Course Prefix/Number/Title: CHEM 115 Introductory Chemistry

**Number of Credits: 4** 

## **Course Description:**

Chemistry is the central science and is important in understanding other fields such as biology, engineering, geology, physics and medicine to name a few. In Introduction to Chemistry we will be learning what chemistry is and study the interactions matter undergoes. We will see how chemistry can be fascinating and answer many questions on how we can use chemistry to our benefit.

# **Course Objectives:**

- 1. To develop and understand the basic theories and concepts of inorganic chemistry.
- 2. To understand how scientists use chemistry to solve problems.
- 3. To develop problem solving skills.
- 4. To see how chemistry occurs all around us.

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Textbooks: Timberlake & Timberlake, Basic Chemistry w/ Mastering Chemistry 3rd ed., Pearson Education, Inc., 2011

Course Co-Requirements: Math 102

Mastering Chemistry: You will be doing all your assignments, quizzes, and studying on Mastering Chemistry. Under Resources on the Moodle homepage you will need to read the Mastering Chemistry Registration Instructions. You will need to enter your student access code found in your Mastering Chemistry student access kit that came with your book package. Once you log into the site you first need to go through the Introduction to Mastering Chemistry. It will show you how to use the site and how to enter in your answers to the assignment. You must complete this for a grade. You need to go to the study area to go through the learning goals, power points, videos and animations, review questions and quizzes to help study for the graded quiz.

**Assignments:** You will be doing your assignments in Mastering Chemistry. The first few assignments are called tutorial questions. They will help explain the chapter material. Take the time to learn from those questions. Except for the first two chapters, you should expect to spend around two hours doing each chapter assignment. The assignments have to be **completed and submitted** by the due date. You may turn in your assignments late (only up to one week late) but 10% of the

grade will be deduct for each day it is turned in late. No exceptions. I will not accept anything past one week after the due date. **Don't wait till the last minute to do your work.** 

Quizzes: There will be a quiz after each chapter. The quizzes are timed, so always have a calculator, scratch paper and a writing utensil ready. When taking the quiz, click on the first question, after that one is completed then you click on continued. The graded quiz is not the same quiz that you find under study area. Those are to help you prepare for the graded quiz.

**Bonus Quizzes:** After each chapter quiz there will be a bonus question on the Chemist of the Week. These bonus quizzes are on the Moodle homepage under each chapter. All you need to do is read through the Chemist of the Week. You can earn up to 17 extra credit points. Those points will go toward your assignment grade. These are easy points to earn.

Tests: There will be a comprehensive midterm and final exam. Both must be taken with a proctor. There is a proctor form, found under resources that must be completed before the end of the first month of the semester.

Lab: There will be a total of 12 labs. Even though you will not be performing labs in an actually laboratory, you must watch the lab safety video and do the assignment. You will be doing all labs at home. A lab kit will be sent to you. After the last lab you must return the lab kit to the Mr. Larry Brooks at Dakota College at Bottineau / 105 Simrall Blvd. / Bottineau, ND 58318. You will NOT be given a grade until the lab kit is returned to the college, instead you will be given an incomplete. If the lab kit is not returned after one month that grade will be changed to a F. Under resources you will find a list of supplies that you will need to complete the home labs. You must submit pictures of every lab you do at home. You will get no credit for the lab if no picture is submitted. The lab picture must be submitted with the report and on time. If the lab is turned on time but the picture is late, you will be deducted 10% of the grade.

#### **Course Content:**

- 1. Measurement
- 2. States of Matter
- 3. Structure
- 4. Ionic and Covalent Bonds
- 5. Chemical Formulas
- 6. Chemical Reactions and Equations
- 7. Solutions

- 8. Acids and Base
- 9. Stoichiometry

### **Course Evaluation:**

Grades are based on assignments, quizzes, exams, and laboratory exercises.

Assignments: 25% of total grade	A = 89.5 - 100% of the total
points	
Quizzes: 30% of total grade	B = 79.5 - <89.5% of the total
points	
Exams: 20% of total grade	C = 69.5 - <79.5% of the total
points	
Labs: 25% of total grade	D = 59.5 - <69.5% of the total
points	
	F = <59.5% of the total points

General Education Goals/Objectives: To make chemistry interesting and understandable for the beginning student and to acquire problem solving skills.

**Relationship to Campus Theme:** "Nature, Technology and Beyond" We will break down nature into its simplest form and learn how we can use chemistry to develop new technology and beyond.

### **Online Class Policies:**

- Regular participation is expected.
- The student is expected to complete all assignments and quizzes in a timely manner; assignments and quizzes must be completed in the order that they are presented.
- I will accept late assignments or labs up to one week after the deadline but you will only receive 50% of the grade. You will NOT be able to make up quizzes after the close date!
- The student is responsible for having a working computer at all times. The student should have a back-up plan, in case their computer fails to work. Not having a computer that works, is not an excuse for turning in late material or missing quizzes. You must have a working computer at all times.
- The student is expected to communicate with other students and instructor via course mail when it is necessary.
- The student will complete each assignment before taking the related quiz.
- Each quiz will be completed online and has a set time limit.
- Once a quiz is opened, it must be completed. It is up to students to be sure they are ready to take a quiz before entering it.
- The midterm and final must be taken with a proctor who is approved ahead of time.
- The student must do each lab, including the lab questions. They must submit a picture of their lab along with their lab report.

# **Academic Integrity:**

The academic community is operated on the basis of honesty, integrity and fair play. It is the expectation that all students, as members of the college community, adhere to the highest levels of academic integrity. This means that: -Students are responsible for submitting their own work. Student's work must not be plagiarized. -Students must not cooperate on written examinations or work together on evaluated assignments or labs. Cheating will result in a zero for that assignment, lab, quiz, or exam or you may be given a zero for the course! You may not do your assignments, labs, quizzes, or exams together, that is considered cheating! You must do your own work.

### **Disabilities and Special Needs:**

If you have a disability for which you need accommodation, contact the Learning Center to request disability support services: phone 701-228-5477 or toll-free 1-888-918-5623. Also let me know how I may help in any way. If you have a technical problem, contact the Distance Education office by calling 1-701-228-5479 or 1-888-918-5623 (toll free)

\*\*This syllabus is subject to change\*\*