CHEM 2153
Fundamentals of Organic Chemistry Laboratory
Spring, 2021

Instructor: Mr. Kevin Boudreaux
Email: Kevin.Boudreaux@angelo.edu
Phone: 486-6623
Office: Office: CAV 207B
Office Hours: MWF 9:30-11, TR 8:30-9:30, or by appointment

Course Information

Class Meeting Times

<table>
<thead>
<tr>
<th>Sec</th>
<th>Days</th>
<th>Time</th>
<th>Instructor</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>02Z</td>
<td>M</td>
<td>2:00 pm – 4:50 pm</td>
<td>Mr. Boudreaux</td>
<td>CAV 227</td>
</tr>
<tr>
<td>03Z</td>
<td>T</td>
<td>2:00 pm – 4:50 pm</td>
<td>Mr. Boudreaux</td>
<td>CAV 227</td>
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Required Texts and Materials
Equipment: Safety Goggles

Technology Requirements

Blackboard: The Blackboard course management system will be used to distribute procedures for the labs, and to turn in lab reports and assignments.

Course Description
Required laboratory experiences to supplement Chemistry 2353. Effective fall 2011 credit may not be applied to a major or minor in chemistry.

Co-requisite
Chemistry 2353 or concurrent enrollment.
Laboratory Dress
Beginning on the first day of lab, everyone MUST have approved goggles, long sleeves, long pants, and closed-toed shoes (no sandals, etc.). Anyone not wearing the appropriate attire will not be allowed into lab.

Course Delivery
In order to maintain academic quality while accommodating social distancing needs this semester, in this course, the each day’s lab will be divided into two groups: Group A and Group B. Group A will meet at 2:00 to perform that day’s lab, and Group B will meet at 3:30 to perform the same lab.

In order to maintain contact tracing, the group assignments will not be flexible. For example, if you miss the 2:00 session, you will not be able to make it up by attending the 3:30 session.

Please refer to this Health and Safety web page[^1] for updated information about campus guidelines as they relate to the COVID-19 pandemic.

Communication
I will hold regular face-to-face office hours, with mask and social distancing policies applied. I will try to respond to e-mail or telephone messages within 24 hours during working hours Monday through Friday. If you send me a message on the weekend, I may not be able to respond until Monday. If you e-mail me, make sure to include the course number in your subject line.

Check your e-mail and the Blackboard page for this course frequently for announcements and policy changes. I will be sending out regular announcements via Blackboard; I usually send these announcements out via e-mail as well, but you should also be able to view these messages on the “Announcements” section on Blackboard.

Grading

Evaluation and Grades
This is a one-credit class which is separate from the lecture course; i.e., the lab grade is not included as a part of the lecture course grade. There will be 13 experiments in this course. Each lab report will be worth 100 pts., including 5 points for lab performance and technique. The final grade will be obtained by averaging the scores from the individual labs. (The lowest score will be dropped.)
Grading System
The following grading scale is in use for this course:

A = 90.0-100%
B = 80.0-89.9%
C = 70.0-79.9%
D = 60.0-69.99%
F = 00.0-59.9%

Lab Procedures
The procedures for each experiment will be made available on Blackboard the week before the scheduled date for the lab. It is your responsibility to download and print out the procedure and lab report forms for each lab.

Attendance / Class Participation / Makeup Policy
Labs which have been missed for valid reasons must be made up no later than one week following the absence. (The lowest lab grade will be dropped, so if you miss one lab, that will count as the dropped grade.)

Cleanup Policy
Clean up your bench before leaving; make sure that the gas and water are turned off, and hotplates are unplugged. If the microscale kits are used, these kits must be returned with ALL of the glassware clean and dry. Five points will be deducted from the lab report grade for every piece of glassware which is missing, damaged, or dirty. If the hoods and balances are left dirty at the end of the period, or reagents are left uncapped, lab performance points will be deducted from the entire class!

Withdrawal from the course
Anyone dropping this class by Friday, April 30, 2021 will receive a grade of W. No drops are allowed after this date. If you need to drop the class, it is your responsibility to obtain the instructor’s signature on any drop slip prior to that date.

Student Learning Outcomes
Upon completion of this course, students will be able to:

• Understand how to safely work with chemicals.
• Perform several basic types of chemical purification procedures (distillation, recrystallization, etc).
• Understand the effect that the structure of a compound has on its physical properties.
• Perform several fundamental types of reactions involving organic chemicals.
• Be able to calculate theoretical and percent yields of chemical reactions.
## Course Schedule

<table>
<thead>
<tr>
<th>Week of</th>
<th>Experiment</th>
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</thead>
<tbody>
<tr>
<td>1 1/25</td>
<td>Lab Orientation and Safety Discussion</td>
</tr>
<tr>
<td>2 2/1</td>
<td>Experiment 1: Identification of an Unknown Solid by Melting Range</td>
</tr>
<tr>
<td>3 2/8</td>
<td>Experiment 2: Simple Distillation of an Organic Liquid</td>
</tr>
<tr>
<td>4 2/15</td>
<td>Experiment 3: Steam Distillation of Limonene</td>
</tr>
<tr>
<td>5 2/22</td>
<td>Experiment 4: Recrystallization of Acetanilide</td>
</tr>
<tr>
<td>6 3/1</td>
<td>Experiment 5: Isolation of TrICYristin from Nutmeg</td>
</tr>
<tr>
<td>7 3/8</td>
<td>Experiment 6: Paper Chromatography of Amino Acids</td>
</tr>
<tr>
<td>8 3/15</td>
<td>Experiment 7: Dehydration of Cyclohexanol</td>
</tr>
<tr>
<td>9 3/22</td>
<td>Experiment 8: Nitration of Methyl Benzoate</td>
</tr>
<tr>
<td>10 3/29</td>
<td>Experiment 9: Reduction of Camphor to Isoborneol</td>
</tr>
<tr>
<td>11 4/5</td>
<td>Experiment 10: Preparation of Aspirin</td>
</tr>
<tr>
<td>12 4/12</td>
<td>Experiment 11: Preparation of Soap</td>
</tr>
<tr>
<td>13 4/19</td>
<td>Experiment 12: Polymers — Nylon and Slime</td>
</tr>
<tr>
<td>14 4/26</td>
<td>Experiment 13: Supercritical Carbon Dioxide — Limonene Revisited</td>
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<tr>
<td>15 5/3</td>
<td>Lab Cleanup</td>
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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 Miller, J.D.
- Special Assistant to the President and Title IX Coordinator
- Mayer Administration Building, Room 210
- 325-486-6357
- michelle.boone@angelo.edu

You may also file a report online 24/7 at [www.angelo.edu/incident-form](http://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.

**Required Use of Masks/Facial Coverings by Students**

As a member of the Texas Tech University System, Angelo State University has adopted the mandatory [Facial Covering Policy](http://www.texastech.edu/downloads/ttus-policy-face-coverings.pdf) to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

**Modifications to the Syllabus**

This syllabus, including grade evaluation and course schedules, is subject to modification. In particular, the COVID-19 pandemic may require significant changes in course delivery and content on potentially short notice.

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2. [https://www.angelo.edu/current-students/student-handbook/](https://www.angelo.edu/current-students/student-handbook/)
3. [https://www.angelo.edu/academics/catalog/](https://www.angelo.edu/academics/catalog/)
5. [https://www.angelo.edu/current-students/disability-services/](https://www.angelo.edu/current-students/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/current-students/writing-center/academic_honesty.php](https://www.angelo.edu/current-students/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)