<table>
<thead>
<tr>
<th>Course Number</th>
<th>CS 305</th>
<th>Course Title</th>
<th>Software Development Practices</th>
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<tbody>
<tr>
<td>Semester Hours</td>
<td>3</td>
<td>Course Coordinator</td>
<td>Abdullah Aydeger</td>
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**Catalog Description**

FA21

Agile software development approach, tools, methodologies, and technical writing are addressed. Understanding of object-oriented design principles, implementation, and testing to meet customer requirements are enhanced through agile practices using modern development tools. A team project is an integral part of this course.

**Textbooks**

SP21


**References**

**Course Learning Outcomes**

- To gain skills and appreciation of the functionality provided by a modern IDE.
- To develop skills in writing clean clear code designed to meet a client’s requirements.
- To be able to coordinate with a team face-to-face as well as through a project repository.
- To gain experience and appreciation for software development process, practices & tools.

**Assessment of the Contribution to Student Outcomes**

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<tr>
<th>Outcome</th>
<th>1</th>
<th>2</th>
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<tr>
<td>Assessed</td>
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**Prerequisites by Topic**

CS 220 with a grade of C or better
## Major Topics Covered in the Course

1. Introduction and Perspectives on Software Development {3 classes}
2. Communication, Collaboration and Teamwork {3 classes}
3. The Software Development Environment- working with the IDE {3 classes}
4. Refactoring and Communicating through code {8 classes}
5. Project Repositories to Support Teamwork {4 classes}
6. Testing and Automation {6 classes}
7. Object-Oriented Principles, Patterns and Design Notations {7 classes}
8. Estimating, Planning and Tracking progress {6 classes}