

# ECE 2200

A. Stolp

Tentative

08/08/20

## COURSE SCHEDULE

| Week                                 | Date     | lect | Topics  | Textbook            |
|--------------------------------------|----------|------|---|---------------------|
| 1                                    | T 08/24  | 1    | Introduction, Basic electrical units & symbols, Kirchhoff's laws        | Ch1, 2.1-3, 2.17    |
|                                      | Th 08/26 | 2    | Resistance, Ohm's law, Power, Resistors in parallel & series            | 2.5-7, 2.11-12, 3.5 |
| 2                                    | T 08/31  | 3    | Voltage and current dividers, Sources, Nodes, Grounds, Branches, Meters | 2.10, 2.12-16       |
|                                      | Th 09/02 | 4    | Superposition, Practical voltage and current sources                    | 2.18, 3.2           |
| 3                                    | M 09/06  |      | Labor Day   |                     |
|                                      | T 09/07  | 5    | Thevenin & Norton Equivalent Circuits, Max power transfer               | 2.19                |
|                                      | Th 09/09 | 6    | Thevenin & Norton Equivalent Circuits                                   | notes               |
| 4                                    | T 09/14  | 7    | Networks, Nodal analysis  | 2.17, notes         |
|                                      | Th 09/16 | 8    | Introduction to AC & Signals, Capacitors                                | 2.29, 2.23          |
| 5                                    | T 09/21  |      | Exam 1  |                     |
|                                      | Th 09/23 | 9    | Capacitors, RC first order transients                                   | 2.23, 3.6, 2.24     |
| 6                                    | T 09/28  | 10   | Inductors, Resonance, RL first order transients                         | 2.24, 3.7, 2.30     |
|                                      | Th 09/30 | 11   | First order transients, Complex numbers                                 | 2.34                |
| 7                                    | T 10/05  | 12   | Steady-state Sinusoids, Phasors, & Impedance                            | 2.25-26             |
|                                      | Th 10/07 | 13   | Phasors, Impedance, & AC circuits                                       | 2.27                |
|                                      | S 10/09  |      | Fall Break  |                     |
|                                      | Su 10/17 |      |   |                     |
| ECE 2210 Continues on as shown below |          |      |   |                     |
| 8                                    | Th 10/21 | 14   | AC circuit examples   | 2.29-30             |
|                                      | lab lect | 15   | Filters & Bode plots  | 2.31-33, notes      |
|                                      | Th 10/21 |      | Exam 2  |                     |
| 9                                    | T 10/26  | 16   | Second order transients, Laplace Impedance, Transfer functions          | 2.34, notes         |
|                                      | Th 10/28 | 17   | Second order transients, Time-domain solutions                          | notes               |
| 10                                   | T 11/02  | 18   | Second order transients, Initial and final condtions                    | notes               |
|                                      | Th 11/04 | 19   | Second order transient examples, Systems                                | notes               |
| 11                                   | T 11/09  | 20   | Diodes basics, Diodes in DC circuits                                    | 4.2                 |
|                                      | Th 11/11 | 21   | Diodes in AC circuits, Rectification                                    | 4.2, notes          |
| 12                                   | T 11/16  | 22   | Diodes, Transistors   | 4.3, notes          |
|                                      | lab lect | 23   | Transistors & Switching circuits  | 4.3                 |
|                                      | Th 11/18 |      | Exam 3  |                     |
| 13                                   | T 11/23  | 24   | Operational Amplifiers  | Ch 8                |
|                                      | Th 11/25 |      | Thanksgiving  |                     |
| 14                                   | T 11/30  | 25   | Operational Amplifiers  | Ch 8                |
|                                      | Th 12/02 | 26   | RMS and AC Power  | 2.21-22             |
| 15                                   | T 12/07  | 27   | AC Power, RMS, examples   | 2.28, 3.8           |
|                                      | Th 12/09 | 28   | AC Power, Transformers, 3 phase, Y, Delta                               | Appendix A          |
| 16                                   | T 12/14  |      | Review, 1:00 pm   |                     |
|                                      | W 12/15  |      | Final Exam, 8:00 - 10:00 am   |                     |