

| Activity   | Required Reading                                  |
|--|---|
| <b>Part 1 - Introduction</b>                                       |   |
| <b>Week 1</b>  |   |
| P1L1: Introduction (14:24)   |   |
| P1L2: Text Browser Exercise (14:34)                                |   |
| P1L3: Design Concepts (24:58)                                      |   |
| <b>Part 2 - UML and Analysis</b>                                   |   |
| <b>Week 2</b>  |   |
| P2L1: Review of UML (29:32)  | <a href="#">UML Specification, Chapter 1</a>      |
| P2L2: Object Oriented Analysis (20:12)                             | <a href="#">SWEBOKv3.pdf [focus on Chapter 2]</a> |
| P2L3: UML Class Models (32:50)                                     |   |
| <b>Week 3</b>  |   |
| pP2L4: Design Studies (09:55)                                      |   |
| P2L5: Library Example (UML) (37:20)                                |   |
| P2L6: Formal Specification (44:33)                                 |   |
| <b>Optional</b>  |   |
| P2L7: OCL (19:21)  | <a href="#">OCL Specification, Chapter 7</a>      |
| P2L8: Library Example (OCL) (42:44)                                |   |
| <b>Week 4</b>  |   |
| P2L9: Behavior Modeling (46:38)                                    | <a href="#">Harel Paper</a>                       |
| P2L10: Clock Radio Exercise (31:47)                                |   |
| <b>Part 3 - Software Architecture</b>                              |   |
| <b>Week 5</b>  |   |
| P3L1: KWIC Exercise (18:36)  |   |
| P3L2: Software Architecture (34:21)                                | <a href="#">Garlan and Shaw Paper</a>             |
| P3L3: Architectural Views (17:38)                                  | <a href="#">Kruchten Paper</a>                    |
| <b>Week 6</b>  |   |
| P3L4: Text Browser Example (Architecture) (24:49)                  |   |
| P3L5: Architectural Styles and Non-Functional Requirements (13:33) |   |
| P3L6: Connectors (24:31)   | <a href="#">Mehta Paper</a>                       |
| P3L7: ACME (14:26)   | <a href="#">Medvidovic and Taylor Paper</a>       |
| P3L8: Refinement (21:25)   |   |
| <b>Week 7</b>  |   |
| P3L9: Middleware (42:48)   | <a href="#">Emmerich Paper</a>                    |
| P3L10: LayerBlox Guest Interview (58:48)                           |   |
| <b>Part 4 - Software Design</b>                                    |   |
| <b>Week 8</b>  |   |
| P4L1: Components (24:23)   |   |
| P4L2: Coffee Maker Example (20:11)                                 | <a href="#">Martin, Chapter 11</a>                |
| <b>Week 9</b>  |   |
| P4L3: Object Design (26:58)  |   |
| P4L4: Design Patterns (34:04)                                      | <a href="#">Gamma Paper</a>                       |
| <b>Week 10</b>   |   |
| P4L5: Design Principles (19:00)                                    | <a href="#">Martin Engineering Notes</a>          |
| P4L6: Design Reviews (23:38)                                       |   |
| <b>Week 11</b>   |   |