<table>
<thead>
<tr>
<th>Dept Number</th>
<th>Course Title</th>
<th>User Interface Design and Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 484</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Christos Mousas</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Catalog Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems and processes in the design of highly usable systems. Understanding stakeholders, requirements, tasks, prototyping, evaluation, guidelines and design process and heuristics. Interactive software concepts and implementation considerations. A group project is an integral part of this course.</td>
</tr>
</tbody>
</table>

**Textbooks**


**References**

References to style guidelines, design notations as well as languages and tools used in project work.

**Course Learning Outcomes**

- To learn about usability and the value of involving users in an iterative incremental development process.
- To be able to apply prototyping and evaluation skills to interaction design.
- To be able to understand and apply common design notations to interaction design problems.
- To be able to apply and appreciate design heuristics and usability testing to interaction design problems.
- To gain experience and appreciation of team development work.

**Assessment of the Contribution to Student Outcomes**

<table>
<thead>
<tr>
<th>Outcome</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessed</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prerequisites by Topic**

CS 306 with a grade of C or better.
<table>
<thead>
<tr>
<th></th>
<th>CS 484</th>
<th>User Interface Design and Development</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Major Topics Covered in the Course</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Introduction to Interaction and Usability {3 classes}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Frameworks and Styles of Interaction {3 classes}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Processes for Interaction Design {4 classes}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Discovering Requirements {4 classes}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>User &amp; Task Analysis {3 classes}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Guidelines and Standards for Interface Design {4 classes}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Prototyping {4 classes}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Evaluation and Usability Testing {3 classes}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Constructing User Interface Software {3 classes}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Design Techniques and Heuristics {3 classes}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Design Models and Metrics {3 classes}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Patterns in HCI/ID, Future Directions etc. {3 classes}</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Latest Revision: Spring 2017