Fundamentals of Organic Chemistry Laboratory – 00511– CHEM 108 Western Kentucky University, Summer 2019

TWR, 12:30 PM-3:30 PM Room OCH 2006

<u>Instructor Information (More information will be provided later.)</u>

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Office Hours (Dr. Yongming Deng)

Thursday 2:00 p.m. – 4:00 p.m. Friday 2:00 p.m. – 3:00 p.m. (For appointments at other times, contact by email.)

Course Information

Lab Time:

TWR, 12:30 PM-3:30 PM, Room 2006 in Ogden College Hall (OCH)

Required Textbook:

Chem Lab: Experiments in General, Organic, and Biochemistry. Stuart & Byrd. 3rd edition. Publisher Kendall/Hunt.

Additional Required:

Goggles. Once the lab starts goggles must be worn appropriately all the time (that means covering the eyes, not the forehead, or the neck)

Students need to bring their lab manual, goggles, and a calculator to class each week.

Description of the Course

CHE 108. Fundamentals of Organic Chemistry Laboratory 1 Credit Hour. (CRN 00511; Subj CHEM)

Prerequisites: CHEM 105 and CHEM 106 (Min Grade: D); Corequisite: CHEM 107

A continuation of CHEM 105 with a major portion of the course devoted to organic chemistry which ends the one-year course for non-science majors. A major portion of the course deals with experiments in organic and biochemistry. It does not count toward a major or minor in chemistry.

Attendance is a REQUIRED part of this lab.

Basic lab safety rules must be followed in this lab. **NO food, drinks, or tobacco products** are permitted in the laboratory. Protective eye and foot gear (**safety goggles and covered shoes**, NO sandals) **MUST BE WORN at all times**. Appropriate clothing is also necessary; **NO-tank tops, exposed midriff shirts or shorts**. Electronic devices, such as **cell phones, are not to be used during lab lecture** and should only be used sparingly when performing experiments (such as when waiting on an experiment).

CHEM 108 Experiments Calendar.

Schedul e	Activities
July 9	No lab
July 10	Check-in and Safety Lecture
July 11	Exp 14: Acids, Bases, pH, Hydrolysis and Buffers
July 16	Exp 15: The Structure of Hydrocarbons
July 17	Exp 16: Properties of Hydrocarbons
July 18	Exp 17: Alcohols
July 23	Exp 18: Aldehydes and Ketones
July 24	Exp 19: Synthesis of Aspirin
July 25	Exp 20: Properties and Preparation of Esters and Buffers
July 30	Exp 22: Detection of Fats, Proteins, and Carbohydrates in Foods
July 31	Exp 23: Analysis of Vitamin C in Foods Juice & Check-out
Aug 1	No lab

Course Policies

Grading

Preliminary Exercise
Quizzes
Lab Reports
Check-out

90 points 180 points 270 points 10 points TOTAL 550 points

Letter grade scale:

Letter grades for the course will be assigned as follows

• Preliminary Exercise = 90 points.

Each lab has a Preliminary Exercise that must be completed prior to coming to lab. These are worth 10 points each. No late work will be accepted.

Pre-lab exercises and reports will only be accepted on the original material from the purchased lab manual at the beginning of the lab period. Remember that you will not be allowed to participate in the lab if you have not completed the pre-laboratory exercise for the week before the meeting time of the class.

Quizzes = 180 points

There will be a quiz before each lab (starting Feb 12, that day will be a safety quiz). These will be worth 20 points each. Quizzes will cover information from pre-lab and lab procedures from lab to be completed that day, information from previous lab, and/or nomenclature. It's important to read the lab and complete the pre-laboratory exercise before coming to lab that day

Lab report = 300 points.

There will be a Report for each lab. These are worth 30 points each. Laboratory report sheets are due at the beginning at the coming next lab period unless otherwise directed by the lab TA. No late work will be accepted. Appropriate units must accompany each value and the appropriate number of significant figures must be given. You must clearly show how you obtained your answers to problems and experimental results. If work is absent or not logically presented, then no credit will be given.

• Check-out = 10 points

It is your responsibility to clean up your lab area, any sink you used, glassware, hood space, etc. Make sure your area of the lab is organized and clean before turning in your report sheet.

Course Policies of Note

General Policies:

- 1. The use of electronic devices during class is strictly prohibited. That includes (but is not limited to) cell phones, iPods/CD players, iPhone's/PDA's, Blackberry, etc.
- 2. It is the student's responsibility to be on time for class.
- 3. University policy does not permit visitors in class.
- 4. University policy does not permit faculty or office staff to report grades by telephone, fax, or email.
- 5. Students in this course are expected to abide by the <u>WKU Student Code of Conduct</u> (https://www.wku.edu/studentconduct/student-code-of-conduct.php)
- 6. The course's content will be provided through Blackboard. Be sure to check your browser in advance to verify that you have the proper setting to be able to access all the posted material. If you need help, you can also contact the IT Helpdesk at 270-745-7000. As much as is possible I will try to post course material that is not covered in the textbook on Blackboard.

Diversity Statements

Integrating a diverse set of experiences is important for a more comprehensive understanding of chemistry and science. It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class.

I would like to create a learning environment for my students that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.) To help accomplish this:

- If you have a name and/or set of pronouns that differ from those that appear in your official WKU records, please let me know!
- If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you. Remember that you can also submit anonymous feedback (which will lead to me making a general announcement to the class, if necessary to address your concerns). If you prefer tospeak with someone outside of the course, Dr. Lynne Holland, Dean of Students and Chief Diversity Officer, is an excellent resource.
- I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that made you feel uncomfortable, please talk to me about it. (Again, anonymous feedback is always an option).

Please contact me (in person or electronically) or submit anonymous feedback if you have any suggestions to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

Emergency Procedures

In the event of a campus closure or other emergency, I will communicate with the class via Blackboard as soon as decisions are made. Should a campus closure and a major assessment coincide, the missed exam will be given on the earliest possible date following the reopening of campus. Details and logistics will be communicated by Blackboard.

Attendance:

Please show up on time, stay the entire class period, and wait until class is dismissed to pack your belongings. Please leave quietly and respectfully if necessary.

Students with disabilities:

Students with disabilities who require accommodations for this course must contact the Office for Student Disability Services in DUC A-200 of the Student Success Center in Downing University Center. The phone number is 745-5004. Please do not request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services

Technology (e.g., phones, computers, tablets)

Use of technology must be approved by the instructor **prior to the start of class.** For example: if you are expecting a truly urgent phone call, you must approach me in person before class and tell me that you may need to leave to take an important call. I will ask you to put your phone on vibrate and sit near the door in case you need to leave. Otherwise, phones must be off before coming to class. Computers and tablets are generally not allowed. Texting, typing, or other distractions are not allowed during class.

Acceptable behavior:

You are expected to prepare for class, interact with your peers, attend class, ask relevant questions, participate in the guided discussion, and be a good citizen. Any other behavior is likely to be unacceptable.

Academic dishonesty and cheating (from the WKU catalog issue 2005 – 2007, page 27): "Students who commit any act of academic dishonesty may receive from the instructor a failing grade in that portion of the course work in which the act was detected or a failing grade in a course without the possibility of withdrawal. The faculty member may also present the case to the Office of the Dean of Student Life for disciplinary sanctions."

Changes to the syllabus

Dr. Deng reserve the right to modify the syllabus throughout the semester. Dr. Deng will inform you of any changes.

Title IX policy

"Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding

WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) and at

https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf and Discrimination and Harassment Policy (#0.2040) at

https://wku.edu/policies/hr_policies/2040_discrimination_harassment_policy.pdf. Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.

Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and **MUST** report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159."