Course Syllabus

CS 682-01 – Software Development Lab
Semester: Fall 2018
Lectures: Tuesdays and Thursdays 5:30pm – 6:45pm
Location: University Hall Y01-1300

This is an in-depth software development laboratory course, where students, working in small groups, specify, design, implement, test and document a relatively large software project.

Instructor

Please contact the instructor if you have any questions or concerns regarding the course.

Kenneth K. Fletcher
Office: Science Center
3rd Floor, Room 75
Hours: Tuesdays & Thursdays (2:00pm – 4:00pm) or by appointment.
Email: kkfletch@cs.umb.edu
Web: www.cs.umb.edu/~kkfletch/

Course Materials

There are no required books for this class.

Course Announcements

Announcements for this course will be posted on blackboard at: https://umb.umassonline.net/

Learning Outcomes

At the end of this course, students should be able to:

- Work together in a team to have productive interactions with clients.
- Communicate effectively with other team members and clients to accomplish project outcomes.
- Perform software requirements elicitation and analysis.
- Use a software version control systems to collaboratively implement a relatively large software project.
- Produce professional-quality code following some coding standard.
- Test and document a relatively large software.

Assessment of these outcomes will be done by a combination of project meetings, code review and document reviews.

Course Requirements

This class is like a part-time job! ☺ Students will be expected to spend a minimum of 15 to 20 hours per week outside of class.

Projects

This course is all about working and managing a relatively large software development project. Students will work in teams and each team will be assigned a real-world project, typically from an industrial client, based on their preferences. A list of all available projects and descriptions will be made available on blackboard (https://umb.umassonline.net/) for students to choose. Students are expected to apply the software development lifecycle to realize the outcomes the project. Emphasis is placed on the quality of software artifacts produced at the end of each milestone and the overall client satisfaction of the project.

Exams

There will be no exams for this course.

Grade Breakdown

The final grade for this course will depend on the software artifacts produced and submitted by each team, customer satisfaction, student participation in team and final demo of the project. The specific breakdown is as follows:

Item	% of Total Score
Artifacts	**70 %**
Requirement document	10%
Design document	10%
Code	25%
Test cases	15%
Project documentation	10%
Customer Satisfaction	**15%**
Member Participation	**10%**
Final Project Demo	**5%**
Total	**100%**

Letter Grades

Letter grades will be assigned according to the following scale:

A	≥	94%
A–	≥	90%
B+	≥	87%
B	≥	84%
B–	≥	80%
C+	≥	77%
C	≥	74%
C–	≥	70%
D+	≥	67%
D	≥	64%
D–	≥	60%
F	<	60%

Attendance Policy

This course is not a regular lecture course. Most of the work will be done outside of class. Students are **required** to be in class the first week of class. After which there will be bi-weekly project meetings with each project team until the end of the semester. Attendance is **mandatory** for all project meetings.

Late Policy

All deadlines for submitting software artifacts are **firm**. No late submissions will be accepted. Exceptions to this policy are made only in the case of verifiable medical or family emergency.

Milestones, Deliverables and Deadlines

Milestone	Description	Deliverable	Due Date
Project Scope Meeting	Meeting between students and organization to confirm: project scope, communication styles, and important dates.	None	None
Requirements Review Meeting	Meeting between students and organization to finalize all requirements gathered. Copies of the finalized requirements document are due to the organization and instructor on this date.	Requirement Document	October 1, 2018 (3 weeks)
Software Design Review	Students finalize design document by inspecting design that aims to check whether the specified design requirements are adequate and the design meets all the specified requirements. Copies of the design document must be submitted to the organization and instructor by this date.	Design Document	October 15, 2018 (2 weeks)
Initial Software Demo	Students complete software implementation and present an initial demo to the organization. Students must document all bugs during this demo to be included in their test cases.	None	November 12, 2018 (4 weeks)
Testing Complete and Final Software Demo	Software testing must be complete by this date and a final software demo must be presented to the organization. A copy of test case document must be submitted to the instructor.	Code & Test Case document	December 10, 2018 (4 weeks)
Final Documentation	Copies of software documentation due to the organization and instructor by this date.	Software documentation	December 17, 2018 (1 week)
Close-off Meeting	Meeting between students and organization to establish a formal project closure of the project and that the project is officially over. Students will also get the final acceptance from the organization.	None	December 24, 2018 (1 week)

Student Disability Services

Section 504 of the American with Disabilities Act of 1990 offer guidelines for curriculum modifications and adaptations for students with documented disabilities. If applicable, you may obtain adaptation recommendations from the UMass Boston Ross Center. For more information, please visit https://www.umb.edu/academics/vpass/disability or call 617-287-7430. You need to present and discuss these recommendations with the instructor within a reasonable period, prior to the end of the Drop/Add period.

Academic Honesty

Students are required to adhere to the Code of Student Conduct, including requirements for the Academic Honesty Policy, delineated in the University of Massachusetts Boston Undergraduate Program Catalog (https://www.umb.edu/life_on_campus/policies/community/code).