

# 6.002x Fall 2013 Course-at-a-Glance

	Week	Topics	Readings	Key Dates
October	1	Lumped abstraction, KVL, KCL, simplification techniques, nodal analysis	1, 2.1-2.5, 3.1-3.3	Wed, Oct 16: Overview release; Week 1 videos, HW1 and Lab1 release
	2	Linearity, superposition, Thévenin & Norton methods, digital abstraction, Boolean logic, combinational gates	3.5-3.6 5.1-5.4, 5.6-5.7	Mon, Oct 21: Week 2 videos, HW2 & Lab2 release
	3	MOSFET switch, MOSFET switch models, nonlinear resistors, nonlinear networks	6.1-6.8, 4.1-4.3	Mon, Oct 28: Week 3 videos, HW3 & Lab3 release Tues, Oct 29: HW1 & Lab1 due
November	4	Small signal analysis, small signal circuit model, dependent sources, analog amplification	4.5, 2.6, 7.1-7.2	Mon, Nov 4: Week 4 videos, HW4 & Lab4 release Tues, Nov 5: HW2 & Lab2 due
	5	MOSFET switch-current source model, MOSFET amplifiers, MOS large signal analysis, MOS small signal analysis	7.3-7.7, 8.1-8.2	Mon, Nov 11: Week 5 videos, HW5 & Lab5 release Tues, Nov 12: HW3 & Lab3 due
	6	Amplifier small signal circuit models, capacitors, first order RC circuits	8.2.1-8.2.4, 9.1, 10.1	Mon, Nov 18: Week 6 videos, HW6 & Lab6 release Tues, Nov 19: HW4 & Lab4 due
	7	Inductors, first order step response, first order circuit analysis, impulses	10.2-10.4	Mon, Nov 25: Week 7 videos, HW7 & Lab7 release Tues, Nov 26: HW5 & Lab5 due
December	Midterm	<b>Dec 4th-8th: Midterm Exam</b>		
	8	Impulse, step, ramp superposition, digital memory, state, ZIR, ZSR	9.4, 10.5.3, 10.6, 10.6.3-10.6.4	Mon, Dec 9: Week 8 videos, HW8 & Lab8 release Tues, Dec 10: HW6 & Lab6 due
	9	Second order systems, damping in second order systems	12.1-12.2, 12.5, 12.7	Mon, Dec 16: Week 9 videos, HW9 & Lab9 release Tues, Dec 17: HW7 & Lab7 due
	10	Sinusoidal steady state analysis, frequency response, frequency response plots, impedance methods	13.1-13.3, 13.4.1-13.4.2	Mon, Dec 23: Week 10 videos, HW10 & Lab10 release Tues, Dec 24: HW8 & Lab8 due
	11	Filters, quality factor, time and frequency domain responses	13.5-13.6, 14.5	Mon, Jan 6: Week 11 videos, HW11 & Lab11 release Tues, Jan 7: HW9 & Lab9 due
January	12	Op-amp abstraction, negative feedback, Op-amp amplifiers, Op-amp filters and other circuits	15.1-15.5, 15.6.5	Mon, Jan 13: Week 12 videos, HW12 & Lab12 release Tues, Jan 14: HW10 & Lab10 due
	13	Stability, positive feedback, oscillators, energy and power	15.7-15.8, 11.1-11.4	Mon, Jan 20: Week 13 videos release Tues, Jan 21: HW11 & Lab11 due
	14	CMOS logic, breaking the abstraction barrier	11.5	Mon, Jan 27: Week 14 videos release Tues, Jan 28: HW12 & Lab12 due
	Final	<b>Feb 5th-9th: Final Exam</b>		