

Sample Course Description

Faculty: Faculty of Natural Sciences

Study program: Bachelor in Biology-Chemistry

Course Title: Inorganic Chemistry

Course Credits:3

Language of Instruction:Albania

Course Description: Inorganic Chemistry is organised in lectures, (seminars), and laboratories. The subject to study involves a lot of topics that include: general, physical, chemical characteristics of chemical elements, occurrence and recovery, chemical reactions. The module is enriched with exercises and problems. The scientific nature of the module is followed by experiments in laboratory. The module deals with modern concepts that will be further developed along the years by transmitting quality.

Course Goals: chemical reactions, occurrence, laboratory, industry, general characteristics, physical properties, chemical properties, applications.

Course Requirements:

Lectures are organized, students do follow every theme presentation, there are seminars to attend, the diversity of engagement enriches the course frequently, evaluation is valued.

Grading:

This course is 100 points to be estimated on regular time.

Course Schedule:

Lectures Lecture Nr.1 Group I A of elements Alkali-metals Natrium, kalium, lithiumi, rubidium, cesium. General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.2 Group IIA of elements Earth-alkali metals Berilium, magnezium, calcium, stroncium, barium General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.3 Group IIIA of elements Boron, aluminium and their components, galiumi, indiumi, taliumi. General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.4 Group IVA of elements Carbon, silicium,

germanium, tin, lead General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.5 Group VA of elements Nitrogen, phosphorus, arsenic, antimony, bismuth. General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.6 Group VIA of elements, chalcogens Sulfur, selenium, tellur, polonium. General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.7 Group VIIA of elements, halogens Fluorine, chlorine, bromine, iodine General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.8 Group VIIIA of elements, noble gases Argon, neon, xenon General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.9 Group IIIB, IVB, VB of elements Explanation and reading only General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.10 Group VIIB, VIIIB of elements General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.11 Group IB of elements General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.12 Group IIB of elements General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Lecture Nr.13 Group VIB of elements General Characteristics, physical and chemical properties, occurrence, recovery, chemical reactions, applications in practice. Laboratories Lab.1 -Hydrogen Physical and chemical properties, recovery, reactions, activity, procedure, experiment. Lab.2 -Oxygen and ozone Physical and chemical properties, recovery, reactions, activity, procedure, experiment. Lab.3 -Group IA Alkaline metals Physical and chemical properties, recovery, reactions, activity, procedure, experiment. Lab.4 -Group IIA Earth-alkaline metals Physical and chemical properties, recovery, reactions, activity, procedure, experiment. Lab.5 -Group III A Boron and aluminium Physical and chemical properties, recovery, reactions, activity, procedure, experiment. Lab.6 -Group IVA Carbon and silicon Physical and chemical properties, recovery, reactions, activity, procedure, experiment. Lab.7 - Group IB Copper and Ag Physical and chemical properties, recovery, reactions, activity, procedure, experiment.