Week 1:  
Read Chapter 1, Sections 2.1 to 2.3, and Sections 2.4 to 2.5  
1/9: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Jan9.pdf))  
1/11: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Jan11.pdf))  
  
Week 2:  
Read Sections 2.6 - 2.8, 2.11 - 2.17  
1/16: no class  
1/18: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Jan%2018.pdf))  
  
Week 3:  
Read sections as specified in Week 2.  
1/23: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Jan%2023.pdf))  
1/25: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Jan%2026.pdf))  
  
Week 4:  
Continued with sections in Chapter 2. Starting Chapter 3, Sections 3.1 - 3.4  
1/30: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Jan%2030.pdf))  
2/1: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Feb%201.pdf))  
  
Week 5:  
Section 3.4 and select examples in Sections 3.6 to 3.8  
2/6: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Feb%206.pdf))  
2/8: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Feb%208.pdf))  
  
Week 6:  
Chapter 4, Sections 4.1 - 4.5, and selected examples in Section 4.8.  
2/13: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Feb%2013.pdf))  
2/15: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Feb%2015.pdf))  
  
Week 7:  
2/20: No class  
2/22: Test 1  
  
Week 8:  
Starting Chapter 5, read Sections 5.1 - 5.3  
2/27: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Feb%2027.pdf))  
3/1: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar%201.pdf))  
  
Week 9:  
Chapter 5 Section 5.4 and 5.5, and Chapter 6, Section 6.1  
3/6: Discuss an example on LUT and Decoder ([pic1](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar6/IMG_20170306_152853.jpg), [pic2](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar6/IMG_20170306_152911.jpg), [pic3](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar6/IMG_20170306_152917.jpg), [pic4](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar6/IMG_20170306_152922.jpg)), discuss Figures 5.4, 5.5, 5.6, and 5.7, and Latch ([pic1](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar6/IMG_20170306_155324.jpg), [pic2](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar6/IMG_20170306_160554.jpg))  
3/8: Latch and flip-flop ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar%208.pdf)), Up/down Counter Statemachine ([pic1](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar8/IMG_20170308_161240.jpg), [pic2](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar8/IMG_20170308_161254.jpg), [pic3](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar8/IMG_20170308_161303.jpg))  
  
Week 10:  
Sections 6.1, 6.2, and 6.3  
3/13: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar%2013.pdf))  
3/15: FSM and one-hot encoding ([pic1](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar15/IMG_20170315_155714.jpg), [pic2](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar15/IMG_20170315_155730.jpg)), similar example with Mealy FSM and one-hot encoding ([pic3](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar15/IMG_20170315_155738.jpg), [complete example](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar15/mealy-101-onehot.pdf))  
  
Week 11: Spring break  
  
Week 12:  
3/27: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Mar%2027.pdf)), detect 101 (fixed window, minimized-bits encoding, [pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/101-fixed-minimizedbits.pdf)), detect 101 (Moore, fixed window, one-hot encoding, [pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/101-fixed-onehot.pdf)), detect 101 (Mealy, fixed window, one-hot encoding, [pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/101-fixed-onehot-mealy.pdf))  
  
3/29: note ([pdf,](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/d-t-jk-gates.pdf) see Chapter 5 for T flip-flop and JK flip-flop and Appendix B for NOT, NAND, NOR, AND, and OR CMOS gate circuits), review Section 6.7.4 Implementation Using JK-type Flip-flops (page 386 - 390)  
  
Week 13:  
4/3: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Apr%203.pdf))  
4/5: note ([pic1](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Apr5/IMG_20170405_152335.jpg), [pic2](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Apr5/IMG_20170405_152346.jpg), [pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Apr5/Apr%205.pdf))  
  
Week 14:  
4/10: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Apr%2010.pdf))  
4/12: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Apr%2012.pdf))  
  
Week 15:  
4/17: note ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/notes/Apr%2017.pdf))  
4/19: Test II  
  
  
**Old Test:** Test 1 Fall 2016 ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/test1-fall2016.pdf)), Test 2 Fall 2016 ([pdf](http://ece.boisestate.edu/~smloo/ece230spring2017/documents/test2-fall2016.pdf))

Week 1 (1/9 - 1/11) :  
1.2, 1.3, 1.7. 1.9, 2.8, 2.9, 2.29, 2.30  
  
Week 2 and 3(1/16 - 1/18, 1/23 - 1/25):  
2.1, 2.3, 2.6, 2.13, 2.14, 2.21, 2.27, 2.33, 2.34, 2.35, 2.40, 2.43, 2.51, 2.52, 2.55, 2.67  
  
Week 4 (1/30 - 2/1):  
2.69, 2.71, 2.75, 2.77, 3.1, 3.2, 3.3, 3.4  
  
Week 5 (2/6 - 2/8):  
3.5, 3.7, 3.21, 3.22, 3.23  
  
Week 6 (2/13 - 2/15) :  
4.3, 4.4, 4.5, 4.6, 4.7, 4.13, 4.14, 4.15, 4.16, 4.17  
  
Week 7 (2/20 - 2/22): No class and test 1  
  
Week 8 (2/27 - 3/1):  
4.1, 4.2, 4.8, 4.29, 4.30  
  
Week 9 (3/6 - 3/8):  
Practice those timing diagrams in Sections 5.1 to 5.7.  
5.1, 5.2, 5.4, 5.7  
  
Week 10 (3/13 - 3/15):  
1. Attempt those SMs that we tried in class on your own.  
2. Design a SM machine to detect "111."  
3. Design a "101" detector (overlapping) with Mealy and minimized bit encoding.  
  
Week 11: Spring break  
  
Week 12:  
Design a moving window SM machine to detect "111." Use minimized-bit encoding and one-hot encoding. Re-do the same problem with fixed window.  
  
6.3, 6.9, 6.23, 6.24, 6.29  
  
Wee 13:  
1. Design a moving window SM machine to detect "010" and "101." Use Mealy.  
2. Design a fixed window SM machine to detect "010" and "101." Use Mealy.