

Global Learning Semesters

Course Syllabus

Course: CHEM-101 Basic Chemistry

Department: Biomedical Sciences

Host Institution: University of Nicosia, Nicosia, Cyprus



| Course Summary | | |
|---------------------|-----------------|--------------------------|
| Course Code | Course Title | Recommended Credit Hours |
| CHEM-101 | Basic Chemistry | 3 |
| Semester Offered | Contact Hours | Prerequisites |
| Please contact us | 42-45 | None |
| Department | Level of Course | Language of Instruction |
| Biomedical Sciences | Lower Division | English |

Course Description

The purpose of this course is to give students an understanding of the basic principles of chemistry and to raise fundamental questions that will strengthen their interest in life science. Using lectures, study exercises in class, home assignments and examples of applications of chemistry in the real world the student will be taught the properties of the most common chemical elements and compounds, about chemical energy and how do these relate to the living organism, industry and to the environment. The students will also be taught about the structure of atoms, how atoms combine to form molecules, about chemical solutions, chemical methods of purification and chemical reactions.

Prerequisites

None

Topic Areas

1. The chemical elements; The atom and its structure.
2. Chemical bonds, chemical compounds, chemical reactions.
3. Physical and chemical properties of elements and compounds.
4. Chemical Energy.
5. Acids and Bases.
6. The chemistry of the atmosphere.
7. The chemistry of the earth.
8. The man use of metals and nonmetals.
9. Carbon and organic compounds.
10. Chemical Industry.
11. Chemical pollution.
12. Water purification.
13. Cells and batteries.
14. Chemistry and the living cells.

Readings and Resources

Required Textbook

- Complete Chemistry by Rose Marie Gallagher and Paul Ingram, Oxford University Press, 2000. ISBN: 0-19-914799-X.