



CHEM 1406.101HY
Introductory Chemistry 1
Summer 2024

Tuesdays & Thursdays from 10:00 AM – 12:20 PM in STEAM 346
Online through D2L Brightspace

Instructor Information:

Name: Dr. Luke Turner, PhD
Office: STEAM 325-23
E-mail: lturner16@com.edu
Phone: 832.352.6222

Student hours and location:

Monday	13:00 – 14:30	STEAM 325-23 & Virtual
Tuesday	12:30 – 13:30	STEAM 325-23 & Virtual
Wednesday	13:00 – 14:30	STEAM 325-23 & Virtual
Thursday	12:30 – 13:30	STEAM 325-23 & Virtual
Friday	**Virtual Office Hours by Appointment**	
Saturday	**Virtual Office Hours by Appointment**	
Sunday	**Virtual Office Hours by Appointment**	

Required Textbook/Materials: Links to the online textbook and Aktiv Learning homework system (including enrollment instructions) will be accessible in D2L Brightspace (D2L) at the start of the semester.

Required Textbook: Ball, D. W.; Hill, J. W.; Scott, R. J. [The Basics of General, Organic, and Biological Chemistry](#) [Online]; Saylor Foundation, 2011. [ISBN-13 9781453311097]

Course Description: Catalog course description: <http://tinyurl.com/mr3ckcb6>

Course Requirements: Apart from completing the five (5) scheduled semester exams, other forms of assessment are completely optional, unless otherwise indicated in the D2L Brightspace course page. If you miss an exam, you will be required to take a make-up exam at the end of the semester. Two missed exams will require completion of a comprehensive final exam. Occasionally, pop quizzes may be administered during class and will be included in the overall grade calculation. The scoring of these quizzes is meant to encourage good study habits, note-taking and engagement with class activities. The following table summarizes the *estimated* point totals for the various assessments for the semester.

Assessment	Approximate Point Value	Overall Average	Grade
5 Exams	500 pts	≥89.5%	A
Class Activities*	} 0 - 200 pts	79.5-89.4%	B
Quizzes*		69.5-79.4%	C
Homework*		59.5-69.4%	D
Lab*	100 - 150 pts	<59.5%	F

*Optional unless explicitly indicated in D2L Brightspace.

Other grade assignments:

- **FN** —assigned at the discretion of the instructor in accordance with college policy.
- **I** — “*incomplete*” assigned at the discretion of the instructor in accordance with college policy.
- **W** — “*withdrawal*” assigned in accordance with college policy.

Late Work, Make-Up, and Extra-Credit Policy: Late work will not be accepted, and I am not going to provide make-up assignments. I provide enough “extra-credit” in the form of class activities and homework, so do not approach me at the end of the semester asking for extra credit.

Attendance Policy: Generally, the attendance policies prescribed in the current College Catalog (<http://tinyurl.com/43vjb8sx>) will be applied as far as Census Day reporting is concerned. Additionally, I will take attendance in class AND monitor your engagement with online assignments & content relevant to the course. Failure to attend class for any reason more than (>2) times during the semester will result in your academic withdrawal from the course. Arriving late to class (more than 15 minutes) will be counted as an absence, and upon your 3rd tardy arrival, you will be academically withdrawn from the course. If you can’t make it to class on time, then you will need to retake the course with another instructor that tolerates tardiness. Excessive talking during class will also result in your dismissal from the classroom and will count as an absence. Arriving late and talking during instruction is rude and distracting for the instructor. A combination of (3) infractions of tardiness or disruptive behavior will result in immediate academic withdrawal from the course.

Communicating with your instructor: If you need to reach me, I am available by email (lturner16@com.edu) and phone (call or text me at 832.352.6222). ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means.

Student Learner Outcome	Maps to Core Objective	Assessment(s)
1. Understand the different states of matter and the difference among elements, compounds and mixtures.	Critical Thinking	Selected Exam Questions
2. Understand SI units and use dimensional analysis to perform calculations correctly with proper attention to units.	Critical Thinking Communication Skills	Selected Exam Questions
3. Understand the basic model of the atom.	Critical Thinking	Selected Exam Questions
4. Understand types of chemical bonds and know theories of chemical bonding and the forces that influence molecular shapes.	Critical Thinking	Selected Exam Questions
5. Determine name and formulas of binary molecular compounds, ionic compounds, and acids.	Critical Thinking	Selected Exam Questions
6. Balance chemical equations, identify basic types of chemical reactions and write molecular, total and net-ionic equations.	Empirical and Quantitative Skills	Selected Exam Questions
7. Use the concept of the mole in quantitative chemical calculations and identify the limiting reactants.	Critical Thinking	Selected Exam Questions
8. Understand stoichiometric relationships involved in reactions.	Critical Thinking	Selected Exam Questions
9. Calculate and utilize solution concentration units such as molarity.	Critical Thinking	Selected Exam Questions
10. Understand the gas laws and its application in quantitative problems.	Critical Thinking	Selected Exam Questions
11. Understand the acid/base and pH concept.	Empirical and Quantitative Skills	Selected Exam Questions

Academic Dishonesty: Any incident of academic dishonesty will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty, such as cheating on exams, plagiarism, or collusion, is an extremely serious offense and will result in at least a grade of zero on that assignment and the student will be referred to the Office of Student Conduct for the appropriate disciplinary action. Additionally, administrative withdrawal from the course prior to the withdrawal deadline for the semester or being assigned a grade of F after the withdrawal deadline are possible and solely at the discretion of your instructor.

Student Concerns: If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Ms. Sheena Abernathy, Science Department Chair, at 409-933-8330/sabernathy@com.edu.

Tentative Course outline: The course schedule will be updated weekly in D2L and should be your primary resource for accessing learning materials and class scheduling. A tentative outline is tabulated below:

Week	Topics	Reading & Assignments
1	<ul style="list-style-type: none"> • Course Intro • Aktiv Learning • Measurement and Chemical Calculations 	<ul style="list-style-type: none"> • Syllabus • Aktiv Access Directions • Chapter 1
1	<ul style="list-style-type: none"> • Atomic Theory • Periodic Trends 	<ul style="list-style-type: none"> • Chapter 2 • Aktiv Problem Set
2	<ul style="list-style-type: none"> • Electron Configuration 	<ul style="list-style-type: none"> • Chapter 3 • Aktiv Problem Set • Exam 1
2	<ul style="list-style-type: none"> • Chemical Bonding • Lewis Dot Structures 	<ul style="list-style-type: none"> • Chapter 4 • Aktiv Problem Set
3	<ul style="list-style-type: none"> • Molecular Geometry 	<ul style="list-style-type: none"> • Chapter 5 • Aktiv Problem Set
4	<ul style="list-style-type: none"> • Molecular Geometry • Hybridizations 	<ul style="list-style-type: none"> • Supplemental Reading • Aktiv Problem Set • Exam 2
5	<ul style="list-style-type: none"> • Naming Ionic Compounds • Naming Acids 	<ul style="list-style-type: none"> • Chapter 6 • Aktiv Problem Set
5	<ul style="list-style-type: none"> • Naming Covalent Compounds • Chemical Formulas 	<ul style="list-style-type: none"> • Supplemental Reading • Aktiv Problem Set
6	<ul style="list-style-type: none"> • Moles • Percent Composition 	<ul style="list-style-type: none"> • Chapter 7 • Aktiv Problem Set • Exam 3
7	<ul style="list-style-type: none"> • Stoichiometry and Chemical Reactions 	<ul style="list-style-type: none"> • Chapter 8 • Aktiv Problem Set
8	<ul style="list-style-type: none"> • Stoichiometry and Chemical Reactions • Thermochemistry 	<ul style="list-style-type: none"> • Aktiv Problem Set • Supplemental Reading
8	<ul style="list-style-type: none"> • Thermochemistry 	<ul style="list-style-type: none"> • Aktiv Problem Set • Exam 4
9	<ul style="list-style-type: none"> • Gases 	<ul style="list-style-type: none"> • Chapter 9 • Aktiv Problem Set
9	<ul style="list-style-type: none"> • Molarity • Acids & Bases 	<ul style="list-style-type: none"> • Chapter 10 • Aktiv Problem Set
10	<ul style="list-style-type: none"> • pH & Electrolytes 	<ul style="list-style-type: none"> • Aktiv Problem Set • Exam 5
10	<ul style="list-style-type: none"> • COM FINAL EXAM WEEK 	<ul style="list-style-type: none"> • Make-up Exam

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook https://www.com.edu/student-services/docs/Student_Handbook_2023-2024_v2.pdf. *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.*

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact Kimberly Lachney at 409-933-8919 or klachney@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 5-week session is July 1. The last date to withdraw from the 10-week session is July 30. The last date to withdraw for the 2nd 5-week session is August 2.

FN Grading: The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <https://www.com.edu/community-resource-center/>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.

Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.