

Fall Semester 2015
Chemistry 4010/6010 Chromatography Syllabus for Laboratory

Instructor: Dr. Jie Jiang
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Office Hours by appointment

Laboratory Times and Location:

Thursday 9:00 am - 12:15 p.m., NSC 240/242
A pre-lab lecture will begin promptly at 9:00am.

Attendance Policy at Laboratory:

Students who miss a pre lab lecture without obtaining prior permission, will not be allowed to perform the experiment that day.

Sign-in and Sign-out for each Laboratory:

State law requires that you sign-in and sign-out for each laboratory session that you attend.

Make-up Labs:

Make-up labs are not allowed, unless you have a legitimate excuse for missing a lab. The student is required to obtain an approval from the instructor. The missed lab must be taken within one week of the scheduled lab date and prior to the final exam week.

Laboratory Notebooks:

A bound notebook is required for the laboratory sessions. The notebook will contain all of your Pre-Lab lecture notes, all the experimental parameters, data results and calculations. (See page 3 for additional requirements of Lab notebook). You must turn in a complete Lab notebook together with your last Lab report.

Additionally, whenever you turn in a laboratory report, the corresponding section of your notebook must be complete. Instructor and TA will check your notebook occasionally. The maximum grade for a completed notebook including notebook reports is 100 points. .

Laboratory Reports (100 points each):

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 clarity, organization and quality of presentation of your report. **Lab report format should follow ACS guidelines and must be turned in on the due dates. Only GC Report 1 can be resubmitted with corrections for re-grading at a later date (see the Lab Schedule).**

Report delay penalty:

2 points each workday delay → 10 points per week!

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Laboratory Schedule

Thur	Week No.	Exercise	Report	Report Due
Aug 27	1	Check In; GC 1- Injection technique	No Report	
Sep 3	2	GC 2 – Qualitative analysis	Report 1	
Sep 10	3	GC 3- Qualitative analysis	Report 1	
Sep 17	4	GC 4- HETP	Notebook Report	Lab Report 1 Due
Sep 24	5	GC 5- Kovat's retention index	Report 2	Lab Report 1 Resubmit Due
Oct 1	6	GC-6 - Temperature programming	Report 2	
Oct 8	7	GC 7- Enthalpy	Report 2	
Oct 15	8	GC 8- Similar boiling points	Report 2	
Oct 22	9	TLC	Report 3	
Oct 29	10	HPLC 1 – Aspirin (group A)	Report 4*	Lab Report 2 Due
Nov 5	11	HPLC 2 – Aspirin (group B)	Report 4*	Lab Report 3 Due
Nov 12	12	HPLC 1 – Benzene (group A)	Notebook Report	
Nov 19	13	HPLC 1 – Benzene (group B)	Notebook Report	
Nov 26	14	Thanksgiving Day Break		
Dec 3	15	Check out		

* **Report 4** along with completed notebooks including notebook reports are **due on the last day of classes for the lecture portion**. Notebook Report means a short handwritten version. Figures can be pasted if necessary, but you have to write a short description. HPLC exercises are scheduled in groups. Each subgroup will have the week off when the other group is on. But you have to turn in your Lab Report on time.