

SYLLABUS  
PART II  
EDISON STATE COMMUNITY COLLEGE  
CHM 110-801US Introduction to Chemistry  
4 CREDIT HOURS

Section/Term: CHM 110-801US

Class Meeting Time: Online

Location: Online

**Required Materials:**

- **Flatworld; Introductory Chemistry** Version 3.0 By David W. Ball (Available in the estore)
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- Computer with Windows 7 or 10, OS X 10.12 – 10.15, Chrome OS, or iOS 10 – 12.1 operating system installed.
- Pencils, pens, Notebook, binder and calculator
- **Mobile app available (do not use for homework or tests)**

Faculty: Kiala Clarke

Masters: Chemistry, Grand Canyon University, 2020

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Faculty Phone: 937.778.7906

Faculty Office Hours: Virtual Mondays/Wednesdays 3:30-5 pm (TEAMS) see blackboard for link.

Faculty Contact: If you have questions or concerns, please contact me via email with the course name and number in the subject line (CHM 110-801US) through your Edison State email. You are welcome to set up an appointment to meet virtually via Teams.  
Free Tutoring though Tutoring Center: Mondays 5-7:00 pm-Link in blackboard.

## WEEKLY SCHEDULE (Topics, Activities, Assignments, Tests)

| Week/Topic Covered                                                                                                                                                                                                                                                                                                                      | Graded Work Due Date                                                                                                                                                                                                                              | Topics Assignments                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <p><u>Week 1</u><br/><b>June 8<sup>th</sup></b></p> <p>Compare and contrast the three states of matter in terms of their properties, the movement of the particles, the distance between the particles, and the attractions between the particles.</p> <p>Apply knowledge of the metric system to perform unit conversion problems.</p> | <p><b>-Practice Quiz-Due 6/14/26</b><br/>(Assignments in red are No/Show assignments complete to stay in the course.)</p> <p><b>-Chapter 1 HW &amp; Participation-Due 6/15/26</b></p> <p><b>-Chapter 2 HW &amp; Participation-Due 6/15/26</b></p> | <ul style="list-style-type: none"> <li>○ Chapter 1 Lecture videos Chapter 1 Reading</li> <li>○ Chapter 1 DSM</li> <li>○ Chapter 1 Homework</li> <li>○ Chapter 1 Participation</li> <li>○ Chapter 2 Lecture videos Chapter 2 Reading</li> <li>○ Chapter 2 DSM</li> <li>○ Chapter 2 Homework</li> <li>○ Chapter 2 Participation</li> <li>○ <b>Lab-Identification of a Substance</b></li> <li>○ Practice Quiz</li> <li>○ Intro Discussion</li> </ul> |
| <p><u>Week 2</u><br/><b>June 15<sup>th</sup></b></p> <p>Apply knowledge of the metric system to perform unit conversion problems.</p> <p>Use knowledge of atomic structure to answer questions related to the electronic structures of atoms and chemical bonding.</p>                                                                  | <p><b>-Chapter 3 HW &amp; Participation-Due 6/22/26</b></p> <p><b>-Chapter 4 HW &amp; Participation-Due 6/22/26</b></p>                                                                                                                           | <ul style="list-style-type: none"> <li>○ Chapter 3 Lecture videos</li> <li>○ Chapter 3 Reading</li> <li>○ Chapter 3 DSM</li> <li>○ Chapter 3 Homework</li> <li>○ Chapter 3 Participation</li> <li>○ Chapter 4 Lecture videos</li> <li>○ Chapter 4 Reading</li> <li>○ Chapter 4 DSM</li> <li>○ Chapter 4 Homework</li> <li>○ Chapter 4 Participation</li> <li>○ <b>Lab-Introduction to Qualitative Lab Techniques</b></li> </ul>                   |

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| <p><u>Week 3</u><br/><b>June 22<sup>nd</sup></b></p> <p>Use the mole concept to solve problems involving chemical formulas and equations.</p>                                                                                                                                                                                | <p><b>-Test-1 (Chapters 1-4)-</b><br/>Due <b>Sunday-6/28/26</b></p> <p><b>-Chapter 5 HW and Participation-Due</b><br/>6/29/26</p>                                                                                                                 | <ul style="list-style-type: none"> <li>○ Chapter 5 Lecture videos</li> <li>○ Chapter 5 Reading</li> <li>○ Chapter 5 DSM</li> <li>○ Chapter 5 Homework</li> <li>○ Chapter 5 Participation</li> <li>○ <b>Lab- Calorimetry</b></li> <li>○ <b>Test-1 Due SUNDAY 11:59 pm</b></li> <li>○</li> </ul>                                                                                                                                  |
| <p><u>Week 4</u><br/><b>June 29<sup>th</sup></b></p> <p>Describe the physical properties of gases and solve problems involving the gas laws.</p>                                                                                                                                                                             | <p><b>-Presentation Recording and Paper #1-Due 7/6/26</b></p> <p><b>-Chapter 6 HW and Participation-Due</b><br/>7/6/26</p>                                                                                                                        | <ul style="list-style-type: none"> <li>○ Chapter 6 Lecture videos</li> <li>○ Chapter 6 Reading</li> <li>○ Chapter 6 DSM</li> <li>○ Chapter 6 Homework</li> <li>○ Chapter 6 Participation</li> <li>○ Presentation/Paper 1</li> <li>○ <b>Lab- Exercise: Formula Writing and Inorganic Nomenclature</b></li> <li>○ <b>Lab- Chemical Models and Practice Exercises: Balancing Equations, Stoichiometry Calculations</b></li> </ul>  |
| <p><u>Week 5</u><br/><b>July 6<sup>th</sup>, 2026</b></p> <p>Compare and contrast the three states of matter in terms of their properties, the movement of the particles, the distance between the particles, and the attractions between the particles.</p> <p>Describe kinetic and potential energy and solve problems</p> | <p><b>-Test 2 (Chapters 6 &amp; 7)-</b><br/>Due 7/12/2026 Sunday.</p> <p><b>Chapter 8 HW and Participation-Due</b><br/>7/13/26</p> <p><b>-Chapter 9 HW and Participation-Due</b><br/>7/13/26</p> <p><b>- Labs 1 to 6 turn-Due</b><br/>7/13/26</p> | <ul style="list-style-type: none"> <li>○ Chapter 8 Lecture videos</li> <li>○ Chapter 8 Reading</li> <li>○ Chapter 8 DSM</li> <li>○ Chapter 8 Homework</li> <li>○ Chapter 8 Participation</li> <li>○ Chapter 9 Lecture videos</li> <li>○ Chapter 9 Reading</li> <li>○ Chapter 9 DSM</li> <li>○ Chapter 9 Homework</li> <li>○ Chapter 9 Participation</li> <li>○ <b>Lab- Determination of the Formula of a Hydrate</b></li> </ul> |

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| <p>involving energy changes during heating, cooling, and changes of state.</p> <p>Use knowledge of atomic structure to answer questions related to the electronic structures of atoms and chemical bonding</p>                                                                                                            |                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                         |
| <p>Week 6<br/>July 13<sup>th</sup>, 2026</p> <p>Describe the factors which influence the formation of solutions and the solubility of solutes and apply the properties of liquid mixtures to answer questions related to specific examples.</p> <p>Solve problems involving molarity and dilution of molar solutions.</p> | <p><b>-Test 3 (Chapters 8 &amp; 9)-</b><br/>Due <b>Sunday 7/19/26</b></p> <p><b>-Chapter 11 HW and Participation-Due</b><br/>7/20/26</p>              | <ul style="list-style-type: none"> <li>○ Chapter 11 Lecture videos</li> <li>○ Chapter 11 Reading</li> <li>○ Chapter 11 DSM</li> <li>○ Chapter 11 Homework</li> <li>○ Chapter 11 Participation</li> <li>○ <b>Lab</b>-Charles' Law</li> <li>○ <b>Lab</b>- Analysis of a Stomach Antacid Tablet</li> <li>○ <b>Test 3-Due Sunday by 11:59 pm</b></li> </ul> |
| <p>Week 7<br/>July 20<sup>th</sup>, 2026</p> <p>Define the terms electrolyte, acid, base, and neutralization, and apply this</p>                                                                                                                                                                                          | <p><b>-Test 4 (Chapters 11 &amp; 12)-Due 7/26/26</b></p> <p><b>-Chapter 12-Due 7/27/26</b></p> <p><b>-Lab turn in #2-Labs 7 to 10-Due 7/27/26</b></p> | <ul style="list-style-type: none"> <li>○ Chapter 12 Lecture videos</li> <li>○ Chapter 12 Reading</li> <li>○ Chapter 12 DSM</li> <li>○ Chapter 12 Homework</li> <li>○ Chapter 12 Participation</li> <li>○ Labs 7 to 10 Due</li> <li>○ Presentation/Paper 2</li> <li>○ Test 4</li> </ul>                                                                  |

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| <p>information to writing chemical equations to describe their behavior.</p> <p>Use the concepts of pH and buffers to answer questions related to specific acid-base examples.</p> | <p><b>-Recorded Presentation/Paper #2-</b><br/>Due 7/27/26</p>                  |  |
| <p>Week 8<br/>July 27<sup>th</sup>, 2026</p>                                                                                                                                       | <p><b>Final Exam</b>-Due 7/31/26<br/>@ 11:59 pm.<br/>( All chapter covered)</p> |  |

## EVALUATION METHODS

There will be four tests and a final exam during the term that will be administered online through blackboard. Each test will be worth 100 points. A index card will be allowed for tests but is otherwise closed book. The final exam will be worth 100 points, and it will be comprehensive. The date of each test is listed above and on the course calendar. **Tests cannot be made up.** Homework will be done in Flatworld. Each student is required to write a lab report for each listed experiment in the lab folder. Each lab report will be worth 10 points Each student is required to prepare written and oral reports over current topics in science. You will write and record presentations on two topics. Further information about these reports is in the research project folder. 50 points total will be assigned for these reports and 50 points for the recording. Participation is done weekly for 10 points each. They are discussion board postings.

## EVALUATION PROCEDURES:

|                                                       |            |
|-------------------------------------------------------|------------|
| Participation (10 pts each)                           | 100        |
| Tests (#1-3 70 pts each; #4 85 pts)                   | 295        |
| Final Exam (100 pts)                                  | 100        |
| Homework (FlatWorld 20 pts each)                      | 200        |
| Lab Reports (10-20 pts each)                          | 130        |
| <u>Written &amp; Oral Presentations (50 pts each)</u> | <u>200</u> |

|              |          |
|--------------|----------|
| Total Points | 1025 pts |
|--------------|----------|

## FINAL GRADE STANDARDS

No final grades will be rounded.

| <u>GRADE</u> | <u>PERCENTAGES</u> |
|--------------|--------------------|
| A            | 90 - 100           |
| B            | 80 - 89            |
| C            | 70 - 79            |
| D            | 60 - 69            |
| F            | Below 60           |

## TESTING YOUR FAITH ACT POLICY

Edison State Community College is committed to providing an environment respectful of students' beliefs. Students are permitted to be absent for up to 3 days each semester based on their faith, religion, or spiritual belief system with no academic penalty. Students must complete the Testing Your Faith Act Accommodations Form, <https://www.edisonohio.edu/Registration-and-Records/> and provide a copy to their individual faculty within 14 days from the start of the course. The entire policy can be found in the student handbook at <http://stage.edisonohio.edu/digipub/StudentHandbook/index.html>.