INDIAN RIVER STATE COLLEGE
CHEMISTRY 1046
MAIN CAMPUS
Spring 2019

Course Title: General Chemistry II

Course Prefix: CHM 1046 (CHM1046-20192-11-M-001)

Instructor: Dr. Larisa Eads

Office: Science Center, N-313

Telephone: 772-462-7888

E-mail Address: leads@irsc.edu

Lecture: MW, 9:30AM- 10:45 AM, N-118

Office Hours: Available During Posted Office Hours (office hours posted on Blackboard)

Required Text: *Chemistry: The Central Science, 14th Edition,* Brown & LeMay.
Also, Modified Mastering Chemistry. You will need a registration code to access Modified Mastering Chemistry on Blackboard.

Also Required: Scientific Calculator; must have scientific notation (EE or EXP key) and common log (LOG key) and natural log (LN key) capability.
Note: If a programmable calculator is used on the exam, the memory must be cleared by the instructor prior to the start of the exam.

Additional Available Text: Chemistry: The Central Science, 14 th Edition, Solutions Manual.

Course Description: CHM 1046 is the second semester of a two-course sequence covering general chemistry. This course will cover the basic principles of intermolecular interactions, solutions, thermodynamics, kinetics, and reaction equilibrium as well as present an introduction to electrochemistry and nuclear chemistry. 3 credits.
Prerequisites: CHM 1045, CHM 1045 Lab.
Corequisites: CHM 1046 Lab

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

- Relate intermolecular attractions to various physical properties of compounds.
- Calculate the energy changes involved in the formation of solutions.
- Describe the various colligative properties of solutions.

- Calculate the boiling point, freezing point, vapor pressure, and osmotic pressure of solutions of various solute/solvent compositions.
- Describe the various factors that affect the rate of a reaction.
- Explain the role of a catalyst in a chemical reaction.
- Describe the role of enthalpy, entropy, and Gibbs free energy in determining the spontaneity of a reaction.
- Introduction to Electrochemistry

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, texting, 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 classroom 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.

Withdrawal from the Course: The last day to withdraw from the course with a **"W" is Mar.25** 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. Grades of "Incomplete"- if not changed within 4-months will be become an "F".

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,
Main Campus ASC L-215,
asc-info@irsc.edu 772-462-7625
Also, online tutoring, go to Blackboard, Smarthinking.com

Grades: Determination of the final grade for the course will be based on 4 unit exams, Comprehensive Final Exam and Mastering Chemistry assignments. Distribution will be as follows:

Unit Exams	67.5%
Final Exam	22.5%
Mastering Chemistry assignments	10%

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.

Final Exam: The final exam will be given on the last day of class meeting. In order to pass this course student must to complete the Final Exam at the end of this semester. **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. Anthony Dribben, phone: 772-462-7509, E-mail: adribben@irsc.edu or Vice President of Academic Affairs, Dr. Heather J. Belmont, phone: 772-462-7216, E –mail: hbelmont@irsc.edu.

TENTATIVE LECTURE SCHEDULE

(We will generally spend between 1 and 3 hours lecture time on each chapter.)

Chapter	Topic
11	Liquids and Intermolecular Forces
13	Properties of Solutions
14	Chemical Kinetics
15	Chemical Equilibrium
16	Acids – Base Equilibria
17	Additional Aspects of Aqueous Equilibria
19	Chemical Thermodynamics
20	Electrochemistry

EXAM SCHEDULE

Exam 1 January 28, Exam 2 February 20
Exam 3 March 25, Exam 4 April 15

Final Exam: April 22