

# ECE 2210

Tentative

A. Stolp

01/04/19

## COURSE SCHEDULE

| Week | Date     | lect                                                              | Topics                                                                  | Textbook (3rd ed.)  |
|------|----------|-------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------|
| 1    | W 01/09  | 1                                                                 | Introduction, Basic electrical units & symbols, Kirchhoff's laws        | Ch1, 2.1-3, 2.17    |
|      | F 01/11  | 2                                                                 | Resistance, Ohm's law, Power, Resistors in parallel & series            | 2.5-7, 2.11-12, 3.5 |
| 2    | W 01/16  | 3                                                                 | Voltage and current dividers, Sources, Nodes, Grounds, Branches, Meters | 2.10, 2.12-16       |
|      | F 01/18  | 4                                                                 | Superposition, Practical voltage and current sources                    | 2.18, 3.2           |
| 3    | M 01/21  | Martin Luther King Day                                            |                                                                         |                     |
|      | W 01/23  | 5                                                                 | Thevenin & Norton Equivalent Circuits, Max power transfer               | 2.19                |
|      | F 01/25  | 6                                                                 | Thevenin & Norton Equivalent Circuits                                   | notes               |
| 4    | W 01/30  | 7                                                                 | Networks, Nodal analysis                                                | 2.17, notes         |
|      | F 02/01  | 8                                                                 | Introduction to AC & Signals                                            | 2.29                |
| 5    | W 02/06  | 9                                                                 | Capacitors, RC first order transients                                   | 2.23, 3.6           |
|      | F 02/08  | Exam 1                                                            |                                                                         |                     |
| 6    | W 02/13  | 10                                                                | Inductors, Resonance, RL first order transients                         | 2.24, 2.30, 3.7     |
|      | F 02/15  | 11                                                                | First order transients                                                  | 2.34                |
| 7    | M 02/18  | Presidents Day                                                    |                                                                         |                     |
|      | W 02/20  | 12                                                                | Steady-state Sinusoids, Phasors, & Complex numbers                      | 2.25-26             |
|      | F 02/22  | 13                                                                | Phasors, Impedance, & AC circuits                                       | 2.27                |
| 8    | W 02/27  | 14                                                                | AC circuit examples                                                     | 2.29-30             |
|      | F 03/01  | 15                                                                | Filters & Bode plots                                                    | 2.31-33, notes      |
| 9    | lab lect | 16                                                                | Second order transients, Laplace Impedance, Transfer functions          | 2.34, notes         |
|      | W 03/06  | Exam 2                                                            |                                                                         |                     |
|      | F 03/08  | 17                                                                | Second order transients, Time-domain solutions                          | notes               |
| 10   | M 03/11  | Spring Break                                                      |                                                                         |                     |
|      | F 03/15  |                                                                   |                                                                         |                     |
| 11   | W 03/13  | 18                                                                | Second order transients, Initial and final conditions                   | notes               |
|      | F 03/15  | 19                                                                | Second order transient examples, Systems                                | notes               |
| 12   | W 03/27  | 20                                                                | Diodes basics, Diodes in DC circuits                                    | 4.2                 |
|      | F 03/29  | 21                                                                | Diodes in AC circuits, Rectification                                    | 4.2, notes          |
| 13   | W 04/03  | 22                                                                | Diodes, Transistors                                                     | 4.3                 |
|      | F 04/05  | 23                                                                | Transistors & Switching circuits                                        | 4.3, notes          |
| 14   | lab lect | 24                                                                | Operational Amplifiers                                                  | Ch 8                |
|      | W 04/10  | Exam 3                                                            |                                                                         |                     |
|      | F 04/12  | 25                                                                | Operational Amplifiers                                                  | Ch 8                |
| 15   | W 04/17  | 26                                                                | RMS and AC Power                                                        | 2.21-22             |
|      | H 04/18  | ME Design Day in Union ballroom, Attendance is required for HW DD |                                                                         |                     |
|      | F 04/19  | 27                                                                | AC Power, Transformers                                                  | 2.28, 3.8           |
|      | M 04/22  | Problem Session at normal class time                              |                                                                         |                     |
| 16   | W 04/24  | Problem Session at normal class time / Review, 1:00pm in          |                                                                         |                     |
|      | H 04/25  | Final Exam, 8:00am                                                |                                                                         |                     |