**CSCE 747 - Preliminary Course Schedule**

Note that the lecture plan may change based on the availability of potential guest speakers or to facilitate more explanation of certain topics. Assignment due dates are tentative. Updated versions of this schedule will be distributed on Moodle as details are finalized.

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| **Lecture** | **Date** | **Topic** | **Note** |
| 1 | 01/16 | Course Overview: Verification and Validation |  |
| 2 | 01/18 | Testing Fundamentals |  |
| 3 | 01/23 | Modeling Software | Last day to drop without “W” (01/22) |
| 4 | 01/25 | Functional Testing | Team Selections Due |
| 5 | 01/30 | Combinatorial Testing | Reading Assignment 1 Due` |
| 6 | 02/01 | Structural Testing |  |
| 7 | 02/06 | Structural Testing: Path-Based Metrics |  |
| 8 | 02/08 | Masking and Data Flow | Assignment 1 Due |
| 9 | 02/13 | Data Flow Analysis |  |
| 10 | 02/15 | Data Flow Testing | Reading Assignment 2 Due |
| 11 | 02/20 | Model-Based Testing: Finite State Machines |  |
| 12 | 02/22 | Model-Based Testing: Decision Structures and Grammars |  |
| 13 | 02/27 | Test Oracles |  |
| 14 | 03/01 | Fault-Based Testing | Assignment 2 Due |
| 15 | 03/06 | Midterm Review |  |
| 16 | 03/08 | **Midterm Exam** | Last day to drop without “WF” (03/09) |
|  | 03/13 | **No Class - Spring Break** |  |
|  | 03/15 | **No Class - Spring Break** |  |
| 17 | 03/20 | Test Execution and Automation |  |
| 18 | 03/22 | Testing Object-Oriented Software |  |
| 19 | 03/27 | Testing Object-Oriented Software |  |
| 20 | 03/29 | Finite State Verification |  |
| 21 | 04/03 | Finite State Verification | Assignment 3 Due |
| 22 | 04/05 | Symbolic Execution and Proof of Properties |  |
| 23 | 04/10 | Program Analysis | Reading Assignment 3 Due |
| 24 | 04/12 | Automated Test Case Generation |  |
| 25 | 04/17 | Automated Test Case Generation | Assignment 4 Due |
| 26 | 04/19 | Release and Post-Release Testing |  |
| 27 | 04/24 | Dependability and Statistical Testing | Reading Assignment 4 Due |
| 28 | 04/26 | Final Review |  |
|  | 05/03 | **Final Exam (9:00 - 11:30 AM)** |  |