Chemistry 1B: General Chemistry and Quantitative Analysis
Reedley College, Spring 2024
Lecture: M/W 9:30 – 10:50 pm
Lab: M/W 11:00 – 1:50 pm

Instructor: Bill Blanken
Contact info: e-mail bill.blanken@reedleycollege.edu using "Chem1B" in subject line, this helps keep the spam filter from rejecting the email if it comes from Yahoo etc.,
office phone is ext. 3141, Office MSCI 220, Office Hours to be announced on Canvas

Course Objectives: Chemistry 1B is a general course in inorganic chemistry, including qualitative analysis and an introduction to organic chemistry. The objective is to provide students with a broad understanding of chemical change, both theoretical and experimental, and to develop skill at the calculations commonly used in practical chemistry. In addition to chemistry majors, the course material is relevant for those studying physics and engineering, and for pre-professional majors in medicine, veterinary medicine, pharmacy, and dentistry.

Study Advice: it is recommended that the relevant chapters be read before coming to class. It is also advised that 12 - 15 hours per week be devoted to studying, this study time includes completing homework and working on lab experiment prelabs. Chem 1B is very math intensive and you should review the basic algebraic rules for solving equations and the rules applying to logarithms.

Course prerequisites: Chemistry 1A
Required Materials: Text: N. J. Tro, *Chemistry: A Molecular Approach*, 3rd edition, or a similar edition such as the 4th. It is also recommended to purchase the student solution manual for the same edition of textbook.

Safety goggles and a lab coat are required for lab, these can be purchased at the bookstore. You will also need materials to take notes and a scientific calculator. No graphing calculators will be allowed during exams.

Lecture Notes: The ability to listen carefully and to take good lecture notes is an essential college skill. Students should print out the fill-in notes and bring them to class and be prepared to copy examples done on the board and problems from the homework assignments. You should also be prepared to take notes longhand should the lecture make that a necessity.

Homework: there will be at least 1 homework assignment for each chapter, some will have 2. It is essential to your success in this chemistry course that you do all the assigned homework and read the relevant sections in your Textbook. The homework is electronic and is found at www.masteringchemistry.com . You can ask other students for help or get a tutor to help you if you are not understanding the material. Make an attempt at every problem.

Laboratory Work: Lab work will follow as closely as possible the material discussed in the lectures. Each lab experiment will have a prelab, experimentation and data section, and a postlab. **The prelab must be completed before coming to lab.** Non-completion of the prelab before the lab starts will lead to a student being barred from conducting the experiments. Tardiness to lab is not acceptable, it is a violation of lab safety protocol and late students will not be allowed to conduct the experiment. The prelab is worth 30% of the experiment and the lab work and post lab questions are worth 70%. Each lab is scored out of 10 possible points.

The lab portion of the course constitutes 25% of the total grade for chem. 1B. **No make up labs or lab quizzes will be allowed. All labs must be completed and turned in the day of the lab unless otherwise directed.**

Important dates:
MLK Holiday observed: no class, Monday January 15
Last day to drop without a W via Webadvisor Jan 26
Lincoln's Day: no class, Friday February 16
Washington's Day: no class, Monday February 19
Easter Break: no class Monday through Friday, Mar 25 - 29
Final exam Monday May 14 @ 12:00 – 1:50 pm
See the schedule of courses for additional dates and times

Attendance: Attendance in lecture and lab is mandatory. Occasional lecture quizzes may be given without advance warning or scheduling of the quiz. Students can be dropped automatically if missing a combined total of 2 weeks without contacting the instructor and during the first 3 weeks of school if a student misses two lecture or labs without contacting the instructor the student can be dropped. **No make up exams will be provided.** If you miss a lecture you need to read and summarize the chapter in the textbook **before** meeting with the instructor to discuss any problems. Students wishing to be added the course will only be added if space is available without exceeding the course cap. In order to be eligible to be added after the first meeting of the course only students who have attended every meeting since the start of the semester will be added.

Grading and Exams: There will be **4 exams** spaced over the semester covering lecture material during the preceding time period. The 4 exams will be equally weighted and the lowest score will be dropped and the second lowest will be doubled, this of course does not pertain to the final exam. There will also be a **comprehensive final** at the end of the semester covering the entire semester. **No make up exams are provided**.

Laboratory (25%):	**Lab Quizzes 5% - 4 lab quizzes** **Lab reports 15% - lowest 2 lab scores are dropped** **Lab practicals 5% - qualitative analysis**
Lecture Material (75%):	**Exams 40%, 4 lecture exams – lowest exam is dropped** **Comprehensive Final 25%** **Homework Assignments 5%** **Lecture quizzes 5%**

The grading scale to be used is **A** 90-100%, **B** 80-89%, **C** 70-79%, **D** 60-69%, **F** 0-59%

Please be aware of the following rules and guidelines:

- Tardiness or leaving early during lecture or lab sessions is considered disruptive behavior and will result in an absence being recorded. Students will need to sign the sign-in sheet within the first 5 minutes of class. Excessive tardiness to class will result in being locked out of class, this applies to both lecture and lab. Shortly after the beginning of lecture the door will be closed and locked, this is for safety reasons.
- Excessive talking during the lecture will result in the student asked to leave the classroom, the student will also be marked absent for the day. It's disruptive and distracting to students who are trying to learn.
- Chem 1B is a college course and as such lecture and lab discussion will be collegial in nature where freedom of expression is protected and at times lecture content will be applied to current events as they relate to chemistry, science, and student life, one of the goals of this course is to dispense with bad science that claims to be scientific fact.
- Cheating in any way during exams will result in a zero on the exam and reported to the Dean and other appropriate administration officials. This exam will not count as the lowest exam and will not be dropped. **If a cell phone or smart watch is observed during examination the exam will be graded as a zero.**
- Copying of homework, experimental data, and lab reports is considered fraudulent behavior for both the copier and the originator.
- **No extra credit will be given except that which is on the exams.**
- Please turn your cell phones onto "silent buzzer" mode during lectures so as not to disturb the class. Lecture and lab will be video recorded. Do not accept or make phone calls during class. This action could result in expulsion from class.
- Texting during lecture is discouraged, if texting becomes a distraction for the instructor or surrounding students the student who is texting will be asked to leave and be given an absence for the day.
- A cumulative total of 2 weeks of absences could result in being dropped from the course.
- Graphing calculators are not allowed during the exams, a calculator such as a TI-30xIIs is highly recommended

- **In the lab**:
    - Cleanliness in the lab is very important in preventing accidental contamination, at the end of each lab clean work area, points will be deducted from experiment if work area is left messy.
    - **Safety glasses need to be worn whenever somebody is conducting an experiment in the lab.**
    - **Be on time to lab, shortly after the start of lab the door will be closed and locked, tardiness will result in a zero for the lab that day.**
    - No experiments may be conducted without the instructor or teaching assistant present.
    - No horseplay or unauthorized experiments. Do not taste any chemical or smell any chemical directly.
    - No visitors inside the lab. You need to go outside to meet with them.
    - **No food or drinks allowed**.
    - Backpacks should not be left on the floor where others can trip over them.
    - **Closed toed shoes must be worn in the lab at all times.**

- Long hair should be tied back so it will not fall into chemicals or flames.
- If any accident occurs in the lab, inform your instructor immediately and follow safety procedures. (To be discussed during first lab period)
- Clean up any spills promptly (Clean-up procedures will be discussed during first lab period)
- Do not point the open end of a test tube towards anybody
- Turn off flames when working with organic solvents. Dispose of them in waste bottles in the fume hood, not down the sink.
- At the beginning of each lab your instructor will inform you of any special safety precautions and how to dispose of used chemicals. You need to be on time for the lab so that you hear these instructions.
- Do not dispose of matches, paper or solid chemicals in the sink. Use the large evaporating dishes for spent matches.
- Put broken glassware in the "broken glassware bucket", not with the trash.
- Before leaving the lab, wipe the desktop and wash your hands with soap and water.
- No make up labs will be done.
- No iPods or mp3 players to be used during the lab or lecture period.
- Dangerous behavior in the lab will result in the student being asked to leave the lab and given a zero for the lab.
- Lab will start promptly on the hour and the door will be close and late students will not be admitted, this is an issue of lab safety.

If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.