Instructor: Dr. Edith Osborne  
Email: edith.osborne@angelo.edu  
Phone: 325-486-6629  
Office: Cav 204A

Office Hours: Office hours will be held virtually by email or by appointment via Blackboard Collaborate (for video or audio conferencing). Collaborate appointments should be requested via email.

Course Information

Course Time and Location
MWF 11:00 am – 11:50 am in Cavness 215

Course Description
A critical review of chemical topics that requires students to integrate the knowledge and skills introduced across the curriculum. The capstone experience requires technical writing and verbal presentation.

Prerequisite and Co-requisite Courses
Must be taken in the spring semester before graduation.

Prerequisite Skills
Accessing Internet websites, using ASU Library resources, and proficiency with Microsoft Word and/or PowerPoint are expectations of CHEM 4301.

Student Learning Outcomes
Upon completion of this course, students will be able to:
- Demonstrate technical, analytical, and communication skills in the area of chemistry and biochemistry.
- Analyze complex chemical problems and draw logical conclusions.
- Evaluate and propose solutions to problems in professional ethics.
Course Objectives
During this course, students will be:
- Learning to apply course material (to improve thinking, problem solving, and decisions)
- Developing skills in expressing oneself orally or in writing
- Learning how to find and use resources for answering questions or solving problems

Course Delivery
This is a blended course with roughly 60% of the course delivered online via Blackboard\(^1\). The class will include online activities, and it will also require attending in class presentations by guest speakers and by class members. Please pay close attention to the course calendar in Blackboard, which may be adjusted during the semester due to the availability of in class presenters.

Required Texts and Materials
No required textbook.

Communication
Faculty will respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

**Written communication via email**: All private communication will be done exclusively through your ASU email address. Check your email and Blackboard frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

Grading

**Evaluation and Grades**
Course grades will be determined as indicated in the table below.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percent of Total Grade</th>
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<tbody>
<tr>
<td>Activities and homework</td>
<td>30%</td>
</tr>
<tr>
<td>Review Article (mid-term paper)</td>
<td>25%</td>
</tr>
<tr>
<td>Mini-Research Proposal (final paper)</td>
<td>25%</td>
</tr>
<tr>
<td>Face to Face Attendance and Participation</td>
<td>10%</td>
</tr>
<tr>
<td>MFT in Chemistry (participation mandatory)</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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</table>
Grading System
Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:
- A ≥ 90%
- B ≥ 80%
- C ≥ 70%
- D ≥ 60%
- F < 60% (Grades are not rounded up)

Assignment and Activity Descriptions
The online activities and guest lectures will be structured to include student participation, and participation will be assessed as part of the course grade.

The scores for the review article and mini-research proposal include weekly progress, the written paper, and the presentation.

The MFT (Major Field Test) points received in this class are for completion of the MFT in Chemistry. The actual points received on the MFT exam will not be included in the Capstone course score. Taking the MFT is mandatory to receive a grade in the class and for graduation.

Late assignments: All assignments will be due at the beginning of class or at a designated time on Blackboard. Late assignments will not be accepted.

Grading corrections: Any discussion of corrections must be made within three weekdays of the return of the assignment.

Courtesy: For in class activities, please be on time, refrain from eating, and turn off cell phones. Attendance will be taken at the beginning of each face to face meeting.

General Policies Related to This Course
All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook
- Angelo State University Catalog
**Academic Integrity**

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject to disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university’s [Statement of Academic Integrity](#).

**Accommodations for Students with Disabilities**

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the [Student Disability Services website](#). The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
dallas.swafford@angelo.edu  
Houston Harte University Center, Room 112

**Incomplete Grade Policy**

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#) for more information.
Plagiarism

Plagiarism is a serious topic covered in ASU’s Academic Integrity policy in the Student Handbook. Plagiarism is the action or practice of taking someone else’s work, idea, etc., and passing it off as one’s own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the ASU Writing Center.

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

Title IX at Angelo State University

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU’s Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.
If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.
For more information about Title IX in general you may visit www.angelo.edu/title-ix.

**Course Schedule**

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
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<tbody>
<tr>
<td>January 13</td>
<td>Types of Sources</td>
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<tr>
<td>January 20</td>
<td>Martin Luther King Jr. Day Holiday – January 20 Library Resources</td>
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<tr>
<td>January 27</td>
<td>Literature Searching and Databases</td>
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<td><strong>January 29: Review Article Topic Due</strong></td>
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<tr>
<td>February 3</td>
<td>Literature Searching and Databases</td>
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<td><strong>February 7: Review Article Outline Due</strong></td>
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<tr>
<td>February 10</td>
<td>Plagiarism Presentations and Powerpoints</td>
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<tr>
<td>February 17</td>
<td><strong>February 17: Submit Review Article for Peer Feedback</strong></td>
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<td>Resumes, CVs, cover letters, job searching, applications</td>
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<td>February 24</td>
<td>February 26: Submit Final Review Article</td>
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<td>March 2</td>
<td>Review Article Seminars</td>
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<td>March 9</td>
<td>Spring break</td>
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<tr>
<td>March 16</td>
<td>Introduction to grants</td>
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<td></td>
<td>Research compliance</td>
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<tr>
<td>March 23</td>
<td>Treatment and Handling of Data</td>
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<td><strong>March 23: Mini-Research Proposal Topic Due</strong></td>
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<tr>
<td>March 30</td>
<td>Figure drawing</td>
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<td>April 6</td>
<td>Logical Arguments</td>
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<td></td>
<td>April 10 – Spring Holiday</td>
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<tr>
<td>April 13</td>
<td>Professional Ethics: Case Studies</td>
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<tr>
<td>April 20</td>
<td><strong>April 20: Mini-Research Proposals Due</strong></td>
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<tr>
<td>April 27</td>
<td>Mini-Research Proposal Talks</td>
</tr>
<tr>
<td>May 4</td>
<td>Major Field Test in Chemistry</td>
</tr>
</tbody>
</table>

1. [https://blackboard.angelo.edu](https://blackboard.angelo.edu)
2. [https://www.angelo.edu/student-handbook/](https://www.angelo.edu/student-handbook/)
3. [https://www.angelo.edu/catalogs/](https://www.angelo.edu/catalogs/)
5. [https://www.angelo.edu/services/disability-services/](https://www.angelo.edu/services/disability-services/)
6. [https://www.angelo.edu/content/files/14197-op-1011-grading-procedures](https://www.angelo.edu/content/files/14197-op-1011-grading-procedures)
8. [https://www.angelo.edu/dept/writing_center/academic_honesty.php](https://www.angelo.edu/dept/writing_center/academic_honesty.php)
9. [https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of](https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)