

Course Information
Chemistry 501: Chemical Science and Profession
Fall 2014

Course: Chemistry 501 will meet each Friday from 2:00-4:00 p.m. in room Science 127 (the room may change some weeks depending on the seminar speaker)

Instructor: Dr. Stephen Starnes

Office: Science 339

Office Hours: MWF: 2:00-3:00pm, TR: 11 am - noon

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STUDENT LEARNING OUTCOMES: Introduce students to chemical research, chemical publications, literature reading, literature searching and to develop student's presentation skills. 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. Specific student learning outcomes from this course include:

1. Students will be able to demonstrate successful chemistry literature search skills.
2. Students should demonstrate the ability to assimilate and disseminate scientific knowledge effectively.

Assignments and Grading:

1. The student is required to present a 25-minute seminar on a paper from the ***Journal of the American Chemical Society*** published ***2010-2014***. 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 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 either the article or your research. (60% of the course grade) Seminar presentation grade is based on faculty and student feedback. For every day late in submitting topic for approval or literature survey = minus 5% from the seminar presentation grade.
2. Assist undergraduate Chem 401 students with their presentation over Chemistry Education, Chemical Business, Chemical Research, Chemical Industry, etc. in an interconnected world. (10% of the course grade)
3. Attendance (20% of the course grade)
4. Students will be required to submit a 1-page literature survey 1 week before the CHEM 501 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 the instructor's mailbox in the chemistry office. The paper should already have signed approval from one of the chemistry department faculty members prior to submitting*

the paper to the course instructor. The 1-page literature survey over the paper is due 1 week before the presentation. For every day late in submitting either document, the student will lose 5% credit.

2. Faculty and students will evaluate your presentation using the form illustrated on page 3 of this document.

Additional requirements for this course

3. The student will be expected to attend all Chem 501 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.
4. 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.

ATTENDANCE POLICY:

All students are expected to attend classes on a regular basis. 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 kept by roll check. Being more than 5 minutes late for seminars or the discussion sessions with seminar speakers is equivalent to being absent. Excessive absence is defined as missing more than 10% of the classes 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, if a student has excessive absences, the instructor may drop the student from the course. The instructor will only excuse an absence if the student provides, with appropriate documents, an excusable reason allowed by the TAMU-Commerce Procedure A13.02.

STUDENT CONDUCT POLICY:

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment (see Student's Guidebook, Policies and Procedures, Conduct). Any student engaging in disruptive behavior will be dismissed from class on the first offense. A second offense may constitute dismissal from the course with a failing grade.

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 132, Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148, StudentDisabilityServices@tamuc.edu

Rubric for Evaluating CHEM 501 Presentations

Seminar Speaker _____

Date _____

Grading system (score each question on a scale of 1 to 5, 1 = poor, 5 = excellent)

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