

University of Pretoria Yearbook 2025

General chemistry 117 (CMY 117)

Qualification Undergraduate

Faculty Faculty of Natural and Agricultural Sciences

Module credits 16.00

NQF Level 05

Programmes BEd in Senior Phase and Further Education and Training Teaching

BSc in Computer Science

Bachelor of Dietetics [BDietetics]

BSc in Applied Mathematics

BSc in Biochemistry

BSc in Biotechnology

BSc in Chemistry

BSc in Chemistry 4-year programme

BSc in Ecology

BSc in Ecology 4-year programme

BSc in Entomology

BSc in Environmental and Engineering Geology

BSc in Food Management specialising in Culinary Science

BSc in Food Management specialising in Nutrition

BSc in Food Science

BSc in Genetics

BSc in Geography option Geography and Environmental Science

BSc in Geology

BSc in Geology 4-year programme

BSc in Human Genetics

BSc in Human Physiology

BSc in Human Physiology 4-year programme

BSc in Human Physiology, Genetics and Psychology

BSc in Mathematics

BSc in Mathematics 4-year programme

BSc in Medical Sciences

BSc in Meteorology

BSc in Meteorology 4-year programme

BSc in Microbiology

BSc in Physics

BSc in Physics 4-year programme

BSc in Plant Science

BSc in Zoology

BScAgric in Agricultural Economics in Agribusiness Management

BScAgric in Animal Science

BScAgric in Applied Plant and Soil Sciences

BScAgric in Applied Plant and Soil Sciences 5-year programme

BScAgric in Plant Pathology

BScAgric in Plant Pathology 5-year programme

Service modules

Faculty of Engineering, Built Environment and Information Technology

Faculty of Education

Faculty of Health Sciences

Faculty of Veterinary Science

Prerequisites

A candidate must have Mathematics for at least 60% and 60% for Physical Sciences.

Contact time

4 lectures per week, 1 practical per week

Language of tuition

Module is presented in English

Department

Chemistry

Period of presentation

Semester 1

Module content

General introduction to inorganic, analytical and physical chemistry. Atomic structure and periodicity. Molecular structure and chemical bonding using the VSEPR-model. Nomenclature of inorganic ions and compounds. Classification of reactions: precipitation, acid-base, redox reactions and gas-forming reactions. Mole concept and stoichiometric calculations concerning chemical formulas and chemical reactions. Principles of reactivity: energy and chemical reactions. Physical behaviour gases, liquids, solids and solutions and the role of intermolecular forces. Rate of reactions: Introduction to chemical kinetics.

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations. The G Regulations are updated annually and may be amended after the publication of this information.

Regulations, degree requirements and information

The faculty regulations, information on and requirements for the degrees published here are subject to change and may be amended after the publication of this information.

University of Pretoria Programme Qualification Mix (PQM) verification project

The higher education sector has undergone an extensive alignment to the Higher Education Qualification Sub-Framework (HEQSF) across all institutions in South Africa. In order to comply with the HEQSF, all institutions are legally required to participate in a national initiative led by regulatory bodies such as the Department of Higher Education and Training (DHET), the Council on Higher Education (CHE), and the South African Qualifications Authority (SAQA). The University of Pretoria is presently engaged in an ongoing effort to align its qualifications and programmes with the HEQSF criteria. Current and prospective students should take note that changes to UP qualification and programme names, may occur as a result of the HEQSF initiative. Students are advised to contact their faculties if they have any questions.