Instructor information:
Instructor: Dr. Tim Causgrove
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Web site: www.tamucc.edu/~tcausgrove/CHEM1312
Office Hours: MWF 11 a.m. – 12 noon, TR 2 p.m. – 3 p.m.

Course Description:
This syllabus covers the General Chemistry 1 Lab. This lab is a standalone lab and does not have to be taken concurrently with Gen Chem 1311 (lecture). As such the course material between lecture and lab may not be related.

Student Learning Outcomes (SLO’s):
This course is designed to give students hands on experience in dealing with chemical concepts. It will introduce the student to the techniques and procedures that are important to the successful practice of experimental general chemistry. At the end of the course the student should understand the technical aspect of chemistry, including developing a proper scientific approach to the performance and interpretation of experiments and experimental data.

Textbook (required):

Supplies (required):
Gen Chem Lab-Blackboard Website: Important information is posted weekly on Blackboard. The website has important information on; schedules, Instructor contact information, lab notebook, periodic table, safety, lab supplementary material, and lab announcements. Students are responsible for the information on Blackboard-visit it often.


Lab Coats and Safety Goggles: A white lab coat and spill proof safety goggles are required.

Required: A black marker (sharpie), small mm/inch ruler and calculator. During midterm and final exams you will not be allowed to use a programmable calculator please bring a simple function calculator to the exams.
Course evaluation:
Lab Grade: The laboratory grade will be based upon attendance, lab technique grade, lab reports, online-web safety course, mid-term exam and final exam. The lab reports will be worth 100 points each and are due at the beginning of the next lab period following the completion of the lab work reported in the lab report (one week). No late lab reports will be accepted. The mid-term exam will be worth 100 points and the final exam will be worth 200 points and both exams will cover experiments that have been done in the lab up to the time of the exam. Each student may drop one lab report grade, but not the mid-term or final exam grade. Final letter grades for the lab will be as follows: A = ≥90%, B = 89-80%, C = 79-70%, D = 69-60%, F = <60%.

LAB GRADE
Lab Reports 9@100 900
Lab Mid-term Exam 1@100 100
Lab Final Exam 1@200 200
Lab Technique Grade 1@100 100
Total Points Possible 1300

Lab Reports: You will prepare a lab report worth 100 points for each experiment you do. Final letter grading for the course will be as follows: A, 90% or above (495 points or above); B, 80-90% (440 to 494 points); C, 70-80% (385 to 439 points); D, 60-70% (330 to 384 points); F, less than 60% (less than 329 points). Rounding is entirely at the discretion to the instructor.

Lab Technique: At the end of the semester, your Instructor/Teaching Assistant will assign you up to 100 points based on your lab technique during the term. Important criteria include being well-prepared, arriving on time, being punctual in starting and finishing experiments on time, neatness in carrying out and cleaning up experiments, being safety conscious and being organized in your work. Since the lecture portion of the lab is extremely important points may be deducted, at the discretion of the instructor, from the lab technique grade for every lab lecture missed. Also any student, who misses the first introductory/safety lab at the start of the semester, may at the discretion of the instructor have points deducted from their lab technique grade.

Mid-term and Final Exam: The questions will cover the background material, techniques, reactions, chemicals, safety information, and chemical concepts.

THE RULES

Eye Safety: When in lab, always wear your safety goggles. A first violation will result in a verbal notification. A second violation will result in a reduction in your "lab technique" grade. A third violation of the safety goggle rule will result in your removal from lab for that day, which will result in a 0 for that lab. If you need a break from wearing the goggles, step out into the hallway and remove them for a few minutes.

Clothing: No open toe shoes, shorts (or short dresses), or mid-drefs (short tops) are allowed in the lab. Please keep your skin covered as protection against chemical spills.

Cleaning and Waste Disposal: Please be neat to avoid spreading chemicals. Always wash your hands just before leaving the lab. Never take samples or glassware out of the lab.
Do not place your coats, backpacks and other personal items on the bench tops or floor in the lab to avoid contamination with chemicals. They should be placed in the cabinets under the benches. During the experiments, you will generate several types of waste, which need to be handled properly. Chemical wastes should be placed in an appropriately marked waste bottle. Do not pour liquid waste down the drain unless instructed by your Instructor. Broken glassware should be placed in the broken glassware box. Never put glass into the trashcans.

Ask for Assistance: If you have any questions about the safety of any procedure, please ask your Instructor/Teaching Assistant before proceeding.

GUIDELINES FOR YOUR LAB REPORTS

Pre-lab: As part of each experiment, we ask that you prepare a pre-lab report in your lab notebook. This section should provide enough specific information on the procedure (e.g., identity and quantity of materials, reaction times, temperatures, etc.) to enable you to perform the experiment. The summary should provide an overview of the experiment showing your understanding of the techniques and concepts being studied. Pre-labs must be written before lab and will be signed by the lab Instructor/Teaching Assistant at the beginning of lab. The Pre-lab must be signed to be graded as part of the Lab Report.

Pre-lab Summary: Summarize on one or two pages: Title of the experiment, purpose of the experiment, technique(s) or reactions(s) being used, and a brief chronological listing of the procedure you will follow in the experiment.

Notebook: All data and observations should be recorded in the lab notebook. The original data and observations from the lab notebook should be copied and submitted along with the Lab Report. The lab Instructor or Teaching Assistant will initial your lab notebook once you have completed the lab experiment and cleaned the lab equipment and your lab space. The notebook pages submitted with the Lab Report must be initialed to receive credit. Torn out original pages from the lab notebook are not to be submitted, only copies will be accepted.

Lab Reports: The full lab report should consist of a pre-lab/notebook (copies), lab report sheets, post lab questions, and pre lab question/assignment. Do not throw away any of your lab reports until the semester is complete. Your graded and initialed lab report can and may be used to resolve any grade disputes, do not throw them away.

Neatness: All lab reports should reflect university standards. Points will be deducted for lab reports with no name on the facing page, misspelled words, torn edges/perforations, and general unprofessional appearance.

GRADING SCHEME FOR LAB REPORTS (100 points total)

The following guidelines will generally be followed in grading lab reports.

- Pre-lab and Notebook 25 pts
- Lab Report Sheets 25 pts
- Post-Lab Questions 25 pts
- Pre-Lab Questions or Assignment 25
Tentative

Make-up policy:

**Students are expected to take each exam at its regularly scheduled time.** Students with a university approved absence (athletics, etc.) MUST contact the instructor well in advance of the scheduled absence to arrange for an early exam. Students who do not arrange to take exams ahead of time will not be eligible for this special consideration. A written excuse from the university department involved or the Office of the Dean of Students is **required**. Students who do not contact the instructor prior to missing an exam do not have the right to a make-up exam. Under extenuating circumstances, with a written letter from the Office of the Dean of Students, a make-up exam may be considered on a case-by-case basis. Such cases are entirely at the discretion of the instructor.

**Tutoring and Test-taking Strategies:** To be successful in this course (and most others) you must have sufficient mathematical ability, develop good note-taking skills, organization skills, study habits, and test-taking strategies from the very beginning. Your instructor and TA’s are available for help. **Do not wait until just before an exam to ask questions.** Should you have test anxiety, stress problems, or need help with study skills, the University Counseling Center (825-2703) also provides a free service.

**Dropping a Class:** I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. **Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class.** Nov. 5 is the last day to drop a class with an automatic grade of “W” this term.

**Disabilities Accomodations:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Driftwood 101. If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

**Academic Advising:** The College of Science and Technology requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. The College's Academic Advising Center is located in Faculty Center 178, and can be reached at 825-6094.

**Grade Appeal Process:** As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible at [http://www.tamu.edu/provost/university_rules/index.html](http://www.tamu.edu/provost/university_rules/index.html). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

**Class standards:**

The student is expected to be on time and attend every class. If absent, it is the responsibility of the student to obtain missed information from a classmate. Missed information includes not only lecture notes, but also any possible information regarding syllabus changes. The student is expected to arrive on time and prepared to begin class. **Before you enter the lecture room, turn off your cell phone.**

**Class conduct:**

All students are expected to follow proper behavior in both the classroom and laboratory and treat other students and the instructor with respect. If a student’s actions or behavior is deemed by the instructor to be disruptive to the class, the students will be asked to leave the class for that day.
Academic Integrity and Honesty:
All students are expected to conform to college-level standards of ethics, academic integrity, and academic honesty. By enrolling in this course, you agree to be bound by the Regulations and Procedures published in the TAMU-CC Student Handbook. Laboratory reports will be turned in as a group; placing a name on a report indicates that the person contributed significantly to that particular report. Omitting a contributing author or including those who did not contribute is dishonest. Likewise, taking material from the laboratory report of another group (or from published sources) is academically dishonest, and will result in a grade of zero for that particular assignment.

Use of Electronic Devices during Exam:
Any use of an electronic device (PDA, Cell Phone, MP3 player, CD player, computer …) during an exam is strictly prohibited. Any use of such a device will be considered an attempt to cheat on the exam and will result in a score of zero on the exam although more severe actions may be considered. Calculators may be allowed on exams when needed, but only for mathematical operations. The use of programmable calculators to store or retrieve information during an exam will be considered an attempt to cheat on the exam. Also, if a calculator is discovered to have saved programs or information that could be used as an unfair advantage on the exam, this will be considered an attempt to cheat on the exam. Programs or operators that aid in mathematical operations such as a quadratic equation calculator may be used.

In choosing to take this course, you are agreeing to abide by the course rules, regulations, and standards. This includes agreeing to be respectful to your instructor and fellow students. Conduct that is disruptive or disrespectful will not be tolerated and is grounds for dismissal from the class. Should you have concerns or questions, you are to discuss them with the instructor as soon as possible. However, you are bound by these rules, regulations, and standards from the first day of class through the duration of the course.
Tentative

Laboratory Schedule:

The schedule below is a preliminary outline of the semester these labs/experiments may change. This is a tentative schedule. It is the student's responsibility to keep up with any changes announced during the lab, posted on the website, or emailed on the list server.

GEN CHEM 1 Lab Schedule

<table>
<thead>
<tr>
<th>Week beginning with</th>
<th>TOPIC</th>
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<tbody>
<tr>
<td>Mon. 8/27</td>
<td>Introduction/Lab Safety</td>
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<tr>
<td>Mon. 8/27</td>
<td>Lab 1: Scientific Observations (w/modifications) (1)</td>
</tr>
<tr>
<td>Mon. 9/3</td>
<td>Labor Day Holiday</td>
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<tr>
<td>Mon. 9/10</td>
<td>Lab 2: PROP:375 Separating Components of a Ternary Mix. (2)</td>
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<tr>
<td>Mon. 9/17</td>
<td>Lab 3: REAC:604 Observing Signs of Chemical Reactions (3)</td>
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<tr>
<td>Mon. 9/24</td>
<td>Lab 4: STOI:386 Determ. Empirical Formula of Copper Chloride (4)</td>
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<tr>
<td>Mon. 10/1</td>
<td>Lab 5: REAC:611 Observing Double Displacement Reactions (5)</td>
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<tr>
<td>Mon. 10/8</td>
<td>Mid-Term Exam</td>
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<td>Mon. 10/15</td>
<td>Lab 6: MISC:468 Radioactivity (8)</td>
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<td>Mon. 10/22</td>
<td>Lab 7: THER:368 Heat of Neutralization (6)</td>
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<tr>
<td>Mon. 10/29</td>
<td>Lab 8: REAC:414 Determ. Comparative Reactivity of Metals (7)</td>
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<td>Mon. 11/5</td>
<td>Lab 9: SYNT:439 Synthesizing Aspirin (9)</td>
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<td>Mon. 11/12</td>
<td>Lab 10: STRC:435 Chemical Models (10)</td>
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<tr>
<td>Mon. 11/19</td>
<td>Thanksgiving Holiday</td>
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<tr>
<td>Mon. 11/26</td>
<td>Final Exam and Equipment Check Out/Cleaning</td>
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Other Important Dates:

- Wednesday, Aug. 29: Last Day to Late Register
- Monday, Sep. 3: Labor Day Holiday
- Friday, Nov. 2: Last day to drop a class with a W grade and keep other classes
- Thu.-Fri., Nov. 22-23: Thanksgiving Break
- Monday, Dec. 3: Last day to drop ALL classes with a W (withdraw from university)
- Saturday, Dec. 15: Fall Commencement