Tentative Syllabus

Course: SENG 691A Strategies for Managing Software Projects

Semester: Fall 2016

Course Format
And Credit hours: Online
3 credit hours

Prerequisites: Students must complete SENG 510: Software Project Management prior to enrolment in this course.

Instructor: Lawrence Jacowitz, PhD
Office location N/A
408-622-4359
lajacowitz@mail.wvu.edu

Office Hours: teleconference can be arranged by appointment

Schedule: Discussion sessions on Thursday, weekly, from 7:00 - 8:00 PM ET

Location: eCampus

Course Description:
This is an online asynchronous course supplemented with weekly live discussion sessions. Lecture slides, assignments and live session archives will be posted on the course website.

The student will become familiar with the domains of software as a business and the management of complex system design. This course will include the notions of software products in a competitive environment and software development in a complex environment. The textbooks focus on the practical application of best practices for project management.

There will be weekly readings in the technical literature and the textbooks. Homework assignments will analyze the applicability of these readings to software as a business and software as a development project. The student will submit a professional white paper to demonstrate proficiency in the course concepts. An important element of this course will be synchronous weekly class discussions, during which the weekly topics will be reviewed and students will have the opportunity to participate and bring up related topics.
Course Objectives: After the completion of this course the student will comprehend the strategic processes which contribute to the success of a complex software project and to the plan for software product lines. The student will be able to evaluate:

1. Principles of competition and strategy (see Module A)
2. Software as a business (see Module B)
3. Role of complexity in system design (see Module C)
4. International software business (see Module D)
5. Best practices for project management (see Module E)

Module Objectives: Each course objective will be met by a module containing one or more lessons. The module and lesson objectives are aligned with the corresponding course objective.

Module A. Principles of competition and strategy
- Apply Porter’s concept of competitive forces
- Evaluate Moore’s procedure for launching a new product or service
- Formulate software product lines

Module B. Software as a business
- Distinguish the strategic options for software start-up businesses
- Contrast investment goals of venture capitalists
- Compare the business strategy of actual case studies
- Analyze entrepreneurship and start-ups

Module C. Role of complexity in system design
- Define complexity
- Evaluate the architectures of software-intensive systems
- Synthesize the design of systems-of-systems
- Apply second-order principles in project management
- Create International software business system designs which incorporate Ashby’s Law

Module D. International software business
- Evaluate international issues in software
- Compare options for in-house development activities vs outsourced activities
- Contrast domestic outsourcing with off-shore outsourcing

Module E. Best practices for project management
- Create a results-oriented methodology for problem-solving based on lessons learned
- Resolve paradoxes in project management
- Research a white paper topic on software business
Required Texts:


Grading:

- Homework Problem Sets (5 @ 6%) 30%
- Short Quizzes (7 @ 3%) 21%
- Exams (2 @ 10%) 20%
- White paper 20%
- Class attendance & participation 9%

100%

Grading Policy: All assignments must be finished and turned in to complete the course. Unless the instructor is notified BEFORE the assignment is due and provides an opportunity for the student to submit his/her assignment late, points may be taken off for late assignments (10% per week).

Attendance Policy: Consistent with WVU guidelines, students absent from regularly scheduled examinations because of authorized University activities will have the opportunity to take them at an alternate time. Make-up exams for absences due to any other reason will be at the discretion of the instructor.

Preparation for class means reading the assigned readings and completing any assignment required for that week. Attendance means logging into eCampus for the scheduled weekly discussion period.

Feedback Response Time: I will generally reply to email and discussion posts within 48 hours, except during holidays. Often I will reply much more quickly, but you should not count on a same-day reply. Please plan accordingly so that you don’t miss deadlines! I generally return assignments within one week of when a discussion or assignment closes. If you need clarification of an assignment, please email me.
Academic Integrity: The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Therefore, I will enforce rigorous standards of academic integrity in all aspects and assignments of this course. For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see the West Virginia University Academic Catalog at http://catalog.wvu.edu/undergraduate/coursecredittermsclassification/#academicintegritytext. Should you have any questions about possibly improper research citations or references, or any other activity that may be interpreted as an attempt at academic dishonesty, please see me before the assignment is due to discuss the matter. Student Conduct Code http://campuslife.wvu.edu/r/download/180235.

Inclusivity Statement: The West Virginia University community is committed to creating and fostering a positive learning and working environment based on open communication, mutual respect, and inclusion. If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with the Office of Accessibility Services (304) 293-6700. For more information on West Virginia University’s Diversity, Equity, and Inclusion initiatives, please see http://diversity.wvu.edu.

Technical Requirements: Students need to have access to a computer for word processing, e-mail and access to eCampus. Access to the Internet is necessary for completion of this course. Run the Browser Check. This tool will check that you are using a supported Internet browsers and have a valid Java version installed. The required technical skills to participate in this course are:

1. Navigate the web
2. Use email with attachments
3. Create and submit files in commonly used word processing program formats
4. Copy and paste
5. Download and install software

Consult software tutorials and other online sources as a method of learning software features.

Course Netiquette: The basic premise is that the etiquette expected of students in the online environment is the same as that expected in a classroom. Common courtesy is the guiding rule of Internet communications. Be prepared to communicate effectively when taking an online course. Following these simple netiquette rules in your online class or education environment will ensure your success:
• Never type in ALL CAPS, because it reads as if you ARE SHOUTING AT PEOPLE.
• Act as professionally, via your writing, as you would in a face to face classroom.
• Refrain from inappropriate language and derogatory or personal attacks.
• Do not dominate any discussion. Give other students the opportunity to join in the discussion.
• Disagree with ideas, but avoid challenges that may be interpreted as a personal attack.
• Check that you are replying to the specific person you intend, and not to the entire class.
• Never give your password to another person.
• Respect the virtual classroom. Never forward in-class communications or posts by others outside of this virtual space.
• Never spam your classmates.
• If you quote someone’s previous post, only quote enough to make your point.

Be aware of the University’s Academic Integrity and Dishonesty Policy [http://catalog.wvu.edu/undergraduate/coursecredittermsclassification/#academicintegritytext](http://catalog.wvu.edu/undergraduate/coursecredittermsclassification/#academicintegritytext). You can review the rules, regulations, and procedures concerning student conduct and discipline for the main campus of West Virginia University, at [http://campuslife.wvu.edu/r/download/180235](http://campuslife.wvu.edu/r/download/180235).

**Technical Support:** For technical assistance, Information Technology Services offers support from 6:30 a.m. to midnight every day, and responds to voicemail and email left overnight at the beginning of each business day. Please contact Information Technology Services at [http://it.wvu.edu/](http://it.wvu.edu/).

Phone: **(304) 293-4444**
Toll Free: **1(877) 327-9260**
Email: **ITSHelp@mail.wvu.edu**