

6.002 at a Glance, Spring 2009

(revised: Jan. 28, 2009)

| | Monday | Tuesday Lecture | Wednesday Recitation | Thursday Lecture | Friday Recitation |
|--------|-----------------------------------|---|--|--|---|
| week 1 | Feb. 2 Registration Day | Feb. 3 L1 Introduction to 6.002; lumped circuit abstraction; KVL& KCL | Feb. 4 R1 Parallel & series resistors; voltage & current dividers HW1 out | Feb. 5 L2 Node analysis | Feb. 6 R2 Node analysis examples |
| | Feb. 9 Tutorials | Feb. 10 L3 Linearity & superposition; Thevenin & Norton | Feb. 11 R3 Thevenin and Norton equivalence HW1 due HW2 out | Feb. 12 L4 Non-linear components | Feb. 13 R4 Examples of non-linear components |
| week 3 | Feb. 16 Presidents' Day | Feb. 17 Monday Schedule Monday Tutorials | Feb. 18 R5 Diode circuits using method of assumed states HW2 due HW3 out Tuesday Tutorials | Feb. 19 L5 Non-linear components: small-signal analysis | Feb. 20 R6 Examples of small-signal analysis with non-linear components |
| | Feb. 23 Tutorials | Feb. 24 L6 Signal amplification; Dependent sources | Feb. 25 R7 Examples of circuits with dependent sources HW3 due | Feb. 26 L7 MOSFET amplifiers | Feb. 27 R8 Examples of MOSFET amplifiers |
| week 5 | Mar. 2 Tutorials | Mar. 3 L8 Amplifier biasing and small-signal analysis | Mar. 4 No Recitations Quiz 1 | Mar. 5 L9 Small-signal equivalent circuits HW4 out | Mar. 6 R9 Problems from Quiz 1. Examples of amplifier biasing and small-signal analysis |
| | Mar. 9 Tutorials | Mar. 10 L10 Digital electronics; MOSFET logic | Mar. 11 R10 Examples of MOSFET logic circuits HW4 due HW5 out | Mar. 12 L11 RC networks; step response | Mar. 13 R11 Examples of RC networks; impulse response |
| week 7 | Mar. 16 Tutorials | Mar. 17 L12 Dynamic of logic circuits | Mar. 18 R12 More on dynamics of RC circuits HW5 due HW6 out Lab1 out | Mar. 19 L13 Energy & power in NMOS logic; CMOS | Mar. 20 R13 More examples of dynamics of RC circuits |

| | | Mar. 23 | Mar. 24 | Mar. 25 | Mar. 26 | Mar. 27 | | | | |
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| Spring Vacation | | | | | | | | | | |
| week 8 | Mar. 30 | Mar. 31 | L14 | Apr. 1 | R14 | Apr. 2 | L15 | Apr. 3 | R15 | |
| | | RL network: step response | | Examples of RL networks; impulse response HW6 due | | LC network: natural response | | RLC network: natural response Lab1 check off due | | |
| | | Lab 1 sessions | | | | | | | | |
| week 9 | Apr. 6 | Apr. 7 | L16 | Apr. 8 | No Recitations Quiz 2 | | Apr. 9 | L17 | Apr. 10 | R16 |
| | | LC networks: step & impulse response | | | | | Sinusoidal steady state; the frequency domain HW7 out | | Problems from Quiz 2 RLC networks: step & impulse response Lab1 write up due | |
| | | Tutorials | | | | | | | | |
| week 10 | Apr. 13 | Apr. 14 | L18 | Apr. 15 | R17 | Apr. 16 | L19 | Apr. 17 | R18 | |
| | | Impedance & admittance | | SSS of second order systems HW7 due HW8 out | | RLC filters; Q | | Examples of impedance and admittance techniques | | |
| | | Tutorials | | | | | | | | |
| week 11 | Apr. 20 | Apr. 21 | | Apr. 22 | R19 | Apr. 23 | L20 | Apr. 24 | R20 | |
| | Patriots Day | | | Examples of RLC filters, Q HW8 due HW9 out | | Operational amplifier | | Examples of op-amp circuits | | |
| | | | | Monday Tutorials | | Tuesday Tutorials | | | | |
| week 12 | Apr. 27 | Apr. 28 | L21 | Apr. 29 | R21 | Apr. 30 | L22 | May 1 | R22 | |
| | | Op-amps circuits | | Examples of op-amp circuits Lab2 out | | Positive feedback; oscillators | | Examples of op-amp circuits | | |
| | | Tutorials | | | | | | | | |
| week 13 | May 4 | May 5 | L23 | May 6 | R23 | May 7 | L24 | May 8 | R24 | |
| | | DLC networks | | Examples of diodes + RC networks and diodes + op-amp HW9 due | | MOS differential amplifier | | Examples of MOS differential amplifier Lab2 check off due | | |
| | | | | Lab 2 sessions | | | | | | |
| week 14 | May 11 | May 12 | L25 | May 13 | R25 | May 14 | L26 | May 15 | | |
| | | AM radio transmitter | | 6.002 wrap up | | AM radio receiver | | | | |
| | | Tutorials | | | | | | | | |
| | | May 18 | May 19 | May 20 | May 21 | May 22 | | | | |
| Final Exam Week | | | | | | | | | | |

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