

## EECS 452 Schedule, Fall 2009

Week	Day	Lectures, Labs	Items due, reminder
<b>0</b>		<b>Prelab 1</b>	
L1	Wed 9/9	Class/Lab introduction	
L2	Fri 9/11	C5510 DSK, C programming	
<b>1</b>		<b>Lab 1: Introduction to the C5510 DSK</b>	Prelabs due b/f lab
L3	Mon 9/14	Number representation; fixed point arithmetic	
L4	Wed 9/16	Fixed point programming on C5510; interrupts	
L5, L6	Wed 9/16 (7-9pm)	<b>Make-up class:</b> C5510 peripherals; direct digital synthesis; intro to VHDL	
L7	Fri 9/18	Xilinx Spartan 3 and VHDL	HW1 due
<b>2</b>		<b>Lab 2: Using the C5510 on-chip peripherals</b>	
	Mon 9/21	Class cancelled; travel	
	Wed 9/23	Class cancelled; travel	
L8	Fri 9/25	VHDL and DDS	HW 2 due
<b>3</b>		<b>Lab 3: Spartan-3 FPGA starter board; VHDL</b>	
L9	Mon 9/28	A/D, D/A, PMods, MIB	
L10	Wed 9/30	Bit serial transfer; connecting C5510 and S2SB	HW3b due
L11	Fri 10/2	DSP basics and review	HW3 due
<b>4</b>		<b>Lab 4: S3SB, A/D, D/A, linking C5510 and S3SB, DDS, DTMF in FPGA, mic amplifier circuit</b>	
L12	Mon 10/5	FIR filter	
L13	Wed 10/7	IIR filter	
	Wed 7pm	<b>Project team formation meeting</b>	Proj. team formed
L14	Fri 10/9	IIR filter continued	HW4 due
<b>5</b>		<b>Lab 5: FIR and IIR filter implementation</b>	
L14	Mon 10/12	IIR filter continued	
	Wed 10/14	Lab 6 (Chih-Wei)	
L15	Fri 10/16	DFT and FFT	<b>Prof. proposal due</b>
<b>6</b>		<b>Lab 6: Real time FFT; bit serial half band IIR filter</b>	Proj. proposal mtgs
	Mon 10/19	No lecture (fall break)	
L16	Wed 10/21	Transfer function measurement	
L17	Fri 10/23	Leakage, windowing, DFT as a filter	
<b>7</b>		<b>Midterm</b>	
L18	Mon 10/26	Midterm review	
	Wed 10/28	No lecture (midterm study)	
	Wed 7pm	<b>7-9pm: Midterm</b>	
	Fri 10/30	No lecture (project presentation preparation)	

## EECS 452 Schedule (cont'd), Fall 2009

Week	Day	Lecture, Lab	Items due
<b>8</b>		<b>Project proposal presentations</b>	
	Mon 11/2	Introductory project presentations	
	Wed 11/4	Introductory project presentations	
	Fri 11/6	Introductory project presentations	<b>HW5 due</b>
<b>9</b>		<b>Misc.</b>	
	Mon 11/9	Guest lecture by Aileen Huang-Saad (Ctr. for Entrepreneurship)	
	Wed 11/11	Midterm return	
L19	Fri 11/13	C5505, part 1 (Dr. Metzger)	
<b>10</b>		<b>Some more DSP topics</b>	
L20	Mon 11/16	Oversampling	
L21	Wed 11/18	Biquad requantization noise	
L22	Fri 11/20	C5505, part 2 (Dr. Metzger)	
<b>11</b>		<b>Continue...</b>	
L23	Mon 11/23	Sigma-Delta A/D conversion	
L24	Wed 11/25	A history of radio (Dr. Metzger)	
	Fri 11/27	No lecture (Thanksgiving)	
<b>12</b>		<b>As matters arise</b>	
L25	Mon 11/30	State machine (Chih-Wei)	
L26	Wed 12/02	Cascaded int. comb filter/PicoBlaze/interrupt	
L27	Fri 12/04	ZigBee/UART/Bluetooth/OFDM	
<b>13</b>		<b>Design Expo!!</b>	
	Mon 12/07	No lecture (work on your projects)	
	Wed 12/09	No lecture (Design Expo preparation)	
	Thu 12/10	CoE Design Expo	
L28	Fri 12/11	Class wrap-up; pizza topping selection	
<b>14</b>		<b>Final presentation</b>	
	Mon 12/14	No lecture	
	Mon 4pm	<b>4pm-whenever: Final project presentation</b>	
<b>15</b>		<b>Final report</b>	
	Tue 12/22	<b>Final project report due by 12noon</b>	<b>Final report due</b>