Course Overview

This course provides you with an overview of a process that will enable a team of software engineers to better work together. The process focuses on some disciplined approaches and strategies to deal with problems that regularly occur during team formations.

Course Objectives

Upon completion of this course, you will be able to recognize those roles and strategies that can be used to form successful teams for working on software projects.

Organization

The course consists of a series of lectures conducted by faculty and staff from the School of Computer Science at Carnegie Mellon University. The lectures, captured on DVDs, lead the way through a series of assignments and chatroom discussions.

Your best approach to successfully complete the course is to follow three simple steps.

1. Do the assigned readings.
2. Watch the lecture.
3. Complete the assignments.

All course materials, with the exception of the text and DVDs, will be available on the Carnegie Mellon Blackboard Systems. Email with specific information about the course Blackboard site will be sent to you prior to the start of class.

Feedback and Support

Office hours and computer conferences will take place in the Virtual Classroom on the course Blackboard site. Your instructor for the course will conduct course discussions in the Virtual Classroom every week, specific time to be determined. Should your instructor decide to use another chat tool, they will notify you at the beginning of the course. Other times, your instructor will be available by email. In addition, you should feel free to post questions and comments on the course electronic bulletin board at anytime to discuss the readings, the course, and issues related to software engineering with members of your class.

Readings

You are required to complete a series of readings related to each lecture. These weekly readings are used to stimulate discussion and as a way to expose you to course topics not covered directly in the lectures. For most lectures, you are assigned a few readings to complete before watching the lecture.

The textbook for this course is *Introduction to the Team Software Process* by Watts S. Humphrey.
Evaluation

Your grade will be based on peer reviews, team performance, and your ability to follow instructions.

**Assignments:** There are eight assignments, and one project. The purpose of the assignments and project is to give you practice in using the concepts taught in class.

**Instructor judgement:** The instructor reserves the right to raise or lower your quantitatively determined grade based on their judgement of your mastery of course material; this judgement will be based in part on your ability to participate constructively in class discussions.

Schedule

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<tr>
<th>Lecture</th>
<th>Topic</th>
<th>Reading</th>
<th>Homework</th>
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| 1       | Overview of TSPi & the Logic of the Team Software Process              | Ch. 1-2         | 1. Complete Student Info Sheet  
                                                       |               | 2. Select Project                             |
| 2       | Launching a Team Project                                              | Ch. 3           | 1. Review Status Report; complete table 3.5  
                                                       |               | 2. Select Team                                |
| 3       | Team Launch Sessions (meetings with teams); Cycle 1 begins            |                 | 1. Launch Postmortem Report                   |
| 4       | The Development Strategy/The Development Plan                         | Ch. 4-5         | 1. Form Week (2)                              
                                                       |               | 2. Complete Form LOGT                         
                                                       |               | 3. Complete Form LOGD                         |
| 5       | Defining the Requirements & Designing with Teams                      | Ch. 6-7         | 1. Draft SRS                                  
                                                       |               | 2. Draft Test Plan                            |
| 6       | Product Implementation, Integration & System Testing; the Postmortem  | Ch. 8-9         | 1. Form Week (3)                              
                                                       |               | 2. Complete Table 5.9 (Form SUMQ)            
                                                       |               | 3. Complete Table 5.10 (Form SUMP)           |
| 7       | Status meetings; project work                                         |                 | 1. Teams meet with Instructor/Mentor          
                                                       |               | 2. Status Report                              
                                                       |               | 3. Progress Report                            |
| 8       | The Team Leader Role, The Development Manager, and Planning Manager Roles | Ch. 10-12      | 1. Peer Reviews                               
                                                       |               | 2. Cycle 1 Report                             
                                                       |               | 3. Form Schedule                              
                                                       |               | 4. Prepare for Team Launch 2                  
                                                       |               | 1. Form Week (4)                              
                                                       |               | 2. Complete Table 5.9 (Form SUMQ)            
                                                       |               | 3. Complete Table 5.10 (Form SUMP)           
                                                       |               | 4. SDS                                       
                                                       |               | 5. Component Allocation, table 7.4           |
| 9       | Team Launch Session 2 (meetings with teams)                           |                 | 1. Launch 2 Postmortem Report                 |
                                                       |               | 1. PIP for the Process                        
                                                       |               | 2. Issue Tracking Log                         
                                                       |               | 3. Size Summary                               
                                                       |               | 4. STRAT                                     |
| 10      | Project Team Work                                                     |                 | 1. Form Week (5)                              
                                                       |               | 2. Complete Table 5.9 (Form SUMQ)            
                                                       |               | 3. Complete Table 5.10 (Form SUMP)           |
| 11      | The Quality/Process Manager and the Support Manager Roles             | Ch. 14-15       | 1. Earned Value Graph                         
                                                       |               | 2. Progress Report                            
<pre><code>                                                   |               | 3. Data reports for teams                     |
</code></pre>
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<tr>
<th>Week</th>
<th>Topic</th>
<th>Chapters</th>
<th>Assignment Details</th>
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| 12   | Managing Yourself, Being on a Team & Teamwork | Ch. 16-18 | 1. Form Week 6  
2. Complete Table 5.9 (Form SUMQ)  
3. Complete Table 5.10 (Form SUMP)  
4. Inspection Report  
5. Conf. Status Report  
6. Logtest  
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1. Report on TSPi |
| 13   | Status meetings; project work  |          | 1. Project Notebook                                                                                                                                 |
| 14   | Project Team Work             |          | 1. Peer Reviews  
2. All Documentations: SRS, SDS, STP  
3. Product tested  
4. Cycle 2 Report  
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Final Project; Submit all Data |

**Bibliography**