CIS 440 – Systems Design and Electronic Commerce (aka Enterprise Systems Development) Fall 2015 Syllabus

Professor: Joseph W. Clark

Office and Hours: BA 301J, 11am-1pm, M/W/F, or by appointment

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Course GitHub Site: http://github.com/asu-cis-capstone/course-info

Course Description and Objectives

CIS 440 is the capstone course for the CIS undergraduate program. Over the fifteen weeks of the course, you and your classmates will work in self-organizing teams to complete IT projects that deliver tangible value to real organizations. You will apply the breadth of knowledge that you have acquired through earlier CIS coursework, internships, and work experience, and learn new skills on-the-job.

In addition, you will undertake an individual research project on an information systems topic of your choice, with the goal of thoroughly understanding a particular problem and empirically investigating its potential solution(s).

Through lectures and readings, I will recommend to you an attitude of empiricism and even entrepreneurial investigation into the work of information systems development: not "how to program" (anyone can learn that!), but rather, "how to design the best processes for producing quality software". This will include a look at project management approaches--traditional and agile—but will also include modern engineering practices, DevOps, and continuous delivery.

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

- work as a member of an IS development team using Agile methods and tools;
- plan software quality assurance activities for validation and verification;
- demonstrate the ability to learn new tools and techniques when needed;
- show off a completed software project as part of your professional portfolio; and
- speak as an expert on a meaningful and challenging topic in information systems.

The individual and group capstone projects are the final milestones of your CIS degree program and you are expected to put forth a great deal of effort. You will need to dedicate a significant amount of outside time for readings, project work, and meetings with your team and your clients.

Course Materials

Three textbooks are required reading for this course:

- 1. *The Elements of Scrum (Version 1.01)*, by Chris Sims & Hillary Louise Johnson. Dymaxicon, 2011. ISBN: 978-0-9828669-1-7
- 2. The Lean Startup, by Eric Ries. Crown Business, 2011. ISBN: 978-0307887894
- 3. *The Phoenix Project*, by Gene Kim, Kevin Behr, & George Spafford. IT Revolution Press, 2013. ISBN: 978-0988262508

Course Schedule

Available on the course GitHub site.

W. P. Carey School Learning Objectives

The Undergraduate Program of the W. P. Carey School of Business has established the following learning goals for its graduates:

- 1. Critical thinking
- 2. Communication
- 3. Discipline specific knowledge
- 4. Ethical awareness and reasoning
- 5. Global awareness

Items in bold have significant coverage in this course.

Grade Breakdown

Grades will be assigned based on the following scale:

<60: E 60-69.99: D 70-76.99: C 77-79.99: C+ 80-82.99: B-83-86.99: B 87-89.99: B+ 90-92.99: A-93-96.99: A 97+: A+

Assignments

Course assignments are weighted toward the final grade as follows:

Individual Research Assignments (60%)

Assignment	Due Date	Points
Research Proposal	Sept. 15	5%
Literature Review & Problem Analysis	Oct. 22	20%
Mid-term Presentation	Oct. 6-22	5%
Final Term Paper	Dec. 10	30%

Group IS Development Project Assignments (40%)

Assignment	Due Date	Points
Milestones 0.1-0.4	Sept. 3 -Nov. 12	4%(x4)
Release 1.0 & Project Showcase	Dec. 3	7%
Group Project Report	Dec. 3	7%
Client Feedback	Dec. 10	10%

Email/Online Communication

One of my jobs is to help you deal with obstacles and get the resources or help you need to succeed in these projects, so I encourage you to stay in communication with me. When e-mailing me, please indicate in the subject line that it is for CIS 440 and which section you are in. Be sure to sign it with your full name, and state your problem clearly. You can expect me to check my e-mail at the beginning and end of the work day, but not necessarily on weekends or at night. If you think you'll need urgent help outside of the work week, let me know in advance.

Group Policies

You will form groups of 3-5 members for the course project. It is important to make sure you are working well with your teammates. When forming teams, it is *strongly* recommended that you communicate frankly about expectations and identify any potential problems early on. At the time of the final exam, teammates will have a chance to grade one another on their performance. If students wish to change their teams for a good reason, I will consider such changes on a case-by-case basis.

Late Work

Most assignments are due at the end of the day on the due date (i.e. midnight). If I receive them late within the next 7 days, I'll accept them but take 25% off. I usually don't accept work later than 7 days after the due date. Work that is due to be delivered during class time (i.e. presentations) cannot be accepted late. The final term paper cannot be turned in late. Contact me if you need an accommodation for some kind of emergency.

Class Attendance and Participation

Class attendance is necessary to achieve the maximum benefit from this class. You are expected to attend every class. Excessive absences will affect a student's course grade and/or result in removal from the course. If a student is unable to attend class for any reason, they should notify the instructor and their teammates as soon as possible by email. In accordance with ASU policies, accommodations will be made for students observing religious holidays, or missing class related to university-sanctioned activities. Please let me know as early as possible.

- ASU calendar of religious holidays (sorry, Pastafarians):
 https://provost.asu.edu/index.php?q=religious-holiday-calendar
- Policy on university-sanctioned activities (ACD 304-02): http://www.asu.edu/aad/manuals/acd/acd304-02.html

Academic Integrity

From the ASU General Catalog: "The highest standards of academic integrity are expected of all students. Failure to meet these standards may result in suspension or expulsion from the university and other sanctions as specified in the academic integrity policies of the individual colleges." By law and regulation, this course will be conducted within the ethical standards of ASU at large, which preclude such activities as plagiarism, cheating, and various forms of harassment. Statement/policy on these issues: http://provost.asu.edu/academicintegrity

The W.P. Carey School of Business Undergraduate Honor Code is linked on the course GitHub site.

Students with Disabilities

If you wish to request accommodation for a disability, you need to be registered with the Disability Resource Center (DRC) and provide documentation from the DRC.

Threatening or Disruptive Behavior

We will follow the ASU Student Services Manual (SSM 104-02) if there are any cases of disruptive, threatening, or violent behavior that arise. Individuals can be asked to leave the premises or the police may be called in an extreme situation.

Classroom Etiquette, Professionalism and the Learning Environment

It is an extremely high priority of your instructor that the classroom experience be one that promotes a learning environment for all students present. Students, taxpayers and many other University stakeholders have paid of their money, time and resources to make this classroom environment available to you. There are a variety of behaviors which are violations of classroom etiquette because they (1) distract other students, (2) distract the instructor, and (3) distract the student exhibiting the behavior. In order to assure an environment that promotes learning for everyone present the following behaviors will absolutely not be tolerated:

- 1. Using your laptop (surfing the web) for anything other than class business.
- 2. Talking during inappropriate times.
- 3. Showing up late for class.
- 4. Doing homework for another class during the normally scheduled class time.
- 5. Listening and/or viewing audio/video devices during class.

Each instance where a student is found to be in violation of classroom etiquette will cost that student 1% off the total 100% available for the class score. There is no limit to the number of percentage points a student may lose due to these violations.