



Course Prefix/Number/Title: Chem. 115, Introductory Chemistry

Number of Credits: 4

Course Description: CHEM 115 introduces foundational chemical concepts in a clear and approachable way, covering topics such as measurements, atomic structure, chemical bonding, reactions, energy, and the behavior of matter. Designed specifically for non-science majors, this course emphasizes real-world applications and critical thinking to help students make meaningful connections between chemistry and everyday life.

Pre-/Co-requisites: ASC 93

Course Objectives:

1. Students will gain an understanding of the nature of atoms, molecules, elements, chemical bonds and compounds.
2. Students will gain a basic understanding of the changes that take place in chemical reactions. Ability to perform simple stoichiometry calculations.
3. Students will gain an understanding of the phases of matter.
4. Students will gain an understanding and use of scientific methods
5. Students will gain an elementary understanding of the nature of acids and bases.

Instructor: Neysha Tirado-Class, Ph.D.

Office: NSC 112

Office Hours: Contact instructor to set-up meeting

Phone: 813-340-1929

Email: neysha.tirado@dakotacollege.edu

Textbook(s): OpenStax ([Chemistry 2e](#))

Course Requirements: Grading: Grades will be based on total points using the following percentage system: 100-90, A; 89-80, B; 79-70, C; 69-60, D; <60, F. Exams, research paper, and homework quizzes, and lab reports will be used to determine the final grade.

IMPORTANT! Any grievances concerning graded material must be addressed within one week from the time the material is returned to the student.

Exams (3) (100 pts each)	300pts
Lab Reports (12) (25 pts. Each)	300pts
Discussion Posts (2) (50pts each)	100pts
Total	700pts

Exams: There will be three exams throughout the semester. Exams may include a combination of multiple choice, short-answer/essay, fill-in-the-blank, and problem-solving questions. Makeup exams will not be permitted unless prior arrangements have been made. If you anticipate an absence due to a school-related activity or a family event, you must contact the instructor ahead of time and schedule your exam before your departure.

Lecture: Weekly PowerPoint presentations will form the foundation of the course content. Quiz and exam questions will be drawn from lecture material. Note that not all assigned readings will be covered in lecture, but all assigned readings are considered exam material. If you encounter any difficult or unclear topics in the readings, please don't hesitate to ask questions—your engagement is encouraged.

Laboratory: The lab portion of this course allows you to apply lecture concepts through hands-on or paper-based activities. Labs will be completed at home using Science Interactive Lab Kit (Bookstore purchase) and some common household items. Clear instructions will be provided each week within the Lab Portal to guide your lab work and reinforce your understanding of key topics. Both Lab lessons and evaluation must be completed for each lab.

Discussion Posts: There will be two discussion assignments during the semester. To receive full credit, students must post an original thread in response to the prompt and reply to at least two classmate's post in a meaningful way. These assignments are designed to promote engagement with the course material and encourage peer interaction. Specific instructions and grading details will be provided within each discussion assignment.

Tentative Course Outline:

Week	Chapter and Reading Assignment	Lab Topic
1	Chapter #1 & Attendance Quiz	Lab 1
2	Chapter #2-3	Lab 2
3	Chapter #4	Lab 3
4	First Exam Review	Lab 4 & Discussion Post 1
5	Exam 1 & Chapter #5	Lab 5
6	Chapter #6	Lab 6
7	Chapter #7	Lab 7
8	Chapter #8-9	Lab 8
9	Review & Exam 2	Lab 9
10	Ch. 10 and 11	Lab 10
11	Chapter #12	Lab 11
12	Chapter #13-14	Lab 12 & Discussion Post 2
13	Chapter #20	
14	Chapter #21	
15	Final Exam Review	
16	Final Exam (Weeks 10-15)	

General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s): General Education Competency #1: Identifies the interrelationships between humans and their environment.

Learning Outcomes #1- Applies scientific methods of inquiry

Learning Outcomes #3- Applies scientific information in everyday life

Relationship to Campus Focus: This course addresses the campus theme by incorporating the role that chemistry plays in our everyday life and the impact it has on our natural world. In addition students will use technology to conduct labs as well as study how technology can be used in chemistry. The course will address the role of chemistry in their everyday life as well as in their future.

Classroom Policies: make-up for missed exams will not be allowed unless prior arrangements have been made. If you must be absent for a school related or family event, you are expected to make prior arrangements and take the exam prior to the event. If you are given permission to take a late exam you will have 48 hours to make it up.

Student Email Policy: Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

Academic Integrity: According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

Disabilities or Special Needs: Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX: Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.