# CS 2450 Object Oriented Analysis and Design

| Instructor | Joshua N. Jensen  
| Office: TE 110B  
| Phone: 801-626-7753  
| Email: IAmCaptainCode+2450@gmail.com (preferred)  
| joshuajensen1@weber.edu (Slow)  
| **DO NOT SEND ME MESSAGES IN CANVAS. I WILL NOT SEE THEM.**  
| Office Hours: M/W 9:30-11:30 AM, T/R 10:50-11:30 AM  
| Classroom | N/A  
| Time | Online  
| Course Description | An Object Oriented Analysis and Design course provides practical guidance on the construction of object-oriented systems. Specifically, you will gain a solid footing in the Software Development Life Cycle (SDLC), and a mastery of object oriented analysis and design. We will also cover the Unified Modeling Language (UML) in depth, and current software engineering practices.  
| Prerequisites: | CS SI1410  
| At the conclusion of this course, you will be able to: |  
| 1. Understand how to design, develop, and implement complex software projects.  
| 2. Understand, and explain the strengths and weaknesses of various modeling approaches.  
| 3. Understand the basics of proper interface design, and be able to design a user interface.  
| Objectives |  
| Class | Class will consist of lectures, group discussions, assignments, and a large group project. This class is structured to be flexible, and our schedule may change to reflect that. Any changes to our schedule will be posted on the course website.  

This course will either reinforce or introduce the following departmental learning outcomes:  
1. Students will understand the importance of and will practice professional and ethical behavior, and will understand the professional, ethical, legal, security, and social responsibilities of computing professionals  
2. Students will be able to read and understand manuals, documentation, and technical literature, find and understand sources of information, and learn on their own what they need to continue to perform professionally after graduation  
3. Students will be able to solve new problems and to express their new solutions appropriately  
4. Students will be able to function as a team member and carry out assigned tasks  
5. Students will have the knowledge and the skills needed to be employable, and to be immediately and continuously productive  
6. Students will have a basic understanding of computer theory, software design and operation, project management, databases, networking, and computer hardware  
7. Students will understand algorithm design and how to express and how to implement algorithms using a variety of notation, programming languages, and paradigms  
8. Students will be able to debug computer programs  
9. Students will be able to express themselves clearly both verbally and in writing  
10. Students will be able to critically evaluate the quality and the features of information from various sources and to make informed decisions about the design of information systems
A significant percentage of the time in class will also be dedicated to lab work to allow for time for the students to work on examples and projects in an environment where one on one help from the instructor is readily available.

Assignments / Projects
Weekly assignments will constitute 40% of your grade. Class participation, in the form of group discussions will constitute 10%. These postings should be constructive to the group, and substantive in nature. posts of just “I agree”, or “Thanks” don’t qualify for full participation points. In addition to assignments, you will participate in a group project. This final project and it’s corresponding group participation evaluation will be the remaining 50% of your grade. (30% for the project, and 20% for your groups evaluation of your participation.)

Accommodations for disabilities
Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Services Center.

Assignments: 40%
Online Participation: 10%
Final Project: 30%
Group Evaluation: 20%

Grading
Standard grading will apply:

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>100-94</td>
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<tr>
<td>A-</td>
<td>93-90</td>
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<tr>
<td>B+</td>
<td>89-87</td>
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<td>B</td>
<td>86-84</td>
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<td>B-</td>
<td>83-80</td>
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<td>C+</td>
<td>79-77</td>
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<td>C</td>
<td>76-74</td>
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<td>C-</td>
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<td>D+</td>
<td>69-67</td>
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<td>D</td>
<td>66-64</td>
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<td>E</td>
<td>59 or below</td>
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You will be grouped into teams for your final project a few weeks into the semester. Because you will spend much of your career working in teams, team participation is critical to your success in this class. Teams will have the option of ‘firing’ you if they feel that you are not equitably participating in the project. This means that if you are fired, you will not be on a team, and may receive a zero on the final project and evaluation. You may petition other teams to ‘hire’ you, but if no other team will hire you it will result in a failure for the course.

Please note that as the instructor for this class, I will evaluate all firings for merit. I will not punish you if the firing was unjustified.

Allocated Time
You should anticipate spending two to three hours of study per week for each credit hour of a university course. Computer and programming classes typically require time in the upper range.

Late Work:
I do not believe that it is equitable to other students to allow work to be submitted past the deadline. Because of this I have a very strict late policy. I will not accept any late assignment beyond one week past the due date. This includes group submissions. Also, any work that is turned in within that window will incur a 50% penalty. Exceptions to this policy will only be granted in advance, and with significant justification. As a personal note this policy is more lenient than most of your employer's will likely be.

Cheating:
I have zero tolerance for cheating, and it will not be tolerated under any circumstance. Students are expected to maintain academic ethics and integrity in regard to performing their own work. The WSU Student Code clarifies cheating.
Cheating, which includes but is not limited to:

1. Copying from another student’s test paper;
2. Using materials during a test not authorized by the person giving the test;
3. Collaborating with any other person during a test without authority;
4. Knowingly obtaining, using, buying, selling, transporting, or soliciting in whole or in part the contents of any test, without authorization of the appropriate official;
5. Bribing any other person to obtain any test;
6. Soliciting or receiving unauthorized information about any test;
7. Substituting for another student or permitting any other person to substitute for oneself to take a test;
8. Plagiarism, which is the unacknowledged (uncited) use of any other person of group’s ideas or work. This includes purchased or borrowed papers;
9. Collusion, which is the unauthorized collaboration with another person in preparing work offered for credit;
10. Falsification, which is the intentional and unauthorized altering or inventing of any information of citation in an academic exercise, activity, or record-keeping process;
11. Giving, selling or receiving unauthorized course or test information;
12. Using any unauthorized resource or aid in the preparation or completion of any course work, exercise or activity;
13. Infringing on the copyright law of the United States which prohibits the making of reproductions of copyrighted material except under certain specified conditions;

CS Department policy dictates that any verifiable evidence of student academic cheating, as defined and determined by the instructor, will result in: 1) an automatic failing grade for the class and 2) a report to the Dean of Students that will include the student’s name and a description of the student’s dishonest conduct.

The University affords you certain rights, including the right to challenge the accusation of cheating. The Dean of Students will explains these rights to you if you are accused of cheating.

WSU subscribes to TurnItIn.com, an electronic service that verifies the originality of student work. Enrollment in this course may require you to submit some or all of your assignments to it this semester, and documents submitted to TurnItIn.com are retained, anonymously, in their databases. Continued enrollment in this course constitutes an understanding of and agreement with this policy.