



CHEM 1111: GENERAL CHEMISTRY LABORATORY I

Fall 2016

Course: Chemistry 1111 laboratory sections meet:

Lab Section 03: Monday 6:00 pm – 9:50 pm, STC 310

Lab Section 04: Monday 6:00 pm – 9:50 pm, STC 311

Lab Section 08: Thursday 2:00 pm – 5:50 pm, STC 310

Lab Section 09: Thursday 2:00 pm – 5:50 pm, STC 311

Faculty contact: Olga Savina

Office Location: STC 344

Office Hours: M/T/R 1:00 pm - 2:00 pm or by appointment

Office Phone: 903-468-8765

Email Address: Olga.Savina@tamuc.edu

COURSE INFORMATION

Text/ Manual and other required material:

- **Lab Manual:** Experiments in General Chemistry, 10th Edition, by R.A.D Wentworth, published by Gammon, Houghton Mifflin Company, New York, NY
ISBN: 978-1-111-98942-2 (11th edition is also acceptable, ISBN: 9781305944985)
- **Supplies: Safety Goggles** with side shields and a **Padlock** or a **Combination lock**
- **Appropriate lab attire** (long pants, no open-toed shoes, long hair tied back, no sleeveless shirts)
- **Calculator**
- **Lab coats (optional).**

Course Description: Introduction to methods and techniques of chemical experimentation using quantitative and semi-quantitative procedures to exploring problems in chemistry.

Student Learning Outcomes

By the end of the semester I intend my students to have realized a number of objectives.

- All students must be able to readily identify glassware commonly used in the chemistry laboratory and know how to properly utilize the glassware.
- Learn basic chemistry techniques, such as gravity and suction filtration, measuring mass and volume, operating Bunsen Burner, and so on.
- Learn the safety requirements and methods needed to work in a chemistry laboratory.
- Learn how to safely handle, utilize and dispose of chemicals, how to properly clean glassware at the end of an experiment.
- Learn how to document laboratory experiments, how to maintain a scientific notebook.
- In laboratory experiments, you should be able to both individually and within a team with fellow classmates, conduct laboratory experiments, critically analyze data, draw conclusions

from the data, and clearly and concisely report the observations and conclusions drawn from the laboratory experiments.

- Students will be able to work together toward a shared purpose relevant to the course or discipline with a sense of shared responsibility for meeting that purpose.

Lab Cleanliness

You will be expected to maintain a clean and orderly lab. At the end of every experiment, your bench space and hood space must be cleaned. Any equipment utilized during the experiment must be cleaned as well (balances, etc.). You should ensure that sinks and floors are also clean.

If the lab space and equipment that you utilized during the experiment is left dirty and unorganized, you will be penalized 20% on your post lab.

GRADING

Methods of Student Evaluation and Grading Scale:

Your laboratory grade will be based on 12 experiments with Pre Lab, Data and Post Lab. **The lab report with the lowest score will be dropped.**

Pre Lab	25%
Data and Post Lab	75%

Total 100%

The eleven best lab grades will be used to calculate a student's final grade.

Grading will be based on a standard percentage scale: 100-90 = A; 89-80 = B; 79-70 = C; 69-60 = D; 59-below = F. Incomplete grades may be given only if the student has a current average $\geq 70\%$ and is precluded from completion of the course by a documented illness or family crisis.

COMMUNICATION AND SUPPORT

Communication: If the instructor needs to contact an individual student, it will be via the student's e-mail account. Students should check e-mail frequently, especially after absence. E-mail is the best, easiest and fastest way to communicate with me.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures

The following are directions for preparing for the laboratory experiments.

- 1) Read the experiment carefully before coming to the lab. It is necessary to read and understand the concepts and the procedure involved in the experiment beforehand.
- 2) **Labs can't be done without safety glasses and gloves.**

- 3) Late arrival (more than 20 minutes) will result in forfeit of the grade for that lab.
- 4) Pre lab: Pre Lab assignment is due at the beginning of each laboratory session.
- 5) In lab: Data and report sheet must be neatly completed during the lab period and must be signed off by GA prior to leaving.
- 6) Post Lab reports must be completed by the beginning of the next laboratory period. For example, Monday lab report is normally due on next week Monday.
- 7) Even though you will work in groups, you have to create your own Pre and Post Lab reports and take your own notes during the experiment.
- 8) You will incur a 10% penalty for every day that your lab report is late; thus, if a lab report is more than 10 days late, you will receive a zero for that report.
- 9) There will be absolutely no make-ups for laboratory experiments the following week unless you are allowed to go to different sections of that week's lab. If you miss a laboratory experiment that will be your dropped laboratory report.

Class Attendance Policy: All students are expected to attend class on a regular basis and attendance will be recorded. The Department of Chemistry adheres to the attendance policy set by the University as stated in the most current Undergraduate Catalog. Being late by more than 5 minutes is equivalent to missing a laboratory. Excessive absence is defined as missing more than 10% of the laboratory sessions without excusable reasons. Excessive absence will be reported to the Dean of the College and the Dean of Students. In addition, according to the TAMU-Commerce Procedure A13.02. Good class attendance will be necessary in order to pass the course.

Student Conduct Policy: Students are required to turn off all cell phones, computers and any other electronic devices before entering the class or in the laboratory that might disrupt class or disturb others.

Students are expected to comply with the student code of conduct as stated Student's Guidebook, Policies and Procedures, Conduct. If the student is failed to comply with the code of conduct and being disrespectful, disruptive to the instructor or the students of the class, the instructor reserves the right to dismiss the student from the class on the first offense. A second offense may constitute dismissal from the course with a failing grade.

Nondiscrimination Statement: Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity expression will be maintained

Academic Integrity and Dishonesty Policy: Academic cheating, plagiarism, and other forms of academic misconduct may result in removal of the student from class with a failing grade or may in extreme cases result in suspension or expulsion from the University as described in the Code of Student Conduct section of the Student's Guidebook A&M-Commerce Procedure 13.99.99.R0.10

ADA Statement:

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 have a disability requiring an

accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 132; Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

StudentDisabilityServices@tamuc.edu

Campus Concealed Carry: Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to

((<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

**Tentative Lab Schedule for CHEM 1111
Spring 2016**

Week	Date	Assignment
1	8/29/16-9/1/16	Check in equipment, Safety Lecture, Safety Quiz
2	9/8/16-9/12/16	1C. Some Measurements of Mass and Volume
3	9/15/16-9/19/16	2. Isotopes and Mass Spectrometry
4	9/22/16-9/26/16	7. The Absorption Spectrum of Cobalt (II) Chloride
5	9/29/16-10/3/16	1A. Identification of an Unknown Compound
6	10/6/16-10/10/16	10A. Geometric Isomers
7	10/13/16-10/17/16	8. Solubility Within a Family
8	10/20/16-10/24/16	3A. The Empirical Formula of an Oxide
9	10/27/16-10/31/16	5B. The Decomposition of Potassium Chlorate
10	11/3/16-11/7/16	3B. Hydrates and their Thermal Decompositions
11	11/10/16-11/14/16	4B. Ionic Reactions in Aqueous Solutions
12	11/17/16-11/21/16	9A. The Identity of an Insoluble Precipitate
13	11/24/16	No Labs – Thanksgiving Break
14	11/28/16-12/1/16	6. Thermochemistry and Hess's Law
15	12/5/16-12/8/16	Check Out

Note: Instructor keeps right to make any changes of the syllabus.