

SURVEY OF CHEMISTRY II

CHEM 1152

SPRING 2020

Instructor	Dr Anne GAQUERE Office 2-119 TLC Phone 678-839-6026 email: agaquere@westga.edu
Class time	T, R 9.30 am – 10.45 am, TLC 1305. Additional meeting time for workshop and laboratory (T 11am-12.50pm), please see class bulletin for your section.
Materials	Required: Knewton access to online homework (~\$40) Textbook: Free open access: https://chem.libretexts.org/Bookshelves/Introductory_Chemistry/Book%3A_The_Basics_of_GOB_Chemistry_(Ball_et_al.) Optional: an old edition of <i>General, Organic and Biological Chemistry</i> , by Karen Timberlake.
Office hours	M: 2.00pm – 3.00pm, W: 9.00am – 12.30pm, 1.45pm - 3.15pm, R: 10.45am–2.45pm

Purpose: This is the second course in a two-semester sequence covering the elementary principles of general, organic and biochemistry for allied health professions and non-science major students. This is the continuation of CHEM1151 in the areas of organic chemistry and biochemistry. Students must have earned a C or higher in CHEM 1151 to attend CHEM 1152, they will be withdrawn from the class if they have not passed CHEM 1151 (or equivalent). This course includes organic structures and functional groups, the chemistry of carbohydrates, lipids, proteins, enzymes, hormones and nucleic acids. A good knowledge of general chemistry (CHEM1151) is assumed. Under the studio format, the class meets for 1 hour and 15 minutes twice a week plus laboratory once a week. In addition workshops will meet an additional 2 hours per week. Laboratory activities will include qualitative and quantitative experiments.

On each examination (closed book), you are supposed to be able to answer questions concerning topics studied previously. Everything that has been taught since the beginning of the class is supposed to be known at any point of time. There will be 4 examinations during the semester plus the final one, which is an American Chemical Society standardized examination. No make-up quizzes or exam will be given. If you miss an examination, the grade obtained on the final examination will replace the missing grade, if you miss two examinations, the grade obtained on the final examination will replace both of them, and so forth...

Learning outcomes

Students who complete this course are expected to develop:

- an understanding of the basic concepts covered in the text content,
- an awareness of the role of organic and biochemistry in everyday life,

- a basic comprehension of some applications of organic and biochemistry to the human body,
- the ability to conduct basic experiments related to the course.

Chapters to be covered

Chapter 11: Introduction to organic chemistry and alkanes.

Chapter 12: Unsaturated hydrocarbons.

Chapter 13: Alcohols, phenols, thiols and ethers.

Chapter 14: Aldehydes, ketones and chiral molecules.

Chapter 15: Carbohydrates.

Chapter 16: Carboxylic acids and esters.

Chapter 17: Lipids.

Chapter 18: Amines and amides.

Chapter 19: Amino acids and proteins.

Chapter 20: Enzymes, Vitamins.

Chapter 21: Nucleic acids and protein synthesis.

Chapter 22: Metabolism and energy.

Study Skills

The best way to make sure that you have thoroughly understood the material covered in class is to read the textbook, work through the appropriate problems, and participate in workshop, on a REGULAR BASIS. Keep track of the end of chapter problems that give you the most difficulty, and try similar problems for additional practice and review. Keep up with the class, and ask questions frequently in workshop and during the office hours.

In-Class Assignments

These assignments consist of all activities that take place during the course of each session. They include learning checks, online exercises, study cases, all computer and laboratory activities. Learning checks and other in class problems will be turned in at the end of each session. All of the results from laboratory activities will be submitted to the instructor at the beginning of the next session (unless otherwise stated), late reports will never be taken into consideration. There will be no makeup sessions. Attendance to class meetings is required and will be recorded. You may earn a zero out of one hundred on the activity of the day you missed without a valid excuse (medical certificate...). Also you are required to attend at least 70% of the labs to be eligible to pass the course. You are required to take the final examination to be eligible to pass the course.

Schedule for the examinations

Examination 1: Thursday January 30th, Chapters 11 – 13.

Examination 2: Thursday, February 27th, Chapters 14 – 16.

The last day to withdraw with a W is Friday February 28th.

Examination 3: Thursday, March 26th, Chapters 17 – 19.

Examination 4: Thursday, April 23rd, Chapters 20-22.

Final Examination: Thursday, Apr 30, 8.00 am (Entire course material).

Every exam will cover material seen in class starting from the first day of class. It will follow the order of the material seen in class and workshop.

You will be given one hour to complete the exam and no exam will be dropped. The exam dates will not be postponed, please make every attempt to be present at these times. No makeup exam will be given. If you miss a test for any reason (illness, death in the family, bad weather conditions, legal events, car problem and so on...), the test score of the exam you missed will be replaced by the score you obtained on the final exam. There will be no exception to this policy. If you happen to miss more than one exam, the final exam score will replace the grade of each exam you missed (for instance, if you missed two exams, the final score will be counted 3 times). Exam will be multiple choice questions only. Please arrive on time, as no extra time will be given if you arrive late. If you arrive consistently late to class, points will be deducted from your final point total (instructor points) as well as for the laboratory activity of the day (-10 points for the first time, -20 points for the second time...). If you leave class early, you will earn a zero for the activity of the day and the instructor points will be lowered as well.

If there is a conflict with the final examination time, you must provide me the written authorization from the Dean of Sciences and Mathematics to move your final examination time. This note should be delivered to me at least two weeks prior to the scheduled final examination time. You are required to take the final examination to be eligible to pass the course. Each examination will be closed book, no cheat sheet will be provided.

Policy on cheating- Academic misconduct

Cheating on a lab report or a quiz or any assignment for the first time will result in a score of zero for that particular paper. If the student is caught cheating a second time, his grade for the entire course will be an F.

Furthermore, if a student is caught cheating on an examination, he will automatically receive a grade F for the entire course. Any infraction will be taken before the disciplinary committee and played out to the fullest extent. Cheating will never be tolerated and I may decide to take additional resolutions if necessary.

Unless a special medical condition (medical certificate required), no student will be allowed the room during an exam. Leaving the room means to be finished with the exam, completed or not. While taking an exam, no calculator, no cell phone, no electronic device of any kind will be permitted. Absolutely nothing else on the desks (no bag or purse or clothing for instance) will be allowed during an exam, besides what the instructor gives you and your pens/pencils/erasers. Students will be placed by the instructor before taking an exam.

Workshop Chemistry

There will be “workshops” conducted in CHEM 1152. In workshops, the large class is broken down into smaller groups. In addition to regularly scheduled lecture and laboratory sessions, it is required to attend a workshop that meets once a week outside of class to discuss chemistry problems and improve your understanding of the material. Each workshop will be scheduled for a two-hour block of time. Please see the workshop syllabus for more details.

SEMESTER GRADES

Your grade will be calculated based on the following formula:

$\% = 0.65 \times (\text{Exams}) + 0.20 \times (\text{Lab Activities, internet assignments, homework, in class problems, practice exams, quizzes, mock exams}) + 0.05 \text{ average of (Instructor Points + Knewton grade)} + 0.10 \times \text{Workshop}$

Note: All exam, quiz and lab activity grades will be based on your ability to DEMONSTRATE full understanding of the material (with full credit given only if you SHOW ALL YOUR WORK, not just for obtaining the correct answer).

Course %	Letter Grade
90% - 100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
0% - 59%	F

Policies

Attendance is mandatory and will be recorded. Instructor points will reflect the attendance record and meaningful participation. Food or beverages are strictly forbidden in this classroom. If a student brings in food or beverage, the item will be thrown away and the student will receive a zero for the activity of the day.

The use of cell phones or other electronic devices is prohibited at any time during class time and will be confiscated for the class period. If you bring a laptop in class, you are allowed to use it only to take notes and nothing else. If using inappropriately a computer during class time, a student will be asked to leave the classroom and will receive a zero for that day.

Lateness will be penalized by deduction from the grade for the lab/activity of the day (10 points for the 1st time, 20 points for the 2nd one...).

Once lab has started (Once any student has started handling chemicals, not necessarily you), safety glasses are required to be worn at all times. If you do not wear your safety glasses (even for a couple of minutes, even if you are not handling chemicals but others are) in order to protect your eyes, you will be expelled from the lab without any appeal and you will receive a grade of zero for the experiment. I will strictly enforce this policy all year long.

If you leave before the end of the lab, you must have all the data proving that you have actually performed the experiment and you must ask me if it is OK for you to leave. I will check from time to time if you have really done everything you are supposed to do during the session (and nothing else), if you are unable to show me the products you are working with, this will be considered as a failure of respecting this policy.

Any failure of respecting this policy will result in you being expelled of the classroom for the day, as well as a grade of zero for that day's activity.

You are expected to wear your goggles at all time during lab, write down the notes from the board on your notebook, solve the in-class problems, cooperate, have a good attitude and leave a clean station. Doing so will not improve your grade, but not doing so will lower it.

Instructor points

This list is not exhaustive, but it will help you get a good idea of what instructor points means. Some points are more important than the other ones and in some cases missing one of them can actually reduce your instructor points to zero.

It includes:

- * Attendance, participation and attitude
- * Do you respect the safety rules?
- * Perform the experiment or study the in-class assignment
- * Work within the time assigned
- * Behavior during class (disruptive behavior...)
- * On time or late for class?
- * Turn in your homework late?
- * Is your homework ready when you step in the lab?
- * Do I have to tell you to wear your goggles repeatedly?
- * Are you doing what you are supposed to do and only what you are supposed to do?
- * How do you behave with me, the teaching assistant and the other students?
- * Disturbing the class by arriving late, talking, using cell phones, laptops (other than for taking notes), will result in a score of zero for the instructor points.
- * Bringing food or beverages.

To ensure a good grade for the instructor points, active participation in the class is mandatory.

Please keep in mind that you will not be allowed to leave the room at your convenience, that cell phones, text messengers and other electronic devices (ipod...) are to be turned off and that you are to be working on your assignment and nothing else.

Extra credit: There is no extra credit for this class.

Communication: The official communication method will be through campus e-mail (MyUWG or D2L), no other form of communication will be accepted as this system only verifies the identity of the interlocutor.

Policy on withdrawals: Undergraduate students may withdraw from courses with a grade of “W” (Withdraw Passing) a maximum of six times during their entire undergraduate enrollment at the University of West Georgia. Students must withdraw from courses during the Withdrawal “W” Period, as noted on the Registrar’s Calendar in The Scoop. Retroactive withdrawals for prior terms are not permitted. The Withdrawal “W” Period typically begins after Drop/Add and closes at mid-term. Grades of “W” do not count toward the grade point average. For complete policy information, please visit the registrar’s website.

University policy

http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf

LAB Calendar - CHEM 1152–Spring 2020

Mon	Tues
January 6 <i>Classes Begin</i>	7 NO LAB
January 13	14 Modeling
January 20 MLK Holiday	21 NO LAB
January 27	28 Alkanes/Alkenes (wet lab)
February 3	4 Alcohol and Phenols
February 10	11 Aldehydes, Ketones, and Carboxylic Acids
February 17	Last Day Withdraw 18 Carbohydrates (dry lab)
February 24	25 Carbohydrates (wet lab)
March 2	3 Esterification
March 9	10 Amines and Amides
March 16	17

SPRING BREAK (NO CLASSES)

March 23	24 Saponification
March 30	31 Amino Acids, Peptides, and Proteins
April 6	7 Enzymes
April 13	14 DNA