INDIAN RIVER STATE COLLEGE
INTRODUCTORY CHEMISTRY
FALL 2016
PRUITT CAMPUS

Course Prefix: CHM 1020 (Ref. Num. 219505)

Instructor: Dr. Larisa Eads

Office: Science Center, N-313, Main Campus

Telephone: *772-462-7888*

E-mail Address: leads@irsc.edu

Lecture: MW, 9:30 AM- 10:45 AM, S- 206

Office Hours: Available during Posted Office Hours.

Required Text: *Introductory Chemistry: Concepts and Critical Thinking*, 7th edition, Charles H. Corwin

Additional Requirement: Scientific Calculator; must have scientific notation (EE or EXP key) and common log (LOG key) and natural log (LN key) capability.

Suggested Software: MasteringChemistry, You will need a registration code to access MasteringChemistry.

Course Description: CHM 1020 is an introductory chemistry course and therefore will cover basic chemical concepts that are fundamental to all areas of chemistry. These concepts include the use and manipulation of measurements and units common to chemistry, the structure of atoms and their general properties, and the bonding of atoms to form molecules. How molecules interact with one another as well as the role energy plays in chemical reactions will also be covered. Finally an introduction to gases, solutions and acid/base chemistry will also be presented. CHM 1020 is designed for students who have had no prior chemistry or are non-science majors. Please note that this course is not considered to be adequate preparation for CHM 2210 (Organic Chemistry). Persons who wish to take CHM 2210 should take the CHM 1045-1046 series.

Learning Objectives: Using the scientific method, critically analyze and evaluate scientific data and utilize analytical skills to solve problems relevant to chemistry.

- Use the scientific method to solve problems.
- Use different systems of measurement and be able to convert between the systems.

- Report all numerical answers to the correct number of significant figures.
- Use the periodic table to classify the elements as well as determine various properties and characteristics of the elements.
- Describe the structure of atoms.
- Describe the bonding and structure of compounds.
- Describe the behavior of ionic compounds in aqueous solutions.
- Describe the basic properties of acids and bases.
- Write balanced chemical equations.
- Predict the products of combustion, metathesis, single-replacement, and acid/base reactions.
- Perform stoichiometric calculations involving atoms, compounds, and chemical reactions.
- Explain the behavior of gases in terms of gas laws and kinetic molecular theory.

Attendance: You are **responsible** for all material covered in lecture. For this reason attendance at all lectures is expected. Absences will lower your comprehension of the material and could be a major contributor to a difficulty with the course material. Attendance will be taken during each class period. Attendance is mandatory if indicated by your financial aid or granting agency.

Class Conduct: Classes will begin and end on time. To minimize disruptions to others, students must be on time and plan to stay until class is dismissed. A student will be allowed three tardies. Each subsequent time a student is late will result in a three percentage point deduction from the next exam. **ALL cell phones, pagers, etc. MUST BE PLACED ON SILANCE OR VIBRATE MODE prior to the start of class. Use of a cell phone is not permitted during the lecture period (this includes stepping outside of the class room to use the phone.)**

Cheating/Plagiarism: Anyone caught cheating or plagiarizing will get an immediate F for the course and will be reported to the Vice President of Student Affairs.

Grades: Determination of the final grade for the course will be based on 4 unit exams and a comprehensive final exam. The distribution will be as follows:

Unit Exams	75 %
Final Exam	25 %

The final letter grade will be based on the following general scale:

A 90-100
B 80-89
C 70-79
D 60-69
F <60

Unit Exams: There will be 4 unit exams given as shown on the schedule. The lowest of the 4 exams will be dropped. There will be no make-up exams. **Note: The dropped score is in case you get ill on the test day or are unable to take the exam for any other reason.**

Students must be on time for exams. Any student more than 10 min. late will not be allowed to take the exam.

Homework Problems: At the end of each chapter I will recommend that you work certain problems. These problems are not collected or graded. **Tutoring is available at the Academic Support Center, ASC J-212, asc-info@irsc.edu, 772- 336-6215. Also, online tutoring, go to Blackboard, Smarthinking.com**

Withdrawal from the Course: The last day to withdraw from the course with a **"W" is Oct. 31** After this date an instructor's withdrawal will only be given for extraordinary circumstances (illness, military commitment, etc.). Please note that **a failing grade is not considered sufficient reason for an instructor's withdrawal. Before withdrawal, check with Financial Aid. Occasionally, when a student attempts to withdraw from the course, the student is not withdrawn, but in fact remains in the course. Therefore, if a student withdrawals from the course, they need to contact the instructor within two days of withdrawing to confirm that the withdrawal did in fact get posted. If the student dose not contact the instructor and receive confirmation that the withdrawal was posted, then at the end of the semester, if the student finds they are still registered in the course, the instructor will not issue an instructor's withdrawal. If the student receives an Incomplete grade, the student needs an incomplete form signed by the instructor.**

Final Exam: The final exam will be given on the last day of the class meeting. **The final exam cannot be made up**.

Note:
In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act of 1990, professional disability specialists and support staff at the Student Disability Services (SDS) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities. IRSC offers many disability resources at on-campus labs. Students who wish to request an accommodation for a documented disability should contact the SDS at 772-462-7782 or 772-462-7808.

Non-Discrimination and Non-Harassment Policy
Indian River State College, is committed to maintaining a fair and respectful employment and educational environment. In accordance with federal, state and local equal opportunity laws, Indian River State College prohibits discrimination on the basis of race, color, national origin, ethnicity, sex, age disability, sexual orientation, marital status, veteran status, or genetic information.

Statement Concerning Student Issues. If you are experiencing difficulty in your course, your first obligation is to work directly with your instructor to resolve the issue. If you unable to settle your concerns with the assistance of your instructor, you can contact the Department of Physical Science, Chair Mr. Michael Jones, phone: 772-462-7855, E-mail: mjones@irsc.edu, who will assist you or advice you about contacting the Assistant Dean of Mathematics, Natural Sciences and Performing Arts, Dr. Paul Horton, phone: 772-462-7520, E-mail: phorton@irsc.edu or Vice President of Academic Affairs, Ed.D. Marta Cronin, phone: 772-462-4702, E –mail: mcronin@irsc.edu

TENTATIVE LECTURE SCHEDULE

Chapter	Subject
1	Introduction to Chemistry Prerequisite Science Skills
2	The Metric System
3	Matter and Energy
4	Models of the Atom
5	The Periodic Table
6	Language of Chemistry
7	Chemical Reaction
8	The Mole Concept
9	Chemical Equation Calculations
10	Gases
12	Chemical Bonding
13	Solutions
14	Acids and Bases

EXAM SCHEDULE:

Ex. 1 September 14
Ex. 2 October 5
Ex. 3 October 31
Ex. 4 November 21
Final Exam December 5