This Week:

You Should Already Have Read:
- SUSB-001, SUSB-002
- SUPL-001 Analysis of Experimental Reliability

Before Next Lecture, Friday Sept 6

Read:
- SUSB-003 Intro to Lab Measurement
- [Try to] Complete Pre-lab assignments SUSB-003 AND SUPL-001

ALL Reading Assignments are from the Lab Manual CHE133 8th Edition

Today's Pre-Lab Lecture

Where's the action? Will you be safe?
Who's who? What if you're absent?
What do you need to buy? Can you get by with a little help from your friends?
What are the course rules? Do you need a lawyer?
How do you get help? Is there a course Web site?
How do we grade? What will you do in the first lab meeting?

If you are on wait list, wish to add, are registered & wish to change Lab Sections:

1. Stay for this pre-lab LECTURE.
2. Wait to hear from Dr. Akhtar.

This Week:
All Labs & pre-lab Lectures have met

Next Week:
No Labs meet. Friday pre-lab Lecture meets.

- If you are registered, do not drop yourself. That will be de-register you.

If I can't take CHE133 Now

WHEN?

Winter Session
Three week session Monday - Thursday
January 7th - 25th 2014
Two sections Morning & Afternoon

Summer Session (CHE134 also offered Session II)
Late May to Early June Tuesday & Thursday
Two sections Morning & Afternoon

Who's Who - Labs / Lectures

Prof. Jin Wang Wong,
Pre-lab Lectures & Lab Secs 4 & 7

Dr. Mohammad Akhtar,
Coordinator of Laboratories
Lab Secs 2 & 6

Dr. Bradford Tooker,
Lab Secs 3 & 5
**Course Requirements**

Must acquire before second lab meeting:

**CHEMISTRY 133 – Laboratory Manual**
(Publ: Hayden-McNeil) 8th Edition
Remote Entry Pad
(*Turning Point*)

**CHE 133 Supplies:**
- Prescribed: Safety Goggles
- Prescribed: Lab Notebook
- Towel
- Calculator

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**Lab Notebook**

Composition book, Composition book,

**Not Spiral**

**Not Bound,**

Lab notebooks must be used **ONLY**
- to record data collection & analysis
- Not for lab lecture notes
- Not for other subjects

Records must be kept in **INK!**

**Line out errors!**

No White Out
No Erasures

Notebook is for **real-time observations,**
not a diary to be reconstructed from memory.

Should be able to reconstruct data sheets
from notebook entries!

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**What will we do?**

**NOT designed to demonstrate, confirm or verify principles**

**Activities that DO require your developing:**

Knowledge of **Modern Terminology**

Mastery of **Modern Equipment**

Ideas, Concepts
Powers of Observation
Arithmetic Skills

Powers of Deduction
Experimental Skills

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**SYLLABUS**

12 Lab meetings:

1 Check-in

2 - 11 Laboratory measurement
- Spectroscopy
- Chromatography
- Volumetric analysis
- Gravimetric analysis
- Gasometric analysis
- Inorganic synthesis
- Organic synthesis

12 Check-out & Makeup

**10 Exercises**

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**What Contributes to Your Grade?**

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**GRADING, cont’d:**

- **Preliminary exercises** (55):
  - quality of reported observations & analysis (35)
  - neatness of datasheets (5)
  - adherence to safety practices (5)
  - proper use of lab notebooks (5)
  - answers to pre-lab questions (5)

- **Test exercises** (105):
  - the above
  - evidence of proficiency in technique,
    usually measured by **ACCURACY & PRECISION** in determining an unknown (50)

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12
What Help is Available?
Lecture Notes
Flow Charts
Concept Maps
Web Supplements
Lecture Videos
Help Sessions
Office Hours

Flow Charts
Flow charts are intended to help you plan your lab activities by managing your time efficiently. They usually point out alternate sequences of activities than those shown in the manual.

Concept Maps
Concept maps are a device that can help you evaluate your depth of understanding of what you WILL DO in the laboratory (as well as in other courses).

Web
Course Materials accessible at:
http://www.ic.sunysb.edu/Class/che133/
Includes:
- schedule/syllabus
- partial lecture notes for exercises
- flow charts for exercises
- links to full lecture videos
- solutions to some pre-lab problems
- grading policies
- other good stuff

Important Web Pages
Course Web Page:
www.ic.sunysb.edu/Class/che133/
Grading:
www.ic.sunysb.edu/Class/che133/grading133.html
Lecture Grades:
www.ic.sunysb.edu/Class/che133/grading/lecturegrades.html
Make-up Policy:
www.ic.sunysb.edu/Class/che133/policies/make-up.html
Lecture Notes:
www.ic.sunysb.edu/Class/che133/lectures/syllabus133.html

We use Blackboard for:
- important announcements,
- Clicker management, and
- Lecture & Course Grade information

The e-mail address we use to reach you is the one in Blackboard. Make sure it is correct!
Independence

You will often work in pre-assigned groups. Each partner must assume individual responsibility for what is done.

- A common grade is assigned for any common RESULT but not necessarily for overall exercise.
- Each submits an INDIVIDUAL REPORT with independent presentations and analyses of the observations.
- Grades of team members may differ because of data format, clarity or completeness of report

If in doubt about some aspect of the exercise, repeat measurements or observations yourself!

Ethical Standards

Honesty is the best policy

- Plagiarism (presenting others' work as yours)
- Unauthorized collaboration on exercises or quizzes
- Fabrication of data (dry-lab-ing)
- Removing quizzes from quiz room
- Taking a quiz in a section other than yours
- Using a response pad other than your own

are taken seriously and can result in DISMISSAL

If you are unsure about whether a particular practice is permissible,

Ask instructor BEFORE doing it

Safety

Stony Brook takes safety very seriously and has an excellent record.

SAFETY = COMMON SENSE

2.8 Million people/yr involved in household accidents

People don't always exercise common sense

GLASS: Don't cut yourself. Use broom & dustpan available in each lab

HOT OBJECTS: Don't pick them up with bare hands

The substances we use in the course are primarily "household" "chemicals"

Failure to Adhere to the Proper Dress Code may mean you can NOT stay in the Lab and do the assigned Experiment

Can result in a grade of ZERO (zilch nada)

The Stock Room staff does have some Lab Coats "Booties" Haz-Mat suits

But if they can not accommodate you  .................
**REAGENTS:** while most are household materials, handle them in accordance with instructions. Take special note of hazard warnings.

**EYES:**

YOU MUST WEAR SAFETY GOGGLES IN THE LABORATORY AT ALL TIMES!

(State Education Law)

It is your neighbor's technique we are concerned with, not yours.

As part of next week's exercise, you will be asked to read and sign a SAFETY AGREEMENT.

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Bookstore goggles are high quality (comfortable, etc.) but cost ~$20. We recommend these if you will take more labs. If not, cheaper goggles are available, but they must be splash goggles that comply with ANSI Z87.1.