

Chemistry 4010/6010 Laboratory Syllabus Summer 2017

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Office Hours: Monday 12:30 – 1:30 pm, other time by appointment

Lab hours/location: Monday, Wednesday, 9am – 12:15pm, NSC-240

Laboratory Attendance:

Students are expected to attend all laboratory sessions. State law requires that you sign-in and sign-out for each laboratory session that you attend. Pre-lab lecture starts at **9am**, and takes 10-20 minutes. Students are required to **arrive on time**. Those who miss the lecture may not be allowed to perform the experiment that day.

Make-up Labs:

Make-up labs **are not allowed**, unless you have a legitimate excuse for missing a lab. After obtaining an approval from the instructor the student must take the missed lab within one week of the scheduled lab date and before the final exams week. Students must make prior arrangements with the instructor who is going to give the make-up lab.

Laboratory Reports:

Criteria used in grading the Lab Reports are: (1) your understanding of the experiment as judged by your comments and answers to questions, (2) the quality of your data, (3) the completeness and accuracy of your data analysis (including error analysis), (4) the report's clarity, organization, and quality of presentation. Lab report format should follow ACS guidelines. Laboratory reports are **100 points each**, and must be turned in on the due dates (see the Lab Schedule). Report outlines, tables and figures can be submitted to your laboratory instructor one week in advance of the due date for helpful comments. Laboratory Report #1 can be re-submitted once with corrections for re-grading at a later date (assigned by the instructor). Reports #2-4 can be submitted only once.

Digital data must be saved offsite, and be available upon demand by the instructor for full credit.

Laboratory Notebooks:

Notebook is required for the laboratory sessions, and will contain all of your notes, data, observations and calculations, and notebook reports (see the Lab schedule table below). For additional requirements please see the lab manual (pg. 3). You must turn in a complete laboratory notebook with your final laboratory report. Additionally, whenever you turn in a laboratory report, the corresponding section of your notebook must be complete. The instructor will occasionally spot check your notebook. The maximum grade for a completed notebook is **100 points**

Late Assignments:

Late assignments will be penalized 2 points each workday delay. After 2 weeks from the due date lab reports will not be accepted, and student will receive 0 points on that report.

Lab Course Grading:

Reports (4)	400 = 4*100
Lab notebook	100
Total	500

Schedule of Laboratory Sessions:

Day	Session #	Exercise	Reports content location	Report Due
Jun 7	1	GC1 – Injection technique	Notebook	
Jun 12	2	GC2 – Qualitative analysis	Report #1	
Jun 14	3	GC3 – Quantitative analysis	Report#1	
Jun 19	4	GC4 - HETP	Notebook	Jun. 19 Report #1
Jun 21	5	GC5 – Kovat’s retention index	Notebook	
Jun 26	6	GC6 – Temperature programming	Report #2	
Jun 29	7	GC7 - Enthalpy	Report #2	
Jul 3	8	GC8 – Similar boiling points	Report #2	
Jul 5	9	TLC	Report #3	Jul. 5 Report #2
Jul 10	10	HPLC1 – Aspirin (group A)	Report #4*	Jul.10 Report #3
Jul 12	11	HPLC1 – Aspirin (group B)	Report #4*	
Jul 17	12	HPLC2 – Benzene (group A)	Notebook	
Jul 19	13	HPLC2 – Benzene (group B), Check out	Notebook	Jul.19 Report #4 Notebook submission

* Formal Report#4 along with completed notebooks including notebook reports are due on the last day of classes for the class portion of 4010/6010

HPLC exercises need to be scheduled for smaller groups. Accordingly, the lab section will be divided into two. Sign-up sheets will be supplied by lab personnel. Each subgroup will have a week on – week off schedule. However, report #3 is due on session 10 no matter how the student is scheduled for the HPLC exercise.