

EC2400 Topics and assignments: lesson planWeek #1

	<u>topic</u>	<u>sections</u>	<u>skip sections</u>	<u>lecture</u>
<u>Mon.</u>	Sinusoids	2-1, 2-2		1
<u>Tues.</u>	Time and phase shift	2-3 thru 2-5		2
<u>Weds.</u>	Phasor addition	2-6	2-7, 2-8	3
<u>Thurs.</u>	(no class)			

Homework: Chapter 2 problems 2.1 (use MATLAB), 2.4, 2.5, 2.8, 2.9, 2.10

Week #2

	<u>topic</u>	<u>read sections</u>	<u>skip sections</u>	<u>lecture notes</u>
<u>Mon.</u>	problem session			
<u>Tues.</u>	The spectrum	3-1		4
<u>Weds.</u>	Periodic signals/ time-varying spectrum	3-2, 3-3, 3-7, 3-8	3-4, 3-5, 3-6	5
<u>Thurs.</u>	Fourier series - analysis	3-4, 3-5, 3-6		6

Homework: Chapter 3 problems 3.1, 3.2, 3.3, 3.5, 3.6, 3.8, 3.11, 3.12

Week #3

	<u>topic</u>	<u>read sections</u>	<u>skip sections</u>	<u>lecture notes</u>
<u>Mon.</u>	HOLIDAY			
<u>Tues.</u>	Fourier series - spectrum	3-4, 3-5, 3-6		7
<u>Weds.</u>	problem session			
<u>Thurs.</u>	QUIZ # 1 - covers only through week #2			

Homework: Chapter 3 problems: 3.9, 3.11, 3.15

Week #4

	<u>topic</u>	<u>read sections</u>	<u>skip sections</u>	<u>lecture notes</u>
<u>Mon.</u>	Sampling and aliasing	4-1, 4-2		8
<u>Tues.</u>	Discussion of sampling	(4.3 optional)	(4.3 optional)	
<u>Weds.</u>	D/A conversion	4.4, 4.5		9
<u>Thurs.</u>	recitation/problem session			

Homework: Chapter 4 problems: 4.1, 4.3, 4.4, 4.6, 4.8, 4.10, 4.12

Week #5

	<u>topic</u>	<u>read sections</u>	<u>skip sections</u>	<u>lecture notes</u>
<u>Mon.</u>	FIR filtering	5-1, 5-2, 5-3		10
<u>Tues.</u>	Recitation/ discussion			
<u>Weds.</u>	Linearity, time-invariance, convolution	5-4, 5-5, 5.6		11
<u>Thurs.</u>	problem session			

Homework: Chapter 5 problems: 5.1, 5.2, 5.3, 5.4, 5.7, 5.8, 5.9, 5.10

Week #6

	<u>topic</u>	<u>read sections</u>	<u>skip sections</u>	<u>lecture notes</u>
<u>Mon.</u>	Frequency response of FIR filters	6-1, 6-2, 6-3, 6-4		12
<u>Tues.</u>	recitation/ work problems			
<u>Weds.</u>	Digital filtering	6-6, 6-7, 6-8		13
<u>Thurs.</u>	recitation/problem session			

Homework: Chapter 6 problems: (to be assigned) Computer project also to be assigned.

Week #7

	<u>topic</u>	<u>read sections</u>	<u>skip sections</u>	<u>lecture notes</u>
<u>Mon., Tues</u>	No class*	Review Chs. 2-6		
<u>Weds.</u>	Problem session			
<u>Thurs.</u>	MIDTERM EXAM			

*This week is a reading and study period in preparation for the midterm exam. You can also use it to work on the computer project. There is no other assigned homework.