

TENTATIVE LECTURES

DUE DATEs to VIEW	LECTURE	TOPIC
01/13	Introduction	
01/20	Lecture 01	Introduction-terminology qualitative, quantitative, sampling, units, molarity x normality, ppm x %, problem solving, calibration
01/27	Lecture 02	Statistics - accuracy, precision, error, deviation, significant digits, t test, outliers, confidence interval, P value
02/03	Lecture 03	Statistics continuation and Intro to chemical equilibrium
02/10	Lecture 04	Chemical equilibrium - constants K , K_{sp} , K_a , K_b , K_w , pH, solubility, titration volumetric, neutralization, pK_a
02/17	Lecture 05	Titration, Review for Exam 1
02/24	Lecture 06	Equilibrium - oxidation/reduction - Nernst equation, potentials, reference and indicator electrodes, pH
	Lectures 01 - 04	EXAM 1
03/02	Lecture 07	Equilibrium - oxidation/reduction - Balancing the ox/red equation, pH, coulometry, potentiometry, amperometry
03/09	Lecture 08	Voltammetry, Sampling & Extraction View Soxhlet video
03/16	Lecture 09	Extraction, Chromatography - general
03/23	Lecture 10	Gas Chromatography (GC) injectors, columns, detectors
03/30	Lecture 11	Liquid Chromatography TLC, HPLC, IC
	Lectures 04 - 09	EXAM II
04/06	Lecture 12	Chromatography add on, Spectroscopy - absorption emission atomic, molecular, AAS, AES, ICP
04/13	Lecture 13	Spectroscopy - Infra Red (IR), Raman, Nuclear Magnetic Resonance (NMR)
04/20	Lectures 14 & 15	Mass Spectrometry (MS) View MS video
	Lectures 01 - 15	FINAL EXAM