Kennesaw State University  
DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION SYSTEMS  
Fall Semester, Year 2014  
CS 6030/01: Agile Software Design and Modern Languages  
TR 6:30pm - 7:45pm, Chastain Pointe  
(Tuesday class meeting is online)

Instructor: Dr. Hisham Haddad  
Office Number: CL 3035  
Office Hours: MW 11:30 - 12:45pm and mainly by appointment  
Phone: (770) 420-4389  
Fax: (770) 423-6731  
Email: hhaddad@kennesaw.edu  
Course Webpage: http://science.kennesaw.edu/~hhaddad/Fall2014/Fall2014.HTM

Course Description:

This course focuses on Object-Oriented Software Engineering with emphasis on agile development. The course covers OO requirements and design and their modeling; and agile development principles, practices, and design. Class project and research paper are major part of the course to enhance studied concepts.

Prerequisites: MSCS Program Admission.

Required Textbooks:


References:


*Design Patterns: Elements of Reusable Object-Oriented Software.* By E. Gamma, R. Helm, R. Johnson, and J. Vlissides. Addison-Wesley, 1995.

Course Objectives:

- Learn the principles, concepts, and modeling of OO requirements analysis.
- Learn the principles, concepts, and modeling of OO software design.
- Learn Agile development principles, concepts, and design.
- Learn a modern programming language such as Java or C#.

Learning Outcomes:

- Ability to conduct OO software requirements analysis and modeling.
- Ability to conduct OO software design and modeling.
- Ability to conduct agile development practices and design using Extreme Programming (XP) approach.
- Ability to conduct program implementation in a modern programming language such as C#.
Class Policies:

A. Attendance: Being a hybrid course, the class meets only on Thursdays. **Class attendance is required either in person or virtual (live login).** **International students are required to attend in person.** Tuesday class meeting time is dedicated for the class project, research paper, and assignments. Tuesday class materials will be communicated via recorded lectures, emails, web postings, or video conference sessions planned in advance.

B. Assignments: All class assignments are part of the course final grade and are expected to be completed by the due dates. Points may vary for each assignment depending on the complexity and required effort.

C. Tests: A midterm and final exam are tentatively planned for this course. More information will be provided in class.

D. Passing Grade: The class project, research paper, and other course work are required and must be satisfactorily completed to pass this course. The student must have a passing performance on each of them. A failing grade on a component may result in a failing grade in the course.

E. Required Effort: For every hour in class, the student is expected to spend at least 3 to 5 hours of serious effort outside the class for studying and working class assignments. Depending on background and preparedness, some students may have to spend more effort.

F. Emails: The instructor guarantees replies to emails received from Kennesaw Student accounts (netid@students.kennesaw.edu). Emails sent from other email domains may not reach the instructor's mailbox. Please make sure that you use your Kennesaw email account.

Weekly Course Schedule: (Tentative, subject to change)

<table>
<thead>
<tr>
<th>Week#</th>
<th>Topic</th>
<th>Chapter</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Thu 08/21/14 Course Syllabus and course Overview Understanding Requirements (Pressman's book)</td>
<td>Ch-5</td>
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<tr>
<td>2</td>
<td>Thu 08/28/14 Requirements Modeling (Pressman's book)</td>
<td>Ch-6, 7</td>
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<tr>
<td>3</td>
<td>Thu 09/04/14 Design Concepts (Pressman's book)</td>
<td>Ch-8</td>
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<tr>
<td>5</td>
<td>Thu 09/18/14 Agile Development Practices (Martin's book)</td>
<td>Ch-1 - 5</td>
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<tr>
<td>6</td>
<td>Thu 09/25/14 No class meeting - Homework Assignment</td>
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<tr>
<td>7</td>
<td>Thu 10/02/14 Agile Development Practices (Martin's book)</td>
<td>Ch-1 - 5</td>
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<tr>
<td>8</td>
<td>Thu 10/09/14 Agile Development Practices (Martin's book)</td>
<td>Ch-1 - 5</td>
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<tr>
<td>9</td>
<td>Thu 10/16/14 Agile Development Practices (Martin's book)</td>
<td>Ch-1 - 5</td>
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<tr>
<td>10</td>
<td>Thu 10/23/14 Agile Design Principles (Martin's book)</td>
<td>Ch-7 - 12</td>
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<tr>
<td>11</td>
<td>Thu 10/30/14 Agile Design Principles (Martin's book)</td>
<td>Ch-7 - 12</td>
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<tr>
<td>12</td>
<td>Thu 11/06/14 Agile Design Principles (Martin's book)</td>
<td>Ch-7 - 12</td>
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<tr>
<td>13</td>
<td>Thu 11/13/14 Quality Management (Pressman's book)</td>
<td>Ch-14 - 16</td>
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<tr>
<td>14</td>
<td>Thu 11/20/14 Configuration Management (Pressman's book)</td>
<td>Ch-22</td>
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<tr>
<td>15</td>
<td>Mon 11/27/14 Fall break - No class on Thursday</td>
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<tr>
<td>16</td>
<td>Mon 12/04/14 Project Presentations and Final Exam Review</td>
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Special Dates:

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Holiday</td>
<td>Monday 9/1/2014</td>
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<tr>
<td>Last day to withdraw w/o academic penalty</td>
<td>Wednesday 10/8/2014</td>
</tr>
<tr>
<td>Fall Break</td>
<td>Monday 11/24/2014 to Sunday 11/30/2014</td>
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<tr>
<td>Last day of classes</td>
<td>Monday 12/8/2014</td>
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</tbody>
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Assessment and Grade Evaluation:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Grade</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>35%</td>
<td>A</td>
<td>90% - 100%</td>
</tr>
<tr>
<td>Research Paper</td>
<td>30%</td>
<td>B</td>
<td>80% - 89%</td>
</tr>
<tr>
<td>Assignments</td>
<td>10%</td>
<td>C</td>
<td>70% - 79%</td>
</tr>
<tr>
<td>Exams</td>
<td>25%</td>
<td>D</td>
<td>60% - 69%</td>
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Instructor Absence:
The instructor will be away on official ACM conference planning business during the weeks of September 22nd. Proper arrangements will be made in advance and communicated to class in time.

Course Withdrawal:
The last day to withdraw the course without academic penalty is **Wednesday October 8, 2014**. Ceasing to attend class or oral notice thereof DOES NOT constitute official withdrawal from the course. Students who simply stop attending classes without officially withdrawing usually are assigned failing grades. Students wishing to withdraw after the scheduled change period (add/drop) must obtain and complete a withdrawal form from the Academic Services Department in the Registrar's Office.

Enrollment Policy:
Only those students who are enrolled in the class may attend lectures, receive assignments, take quizzes and exams, and receive a grade in the class. If a student is administratively withdrawn from this course, they will not be permitted to attend class nor will they receive any grade for the class.

Diversity Statement:
All courses offered by the Computer Science and Information Systems department will adhere to the KSU policy that prohibits discrimination on the basis of race, religion, color, sex, age, disability, national origin, or sexual orientation.

Disability Statement:
Any student with a documented disability needing academic adjustments is requested to notify the instructor as early in the semester as possible. Verification from KSU disabled Student Support Services is required. All discussions will remain confidential."

Electronic Devices:
In order to minimize the level of distraction, **all beepers and cellular phones must be on quiet mode during class meeting times**. Students who wish to use a computer/PDA for note taking need prior approval of the instructor since key clicks and other noises can distract other students. Recording of lectures by any method requires prior approval of the instructor. Students using a laptop in class should not check their email, browse the web, or in other way detract from the focus of the class.

Student Email and Web Account Access:
KSU is moving towards a central authentication server that will allow one username and password to be used by all KSU users to access an increasing variety of applications (email, WebCT etc.) This unified network identification is referred to as your "NetID". The new source for university-provided email and web space for students will be located at students.kennesaw.edu  All students will have access to this system once they have established their NetID. This system will provide email service through a web-based interface, FTP and SFTP.
How to Activate your NetID:
To activate your NetID go to http://netid.kennesaw.edu and click on the "Sign up Now!" link. You will be asked to provide information to verify your identity and set your password. This password will only be for NetID enabled applications.

How to Look Up a NetID:
After you have activated your NetID, you can look up other users by logging into http://netid.kennesaw.edu and clicking on Directory Search.

How to Send Email:
For student email, your NetID in combination with the new email address would look like netid@students.kennesaw.edu.

Web Address:
For student web address, your NETID in combination with the new server address would look like http://students.kennesaw.edu/~netid. If you have problems please call the Service Desk at ext. 6999 or e-mail service@kennesaw.edu.

Class Format:
Scheduled class meetings are broadcasted and recorded. All recordings will be available throughout the semester at http://tugaloo.kennesaw.edu/lectures/.

Lecture Notes:
Lecture notes will be available on the course website in power point format. Recorded lectures will be available on msonline.kennesaw.edu

Assignments:
Homework assignments/projects and their requirements will be posted on the course webpage.

Additional Materials:
Additional course materials will be posted on the course webpage or provided in printed format.

Student Evaluation of Course:
A standard questionnaire will be administered during the last two weeks of the semester in all classes. Additional questions developed by the college or instructor(s) may be included as well. It is important that each student provide meaningful feedback to the instructor(s) so that changes can be made in the course to continually improve its effectiveness. We value student feedback about the course, our teaching styles, and course materials, so as to improve our teaching and your learning.

Acquiring Final Grades:
In an effort to better utilize our technology resources, Kennesaw State University has instituted the reporting of end of term grades by phone. This is in addition to the web version of grades, which has been in effect for several terms. All current semester term students may call 770-420-4315 and select Option Number 4 to secure their end of term grades. With this new development, printed grade reports will not be mailed at the end of the term. Students needing verification of grades or enrollment should request either an official transcript or enrollment verification through the Office of the Registrar.

Academic Integrity Statement:
Every KSU student is responsible for upholding the provisions of the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. Section II of the Student Code of Conduct addresses the University's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to University materials, misrepresentation and falsification of University records or academic work, malicious removal, retention, or destruction of library materials,
malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the University Judiciary Program, which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimum one semester suspension requirement.

Students are encouraged to study together and to work together on class assignments and lab exercises; however, the provisions of the STUDENT CONDUCT REGULATIONS, II. Academic Honesty, KSU Undergraduate Catalog will be strictly enforced in this class.

Frequently students will be provided with "take-home" exams or exercises. It is the student's responsibility to ensure they fully understand to what extent they may collaborate or discuss content with other students. No exam work may be performed with the assistance of others or outside material unless specifically instructed as permissible. If an exam or assignment is designated "no outside assistance" this includes, but is not limited to, peers, books, publications, and the Internet. If a student is instructed to provide citations for sources, proper use of citation support is expected. Additional information can be found at the following locations.

http://www.apa.org/journals/webref.html
http://www.lib.duke.edu/libguide/citing.htm
http://bailiwick.lib.uiowa.edu/journalism/cite.html
http://www.cas.usf.edu/english/walker/papers/copyright/ipdummie.html
http://www.indiana.edu/~wts/wts/plagiarism.html
http://plagiarism.phys.virginia.edu/links.html
http://www.arts.ubc.ca/dao/plagiarism.htm
http://alexia.lis.uiuc.edu/%7ejanicke/plagiary.htm
http://webster.commnet.edu/mla/plagiarism.htm
http://www.virtualsalt.com/antiplag.htm
http://www.engr.washington.edu/~tc231/course_info/plagiarism.html
http://quarles.unbc.edu/lsc/rpplagia.html