

Chemistry 204
Introduction to Chemical Practice



Spring 2007

Dr. Brian Anderson

Your Humble Instructor



Dr. Brian Anderson

WEL 5.220A (512) 475-6729

banderson@cm.utexas.edu

Office Hours: Monday 10:00 – 11:30 or by appointment

<http://courses.cm.utexas.edu/banderson/ch204>

Monday Afternoon

Unique Number	Your Lab	Your TA
53195	4.116	Travis
53200	4.122	Christina
53205	4.124	Josh
53210	4.138	Tori
53215	4.140	Yu-shan

Monday Night



Unique Number	Your Lab	Your TA
53295	4.116	Travis
53300	4.122	Christina
53305	4.124	Josh
53310	4.138	Shreya
53315	4.140	Yu-shan

Tuesday Morning



Unique Number	Your Lab	Your TA
53095	4.116	Jae
53100	4.122	Ashley
53105	4.124	Wei-chen
53110	4.138	Shreya
53115	4.140	Dmitry

Wednesday Night



Unique Number	Your Lab	Your TA
53320	4.116	Jae
53325	4.122	Ashley
53330	4.124	Wei-chen
53335	4.138	Tori
53340	4.140	Dmitry

Required Materials



Lab Manual

Leytner, S. *General Chemistry Lab Manual*; McGraw-Hill Higher Education, Spring 2007 edition

Lab Notebook

Bound with duplicate numbered pages.

Combination Lock

Calculator

Recommended — *Atkins and Jones* or another general chemistry text.

Today

- Grading
- Lab Reports
- Absences
- Safety/Check-In

Grading

- 70% Lab
- 30% Quizzes

90 – A

80 – B

70 – C

60 – D

70% Lab

- Lab Write-Ups
 - Pre-Lab Questions
 - Lab Report
 - Discussion Questions
 - Post-Lab Problems
 - Unknown Summary Sheet
- Safety/Technique Evaluation
- End of Semester Notebook Grade

30% Quizzes



- 30% of your grade.
- Like a final exam given in 9 weekly installments
- Drop the lowest score
- Each quiz is 3-4 questions based on
 - Material covered in previous week's lecture
 - Lab manual introduction from previous week's lab
 - Procedures in previous week's lab
 - Post-Lab questions from previous week's lab
- **NO MAKE-UP QUIZZES.** If you miss one, that's the one you drop.

Anatomy of a Lab Report



For every experiment that you perform, you will turn in:

- Pre-lab**
due on the day of the experiment
- Report and discussion questions**
due one week after the experiment is performed
- Post-lab problems**
due one week after the experiment is performed
- Unknown summary sheet (if applicable)**
due one week after the experiment is performed

Before you come to class...



Answer the five pre-lab questions for that week's experiment

Do a preliminary lab write-up what's that?

These should be written into your lab notebook. All lab work for this class goes directly into the lab notebook. Always use a ballpoint pen to write in your notebook.

Once you get to lab...



Carry out the experiment. Write all data directly into your lab notebook in the tables you already prepared. Record your observations too!

Have your TA sign any pages where you have collected data before you leave the lab.

After the ordeal



The rest of the lab write-up consists of

The Lab Report

Data organized in tables

Sample calculation(s)

Graphs (if applicable)

Answers to discussion questions

The Post-Lab questions

The Lab Notebook



Use your laboratory notebook for pre-labs, laboratory reports, and post-labs.

Never tear out the original pages from your notebook. If you made a mistake, cross it with a single line. If there is any unused space left on the page, cross it out with a single diagonal mark.

Tear out and submit *copy* pages for grading.

Be nice to your TA



Write neatly and legibly.

Always start the

PRE-LAB on a new page.

REPORT on a new page.

POST-LAB on a new page.

Donnae forget the insert page!

Turning in pre-labs and lab reports



Must be written on pages torn from your lab notebook. No loose sheets of paper will be accepted.

Pre-labs are due during the first five minutes of lab on the day of the lab.

Lab reports are due during the first five minutes of lab one week after the experiment is performed.

Late reports



Reports that are not turned in during the first five minutes of lab are late and will be penalized 10% per day.

Turn in late reports to your TA, to me, to another 204 TA, or to the stockroom at any time. They will sign and date them and give them to your TA.

If you know you will miss a week



Let me know ASAP via e-mail.

You might be able to make up the lab during another lab period that same week and not fall behind.

Make-Up Labs



There is ONE make-up week at the end of the semester for doing missed labs.

You can not just get the data from someone, you must actually do the experiment to receive credit.

The Double Whammy



IF YOU ARE ABSENT AND MISS A LAB

- 1) You will get a 0 on that week's quiz, and
- 2) you will still have to take the quiz on the lab you missed when you return next time.

If you miss a week...



Check the lecture slides online to see if I said what to expect on the quiz.

Read the introduction to the experiment you missed.

Do the post-lab problems for the experiment you missed.

Today in Lab



Safety orientation and tour of the laboratory

Check-in – make sure you are in the right lab!

Write down your drawer number and combination!

Safety



Your TA will provide a safety orientation in the laboratory.

Wear **SAFETY GOGGLES** at all times while you are in the laboratory.

Dress appropriately. No shorts, no sandals, no bellybuttons, no armpits.

Backpacks go on the wall or in the corner.

No eating, drinking, or chewing gum in the laboratory at any time.

No cell phones. No headphones.

Dispose of all chemical waste in the designated waste containers in the hood.

Broken glass *and broken glass only* goes into the specially marked waste containers.

Land mines



Don't wait till the weekend to start the report.

Don't do the pre-lab during lecture.

Review the material for the quizzes.

Next Week



**Must have combination lock. Must have lab manual.
Must have lab notebook.**

Read and understand the syllabus.

HOMEWORK FOR NEXT TIME:

Next week we will do Experiment 1: *Are the Densities of Coke and Diet Coke Different?*

- 1) Pre-Lab 1 is due at the start of lab.
- 2) Have a preliminary write-up for Experiment 1 completed in your notebook.

And finally...

No quiz next week

Pre-lab question 5: sketch a graph of mass as a function of volume.