

Chemistry 3100 Organic I
Fall Semester 2014
Thursday 12:00 pm – 16:45 pm

Instructor: Danzhu Wang dwang19@gsu.edu

When sending me an email, please use your official GSU email and put course name (CHEM 3100) in the subject line.

Office: Courtland North 202

Office Hours: Monday 3:00 pm-5:00 pm

Texts & Materials:

Experimental Organic Chemistry by Wilcox & Wilcox 2nd (**required**)

GSU Chemistry 3100 lab manual (**provided**)

Hard bound lab notebook (**required**)

Safety glasses or goggles (**required**)

Lab policies:

1. Safety glasses or goggles required to be worn at all times inside the lab.

2. Dress appropriately. **Students will not be allowed to enter the lab without appropriate clothing.**

No open-toed shoes, shorts, sleeveless shirts/tops

3. No food or drink allowed in the lab includes chewing gum and candy.

Failure to follow safety rules will result in expulsion from the lab with no make-up allowed.

4. Notebook: Stitched, bound notebook required

All data must be recorded in ink.

Take notes in lab notebook during pre-lab lecture

Sign by TA. **Data must NEVER be recorded in pencil or on other books/papers and later transferred to the notebook.**

5. Quiz: No makeup quizzes given.

6. Cleaning up is part of the lab session. 30 minutes before the closing time of lab session. Return all checked out items to TA 15 minutes before the end of lab.

To pass the lab: Students **MUST** 1) take the written lab final exam, 2) turn in mid-tern/final lab report, and 3) Lab notebook check. All these are due on Dec.4, 2014.

Grading Scheme:

Attendance, Activity, Homework, mid-term exam, quizzes, notebook	150 pts
Final Exam	100 pts
Final Report	100 pts
Midterm Report	50 pts
Total	400 pts

Grades:

A+	>96%
A	90%
A-	87%
B+	84%
B	80%
B-	77%
C+	74%
C	70%
C-	67%

Class Preparation and attendance:

Students are expected to attend all laboratory sessions and all pre-lab lectures. Students will not be allowed to participate in the lab without attending the lecture and preparing a pre-lab procedure in the lab notebook. Every effort should be made to arrive on time, as important pre-lab advisories will be given at the start of each session. The student is individually responsible for the timely completion of all assignments, regardless of any reason of absence. Reading assignments, which will be given in lecture, should be completed prior to the following lecture and will constitute the quiz material.

Teaching Schedule:

The lab/lecture schedule listed on page 7 of the GSU laboratory manual will be adhered to as far as is possible.

Students are requested NOT to bring cellular telephones and/or pagers to lectures or exams. Persons violating this request will be asked to leave the room.

*Deviations from this syllabus may be required.

SCHEDULE OF CHEMISTRY 3100

DATE	WEEK	LAB EXPERIMENTS
Aug.28	1	<input type="checkbox"/> Check in <input type="checkbox"/> Safety quiz
Sept.4	2	<input type="checkbox"/> Separation of benzoic acid and acetanilide by extraction <input type="checkbox"/> Record the initial weight of the solid mixture before start of separation <input type="checkbox"/> Separated compounds will be left over one week for drying
Sept.11	3	<input type="checkbox"/> Isolation of natural products--Caffeine <input type="checkbox"/> Melting points determination of benzoic acid and acetanilide
Sept.18	4	<input type="checkbox"/> Isolation of natural products--Trimyristin and recrystallization <input type="checkbox"/> Sublimation (group) of caffeine and IR analysis
Sept.25	5	<input type="checkbox"/> Synthesis and purification of butyl acetate <input type="checkbox"/> Record the empty weight of (vial+cap) before start of separation <input type="checkbox"/> IR, RI, and Density
Oct.2	6	<input type="checkbox"/> Simple distillation: purification of neat liquid (NL), save NL for chemical tests on week 10 (parafilm, a lot!!) <input type="checkbox"/> Density determination Mid-term exam ☹ Mid-term report due today!!
Oct.9	7	<input type="checkbox"/> Introduction to Gas Chromatography (GC) <input type="checkbox"/> Fraction distillation of unknown binary liquid (BM mixture) <input type="checkbox"/> SAVE ~1mL BM for GC analysis
Oct.14		Last day to Withdraw !!!
Oct.16	8	<input type="checkbox"/> Introduction to Infrared (IR) Spectroscopy <input type="checkbox"/> CONTINUE: Separation of Low boiler (LB) and High boiler (HB) and boiling point.
Oct.23	9	<input type="checkbox"/> Introduction to Infrared (IR) Spectroscopy <input type="checkbox"/> CONTINUE: Separation of Low boiler (LB) and High boiler (HB) and boiling point. SAVE LB and HB for chemical test on week 10 Gas Chromatography (GC)
Oct.30	10	<input type="checkbox"/> Introduction to Chemical tests <input type="checkbox"/> CONTINUE: Separation of Low boiler (LB) and High boiler (HB) and boiling point. <input type="checkbox"/> Chemical tests
Nov.6	11	<input type="checkbox"/> Introduction to Mass spectrometry <input type="checkbox"/> CONTINUE: Separation of Low boiler (LB) and High boiler (HB) and boiling point. <input type="checkbox"/> CONTINUE: Chemical tests <input type="checkbox"/> Mass spectrometry request
Nov.13	12	<input type="checkbox"/> CONTINUE: Separation of Low boiler (LB) and High boiler (HB) and boiling point.

		<input type="checkbox"/> Request an mass spectrum of the unknown you have more difficulty to identify <input type="checkbox"/> Last week for GC
Nov.20	13	Final preparation Form of Final report Make up lab Only bp, chemical tests, IR, RI, density and book search are allowed. No more distillations.
Nov.27		<i>Thanksgiving week ☺</i>
Dec.4	14	Final Exam (NO make-up!!!) ☹ Lab Notebook grading and Final report submit by 5:00 pm Department office Mail box #60

This schedule is only tentative and subjected to changes.