Course Information

Course: CS 4322 – Software Engineering II, Section A, 3 hrs. credit, Department of Math & CS, College of Arts & Sciences, Valdosta State University.

Prerequisites: CS 4321 with a C or better and self-sufficiency in coding in an object-oriented language.

Catalog Description: A continuation of CS 4321 in which advanced topics in software engineering, such as analysis, design, architecture, testing, and maintenance are studied.

Topics & Coverage: Software design patterns and agile software engineering techniques

Learning Outcomes: Students who have successfully completed this course will be able to:

1. Describe the problem that each of the major design patterns solves and how the pattern contributes to reusability, extensibility, and maintainability of a design.
2. Describe the major design principles and how they relate to design patterns.
3. Use UML to design systems that utilize design patterns.
4. Implement systems that utilize design patterns.
5. Describe the agile approach to software engineering including organizational culture, different types and roles, collecting and documenting requirements, grooming and planning, testing and quality, tracking and reporting

Class Information

Class: T,Th 9:30-10:45pm, 3034 Nevins Hall. Final Exam: Thursday, May 5, 8-10am.

Instructor: Dr. Dave Gibson, 1128 Nevins Hall, dgibson@valdosta.edu, 229-333-7151 (Direct line), 229-333-5778 (Dept. office, messages). Office Hours: M,W,F – 10-11 am & T,Th 1-2 pm & and anytime by appointment

Course Website: The course website is found by going to my homepage: http://mypages.valdosa.edu/dgibson, and choosing the CS 4322 link which will display the course Schedule. The Schedule provides a list of exactly what we do in class, assignments, and due dates. It is your responsibility to check the Schedule regularly.

Textbook:

1. (HFDP) Head First Design Patterns, Freeman & Freeman, ISBN: 978-0596007126

General Policies:

• Be on-time for class. Don’t miss class.
• Electronic devices are allowed for viewing course notes and for taking notes. Any other use is not allowed. Phones are turned off. You can be asked to leave if there is a violation of this policy and counted as absent. A violation during a test can result in penalty.
• Check the Schedule on the website regularly. Check your VSU email account regularly.
• Drinks are OK. Food/candy/snacks are not allowed.
Attendance: Required. There is no penalty for the first two absences. Each absence beyond the second results in 1 point being subtracted from the course average (see below). 6 or more absences results in a failing grade for the course. Excessive tardies are counted as absences. Absences for any reason count.

Special Services: Students requesting classroom accommodations or modifications due to a documented disability must contact the Access Office for Students with Disabilities located in the Farber Hall. The phone numbers are 245-2498 (V/VP) and 219-1348 (TTY).

Academic Honesty: You are expected to work individually for all Homework, Tests, Coding Assignments unless indicated otherwise. You may (and should) discuss assignments with others in your class. You may not possess work (including computer code), in any form, from someone else in the class, if the work is part of a graded assignment or test. In other words, talk out, in as much detail as desired, approaches to a problem, but write up the work (code) yourself. Violation these and any other related policies are unacceptable and will not be tolerated.

Assessment

Tests: There are 3 tests, in class, closed book, notes, etc. The third test is given during the final exam period.

Homework (HW): Homework assignments generally entail reading a chapter of the text or some other reading and answering questions that I have provided. Late homework is accepted with a 50% penalty provided it is turned in by the next class period.

Coding Assignments (CA): You will design and write code and provide a writeup including UML. There are 6-10 Coding Assignments.

Final Exam: There is no final exam, per se; however, Test 3 will be given during the final exam period.

Grade Components:

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<thead>
<tr>
<th>Category</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Tests</td>
<td>45%</td>
</tr>
<tr>
<td>Homworks</td>
<td>15-20%</td>
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<tr>
<td>Coding Assignments</td>
<td>35-40%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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*Each absence beyond the second subtracts 1 point from the course average.

Course Average: Computed from the weights above using a 100 point scale.

Final Grades: Final grades are assigned according to where your course average (rounded) falls on the following scale: 90-100=A, 80-89=B, 70-79=C, 60-69=D, 59 or below=F.