

Course Information

Chemistry 401: Chemical Science and Profession

Spring 2024

Course: Chemistry 401 will meet each Friday from 2:00-4:00 p.m. in room Science 122 (the room may change some weeks depending on the seminar speaker)

Instructor: Dr. Stephen Starnes

Office: Science 339

Office Hours: MWR: 2:00 pm – 3:30 pm, F: 10:00 am – 11:00 am, or by appointment

Contact Information: 903-886-5389, Stephen.Starnes@tamuc.edu

STUDENT LEARNING OUTCOMES: Specific student learning outcomes from this course include:

1. Introduce students to chemical research, chemical publications, literature reading and searching and to develop student's presentation skills.
2. The course will give students knowledge on how to assimilate scientific information, develop an organized scientific presentation and present it to a broad scientific audience. Students will be able to demonstrate the ability to successfully communicate chemistry research.
3. This course is designated as a Global course tied to the Quality Enhancement Plan (QEP) and as such will contribute to "*Preparing Students for an Interconnected World*". This course will address learning outcome 3 of the QEP whereby the course will impact student's view of themselves as engaged citizens within an interconnected and diverse world through course activities, experiences, and opportunities. A QEP project in this course will be utilized to assess the QEP student-learning outcome for each student. Students are responsible to upload a copy of the project to their ePortfolio in ManeSync.

Assignments and Grading:

1. The student is required to present a 25-minute seminar on a paper from a leading scientific journal such as an *American Chemical Society* journal or an article from a non-ACS journal with instructor approval. The article must have been published between 2018-2021. You should search for a suitable article using the *Web of Knowledge* search engine or *SciFinder Scholar* database found on the TAMU-C library website. The seminar must be organized to fit the allocated 20 minutes. There will be an additional 5 minutes for discussion with the audience at the end of the seminar. The purpose of the presentation is to teach the audience about the **background, methods, results and findings** of the either the article or your research. (65% of the course grade). Seminar presentation grade is based on instructor and student feedback. For every day late in submitting topic for approval or literature survey = minus 5% from the seminar presentation grade.
2. Weekly attendance and participation (25% of the course grade)
3. Students will be required to submit a 1-page literature survey 1 week before the CHEM 401 seminar briefly describing and referencing a body of chemistry literature relevant to their talk. (10 % of the course grade)

A: ≥ 90.0 ; B: 80.0 ~ 89.9; C: 70.0 ~ 79.9; D: 60.0 ~ 69.9; F: <60.0 ; P: ≥ 70.0 ; F: < 70.0

Guidelines for presenting a topic or paper from the literature:

1. Students presenting a 25-minute seminar over literature: *The student must submit the paper to the instructor at least **2 weeks** in advance of the seminar for final approval. Place the article in my mailbox in the chemistry office or email it to Professor Starnes. For every day late in submitting the paper for approval the student will lose 5% credit. The 1-page literature survey over the paper is due 1 week before the presentation.*
2. Instructor and students will evaluate your presentation using the form illustrated on page 5 of this document.

Additional requirements for this course

1. The student will be expected to attend all Chem 401 seminars. Some of the presenters may be outside speakers who hold academic, government, or industrial positions. Attendance at these seminars will expand students' knowledge of current research interests and topics and will help the student be more prepared for their future career.
2. Seminar speakers normally will set aside one hour to talk to students either right before or after the seminar or at lunchtime; all students are required to attend those sessions.

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 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 course work in a timely and satisfactory manner. Each student needs to have 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 home, 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 contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact 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

The best way to communicate with the instructor is via e-mail: stephen.starnes@tamuc.edu or stop by the instructor's office (Science 339) for clarification of course material and expectations.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

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: <https://www.britannica.com/topic/netiquette>

TAMU-C 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>

Students with Disabilities-- 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 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

AI use policy

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

13.99.99.R0.10 Graduate Student Academic Dishonesty

Rubric for Evaluating CHEM 401 Presentations

Seminar Speaker

Date

1. Chemical Literature Skills

Did the Presentation include valuable material related to the concise discussion of previous research literature in the area? Evidence of related valuable material includes references and a clear understanding of previous contributions.

1= The Research Project showed no real evidence of knowledge of previous research literature in the area. 2= The Research Project showed some knowledge of previous research literature in the area but was lacking. 3= The Research Project showed valuable knowledge and documentation of previous research literature in the area and benefited the project. 4= The Research Project showed an exceptional amount of knowledge and documentation of previous research literature in the area and was of great benefit to the project. SCORE _____

2. Communications Skills

Was the Presentation organized and developed in a way to communicate effectively to the general audience?

1= The Research Project was poorly organized and did not effectively communicate with the general audience. 2= The Research Project showed some effective communications with the general audience but was lacking. 3= The Research Project was well organized and effectively communicated its principle ideas to the general audience. 4= The Research Project showed an exceptional organization and degree of communication with the general audience. SCORE _____

3. Presentation Aids

Were audiovisual aids effective in illustrating and clarifying points in the talk?

1= The audiovisual aids were poorly organized and did not effectively communicate with the general audience. 2= The audiovisual aids allowed some effective communication with the general audience but was lacking. 3= The audiovisual aids were well designed and effectively communicated its principle ideas to the general audience. 4= The audiovisual aids were very clear and useful showing exceptional design to aid in communication with the general audience. SCORE _____

4. Understanding

Did the student display an understanding of both the details and the 'big picture' of the research problem?

1= The presenter showed no real evidence of knowledge of the research topic. 2= The presenter showed some knowledge of the research topic but was lacking. 3= The presenter showed good knowledge of the research topic. 4= The presenter showed an exceptional amount of knowledge of the research topic. SCORE _____

General comments

Evaluator's Name: _____ FINAL GRADE: _____ out of 16