

Chemistry 204  
Introduction to Chemical Practice



Fall 2007

Dr. Brian Anderson

# Your Humble Instructor



Dr. Brian Anderson

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Office Hours: Wednesday 9:00 – 10:30 or by  
appointment

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

# Monday Morning



Unique Number	Your Lab	Your TA
54815	4.116	Peter Ruymgaart
54820	4.122	Lauren Lytwak
54825	4.124	Ki Youl Yoon
54830	4.140	Jeff Knight

# Monday Afternoon



Unique Number	Your Lab	Your TA
54935	4.116	Tori Kim
54940	4.122	Dr. Patricia Fanning
54945	4.124	David Ulkoski
54950	4.138	Daniel Varnado
54955	4.140	Mei Shen

# Tuesday Morning



Unique Number	Your Lab	Your TA
54835	4.116	Tori Kim
54840	4.122	Lauren Lytwak
54845	4.124	Ki Youl Yoon
54850	4.138	Dr. Patricia Fanning
54855	4.140	Mei Shen

# Tuesday Afternoon

Unique Number	Your Lab	Your TA
54960	4.116	Peter Ruymgaart
54965	4.122	Dr. Patricia Fanning
54970	4.124	David Ulkoski
54975	4.138	Daniel Varnado
54980	4.140	Jeff Knight

# Required Materials



## Lab Manual

*General Chemistry Lab Manual* by Svetlana Leytner,  
Fall 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

90.0 + – A

80.0 – 89.9 – B

70.0 – 79.9 – C

60.0 – 69.9 – 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

# 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)

Conclusions

Answers to discussion questions

The Post-Lab questions

Let's see an example. . .

# 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 the *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. TA's are not allowed to accept loose sheets of paper.

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.

# 30% Quizzes



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

# If you know you will miss a week



Let me know ASAP via e-mail.

Each new experiment starts on Wednesday and ends on Tuesday.

If you let me know of an absence far enough in advance, you might be able to make up the lab earlier in the 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't 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 anything about 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



Learn your TA's name and your unique number.

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 lab.

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 cardboard box waste containers.

# Land mines



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

Don't do the report or pre-lab during lecture.

Study 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.