Liverpool John Moores University

Title:	PROPERTIES OF MATTER
Status:	Definitive
Code:	**4005APCHEM** (121127)
Version Start Date:	01-08-2021
Owning School/Faculty:	Pharmacy & Biomolecular Sciences
Teaching School/Faculty:	Pharmacy & Biomolecular Sciences

Team	Leader
Barry Nicholls	Y
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Academic Level:	FHEQ4	**Credit Value:**	20	**Total Delivered Hours:**	62
Total Learning Hours:	200	**Private Study:**	138		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	55
Tutorial	5

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Exam	60	2
Report	Report	Report	40	

Aims

This module provides candidates with an outline of some basic principles of inorganic aqueous chemistry and solid state structures. It also indicates how the interaction of radiation with such matter leads to spectroscopic properties widely

used in analytical chemistry.

Learning Outcomes

After completing the module the student should be able to:

1	Identify the characteristics of acids, bases and materials that undergo oxidation and reduction processes.
2	Discuss the analytical techniques that can be used for inorganic materials.
3	Apply chemometrics and statistics to chemical processes.
4	Discuss the structures and properties of inorganic solids.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Examination	1	2	3	4
Report	1	2	3	4

Outline Syllabus

Acids and bases, inorganic solids, molecular symmetry, oxidation, reduction and half equations. The basic interaction of radiation with matter, illustrated by associated analytical techniques. Chemometrics and statistics.

Learning Activities

Lectures, workshops, tutorials and seminars

Notes

This module will provide a solid introduction to Inorganic Chemistry and various analytical techniques specific to this branch. Other introductory areas underpinning the ideas of compound symmetry and the interaction of radiation with matter willl also be covered.
The syllabus is supported by standard lectures , tutorials workshops and seminars, together with teaching materials held on BlackBoard and books from the standard literature. The module is assessed by one open-book comprehensive written assignment, together with one closed-book formal examination of 2 hours duration, held within 4 weeks of the module's conclusion. The pass mark is set at 40% for the whole module. There is no lower limit set for the individual components.