

CHEM 1411.102H3 General Chemistry 1 Fall 2024 Thursdays from 11:00 AM – 1:50 PM in STEAM 403 Online through D2L Brightspace

Instructor Information: Luke Turner | <u>lturner16@com.edu</u> | 832-352-6222

. .

...

Q4 1 41

| Student hours and location: | | | |
|-----------------------------|---|------------------------|--|
| Monday | 10:00 - 12:30 | STEAM 325-23 & Virtual | |
| Tuesday | 10:30 - 12:30 | STEAM 325-23 & Virtual | |
| Wednesday | 14:00 - 15:00 | STEAM 325-23 & Virtual | |
| Thursday | 10:30 - 12:30 | STEAM 325-23 & Virtual | |
| Friday Saturday Sunday | **Virtual Office Hours by Appointment** | | |

Required Textbook/Materials: Links to the free online textbook and other open educational resources will be provided in the course materials in D2L Brightspace. Additionally, links to the <u>Aktiv Learning</u> homework system and <u>Beyond Labz</u> virtual laboratory activities (including enrollment instructions) will be accessible in D2L Brightspace (D2L) at the start of the semester.

Required Textbook: Averill, B.; Eldredge, P. <u>General Chemistry: Principles, Patterns and</u> <u>Applications</u> [Online]; Saylor Foundation, 2011. [ISBN-13 9781453322307]

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

Course Requirements: Apart from completing the five (5) scheduled semester exams and 70% of laboratory experiments, other forms of assessment are completely optional, unless otherwise indicated. 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.

| Assessment | | Approximate Point Value | Overall Average | Grade |
|-------------------|---|-------------------------|------------------------|-------|
| 5 Exams | | 500 pts | ≥89.5% | А |
| Class Activities* | ר | | 79.5-89.4% | В |
| Quizzes* | } | 100-150 pts | 69.5-79.4% | С |
| Homework* | J | | 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: 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 3^{rd} 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 (<u>lturner16@com.edu</u>) 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. | Define the fundamental properties of matter. | Critical Thinking | Selected Exam Questions |
| 2. | Classify matter, compounds, and chemical reactions. | Critical Thinking Communication Skills | Selected Exam Questions Presentation |
| 3. | Determine the basic nuclear and electronic structure of atoms. | Critical Thinking | Selected Exam Questions |
| 4. | Identify trends in chemical and physical properties of the elements using the Periodic Table. | Critical Thinking | Selected Exam Questions |
| 5. | Describe the bonding and the shape of simple molecules and ions. | Critical Thinking | Selected Exam Questions |
| 6. | Solve stoichiometric problems. | Empirical and Quantitative Skills | Selected Exam Questions |
| 7. | Write chemical formulas. | Critical Thinking | Selected Exam Questions |
| 8. | Write and balance equations. | Critical Thinking | Selected Exam Questions |
| 9. | Use the rules of nomenclature to name chemical compounds | Critical Thinking | Selected Exam Questions |
| 10. | Define the types and characteristics of chemical reactions. | Critical Thinking | Selected Exam Questions |
| 11. | Use the gas laws and basics of the Kinetic Molecular Theory to solve gas problems. | Empirical and Quantitative Skills | Selected Exam Questions |
| 12. | Determine the role of energy in physical changes and chemical reactions. | Critical Thinking | Selected Exam Questions |
| | Convert units of measure and demonstrate dimensional analysis skills. | Empirical and Quantitative Skills | Selected Exam Questions |
| 14. | Use basic apparatus and apply experimental methodologies used in the chemistry laboratory. | Team Work | Selected Experiment Grades |
| 15. | Demonstrate safe and proper handling of laboratory equipment and chemicals. | Critical Thinking | Selected Experiment Grades |
| 16. | Conduct basic laboratory experiments with proper laboratory techniques. | Team Work | Selected Experiment Grades |
| 17. | Make careful and accurate experimental observations. | Empirical and Quantitative Skills | Selected Experiment Grades |
| | Relate physical observations and measurements to theoretical principles | Empirical and Quantitative Skills | Selected Experiment Grades |
| 19. | Interpret laboratory results and experimental data, and reach logical conclusions. | Critical Thinking | Selected Experiment Grades |
| 20. | Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports. | Communication Skills | Laboratory Report Grade |
| 21. | Design fundamental experiments involving principles of chemistry. | Critical Thinking | Selected Experiment Grades |
| 22. | Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry. | Critical Thinking | Selected Experiment Grades |
| 23. | Demonstrate the ability to work effectively with others. | Team Work | Lab Grade |

Academic Dishonesty: Any incident of academic dishonesty will be dealt with in accordance with college policy and the Student Handbook (<u>http://tinyurl.com/v8yeztjp</u>).

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.

<u>**Tentative</u>** 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:</u>

| Weeks | Topics | Exam Date |
|-------|---|-----------|
| 1-3 | Atomic Structure & Periodic Trends | 08.28.24 |
| 3-6 | Chemical Bonding, Electron Configuration & Lewis Dot Symbols | 09.18.24 |
| 6-9 | Molecular Shapes, Polarity, Formal Charges & Lewis Structures | 10.09.24 |
| 10-13 | Formulas, Equations, Moles & Stoichiometry | 10.30.24 |
| 13-16 | Classifying Reactions & Thermochemistry | 11.20.24 |

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 <u>https://www.com.edu/student-services/docs/Student_Handbook_2024-2025_v2.pdf</u>. *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, Student Accessibility Services Coordinator Phone: 409-933-8919 Email: <u>AccessibilityServices@com.edu</u> Location: COM Doyle Family Administration Building, 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 8-week session is October 2. The last date to withdraw from the 16-week session is November15. The last date to withdraw for the 2nd 8-week session is November 26.

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 <u>https://www.com.edu/community-resource-center/</u>. 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 <u>deanofstudents@com.edu</u> or <u>communityresources@com.edu</u>.

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.