Spring 2-1-2004

CS 364.01: Software Engineering (Software Science)

Changwon Yoo
University of Montana, Missoula

Let us know how access to this document benefits you.
Follow this and additional works at: https://scholarworks.umt.edu/syllabi

Recommended Citation
https://scholarworks.umt.edu/syllabi/9379

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.
Computer Science 364
Software Engineering (Software Science)
3 credits

Instructor: Changwon Yoo, Assistant Professor
Office: SS 420
Phone: 243-5605
Office Hours: Mons. 2-3pm / Tues. 3:30pm-4pm / Thurs. 3-4pm
Email: cwyoo@cs.umt.edu

TA: Sandeep Pulavarty
Office: SS 306
Phone: 243-2059
Office Hours: Mons., Tues., Fris. 10-11am
Email: hi_psandeep@yahoo.co.in

Description:
This course is intended to be an investigation of the subject of software engineering in detail. In this course students will be exposed to a more detailed discussion of how large, complex software systems are developed. Along the way students will learn about a number of methodologies and tools currently being used in software development.

Format: Two classes per week.

Offered: Spring semester

Prerequisites: Consent of Instructor

Materials: Articles and text books:
Software Engineering (6th Edition) by Ian Sommerville
Publisher: Addison-Wesley Pub Co; 6th edition (August 11, 2000)
ISBN: 020139815X

Extreme Programming Explained: Embrace Change by Kent Beck
Publisher: Addison-Wesley Pub Co; 1st edition (October 5, 1999)
ISBN: 0201616416

Assessment of Student Performance: Homework (30%) / Midterm (30%) / Final Project (40%)

Meetings (2004): Tues/Thurs 11:10am-12:30am (SS 356)

Class Conduct:
Plagiarism on homework assignments, cheating on tests, use of inappropriate language (oral or written), or misuse of the computer facilities will not be tolerated. Offenders will be prosecuted to the fullest extent of the University Student Conduct Rules.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Required Readings and Other Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 27,</td>
<td>Introduction to Software Engineering /</td>
<td>• Sommerville, Chapter 1</td>
</tr>
<tr>
<td>Tues.</td>
<td>Course Overview</td>
<td></td>
</tr>
<tr>
<td>Jan. 29,</td>
<td>Software Processes</td>
<td>• Sommerville, Chapter 3</td>
</tr>
<tr>
<td>Thurs.</td>
<td></td>
<td>• Beck, Chapters 1-5</td>
</tr>
<tr>
<td>Feb. 3,</td>
<td>Project Management</td>
<td>• Sommerville, Chapter 4</td>
</tr>
<tr>
<td>Tues.</td>
<td></td>
<td>• Beck, Chapters 6-9</td>
</tr>
<tr>
<td>Feb. 5,</td>
<td>People Management</td>
<td>• Sommerville, Chapter 22</td>
</tr>
<tr>
<td>Thurs.</td>
<td></td>
<td>• Beck, Chapters 10-11</td>
</tr>
<tr>
<td>Feb. 10,</td>
<td>People Management (cont.)</td>
<td>• Sommerville, Chapter 22</td>
</tr>
<tr>
<td>Tues.</td>
<td></td>
<td>• Beck, Chapters 12-14</td>
</tr>
<tr>
<td>Feb. 12,</td>
<td>Requirement Specification</td>
<td>• Sommerville, Chapter 5</td>
</tr>
<tr>
<td>Thurs.</td>
<td></td>
<td>• Beck, Chapters 16</td>
</tr>
<tr>
<td>Feb. 17,</td>
<td>Requirement Specification (cont.)</td>
<td>• Sommerville, Chapter 6</td>
</tr>
<tr>
<td>Tues.</td>
<td></td>
<td>• Beck, Chapters 16</td>
</tr>
<tr>
<td>Feb. 19,</td>
<td>Requirement Specification (cont.)</td>
<td>• Beck, Chapters 15</td>
</tr>
<tr>
<td>Thurs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb. 24,</td>
<td>Testing</td>
<td>• Sommerville, Chapter 19-20</td>
</tr>
<tr>
<td>Tues.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb. 26,</td>
<td>Testing (cont.)</td>
<td>• Sommerville, Chapter 19-20</td>
</tr>
<tr>
<td>Thurs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 2,</td>
<td>XP</td>
<td>• Beck, Chapters 21-23</td>
</tr>
<tr>
<td>Tues.</td>
<td></td>
<td>• REQUIREMENT SPECIFICATION DUE</td>
</tr>
<tr>
<td>Mar. 4,</td>
<td>Architecture</td>
<td>• Sommerville, Chapter 10</td>
</tr>
<tr>
<td>Thurs.</td>
<td></td>
<td>• Beck, Chapters 17</td>
</tr>
<tr>
<td>Mar. 9,</td>
<td>Distributed Systems</td>
<td>• Sommerville, Chapter 11</td>
</tr>
<tr>
<td>Tues.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 11,</td>
<td>OO Design</td>
<td>• Sommerville, Chapter 12</td>
</tr>
<tr>
<td>Thurs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 16,</td>
<td>Design with Reuse</td>
<td>• Sommerville, Chapter 14</td>
</tr>
<tr>
<td>Tues.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 18,</td>
<td>Testing Revisited</td>
<td>• Sommerville, Chapter 20</td>
</tr>
<tr>
<td>Thurs.</td>
<td></td>
<td>• Beck, Chapter 18</td>
</tr>
<tr>
<td>Mar. 23,</td>
<td>Testing Revisited (cont.)</td>
<td>• Design Specification document DUE</td>
</tr>
<tr>
<td>Tues.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 23,</td>
<td>Testing Revisited (cont.)</td>
<td>• Sommerville, Chapter 20</td>
</tr>
<tr>
<td>Tues.</td>
<td></td>
<td>• Beck, Chapter 18</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td>Text</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Mar. 25, Thurs. | Software prototyping and coding conventions | - Sommerville, Chapter 8  
- **Testing and Implementation Plan DUE** |
| SPRING BREAK |                               |                                                                      |
| April 6, Tues. | XP Revisited                  | - Beck, Chapters 21-23                                               |
| April 8, Thurs | Guest Lecture                 | - Careers in software engineering                                    |
| April 13, Tues. | Real Time Architecture        | - Sommerville, Chapter 13                                             |
| April 15, Thurs | Design with Reuse Revisted    | - Sommerville, Chapter 14                                             |
| April 20, Tues. | Quality Management            | - Sommerville, Chapter 24                                             |
| April 22, Thurs | Quality Management (cont.)    | - Sommerville, Chapter 24                                             |
| April 27, Tues. | Software Cost                 | - Sommerville, Chapter 23                                             |
| April 29, Thurs | Software maintenance          | - Sommerville, Chapter 25-26                                         |
| May 4, Tues. | Software maintenance (cont.)  | - Sommerville, Chapter 27                                             |
| May 6, Thurs. | Guest Lecture                 | - How to success as a software engineer                              |
| May 11, Tues. | Demos                         |                                                                      |
| May 13, Thurs. | Demos                         | - **Final project documentation DUE**                                 |