

Chemistry 432  
Advanced Inorganic Chemistry  
Laboratory Schedule and Assignments

**General Information**

**Instructor:** Dr. Kimberly Lawler-Sagarin  
**Contact Info:** SC 218, x 3202, ksagarin@elmhurst.edu  
**Lab Text:** *Synthesis and Technique in Inorganic Chemistry*  
by Girolami, Rauchfuss and Angelici, 3rd edition (Required)  
**Materials:** Suitable lab notebook, eye protection with full side shields  
**Lab Meetings:** M 1:00pm-5:00pm Schiabile Science 209/237/etc

**Assignments**

Assignment	Points Each	Total
Formal Lab Reports (2)	20	40
Experiments + Analyses (9)	15-20	155
Literature Assignments (3)	10	30
Total Possible		225

The laboratory will contribute 225 points or 22.5% to your final grade in Advanced Inorganic.

**Course Requirements Pertaining to the Lab**

1. Have no more than one unexcused absence from the lab
2. Perform all laboratory experiments
3. Turn in required reports/analyses for all laboratory experiments

Failing to meet one or more of these requirements will result in a student not be graded on the regular grading scale. Grades in these cases are determined on an individual basis and are at the instructor's discretion. In general, you may expect at least a one-full-grade penalty for each requirement which is not fulfilled. For example not turning in a laboratory report or analysis will result in a one-letter grade penalty for each instance.

**Policy for Late or Missed Assignments**

Because everyone has a bad week, gets sick, or just runs behind, you will get a series of flexible late certificates as described in the syllabus. Late lab assignments not accompanied by a late certificate will incur a 25% penalty if turned in by the end of the week. Lab assignments turned in after this point will incur a 50% penalty. Exceptions to this policy will only be made in the case of serious (and documented) illness or tragedy.

**Tentative Lab Schedule:**

The lab schedule is provided on the next page. Laboratory experiments may be substituted due to equipment and chemical availability or time considerations.

Key:

- RA = Girolami, Rauchfuss and Angelici, *Synthesis and Technique in Inorganic Chemistry*
- DA = Data analysis (yields, interpreted spectra/properties, questions, calculations), lab notebook
- Intro Exp = Synthesis and characterization of some inorganic complexes
- HSAB: Hard/Soft Acid/Base Theory: Synthesis of two complexes (handout)
- Selected = Trial laboratories chosen individually by students from a selection of possible experiments from GRA and other sources.
- Lit = Literature assignments/presentations

Wk #	Day	Date	Experiment Planned	DA/Reports Due	Literature
1	M	Aug. 29	Intro Exp		
2	M	Sept. 5	—	<i>No Class, Labor Day</i>	
3	M	Sept. 12	GRA 4		
4	M	Sept. 19	GRA 23	DA for Intro + DA for GRA 4	
5	M	Sept. 26	GRA 23		Lit 1
6	M	Oct. 3	HSAB	DA for GRA 23	Lit 1
7	M	Oct. 10	—	<i>No Class, Fall Break</i>	
8	M	Oct. 17	HSAB		Lit 2
9	M	Oct. 24	GRA 12	DA for HSAB	Lit 3
10	M	Oct. 31	GRA 13A	Formal Report HSAB	
11	M	Nov. 7	GRA 13A/14	DA for GRA 12	Lit 3
12	M	Nov. 14	GRA 14		Lit 3
13	M	Nov. 21	GRA 16	DA for GRA 13A + DA for GRA 14	
14	M	Nov. 28	Selected	DA for GRA 16 + Formal Report GRA 12	
15	M	Dec. 5	Selected	DA for Selected	
16	-			Happy Winter Break!	

Table 1: Tentative Schedule - Chemistry 432 Laboratory - Fall 2011

Additional Notes:

- Lab + DA for the following experiments will be worth 15 points: Intro Exp, GRA 4, GRA 12, HSAB, GRA 16
- Lab + DA for the following experiments will be worth 20 points: GRA 23, GRA 13A, GRA 14, Selected
- Formal reports are required for HSAB and GRA 12.