

Comments on the Ongoing XRD Lab with Petrology

- The three groups should be talking to one another, particularly about the quality of the high temperature data. Since you will be putting your data together to construct a common calibration curve, it would be a good idea to reheat some of your samples between the solvus and solidus temperatures (that is, between 550°C and 600°C) to ensure the creation of a single phase.
- You are allowed to make measurements only when at least one geology faculty member is present. Karl will be in part of Saturday and most of Sunday.
- Each group will have 15 minutes to present on Wednesday, February 12. Unlike P-Chem I Lab, you are encouraged (nay, required) to have a few overheads prepared beforehand to show your results. Each person in the group is required to do at least some talking.
- Again, follow the P-Chem I Lab report format for the write-up due on Valentine's Day.
- I know you have a hectic next few days. To compensate for this, I have (1) postponed PS 2, and (2) postponed the β -Carotene lab until after Test 1. These and other changes are show below:

REVISED COURSE SCHEDULE (as of 2/7/03) (timing of lecture topics may vary)

Date	Day	What's Due?	Chap	Topics/Event
2/7	F		11	Quantum Mechanics: Fundamentals [Validation Deadline]
2/10	M		11	
2/12	W			XRD Oral Presentations (with Petrology class, Karl Wirth)
2/13	Th		11	Lecture (in OR 350)
2/14	F	XRD Report	11	[Add/Drop Deadline]
2/17	M		12	Quantum Mechanics: Applications
2/19	W	PS 2	12	
2/20	Th		12	Lecture (in OR 350)
2/21	F		12	
2/24	M	PS 3	13	The Electronic Structure and Spectra of Atoms
2/26	W		13	
2/27	Th			TEST 1: Lectures thru 2/21; PS 1, 2, and 3 (in OR 350)
2/28	F		13	
3/3	M		14	The Electronic Structure and Spectra of Molecules
3/5	W	PS 4	14	
3/6	Th		Lab	The β -Carotene Spectrum: Experiment and Computation
3/7	F		14	
3/10	M			Phi Beta Kappa Speaker William Reinhardt
3/12	W		14	
3/13	Th		14	Lecture (in OR 350)
3/14	F	β-Carotene	15	Molecular Symmetry and Group Theory
3/15 – 3/23				Spring Break (no class)

Date	Day	What's Due?	Chap	Topics/Event
3/24	M		15	Prof. Varberg (I'll be at the ACS Meeting)
3/26	W	PS 5	15	Prof. Varberg (I'll be at the ACS Meeting)
3/27	Th			NO CLASS (I'll be at the ACS Meeting)
3/28	F		15	
3/31	M	PS 6	16	Rotational and Vibrational Spectroscopy
4/2	W		16	
4/3	Th			TEST 2: Lectures thru 3/28; PS 4, 5, and 6 (in OR 350)
4/4	F		16	[Withdraw Deadline]
4/7	M		16	
4/9	W		16	
4/10	Th		Lab	Computational Chemistry (in OR 341)
4/11	F	PS 7	17	Electronic Spectroscopy
4/14	M		17	
4/16	W		17	
4/17	Th	Computation	Lab	The FTIR Spectrum of HCl (in OR 378)
4/18	F			Good Friday (no class)
4/21	M	PS 8	18	Magnetic Resonance Spectroscopy
4/23	W		18	
4/24	Th		Lab	To be announced
4/25	F	FTIR	18	
4/28	M	PS 9	19	Statistical Thermodynamics: Fundamentals
4/30	W		19	
5/1	Th			TEST 3: Lectures thru 4/25; PS 7, 8, and 9
5/2	F		19	
5/5	M	PS 10	20	Statistical Thermodynamics: Applications
5/8	Th			FINAL EXAMINATION, 8:30 - 10:30 a.m., OR 301
5/9	F	Final Lab		