

**Olin College of Engineering**  
**ENGR2410 -- Signal and Systems**

**Spring 2016 Calendar**

<b>Date</b>	<b>Topics</b>	<b>Ref</b>	<b>Out</b>	<b>Due</b>
Thu, 1/21	course policies, diagonalization as an example of a transform, 1st order step response (capacitor voltage)	<b>1</b>	<i>pset 1</i>	
Mon, 1/25			<i>quiz 1</i>	<i>pset 1</i>
Thu, 1/28	linearity, diff. eq.; sinusoidal steady state, complex exponentials, transfer function; frequency response, Bode plots	<b>2</b>	<i>pset 2</i>	<i>quiz 1</i>
Mon, 2/1			<i>quiz 2</i>	<i>pset 2</i>
Thu, 2/4	impedance, kvl, kcl	<b>3</b>	<i>pset 3</i>	<i>quiz 2</i>
Mon, 2/8			<i>quiz 3</i>	<i>pset 3</i>
Thu, 2/11	square wave, sinc, orthogonality; Fourier series, Fourier transform	<b>4</b>	<i>pset 4</i>	<i>quiz 3</i>
Mon, 2/15	<b>no class, recovered Wed, 2/17</b>			
Thu, 2/18	$Y(j\omega)=H(j\omega)X(j\omega)$ ; impulse response, $d=d/dt$ u, picking property, $F\{d(t)\}$ , $F\{h(t)\}=H(j\omega)$	<b>5</b>	<i>pset 5</i>	<i>pset 4</i>
Mon, 2/22			<i>quiz 5</i>	<i>pset 5</i>
Thu, 2/25	convolution, system response in time, impulse train, square wave revisited	<b>6</b>	<i>pset 6</i>	<i>quiz 5</i>
Mon, 2/29	$F\{x(t)y(t)\}$ , sampling	<b>7</b>	<i>pset 7</i>	
Thu, 3/3	<b>no class</b>			<i>pset 6</i>
Mon, 3/7			<i>quiz 7</i>	<i>pset 7</i>
Thu, 3/10	review/discussion/feedback			<i>quiz 7</i>
Mon, 3/14	<b>Spring break</b>			
Thu, 3/17	<b>Spring break</b>			
Mon, 3/21	discrete, 1st order diff. eq.	<b>8</b>	<i>pset 8</i>	
Thu, 3/24	DT processing of CT			
Mon, 3/28			<i>quiz 8</i>	<i>pset 8</i>
Thu, 3/31	modulation and Communications. Laplace of functions, s-plane, ROC, $L\{\exp*u\}$ , relation to fourier	<b>9</b>	<i>pset 9</i>	<i>quiz 8</i>
Mon, 4/4	Laplace of systems, poles and zeros, $L\{u\}$ , control, feedback, Black's formula, proportional control, DC gain, delay instability	<b>10</b>	<i>quiz 9</i>	<i>pset 9</i>
Thu, 4/7			<i>pset 10</i>	<i>quiz 9</i>
Mon, 4/11	review		<i>quiz 10</i>	<i>pset 10</i>
Thu, 4/14			<i>project description</i>	
Mon, 4/18	<b>no class, recovered Tue, 4/19</b>			<i>proposal, quiz 10</i>
Thu, 4/21				
Mon, 4/25				
Thu, 4/28	<b>last day</b>			
Finals				<i>video+write up</i>