

Chemistry 204
Introduction to Chemical Practice



Fall 2006

Dr. Brian Anderson

Why are we here?



- Get ourselves some laboratory experience
- Learn ourselves some chemistry
- Teach ourselves some Excel
- Have ourselves some fun

Your Humble Instructor



Dr. Brian Anderson

WEL 5.220A (512) 475-6729

banderson@cm.utexas.edu

Office Hours: Thursday 9 – 10:am or by appointment

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

Stockroom Wizard: Ethan Greene

Monday Morning

Unique Number	Your Lab	Your TA
54620	4.116	Audrea
54625	4.122	Monica
54630	4.124	Ryan
54635	4.140	Yu-shan

Monday Afternoon



Unique Number	Your Lab	Your TA
54740	4.116	Evelyn
54745	4.122	Christina
54750	4.124	Ryan
54755	4.138	Dan
54760	4.140	Yu-shan

Tuesday Morning



Unique Number	Your Lab	Your TA
54640	4.116	Audrea
54645	4.122	Christina
54650	4.124	Josh
54655	4.138	Si
54660	4.140	Travis

Tuesday Afternoon



Unique Number	Your Lab	Your TA
54765	4.116	Evelyn
54770	4.122	Monica
54775	4.124	Josh
54780	4.138	Dan
54785	4.140	Travis

Required Materials



Lab Manual

Leytner, S. *General Chemistry Lab Manual*; McGraw-Hill Higher Education, Fall 2006 edition

Lab Notebook

Bound with duplicate numbered pages.

Combination Lock

Calculator

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

Grading

- 70% Lab
- 30% Quizzes

90 – A

80 – B

70 – C

60 – D

70% Lab

- Lab Reports
 - Pre-Lab
 - Report
 - Discussion
 - Post-Lab Questions
 - Unknown Summary Sheet
- Safety/Technique Evaluation
- Notebook Grade

Anatomy of a Lab Report



For EVERY experiment that you perform:

- ❑ **Pre-lab**
due on the day of the experiment

- ❑ **Report (includes Discussion Questions)**
due one week after the experiment is performed

- ❑ **Post-lab**
due one week after the experiment is performed

- ❑ **Unknown summary sheet (if applicable)**
due one week after the experiment is performed

30% Quizzes

- 9 Quizzes total
- 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
- Drop lowest quiz grade
- **NO MAKE-UP QUIZZES**

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.

Before you come to class...



Answer the *five Pre-Lab questions* for the experiment.
Tear them out and turn them in when you get to lab.

Complete a *Preliminary Write-Up* in your lab notebook:

- ☐ Your name, section number, TA's name, and date
- ☐ Experiment number and title
- ☐ Objective (in your own words)
- ☐ Equations for chemical reactions (if applicable)
- ☐ Copy blank data tables from the lab manual so they are ready for data collection

After the ordeal



The rest of the lab write-up consists of

The 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.

Always use ink in your notebook.

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.

Have your TA sign your data **IN YOUR NOTEBOOK** before you leave

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.

Be nice to your TA



Write neatly and legibly. If they can't read it, they can't grade it.

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!

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 somebody in the stockroom at any time. They will sign and date them and give them to your TA.

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 lab report during lecture.

Today



Safety orientation and tour of the laboratory

Check-in

Write down your drawer number and combination!

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

Note to self: Show them the pre-lab thing
before they leave.