



Inorganic Chemistry Laboratory (CHEM 415L)
COURSE SYLLABUS: Spring 2024

Instructor: William Longley, Adjunct Professor

Office Location: Remote

Office Hours: By appointment after 5 pm

University Email Address: William.Longley@tamuc.edu

Lecture Time: Wednesday 6:00 pm – 8:30 pm | Room 123

Lab time: Thursday at 6:00 pm-9:50 pm | Room 313

Required Textbook: "Microscale Inorganic Chemistry," Szafran, Pike, and Singh, John Wiley & Sons. ISBN: 978-0-471-61996-3.

Course: This is the laboratory course that accompanies the CHEM 415 lecture class and involves the preparation and study of several types of inorganic and organometallic compounds. Experiments will be described in the required text, as well as additional handouts if necessary.

Grading: Your laboratory grade will be based on ten experimental write-ups (lab reports) (80%) and lab performance (20%) with a total of 100 points.

You are required to submit lab reports promptly. You will incur a 10% penalty for every day that your lab report is late; thus, if a lab report is ten days late, you will receive a zero for that report. There will be no make-up for laboratory experiments. If you miss a laboratory experiment, that will be your dropped laboratory write-up. If you miss more than one laboratory experiment, you will be assigned a grade of zero for that assignment.

The dishonest scholarship will earn an automatic zero (0) and initiate prosecution to the fullest extent. Incomplete grades may be given only if the student has a current average of $\geq 70\%$ and is precluded from course completion by a documented illness or family crisis.

Lab Cleanliness

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

Suppose the lab space and equipment you utilized during the experiment are dirty and unorganized. In that case, you will be penalized 20% on your lab report and quiz associated with that experiment.

Each laboratory report will consist of the following sections:

- I. *Prelab Section – 40 points (due at the beginning of the laboratory)*

- A. Title – 2 points B. Objective – 3 points C. Procedure – 15 points
 D. Physical Constants/Reagent Data – 10 points E. Safety – 5 points
 F. Stoichiometry/Theory – 5 points
- II. Postlab Section – 60 points (Must be completed by the beginning of the following laboratory period).
- A. Modifications to procedure – 5 points
 B. Observations – 15 points (this section should be your notes of observations that you make DURING the experiment)
 C. Results – 20 points
 D. Discussion – 20 points

Tentative Lab Schedule and Reports:

Week and Experiment

- 1 Watch the lab safety video and take the safety quiz,
 2-3 Preparation of Sodium Thiosulfate and its reactions (handout)
 4-5 Preparation of sodium tetrathionate, Exp. 16A-B
 6 NMR of acetylacetone, Synthesis of Cr(acac)₃, Exp. 22A
 7 No Lab
 8-9 Synthesis of [Cr(en)₃]Cl₃, Exp. 29
 10 Spring break, No Lab
 11 Preparation of iron (II) chloride, Exp. 32
 12-13 Synthesis and Characterization of [Co(NH₃)₅ONO]Cl₂
 and [Co(NH₃)₅NO₂]Cl₂, Handout
 13-15 No Lab

TECHNOLOGY REQUIREMENTS

LMS – myLeo Online – D2L Brightspace

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are the technical requirements.

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all coursework promptly and satisfactorily. Each student needs a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's house, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please get in touch with your Instructor.

Technical Support

If you have technical difficulty with any part of Brightspace, please get in touch with Brightspace Technical Support at 1-877-325-7778. Other support options can be found here: <https://community.brightspace.com/support/s/contactsupport>.

Interaction with Instructor Statement

Communication: If the instructor needs to contact an individual student, it will be via the student's Texas A&M –Commerce email account.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Attendance Policy: All students are expected to attend classes regularly. The Department of Chemistry adheres to the attendance policy set by the University as stated in the most current Undergraduate Catalog. The attendance record is taken from the **daily sign-in sheet**. A student who is more than 5 minutes late or fails to sign the sign-in sheet will be counted as missing a class. **Excessive absence is missing more than 10% of the course without excuses.** Excessive absence will be reported to the Dean of the College and the Dean of Students. In addition, **according to the TAMU-Commerce Procedure 13.99.99.R0.001, the instructor may drop the student from the course if a student has excessive absences.** The instructor will only excuse an absence if the student provides an appropriate document with an excusable reason allowed by the TAMU-Commerce Procedure **13.99.99.R0.001**. Good class attendance will be necessary to pass this course.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University-Specific Procedures Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: [Netiquette](#)
<http://www.albion.com/netiquette/corerules.html>.

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

ADA Statement Students with Disabilities

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 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

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, or gender expression will be maintained.

Campus Concealed Carry Statement

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 the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:
<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

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.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

Students should not attend class when ill or after exposure to anyone with a communicable illness. Communicate such instances directly with your instructor. Faculty will work to support the student getting access to missed content or completing missed assignments.