Atoms, Molecules, Spectroscopy

Chemistry 260

Section: D100

Term: 2003 Summer

Instructor: Mr. I. D. McKenzie.

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Discussion Topics: General Course Description:

Elements of physical chemistry from the molecular point of view. Introduction to quantum chemistry, atomic and molecular structure, and spectroscopy.

3 lecture hours/week; 1 tutorial hour/week; 2 lab hours/week.

Lecture Topics:

Introduction to Principles of Quantum Mechanics

Introduction to Spectroscopy

Applications of Quantum Mechanics: Rotation of Molecules

Magnetic Resonance Spectroscopy

Atomic Structure and Spectroscopy

Applications of Quantum Mechanics: Vibrations of Molecules

Molecular Structure

Molecular Electronic Spectroscopy

Grading: 25% Assignments & Laboratory; 25% Midterm; 50% Final Exam.

Required Texts: P. Atkins, "Physical Chemistry", 6th Edition. 1998. Freeman & Co.

Recommended Texts: None

Materials/Supplies: None

Prerequisite/Corequisite: Prerequisite: CHEM 122 (or 103). MATH 152, PHYS 121.

Recommended: MATH 232.

Notes: None

This outline is derived from a course outline repository database that was maintained by SFU Student Services and the University's IT Services Department. The database was retired in 2014 and the data migrated to SFU Archives in 2015.