1 Course Description

The Professional Workforce Development course sequence (CS 410 and CS 411W) expand upon the experimental and design approach of typical computer science curricula by addressing the creativity and productivity required for business and industrial applications. Students in this course sequence engage in projects that investigate each stage of transforming a creative idea into an innovative product.

Writing can comprise as much as 60% of a computer scientist’s professional activities. The evolution of software engineering into a team-centric process (possibly across geographic distances) requires the sharing of a wide variety of documentation with attention to version control and version management.

This course is the writing intensive course for the major, which requires 51% or more of the computed grade be based upon writing assignments. You must demonstrate the ability to write clearly and accurately for a technically oriented audience. You will complete graded and ungraded writing in various forms.

You will write professional and technical documents, and continue the development of the project defined in CS 410. Written work is reviewed and returned for corrective rewriting.

Students will design and develop a project prototype, and formally demonstrate the prototype.

2 Instructor Information

<table>
<thead>
<tr>
<th>INSTRUCTOR:</th>
<th>Thomas J. Kennedy</th>
<th>Janet Brunelle</th>
<th>Hill Price</th>
</tr>
</thead>
<tbody>
<tr>
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3 Readings

There is no required textbook. All readings will be provided through the course site.

4 Objectives
At the end of this course, students will be able to:

- Recognize the value of collaboration in the field of computer science
- Plan and execute the development of a major software project
- Identify the order in which tasks should be completed either in parallel or in sequence in completing large projects.
- Establish communication strategies to stay on task, complete team-based deliverables, and conduct effective team meetings asynchronously.
- Establish effective asynchronous and synchronous communications with faculty and industry mentors.
- Prepare collaborative outlines of the required written Assignments.
- Prepare quality written papers based upon the collaborative outlines.
- Document individual progress, challenges, concerns, and successes.
- Recognize the need for the four types of professional writing addressed in the course as professionals and academics.
- Utilize the assignments to develop high quality group projects.
- Recognize the value of prototyping in the development of software projects

### 5 Grading

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<thead>
<tr>
<th>Graded Element</th>
<th>Description</th>
<th>Weight</th>
<th>Individual/Group</th>
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<tbody>
<tr>
<td>WRITING EXERCISES</td>
<td>Discussion Activities</td>
<td>5%</td>
<td>(Individual)</td>
</tr>
<tr>
<td>WRITING - LAB I</td>
<td>Descriptive/Persuasive Paper</td>
<td>10%</td>
<td>(Individual)</td>
</tr>
<tr>
<td>WRITING - LAB II</td>
<td>Prototype Product Specification</td>
<td>20%</td>
<td>(Individual/Group)</td>
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<tr>
<td>WRITING - LAB III</td>
<td>Prototype Test Plan/Procedures</td>
<td>20%</td>
<td>(Individual/Group)</td>
</tr>
<tr>
<td>WRITING - LAB IV</td>
<td>Product/Prototype User’s Manuals</td>
<td>15%</td>
<td>(Individual/Group)</td>
</tr>
<tr>
<td>PROTOTYPE DEMO</td>
<td>Product Laboratory Prototype</td>
<td>25%</td>
<td>(Group)</td>
</tr>
<tr>
<td>WEBSITE</td>
<td>Product and Course Documents</td>
<td>5%</td>
<td>(Group)</td>
</tr>
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### 6 Course Policies

Each week of the semester, there is an informal presentation by a member of the project group. It is expected that these reports will be made by a different member of the group on a week by week basis. In addition to the specific topic of the weekly report, the presenter should provide a brief summary of the weeks accomplishments or new problems identified during the week.

Because the class period is important and discussions cannot be reproduced, absences cannot be made up. Excessive absences may have a negative effect on a student’s learning and performance. Any student who must miss a class is expected to have the initiative necessary to properly cover the material missed (e.g., assignments given or modified, due dates established or modified and any handouts). Students must meet all course deadlines and be present for the final exam and demonstrations.

**LATE WORK IS NOT ACCEPTABLE**

Old Dominion University supports a comprehensive evaluation of a student’s achievement in a course as a vital part of the educational process. In support of this university policy, successful completion of this course includes a satisfactory performance in the prototype demonstration and development of the formal product proposal specification. A student who fails the comprehensive final examination may not pass the course regardless of the student’s semester performance.

#### 6.1 Honor Code Policy

The instructor reserves the right to question a student orally or in writing and to use this evaluation of the student’s understanding of the assignment and of the submitted solution as evidence of cheating. Violations will be reported to the Honor Council for consideration for punitive action. By CS Dept. policy, students found to be in violation of this rule will, at the very least, receive a failing grade in the course and may be subject to stiffer penalties.

#### 6.2 Professionalism/Project Submissions

Old Dominion University supports a comprehensive evaluation of a student’s achievement in a course as a vital part of the educational process. In support of this university policy, successful completion of this course includes a satisfactory performance in the development of the formal project proposal plan documentation. Any student who fails to perform in a satisfactory manner on the plan may possibly not pass the course, regardless of the student’s overall point total. In addition, each student will be evaluated based upon demonstrated professionalism. Any student who receives poor marks by the professor and/or their group members may not pass the class.
7 University Policies

7.1 Honor Pledge

“I pledge to support the honor system of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic community, it is my responsibility to turn in all suspected violators of the honor system. I will report to Honor Council hearings if summoned.”

7.2 Special Needs

Old Dominion University is committed to achieving equal educational opportunity and full participation for persons with disabilities. It is the university’s policy that no qualified person be excluded from participation in any university program or activity, be denied the benefits of any university program or activity, or otherwise be subjected to discrimination with regard to any university program or activity. This policy derives from the university’s commitment to non-discrimination for all persons in employment, access to facilities, student programs, activities and services.

7.3 Disability Services

In compliance with PL94-142 and more recent federal legislation affirming the rights of disabled individuals, provisions will be made for students with special needs on an individual basis. The student must have been identified as special needs by the university and an appropriate letter must be provided to the course instructor. Provision will be made based upon written guidelines from the University Office of Educational Accessibility.

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