

Schedule Fall 2008

CHEM 5161 - Analytical Spectroscopy

Aug 26	Syllabus	
Aug 28	Interaction of Light with Matter	HoCh1
Sept 2	Transitions in atoms and molecules	BerCh1, HoCh2
Sept 4	Line shapes	BerCh1, HoCh2
Sept 9	Line positions	HoCh5.1+5.2+6.1, BCh6.1+6.2
Sept 11	Light coupling and selection rules	BerCh8, HoCh5.3
Sept 16	Introduction to IGOR Pro	
Sept 18	Absorption, Fluorescence and Phosphorescence	
Sept 23	Line strength + The HITRAN database	BerCh5.7+6.3+7.6
Sept 25	<b>Interim Exam 1</b>	
Sept 30	Light sources	BerCh1, HoCh3
Oct 2	Laser light sources	HoCh9.1
Oct 7	Light dispersion	HoCh3,
Oct 9	Excursion: Rocky Mountain Metropolitan Airport	
Oct 14	Fourier Transform Spectrometers	
Oct 16	Detectors	
Oct 21	Czerny Turner vs. FTS	
Oct 23	Signal to Noise	
Oct 28	Numerical Filters	
Oct 30	<b>Interim Exam 2</b>	
Nov 4	DOAS	
Nov 6	CRDS	
Nov 11	IBB-CEAS	
Nov 13	LIF	
Nov 18	FTIR	
Nov 20	RAMAN	
Dec 2	Student presentation #1	
Dec 4	Student presentation #2	
Dec 9	Recap and preparation for Final Exam	
Dec 11	<b>Final Exam</b>	