CSCI 426 Adv. Programming
Class meeting time: TR 11:00-12:20
Class location: SS362

Course Syllabus
Fall 2017

Instructor: Yolanda Reimer
Office location: SS 416
Office hours: Mon 10am-12; Thur 12:30-1:30 pm; or by appt
Email: reimer@cs.umt.edu

Text: There is no required textbook for this class. Readings will be assigned from various resources throughout the semester.

Course Description
This class is your senior CS capstone experience. It provides the opportunity for you to coalesce the technical skills you have acquired during your time in our program, but also to develop additional crucial skills like project management, leadership, professionalism, communication, and team building. You will work together with a group of other students to design, develop, implement, and test real-world software. You will work with and report to an actual client throughout the semester in addition to the class instructor. At the end of the semester, you will submit a final report and make a formal presentation of your work to our class, your client, industry professionals, and other professors.

(ABET) Student Learning Outcomes
Upon successful completion of this class, students should have:

- An ability to apply knowledge of computing and mathematics appropriate to the program’s student outcomes and to the discipline
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, legal, security and social issues and responsibilities
- An ability to communicate effectively with a range of audiences
- Recognition of the need for and an ability to engage in continuing professional development
- An ability to use current techniques, skills, and tools necessary for computing practice

Prerequisites
The prerequisites for this class are CSCI 205, 232, 323 and M 225, or consent of the instructor. I will waive prerequisites only for exceptional circumstances.
Course Evaluation: Your grade for the course will be determined by the following elements. Some of these elements are individually-based, and others are group-based. For group-based items, all team members will receive the same grade unless I learn that some are not contributing equally. In those cases, I reserve the right to downgrade certain team members.

Status reports/updates: (15%)  
These will happen frequently throughout the semester. You will meet with the class instructor to present a formal update on team progress. All group members must be present for these status updates. If you are absent, you will receive a zero for that update.

Class attendance and participation: (15%)  
While there will be many class periods where I present and we discuss topical materials in a fairly traditional format, there will also be many other periods dedicated to status updates and group work. Students are expected to attend all class periods. Attendance will be taken and will count substantially towards your final grade. If you are late for class, attendance points will be deducted. You shouldn’t be late for, or miss, a meeting with the client, so don’t be late for, or miss, a meeting with the class.

Project Deliverables: (40%)  
Throughout the semester, your team will be required to submit various projects deliverables. These will include client contracts, requirements specification and analysis documents, design documents, etc. All such deliverables will be stored and saved in a 3-ring binder.

Client Evaluation: (15%)  
Two or three times throughout the semester, I will ask your client(s) to evaluate your team.

Final Presentation: (15%)  
At the end of the semester, your team will give a formal presentation to the rest of the class, clients, industry professionals, and other professors.

Late Work Policy  
Late work will NOT be accepted, period.

Academic Dishonesty  
All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at http://www.umt.edu/vpesa/Dean%20of%20Students/default.php

Additional class policies and information:  
- If you miss a class, you and you alone are responsible for the material covered. This includes handouts, schedule changes, and lecture notes.
- For important dates and deadlines related to classes, visit: http://catalog.umt.edu/academics/policies-procedures/
• Also in the University catalog, review the policy on **incompletes**. In particular, note that incompletes can only be assigned when the student has “been in attendance and doing passing work up to three weeks before the end of the semester.” Incompletes will not be issued simply to prevent a failing grade.

• Students with disabilities will receive reasonable modifications in this course. Your responsibilities are to request them from me with sufficient advance notice, and to be prepared to provide verification of disability and its impact from Disability Services for Students. Please speak with me after class or during my office hours to discuss the details. For more information, visit the Disability Services for Students website at [http://www.umt.edu/disability](http://www.umt.edu/disability).

*Questions? Email reimer@cs.umt.edu*