Course: SENG 691A – Strategies for Managing Software Projects

Semester: Fall 2018

Course Format:
And Credit hours: 1 hour - Student/Instructor Discussion, 2 hours - Lecture/Research and Assignments
3 hours Total Course Credit
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. 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 participate in an agile/SCRUM simulation to demonstrate proficiency in the course concepts. An important element of this course will be synchronous weekly class discussions supported by discussion board posts, during which the weekly topics will be reviewed and students will have the opportunity to participate and bring up related topics.

Prerequisites: SENG 510 or instructor consent

Instructor: Dale G. Dzielski, Dale.Dzielski@mail.wvu.edu, office: 304-293-9135
Communication Plan: Please use the eCampus Course Message feature to communicate with anyone in the class and myself. All course material and assignments will be provided using the eCampus features. The Instructor will attempt to respond to learner questions within 24 hours of receipt of inquiry on weekdays and 48 hours on weekends.

Schedule: Online Synchronous Archived Discussions - Thursdays 6:00 to 7:00 pm

Location: WVU eCampus, https://ecampus.wvu.edu/

Office Hours: Upon Request

Course Objectives: The objectives of this course are to evaluate the domains of software as a business and the management of complex system design, research the history, principles and techniques of software as a business from internal complexity and international perspectives, and apply best practices for project management today in a simulation.

Expected Learning Outcomes: Upon successful completion of Strategies for Managing Software Projects course, students will be able to:

1. Identify principles and concepts of competition and strategy for a software business.
2. Describe, compare, and contrast various strategies for a software business.
3. Use and synthesize internet research in software complexity in system design and international software business and report on findings.
4. Apply the Agile/Kanban/Scrum and other best business practices for project management in a real-to-life software development simulation.

Required Textbooks:

Reading assigned from various Internet sources provided by the instructor.
Recommended Reading:

Technology Needed:
Students must have technology compatible with the standard requirements of the current platform with eCampus access, https://ecampus.wvu.edu/, and Windows Media Player. Student assignments are primarily required to be turned in using Microsoft Office 2010 Product Suite therefore reasonable proficiency in this product is required.

Materials Needed: Students must have a current University email account and WVUID with password.

Grades:

<table>
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<tr>
<th>Task</th>
<th>Total Grade Points</th>
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<tbody>
<tr>
<td>Homework Problem Sets (5 @ 40)</td>
<td>200</td>
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<tr>
<td>Short Quizzes (5 @ 40)</td>
<td>200</td>
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<tr>
<td>Agile/Scrum Simulation</td>
<td>200</td>
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<tr>
<td>Exam (2 @ 100)</td>
<td>200</td>
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<tr>
<td>Class Participation (Discussions)</td>
<td>200</td>
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Total Class Points: 1,000

Grading Scale:
1000 – 900 A
899 – 800 B
799 – 700 C
699 – 600 D
599 – 0 F

Grading Policy:
A late assignment equals no assignment; however, brief presentations may be made up. Late assignments (homework problem sets, quizzes, simulation, discussion posts) will not be graded and count as a zero for the portion of the assignment that is late. Exam grading appeals must be in writing on the day the exam is returned. There are no make-up exams except by prior arrangement with the instructor.

Every attempt will be made to grade assignments within seven days of the due date. Other grades will be graded within the same length of time the student had been given to complete the assignment, e.g. case studies are given two weeks for the student to complete; therefore, the instructor will attempt to provide the grade within two weeks after the case study had been turned into the instructor.
# Course Objectives, Module Objectives and Assignments Alignment Table

<table>
<thead>
<tr>
<th>#</th>
<th>Module</th>
<th>Course Objectives - The student will:</th>
<th>Module Level Objectives – The student will be able to:</th>
<th>Related Assignments</th>
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<tbody>
<tr>
<td>1</td>
<td>Software Business Principles and Concepts</td>
<td>Identify principles and concepts of competition and strategy for a software business.</td>
<td>Investigate software business principles and concepts in reading. Report on findings found in reading. Discuss software business concepts with other learners and instructor.</td>
<td>Reading Discussion Board Homework Problem Set Quiz</td>
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<tr>
<td>2</td>
<td>Software Business Strategies</td>
<td>Describe, Compare, and Contrast various strategies for a software business.</td>
<td>Research and report on software business strategies and compare. Research current cases and report on strategic concepts. Discuss with class and instructor strategies found in software business.</td>
<td>Reading Discussion Board Quiz Homework Problem Set Exam 1</td>
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<tr>
<td>3</td>
<td>Complexity in System Design</td>
<td>Use and synthesize internet research in software complexity in system design and international software business and report on findings.</td>
<td>Find and report on complexity found in system design. Study current system design methods in industry and report on how complexity plays a part in strategy. Discuss complexity of design with other learners.</td>
<td>Reading Discussion Board Quiz Homework Problem Set</td>
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<tr>
<td>4</td>
<td>International Software Business Strategies</td>
<td>Use and synthesize internet research in software complexity in system design and international software business and report on findings.</td>
<td>Develop responses to homework related to international software business. Present a summary of the research findings. Discuss international software business practices with learners and instructor.</td>
<td>Reading Discussion Board Quiz Homework Problem Set</td>
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<tr>
<td>5</td>
<td>Strategies for software project management</td>
<td>Apply Agile/Kanban/Scrum and other best business practices for project management in a real-life software development simulation.</td>
<td>Develop responses to homework related to strategies for software project management. Discuss strategies for software project management with learners and instructor. Apply strategies for software project management using the agile simulation and report on the experience.</td>
<td>Reading Discussion Board Quiz Homework Problem Set Simulation Exam 2</td>
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**Exams (2 at 100 Points):** The exams are designed to gauge the student’s understanding of topics covered in assigned reading, lectures, and assignments. The primary focus will be on all the course materials covered in the course. The first exam will be online covering Modules 1 and 2. The second exam will be a ‘take home’ exam in essay format and you will be given one week to complete this exam which will address primarily Modules 3 – 5. Exam Rubric will be provided on the exam and discussed in class during the review.

**Academic Integrity:** Policies can be found at [https://tlcommons.wvu.edu/qualitymatters/syllabus-policies-and-statements](https://tlcommons.wvu.edu/qualitymatters/syllabus-policies-and-statements). Students who practice academic dishonesty, such as cheating or plagiarism, will be penalized. Severe penalties will follow from the discovery of any representation of another individual’s
work (in any form) as your own (i.e., copying any portion of written assignments or exams). Check the MLA Handbook for Writers of Research Papers Seventh Edition (ISBN: 9781603290241) for proper citation of others’ work to avoid plagiarism in written assignments. Penalties range from a grade of “zero” on the assignment in question to an “unforgivable F” in the course.

If you have not already done so please go to the website http://www.libraries.wvu.edu/instruction/plagiarism and sign-in as WVU Students-First Time. Use your MyID username and password and complete the Tutorial & Take the Test. Please e-mail your certificate for the test to the Software Engineering Program Coordinator, Dale.Dzielski@mail.wvu.edu.

**Attendance Policy:** Students are expected to attend every class or make arrangements with the instructor. Archives are made available to review if missed due to personal or work related absence that should be communicated with instructor when possible. 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.

**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 your classes, please advise your instructors and make appropriate arrangements with the Office of Accessibility Services. (https://accessibilityservices.wvu.edu/)

More information is available at the Division of Diversity, Equity, and Inclusion (https://diversity.wvu.edu/) as well.