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Instructor and Communication Information

Instructor	Dr. Warren D. MacEvoy
Office	WS 119F
Phone	970-248-1070 email is preferred.
Email	wmacevoy@coloradomesa.edu - have a clear subject line!
Office Hours	9:00AM-9:50AM Monday, Wednesday, Friday in Wubben 119F, 12:30AM-1:50PM Tuesday, Thursday in MIC
Communication s Policy	I check email daily. You must have a clear subject line or I will probably skip the email.
Assignment Grading and Feedback	The instructor will attempt to return grades and feedback on your assignments within two weeks after the due date. Since these assignments are large virtualized systems, your assignment will often come from a demonstration of the configured system(s).

Course Information

Course Title	Software Engineering - 22514 - CSCI 490 - 001 - Fall 2018
Class Time	Class 12:00 pm - 12:50 pm MWF
Classroom	Wubben Hall and Science Center 118
Prerequisites	CSCI 250 Data Structures and CSCI 330 Programming Languages
General Education Requirements	<i>None.</i>
Drop Date	October 17
Credit Hours	3 (45 contact hours)
Lecture Hours	3
Lab Hours	0
Other Hours	0

Course Catalog Description

Exploration of the philosophy of software engineering. Software project planning, requirement analysis, software system design and strategies, software design tools, program and system testing, system maintenance, and economics are examined. Prerequisites: CSCI 250 and CSCI 330.

Required Text and Supplies

You will have to set up version control (preferably github) for management of your development and add me as a collaborator (wmacevoy github user) so I can track your project progress.

Lesson/Instructional Materials

We will use a variety of online resources and you will have to be independently motivated to learn and build your final project.

Learning Objectives

Our goal is to understand individual and team dynamics, engineering and software development principles, ethical, privacy and security concerns about software development, the landscape of intellectual property, software lifecycle, and typical tools for team management, automated testing and version control.

Concurrently you will be working with a team to deliver a software engineering product to a client using these ideas and demonstrating your professionalism to your client and within your team to deliver a product under the constraints of a timeline.

My principal role is a facilitator. It is your job to manage your team and strive to deal with the personal and technical issues which will arise, and will certainly involve a lot of independent learning. We use the projects

and teams you are on as a significant goal in themselves, but also as a reflection of the professional software development process.

Methods of Evaluation/Grading Policy

Grade Items	Percent (or points if not using weighted categories) of Final Grade
Final Project	70%
Summary Presentations	20%
Participation	10%

GRADING	SCALE
A	90 -100%
B	80 - 89%
C	70 -79%
D	60 - 69%
F	Under 60%

Assignments

Your team projects must be hosted on github or bitbucket. I will track individual contributions to your projects through there. You must participate in the standup scrums and your team must make a presentation to the class on your final project. Your client will have a 50% contribution to your final project grade.

Many years I have students that have delayed their graduation because they did not satisfactorily complete this course. Don't be that student! Set aside enough time to make this a priority and choose your teammates and project well, and talk to me early if you are seeing a problem.

[Student Showcase](#)

[Projects Spreadsheet](#)

[Tom Wujec Build a Tower Build a Team](#)

[Dan Pink on Motivation](#)

[Contract Template](#)

[Presentation Rubric](#)

[Client Feedback Request](#)

[Git Started](#)

<https://github.com/wmacevoy/software-engineering-spring2018-public>

Testing Statement

We have no tests. You must deliver on your projects and participate to pass this class.

Supplemental Help

If you wish to discuss academic accommodations, please contact me as soon as possible. Specific information about Educational Access Services and the Tutorial Learning Center is included under General Student Services in this Syllabus.

Attendance Policy

Let me know ahead of time if you can't be here for a due date.

Course Correspondence

All communication in this course will be made via your CMU email account. Please include the title of the course and section number in the subject line (i.e, CSCI 490 - useful subject line) Check your email regularly throughout the semester. I will respond within 48 hours.

Course Schedule

Week	Mon	Wed	Fri
19-Aug	2018 20-Aug 1	2018 22-Aug 2	2018 24-Aug 3
26-Aug	2018 27-Aug 4	2018 29-Aug 5	2018 31-Aug 6
2-Sep	2018 03-Sep 7	2018 05-Sep 8	2018 07-Sep 9
9-Sep	2018 10-Sep 10	2018 12-Sep 11	2018 14-Sep 12
16-Sep	2018 17-Sep 13	2018 19-Sep 14	2018 21-Sep 15
23-Sep	2018 24-Sep 16	2018 26-Sep 17	2018 28-Sep 18
30-Sep	2018 01-Oct 19	2018 03-Oct 20	2018 05-Oct 21
7-Oct	2018 08-Oct 22	2018 10-Oct 23	2018 12-Oct *Fall Break*
14-Oct	2018 15-Oct 24	2018 17-Oct *Last Drop Day*	2018 19-Oct 25
21-Oct	2018 22-Oct 26	2018 24-Oct 27	2018 26-Oct 28
28-Oct	2018 29-Oct 29	2018 31-Oct 30	2018 02-Nov 31
4-Nov	2018 05-Nov 32	2018 07-Nov 33	2018 09-Nov 34
11-Nov	2018 12-Nov 35	2018 14-Nov 36	2018 16-Nov 37
18-Nov	2018 19-Nov 38	2018 21-Nov 39	2018 23-Nov 40
25-Nov	2018 26-Nov 41	2018 28-Nov 42	2018 30-Nov 43
2-Dec	2018 03-Dec 44	2018 05-Dec 45	2018 07-Dec 46
9-Dec	2018 10-Dec *Finals*	2018 12-Dec *Finals*	

Our Final is Monday Dec 10 from 1:00 PM - 2:50 PM

Course Topics

1. Problem Solving
2. Version Control
3. Individuals
4. Teams

5. Management
6. Decisions
7. Lifecycle
8. Testing
9. Documentation
10. Deployment
11. Waterfall
12. Agile
13. Intellectual Property
14. Knowledge
15. Deployment
16. Security
17. Failure
18. Hiring
19. Firing
20. Presentations

Campus Wide Policies

See [Colorado Mesa University Campus Wide Policies](#)

Errata

Git:

Git Started: [[google doc](#)]

Udacity Git Class: <https://www.udacity.com/course/how-to-use-git-and-github--ud775>

Client

Contract: [[google doc](#)]

Feedback: [[google doc](#)]

Teamwork Tools:

Jira

Trello

http://www.ted.com/talks/dan_pink_on_motivation.html

http://www.ted.com/talks/shawn_achor_the_happy_secret_to_better_work.html

<http://en.wikipedia.org/wiki/Happiness>

<http://content.time.com/time/magazine/article/0,9171,2019628,00.html>

<http://sams.scientificamerican.com/article/using-money-to-buy-happiness/>

http://en.wikipedia.org/wiki/The_Seven_Habits_of_Highly_Effective_People

<http://www.microsoft.com/business/en-us/resources/marketing/advertising-branding/5-tips-for-creating-an-elevator-pitch.aspx?fbid=Zpn78R03miE>

<http://www.chasedumont.com/when-to-cut-losses-the-guide/>

Team Management

<http://www.dummies.com/how-to/content/the-essentials-of-managing-a-project-team.html>

Beer - The Key Ingredient to Team Development

http://www.sans.org/reading_room/whitepapers/leadership/beer-key-ingredient-team-development_33104

<http://en.wikipedia.org/wiki/Teamwork>

http://en.wikipedia.org/wiki/Team_building

Medical imaging case study

<http://www.agilealliance.org/resources/learning-center/agile2012-keynote-dr-sunita-maheshwari>

CMMI overview

<http://www.tutorialspoint.com/cmmi/cmmi-maturity-levels.htm>

Scrum

[http://en.wikipedia.org/wiki/Scrum_\(development\)](http://en.wikipedia.org/wiki/Scrum_(development))

Agile

<http://agilemanifesto.org/>

<http://www.agile-process.org/>

A Brief Survey of the Team Software Process (TSP)

http://www.sei.cmu.edu/library/assets/presentations/SEITECHFORUM_JM.pdf

XP

<http://www.extremeprogramming.org/>

RUP

<http://www.ambysoft.com/downloads/managersIntroToRUP.pdf>

Working with other people's code

<http://www.natpryce.com/articles/000756.html>

Cowboy Coders

<http://gamesfromwithin.com/cowboy-coders-and-the-hero-programmer-culture>

Get Er Done

<http://blog.bootstraptoday.com/2011/10/14/5-tricks-to-getting-things-done/>

Mistakes

<http://www.stevemcconnell.com/rdenum.htm>

Software Development Mistakes

<http://www.techrepublic.com/blog/10things/10-classic-mistakes-that-plague-software-development-projects/3187>

Code of Ethics

<http://www.acm.org/about/se-code>

Business/Entrepreneurship

<https://www.coursera.org/course/startup>

IP

<http://www.nolo.com/legal-encyclopedia/how-protect-intellectual-property-rights-29913.html>

<http://www.shopify.com/blog/8437521-12-must-watch-non-ted-talks-for-entrepreneurs#axzz2tep2UhNp>

Useful tools:

Trello, Asana

Basecamp, Redboot, Pivotal Tracker, Assembla

GitHub, BitBucket

TortoiseSVN, TortoiseGit, SourceTree

Google+, Google Drive, Dropbox

Technical Presentations:

<https://www.hanselman.com/blog/11TopTipsForASuccessfulTechnicalPresentation.aspx>