30%
Homework + Project Deliverables	70%

Student Outcomes

This course gives the student the necessary background to allow her/him to manage software projects; this includes economic, managerial and organizational aspects. The essence of software engineering is not only to introduce a valuable software product, but to do so economically and competitively. Like any engineering discipline, software engineering depends critically on managerial, economic and organizational considerations. Students will learn software management technique, various software costing techniques including Boehm's Constructive Cost Model (COCOMO) and Return on Investment (ROI), team organization and management, and various methods of software development including Waterfall and Agile.

Topics

Non-Cheating Policy

Cheating on a programming assignment results in zero credit for all students involved. Cheating on an exam will result in an "F" in the course.
You may discuss problems with each other, in fact, you are encouraged to do so.
Violations of the honor code will be dealt with seriously and reported immediately to the Dean of Students.

Late Policy

To receive credit assignments must be handed in on time. No credit will be given for any programming assignment that is not turned in on the day (and time) it is due.

Prerequisites

Graduate Standing or permission (obtained from the administration) if you are undergraduate.

Week	Lecture Topic	Project Deliverable	Text Chapter
1	Introduction Software Project and Software Configuration Management Baselines	Information Sheets	1/2
2	Types of (software projects)/ Project Description/ Reviews/ Object Oriented Analysis.	Software Development Plan (SDP) assigned (by 1/31)	3
3	Software Quality Assurance	Monthly Report	
4	Software Metrics/Review		4
5	Exam 1		5
6	Monitoring and Control	SDP due	
7	Application Lifecycle Management	SDP Review Assigned	6
8	More on Software Metrics		7
9	Text/Exam Review		8
10	Exam 2	SDP Review Due	
11	Adapting SCM for Agile I		9
12	Text		10
13	Adapting SCM for Agile II	Final SDP due	11
14	Final Review		

Grading Breakdown

- Monthly Reports   15%
- Software Development Plan   15%
- Review Assignment   20%
- Review Incorporate Assignment   10%
- Exams   20%
- Final   20%

Grading Scale (Guaranteed*)

- 90+   A
- 85+   B+
- 80+   B
- 75+   C+
- 70+   C

*May be lowered but not raised.

- The first two lectures will cover what a software project is: what it is we are managing (the software configuration) and how to measure its attributes (software quality assurance, testing and metrics.
- Deliverables: Monthly reports and presentations are team efforts. All members of the team get the same grade for the team assignments.
- I will be referring to/using other texts to cover topics above. There are a few books that a software engineer should be familiar with. The Kindle version of the text is available on Amazon for under $5 or you can get the paper version for not that much more. Material from other texts I will make available, or power point slides will be provided.
- All lectures will be broadcast live, recorded and posted to canvas. I intend to be on campus for the majority of lectures.