
CH1200 General Chemistry

Academic Year: 2021/2
Module Level: Year 1
Scheme: UG
Department: Chemistry
Credits: 15

Student Workload (hours)

| | |
|---|------------|
| Synchronous Lectures | 5 |
| Synchronous Small Group Teaching | 3 |
| Synchronous Practical Classes/ Workshops/Professional Placements | |
| Synchronous Other | |
| Asynchronous Lectures/Presentations | 25 |
| Asynchronous Other | 117 |
| Guided Independent Study | |
| Total Module Hours | 150 |

Period: Semester 1
Occurrence: E
Coordinator: Richard Blackburn
Mark Scheme: UG Honours Level Module Mark Scheme

| No. | Assessment Description | Weight % | Qual Mark | Exam Hours | Ass't Group | Alt Reass't |
|-----|-------------------------|----------|-----------|------------|-------------|-------------|
| 004 | Continuous Assessment 1 | 30 | | | | |
| 005 | Continuous Assessment 2 | 30 | | | | |
| 006 | Examination (Final) | 40 | | 1.5 | | |

Period: Semester 1
Occurrence: E1
Coordinator: Richard Blackburn
Mark Scheme: UG Module Mark Scheme

| No. | Assessment Description | Weight % | Qual Mark | Exam Hours | Ass't Group | Alt Reass't |
|-----|-------------------------------|----------|-----------|------------|-------------|-------------|
| 001 | Continuous Assessment (Final) | 100 | | | | |

Intended Learning Outcomes

On successful completion of the module, students should be able to:

- Explain the principles of atomic structure, electron configuration, energy quantisation, wave particle duality, molecular orbital theory and coordinate bonding
- Determine the shapes of covalent molecules using Valence-Shell Electron-Pair repulsion theory
- Predict the Lewis acidity or basicity of a molecule
- Describe chemical equilibria on both molecular and mathematical levels
- Describe the underlying principles of spectroscopy and apply quantitative relationships (e.g. Beer-Lambert law, Rydberg equation) to analyse spectra; predict and rationalize spectra of atoms & molecules
- Draw and name organic molecules explaining their structure, shape and possible isomers
- Use curly arrow notation to rationalise and predict stability, polar reactivity and acidity for organic molecules

Teaching and Learning Methods

Asynchronous lectures, synchronous classes that include example problems and problem solving, tutorials, marked work & VLE directed activities

Assessment Methods

Coursework
 Examination

Pre-Requisites

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Co-Requisites
Excluded Combinations

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Guided Independent Study: Indicative Activities

Directed reading, set problems, group problem solving exercises, formative quizzes