

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. There will also be a virtual laboratory session.

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.

Instructor: Dr. Sherri Borowicz

Virtual Online Office Hours: To be announced

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Textbooks: Timberlake & Timberlake, Basic Chemistry w/ Mastering Chemistry 3rd ed., Pearson Education, Inc., 2011
Woodfield, Brian F., Virtual ChemLab: General Chemistry, Student Lab Manual / Workbook and CD v. 2.5, Pearson Education, Inc., 2006

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. **The course ID: MCBOROWICZ22435.** You will need to enter your student ID. 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 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. There is also an etext that is the same as your text book.

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 these 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. If you start working on your assignment in Mastering Chemistry at 11:50 p.m. on the final due date, it will kick you out at 11:59 p.m. and you will not be allowed to finish your assignment. **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 by Friday, September 10th.

Lab: There will be a total of 14 labs. Most of the labs are due on a Thursday Even though you will not be performing labs in an actual laboratory, you must watch the lab safety video and do the assignment. You will be doing some labs at home. Under resources you will find a list of supplies that you will need to complete the home labs. **You must submit pictures of the labs you do at home.** You will get no credit for the lab if no picture is submitted.

Lab questions: There will be questions with each lab that are due after each lab. Lab reports for labs at home will need to be turned in on time.

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 Bases
9. Stoichiometry
10. Organic Chemistry
11. Biochemistry

Course Evaluation:

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

Assignments: 30%, (10 points come from the glossary entry)

Quizzes: 25%

Exams: 20%

Labs: 25%

90%=A, 80%=B, 70%=C, 60%=D, less than 60% = F

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 read the *How to Pass Chemistry* found under resources.
- 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 not accept late assignments or labs and you will not be able to make up quizzes after the close date!

- The student is expected to communicate with other students and instructor via course mail or virtual office hours 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.

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 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!

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).