

# Louisiana Delta Community College

## Academic Affairs Master Syllabus

**Course Name:** CHEMISTRY II  
**Course Number:** CHEM 120

**Credit Lecture hours:** 3      **Credit Lab Hours:** 0      **Credit Hours:** 3

**Textbook, Author, and Publisher:** To be provided by College Campus

**Instructor Information:** To be provided by College Campus

**Class Location:** To be provided by College Campus

**Course Description:** This course includes the fundamental laws, modern theories, and principles of chemistry with emphasis on reaction kinetics and equilibrium, thermodynamics, electrochemistry, nuclear chemistry, and the chemistry of metals and nonmetals. This course is intended for science and engineering curricula.

**Prerequisites:** Completion of CHEM 110 with a C or better

**Co-requisites:** None

### **Learning Outcomes:**

On completion of this course, the student will be able to:

1. Explain the relationship of several factors on reaction rates, such as concentration, temperature, and catalyst
2. Determine equilibrium constants for a variety of reactions
3. Identify the key differences in strong/weak acids/bases
4. Explain the chemical reactions that are occurring in the Earth's Atmosphere, Oceans, and Fresh Water
5. Predict the spontaneity of chemical reactions based on the First, Second, and Third Laws of thermodynamics
6. Explain how voltaic cells work in terms of Oxidation Reduction Reactions
7. Predict patterns in nuclear stability and decay
8. Explain the differences in Nuclear Fission and Fusion
9. Identify properties/preparations/reactions of Hydrogen, Halogens, Nobel Gases, and of groups 4A, 5A, and 6A
10. Explain metallic bonding and identify physical properties of metals
11. Identify major classes of organic compounds

**Assessment Measures:** To be provided by the College Campus.

### **Library Resource Center:**

The Delta Library and Learning Resource Center is committed to providing quality information and learning resources and services, including technology, in supporting the overall mission of Delta Community College and its commitment to lifelong learning.

**Special Accommodations:**

Louisiana Delta Community College complies with Section 504 of the Rehabilitation Act, as well as the Americans with Disabilities Act. Students with disabilities who attend the Monroe campus may make a request by contacting the Director of Counseling and Disability Services (See College Directory for contact information.) at the beginning of each semester. Reasonable accommodations will be attempted for students with documented disabilities. If an impairment is identified later in the semester, a non-retroactive accommodation plan will be developed. Students at satellite campuses should contact the Coordinator of Student Affairs at their particular campus.

**Title IX:**

Louisiana Delta Community College is committed to protecting the rights of students, which includes compliance with Title IX requirements. As such, the institution and members of our community will not tolerate the offenses of dating violence, domestic violence, sexual assault, and stalking. Students with Title IX concerns should contact the College's Title IX Coordinator (See College Directory for contact information.) Students are required to complete Sexual Assault Awareness and Prevention Online Training. Access to this online course will be sent out through the Delta email account.

**Student Code of Conduct:**

Louisiana Delta Community College encourages an environment of academic integrity and mutual respect. Students should read and follow both academic and behavioral expectations identified in the Code of Student Conduct that can be found online at [www.ladelta.edu](http://www.ladelta.edu). Students are expected to act with integrity, respect the rights of others, and conduct themselves in a professional manner. The Honor Code prohibits academic misconduct such as cheating, engaging in unauthorized collaboration, and plagiarism. Violations of the Code of Student Conduct may result in disciplinary action as provided in the Code. Incidents are reported through the online Student Conduct system.