

# CHEM 1411.101H6 General Chemistry 1 Summer 2025

# Wednesdays & Fridays from 9:30 AM – 11:50 AM in STEAM 403 Online through D2L Brightspace

Instructor Information: Luke Turner | <a href="mailto:ltmrer16@com.edu">ltmrer16@com.edu</a> | 409-933-8433

## **Student hours and location:**

| Monday                     | 09:00 - 10:00                           | Virtual (Microsoft Teams) |  |  |
|----------------------------|---|---------------------------|--|--|
| Tuesday                    | 08:00 - 08:30                           | STEAM 325-23 & Virtual    |  |  |
| Wednesday                  | 08:00 - 08:30                           | STEAM 325-23 & Virtual    |  |  |
| Thursday                   | 08:00 - 08:30                           | STEAM 325-23 & Virtual    |  |  |
| Friday   Saturday   Sunday | **Virtual Office Hours by Appointment** |                           |  |  |

**Required Textbook/Materials:** Links to the free online textbooks and other open educational resources will be provided in the course materials folder located in D2L Brightspace. This course consists completely of **OER** (Open Educational Resources) and will NOT *require* a subscription to a homework service, a license to inclusive access, or any bookstore related ancillary materials. I will use a variety of free online resources, including my own Quizlet study sets and pdf worksheets, and these materials will be made available at *ZERO* cost to you.

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

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

Course Requirements: Apart from completing semester exams (~bi-weekly), 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.

| Assessment          | Approximate Point Value      | Overall Average | Grade |
|---------------------|------------------------------|-----------------|-------|
| Semester Exams      | $\sim 400 - 600 \text{ pts}$ | ≥89.5%          | A     |
| Class Activities*   |                              | 79.5-89.4%      | В     |
| Quizzes*            | ~50 pts                      | 69.5-79.4%      | C     |
| Homework*           |                              | 59.5-69.4%      | D     |
| Laboratory Reports* | ~100 pts                     | ≤59.5%          | F     |

<sup>\*</sup>Optional components unless otherwise indicated.

## 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 (<a href="http://tinyurl.com/43vjb8sx">http://tinyurl.com/43vjb8sx</a>) will be applied as far as Census Day reporting is concerned.

Communicating with your instructor: If you need to reach me, I am available by email (<a href="lttrner16@com.edu">lttrner16@com.edu</a>) and phone (409.933.8433). 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<br>Objective                 | Assessment(s)                           |
|-------------------------|---|---|---|
| 1.                      | Define the fundamental properties of matter.  | Critical Thinking                         | Selected Exam Questions                 |
| 2.                      | Classify matter, compounds, and chemical reactions.   | Critical Thinking<br>Communication Skills | Selected Exam Questions<br>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              |
|                         | Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports. | Communication Skills                      | Laboratory Report Grade                 |
|                         | 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 (http://tinyurl.com/v8yeztjp).

**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:

| Weeks | Topics  | Exam Date |
|-------|---|-----------|
| 1-2   | Atomic Structure & Periodic Trends                            | See D2L   |
| 3-4   | Chemical Bonding, Electron Configuration & Lewis Dot Symbols  | See D2L   |
| 5-6   | Molecular Shapes, Polarity, Formal Charges & Lewis Structures | See D2L   |
| 7-8   | Formulas, Equations, Moles & Stoichiometry                    | See D2L   |
| 9-10  | Classifying Reactions & Thermochemistry                       | See D2L   |

### **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 <a href="https://www.com.edu/student-services/docs/Student Handbook 2024-">https://www.com.edu/student-services/docs/Student Handbook 2024-</a>

**2025 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, Student Accessibility Services Coordinator

Phone: 409-933-8919

Email: AccessibilityServices@com.edu

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 5-week session is June 30. The last date to withdraw from the 10-week session is July 29. The last date to withdraw for the 2nd 5-week session is August 1.

**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 <a href="https://www.com.edu/community-resource-center/">https://www.com.edu/community-resource-center/</a>. 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 <a href="maintenance-deanoft-deanoft-deanoft-deanoft-deanoft-dailness-center/">deanoft-

#### **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.