

| Week # | Lecture # | Date | Topic |
|--------|-----------|-------------------|---|
| 1 | 1 | January 21, 2019 | <i>Dr. Martin Luther King, Jr. Holiday – University Closed</i> |
| | 2 | January 23, 2019 | Course Information, Syllabus, Introduction to Digital Design |
| 2 | 3 | January 28, 2019 | Number Systems, Basic Boolean Operators |
| | 4 | January 30, 2019 | Arithmetic and Two's Complement |
| 3 | 5 | February 4, 2019 | Basic Boolean Algebra, Equations, and Logic Gates |
| | 6 | February 6, 2019 | Logic Diagrams, Design of Circuits, Timing Diagrams |
| 4 | 7 | February 11, 2019 | Canonical Equations, Reduced Equations via Boolean Algebra |
| | 8 | February 13, 2019 | K-Maps & Reduced Equations |
| 5 | 9 | February 18, 2019 | Design of Combinational Systems |
| | 10 | February 20, 2019 | Quine-McCluskey method of reduction |
| 6 | 11 | February 25, 2019 | More design considerations |
| | 12 | February 27, 2019 | Analysis, reverse engineering |
| 7 | 13 | March 4, 2019 | Adder design, other gates, implementation guidelines |
| | 14 | March 6, 2019 | MSI Devices: MUXes and Decoders, Adders |
| 8 | 15 | March 11, 2019 | Flip-Flops and timing diagrams |
| | 16 | March 13, 2019 | Counter design, Registers |
| 9 | --- | March 18, 2019 | <i>Spring Break – No Classes</i> |
| | --- | March 20, 2019 | |
| 10 | 17 | March 25, 2019 | Sequential Machines |
| | 18 | March 27, 2019 | Mealy and Moore Machines |
| 11 | 19 | April 1, 2019 | Capturing behavior with FSM |
| | 20 | April 3, 2019 | Sequential design considerations |
| 12 | 21 | April 8, 2019 | State Encodings |
| | 22 | April 10, 2019 | Reducing States |
| 13 | 23 | April 15, 2019 | Algorithmic State Machines methodology |
| | 24 | April 17, 2019 | Basic ASM Design |
| 14 | 25 | April 22, 2019 | ASM Design with MSI |
| | 26 | April 24, 2019 | Design Examples |
| 15 | 27 | April 29, 2019 | ASM Design with LSI |
| | 28 | May 1, 2019 | Design Examples |
| 16 | 29 | May 6, 2019 | Controller Clock Frequency |
| | 30 | May 8, 2019 | Other design considerations (e.g. max. frequency, critical paths, etc.) |
| 17 | --- | May 15, 2019 | <i>Final Exam (4:00pm to 6:45 pm.)</i> |