Course Syllabus

✎ Edit

CS 499 - Senior Team Project

Fall 2020

Syllabus and Course Summary

Instructor: Dr. Harry S. Delugach

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WWW: http://www.cs.uah.edu/~delugach   (http://www.cs.uah.edu/%7Edelugach)
Phone: (256) 824-6614
Class Meets: Tue., Thu. - 6:00 - 7:20 PM ~~in OKT N 324~~ **via Zoom   (https://uah-uasystem.zoom.us/j/91991862831?pwd=TVZ1b1dpSnJ4MGtxYmcyQjYxZUxOUT09)**
Office Hours: Tue., Thu. 2:30 - 4:15 in OKT N-351 or by appointment or via Zoom.

Text: *Software Engineering A Practitioner's Approach,* 9th edition, Roger S. Pressman and Bruce Maxim, McGraw Hill, Inc, 2020.

Course Objectives

When you have completed this course you should have:

- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
- An ability to apply design and development principles in the construction of software systems of varying complexity.
- Practical experience in the software engineering process by participation on a team in the development of a major software system.
- Developed an understanding of the professional, ethical, legal, and social issues related to computing and the responsibilities of computing professionals with respect to these issues.
- An ability to communicate effectively with a range of audiences; customers, supervisor, team mates, etc.
- Learned to recognize and analyze the impact of computing on individuals, organizations, and society.

Team Software Development Project

- The class will be divided up into teams of three or four people.
- Each team will be given a project assignment.
- Following the Agile Scrum approach to software development teams will work just as if this were an actual project for a major software development company.
- Each team submits a weekly report spreadsheet, found in **Weekly-Report-Team-Z-Wknn.xlsx** 📄.
- Each team member submits a weekly individual report spreadsheet, found in **Weekly-Report-Ind-yourname-Wknn.xlsx** 📄.
- See the **Overview** for more information.

Final Grade

Final grades are based on both individual and team efforts. If a team reports that a member is not doing their share of the work that member's grade may suffer. If the team "fires" a member because of lack of participation that member will receive an F for the course.

Factors figured in the final grade are:

- Participation in team presentations in class.
- Participation in team software process out of class.
- Weekly team meeting reports.
- Individual sprint reports.
- Quality of software documents prepared by the team.
- Individual work completed in each sprint.
- Final, in-class, presentation of the team project.

General Information

Please read the **general guidelines and policies (http://www.cs.uah.edu/~delugach/Courses/Syllabus-General.html)** that apply to this course, They are a part of this syllabus. This syllabus is freely available to anyone. Other course materials, announcements, discussions, etc. will be distributed using Canvas (canvas.ah.edu).

Course Mode

This course will be conducted in an "online, flipped, synchronous" mode:

- **Online** - Students will not be required to meet their team or the professor face-to-face.
- **Flipped** - Each scheduled class session will be preceded by a short (approx. 20-25 min.) lecture recorded by the professor using Panopto and made available the day before class. Students are expected to view this recording before the interactive portion occurs.

- **Synchronous** - The interactive portion of the class will be conducted via Zoom in real-time at the time period scheduled. This is a good time for student questions. In most cases, this portion will not last the entire 80 minutes. When team presentations occur, however, be prepared for the full time to be used.

General notices will often be posted under **Announcements**. Be sure you check them at least once a day, preferably before class time.

Canvas Online Access

Communication in this class will be conducted through Canvas by Instructure, the university's course management system. To access Canvas, go to **uah.instructure.com** or access it through **the Central Authentication Service (SSO)** **(http://sso.uah.edu/cas)** . You'll find instructions there about id/password and access information. You may also reach the Help Desk at **http://www.uah.edu/oit,** **(http://www.uah.edu/oit/contact)** **helpdesk@uah.edu, (mailto:helpdesk@uah.edu,)** or phone them at 256-824-3333.

Course Schedule

**Assignments will generally not be accepted late.

	Date*	Topic	Assignment	Due**
1	Thursday, Aug, 20	**Team Organization** 　　**Lecture: *Course Introduction and Requirements*** 　　Activity: Meet your development team.		
2	Tuesday, Aug. 25	**Contract Awarding** 　　**Lecture: *Agile Software Development*** 　　Activity: Assignment of semester project.	**Start of Sprint 1** Chapters 1-4	
		Sprint 1		
3	Thursday, Aug. 27	**Software Development Plan** 　　**Lecture: *Project Management and the S.D.P.*** 　　Activity: Work on Software	Chapters 21-27	

		Development Plan.		

4	Tuesday, Sept. 01	**Software Development Plan**
		    Lecture: *Software Development Tools*
		    Activity: Work on Software Development Plan.		

5	Thursday, Sept. 03	**Making oral presentations**
		    Lecture: *Some advice from Toastmasters*
		    Activity: Work on Software Development Plan
		    and class presentation.		

6	Tuesday, Sept. 08	**Team Presentations - First Group**
		    Activity: Presentation of Software Development
		    Plan to Supervisor.
		Teams will be randomly selected and as many as possible will present. The remaining teams will present at the next class meeting.
				SW Dev Plan SDP PPT slides

7	Thursday, Sept. 10	**Team Presentations - Second Group** Activity: Presentation of Software Development Plan to Supervisor.	**End of Sprint 1** **Start of Sprint 2** If your project is web based read Chapters 16-20	**Sprint 1 Reports**

Sprint 2

8	Tuesday, Sept. 15	**Requirements and the Backlog**
		    Lecture: *Defining requirements in the Backlog.*
		    Activity: Work on Backlog and meet with supervisor as needed.		

9	Thursday,	**Backlog** Activity: Work on the Backlog. List		

	Sept. 17	all epics.		
10	Tuesday, Sept. 22	**Backlog** Activity: Report to supervisor on status of the Backlog, list user stories for first epics to be implemented, prepare for team presentations.		**Sprint 1 Reports**
11	Thursday, Sept. 24	**Team Presentations - First Group** Presentation of first version of the Backlog. **Teams who presented on the second night last time will present first this time.**		**First Draft: Project Backlog** PowerPoint slides if used.
12	Tuesday, Sept. 29	**Team Presentations - Second Group** Presentation of first version of the Backlog.	**End of Sprint 2 Start of Sprint 3**	**Sprint 2 Reports**

Sprint 3

13	Thursday, Oct. 01	**Design** **Lecture:** *Object Oriented Design* Activity: Work on Architectural Design: determine modules, units, classes, etc. of product. Update Backlog as needed.	Chapters 5-15	
14	Tuesday, Oct. 06	**Lecture:** *Agile Testing* Activity: Work on Architectural Design. Update Backlog as needed.		

15	Thursday, Oct. 08	**Lecture: *MoreAgile Testing***
		    Activity: Work on Architectural Design.
		        Update Backlog as needed.		

16	Tuesday, Oct. 13	**TBA**		**Sprint 2 Reports**
17	Thursday, Oct. 15	**Team Presentations - First Group** Presentation of Architectural Design and updates to the Backlog. **Teams will be randomly selected and as many as possible will present tonight. The remaining teams will present at the next class meeting.**		
18	Tuesday, Oct. 20	**Team Presentations - Second Group** Presentation of Architectural Design and updates to the Backlog.	**End of Sprint 3 Start of Sprint 4** Chapters 5-15	**Sprint 3 Reports Architectural Design Backlog - Version 2 PowerPoint slides if used.**

Sprint 4

19	Thursday, Oct. 22	**The User Interface**
		        Lecture: *Principles of GUI Layout*
		        Activity: Work on GUI Design.		

20	Tuesday, Oct. 27	**The User Interface** Activity: Work on GUI layout.		
21	Thursday, Oct. 29	**The User Interface** Activity: Report to supervisor on GUI layout.		**Sprint 3 Reports**
22	Tuesday,	**Team Presentations - First Group** Activity: Presentation of Preliminary GUI design.		

	Nov. 03	Teams who presented on the second class last time will present first this time.		
23	Thursday, Nov. 05	**Team Presentations - Second Group** Activity: Presentation of Preliminary GUI design.	**End of Sprint 4** **Start of Sprint 5**	**Sprint 4 Reports PowerPoint slides if used in presentation.**

Sprint 5

24	Tuesday, Nov. 10	**The Beta Release** Activity: Status report to supervisor.		
25	Thursday, Nov. 12	**The Beta Release** Activity: Status report to supervisor on beta version.		
26	Tuesday, Nov. 17	**Prepare for Delivery** Activity: Status report to supervisor on final delivery.		**Sprint 4 Reports**
27	Thursday, Nov. 19			
	Tuesday, Nov. 17	*Thanksgiving Week (BREAK)*		
	Thursday, Nov. 26	*Thanksgiving Week (BREAK)*		
28	Tuesday, Dec. 01 (last day of class)	**Team Presentations-Product Delivery - First Group** Presentation of completed project to customer. **Teams will be randomly selected and as many as possible will present tonight. The remaining teams will present at the next class meeting.**		
	Thursday,	**Team Presentations-Product Delivery - Second Group**		

29	Dec. 03	Presentation of completed project to customer.	**End of Sprint 5**	**Sprint 5 Reports**
--	Tuesday, Dec. 08	End of course		**All source files, executables, web pages, pages, etc. appropriate for installation of final product. PowerPoint Slides if used.** **Exit surveys.**

Course Summary:

Date	Details	
Tue Aug 18, 2020	🗓 **"Test" of CS 499 Zoom meeting (https://uah.instructure.com/calendar? event_id=106905&include_contexts=course_48177)**	6pm to 6:30pm
Mon Aug 24, 2020	📝 **Week 1 Individual Report (https://uah.instructure.com/courses/48177/assignments/391386)**	due by 11:59pm
	📝 **Week 1 Team Report (https://uah.instructure.com/courses/48177/assignments/391387)**	due by 11:59pm
Mon Aug 31, 2020	📝 **Week 2 Individual Report (https://uah.instructure.com/courses/48177/assignments/391388)**	due by 11:59pm
	📝 **Week 2 Team Report (https://uah.instructure.com/courses/48177/assignments/391389)**	due by 11:59pm
Mon Sep 7, 2020	📝 **Week 3 Individual Report (https://uah.instructure.com/courses/48177/assignments/399670)**	due by 11:59pm
	📝 **Week 3 Team Report (https://uah.instructure.com/courses/48177/assignments/399669)**	due by 11:59pm

Fri Sep 11, 2020	✏ **Software Development Plan** (https://uah.instructure.com/courses/48177/assignments/391381)	due by 11:59pm
Wed Sep 30, 2020	✏ **Requirements Definition Document** (https://uah.instructure.com/courses/48177/assignments/426411)	due by 11:59pm
Wed Oct 21, 2020	✏ **Architectural Design and Test Plan** (https://uah.instructure.com/courses/48177/assignments/391377)	due by 11:59pm
Tue Nov 3, 2020	📅 **GUI Presentations (First Set)** (https://uah.instructure.com/calendar? event_id=99436&include_contexts=course_48177)	5:40pm to 6:55pm
Thu Nov 5, 2020	📅 **GUI Presentations (2nd Set)** (https://uah.instructure.com/calendar? event_id=99435&include_contexts=course_48177)	5:40pm to 6:55pm
Fri Nov 6, 2020	✏ **GUI Demonstration and Updates** (https://uah.instructure.com/courses/48177/assignments/391380)	due by 11:59pm
Mon Nov 23, 2020	📅 **Thanksgiving Break BEGINS** (https://uah.instructure.com/calendar? event_id=106208&include_contexts=course_48177)	12am
Thu Dec 3, 2020	✏ **Exit Survey** (https://uah.instructure.com/courses/48177/assignments/391378)	due by 11:59pm
Tue Dec 8, 2020	✏ **Final Evaluation** (https://uah.instructure.com/courses/48177/assignments/391376)	due by 6pm
	✏ **Final Project Deliverable** (https://uah.instructure.com/courses/48177/assignments/391379)	due by 11:59pm