Pensacola State College Section Syllabus
CHM 1020 Introduction to College Chemistry

Instructor: Dr. Domenick Grasso
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Credits: 3 cc

Course Description: Introduces the field of chemistry. Emphasizes the language, fundamental concepts, and problem solving in chemistry.

Offered: FA, SP, SU.

Distribution: Meets AA General Education Core, Natural Sciences (Physical Sciences) requirement.

Textbooks:
Chemistry 2e open stax, hard cover; 9781947172623; 2; Open Stax; 2019Chemistry 2e open stax, paperback; Flowers, Pauleta; 9781593995282; 2; Open Stax; 2019

Supplemental Materials: None

Special Requirements:
Student Expectations—Students enrolled in this course can expect the following: 1) clearly identified course objectives; 2) productive class meetings; 3) a positive learning environment; 4) opportunities for appropriate student participation; 5) effective instruction; 6) positive and appropriate interactions; 7) assistance with meeting course objectives during and beyond class hours; 8) evaluation of student performance and appropriate and timely feedback; and 9) clear and well-organized instruction.

General Education Student Learning Outcomes:

Critical Thinking: The student analyzes, evaluates, and, if necessary, challenges the validity of ideas, principles, or data in order to develop informed opinions, probable predictions, or defensible conclusions.

Scientific and Mathematical Literacy: The student properly identifies and applies scientific or mathematical principles and methods.

Information Literacy: The student effectively locates, evaluates, and applies information from a variety of sources.

Course Learning Outcomes:

1. Utilize metric units of measure for problem solving and describing chemical reactions.

2. Identify forms of energy and know units in which energy is measured.
3. Describe the properties of matter and the classes which occur: mixtures, pure chemical substances, compounds, elements.
4. Identify chemical symbols for about 50 important elements.
5. Understand the nature of changes which occur in matter and their classification as chemical or physical.
6. Know about the development of atomic theory and understand the arrangement of protons, neutrons, and electrons in atoms, and the relative size and mass of atoms.
7. Understand how the arrangement of electrons controls the chemical properties of atoms.
8. Understand the arrangement of Periodic Table of Elements and predict the properties of elements based on their location in the table.
9. Discuss the principles of chemical bonding (covalent and ionic) and be able to show electron arrangements in ionic and molecular compounds.
10. Write correct formulas for named compounds.
11. Utilize chemical equations to describe changes and be able to write balanced chemical equations.
12. Apply the concept of a mole to calculate quantities of substances involved in chemical changes.
13. Describe basic characteristics of acids and bases.

Methods of Evaluation:

To receive maximum credit you must show all of your work on paper with corresponding units. Numerical answers must have the correct number of significant digits. There will be 14 homework (HW) assignments throughout the course which are worth 10 points each. There will be 5 exams throughout the course which are worth 100 points each. The lowest HW and exam will be dropped. Total points in this course will be 530.

Grade Point Average:

A ≥ 90 %, B+ ≥ 85 %, B ≥ 80 %, C+ ≥ 75 %, C ≥ 70 %, D+ ≥ 65 %, D ≥ 60 %, F < 60 %

Student Email Accounts:

Pensacola State College provides an institutional email account to all students enrolled in courses for credit. PirateMail is the official method of communication, and students must use Piratemail when communicating with the College. In cases where companion software is used for a particular class, email may be exchanged between instructor and student using the companion software.

Flexibility:

It is the intention of the instructor to accomplish the objectives specified in the course syllabus. However, circumstances may arise which prohibit the fulfilling of this endeavor. Therefore, this syllabus is subject to change. When possible, students will be notified of any change in advance of its occurrence.

ADA Statement:

Students with a disability that falls under the Americans with Disability Act or Section 504 of the Rehabilitation Act, it is the responsibility of the student to notify Student Resource Center for ADA Services to discuss any special needs or equipment necessary to accomplish the requirements for this course. Upon completion of registration with the Student Resource Center for ADA Services office, specific arrangements can be discussed with the instructor.

Equity Statement:

Pensacola State College does not discriminate against any person on the basis of race, color, national origin, sex, disability, age, ethnicity, religion, marital status, pregnancy, sexual orientation, gender identity or genetic information in its programs, activities, and employment. For inquiries regarding the College's nondiscrimination policies, contact the Executive Director of Institutional Equity and Student Conduct, 1000 College Blvd., Building 5, Pensacola, Florida 32504, (850) 484-1759.

Security Statement:

Pensacola State College is committed to encouraging all members of the College community to be proactive in personal safety measures. In case of emergency, students should ensure that they are aware of the building exit closest to each of their classrooms, as well as all alternative building exits in case circumstances require using a different route.

Emergency Statement:

In the case of severe weather or other emergency, the College administration maintains communication with appropriate state and local agencies and makes a determination regarding the cancellation of classes. Notices of cancellation will be made through the College's PSC Alert system and on the College's website.