

Liverpool John Moores University

Title: CHEMISTRY OF LIFE
Status: Definitive
Code: **4066TEF** (103792)
Version Start Date: 01-08-2016

Owning School/Faculty: Sports Studies, Leisure and Nutrition
Teaching School/Faculty: Sports Studies, Leisure and Nutrition

Team	Leader
Genevieve Stone	Y
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Academic Level: FHEQ4 **Credit Value:** 12 **Total Delivered Hours:** 34.5
Total Learning Hours: 120 **Private Study:** 85.5

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	20
Practical	8
Workshop	5

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Exam	50	1.5
Report	AS2	1,000 word Practical Report	50	

Aims

To provide students with an in-depth knowledge of the relationship between food and the chemistry of living systems, to support further study and understanding of food and nutrition.

Learning Outcomes

After completing the module the student should be able to:

- 1 Understand the basic principles of organic chemistry
- 2 Describe the structure, properties and reactions of carbohydrates, proteins and fats
- 3 Outline the basic activity and functions of enzymes

Learning Outcomes of Assessments

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

EXAM	1	3
Practical Report	2	

Outline Syllabus

Organic nomenclature. Determination of empirical, molecular and structural formulae. Isomerism. Basic principles of organic chemistry. Acidity and basicity of organic compounds. The structure, properties and basic reactions of carbohydrates, proteins and fats in terms of their constituents. The basic structure and function of enzymes. The biochemical synthesis of proteins, lipids and sugars.

Learning Activities

The course consists of lectures, work shops and practical sessions, during which you have the opportunity to gain experience in a variety of lab based skills. you will also be involved in handling information and data, and will undertake a range of problem solving activities.

Notes

This module aims to provide students with an in depth knowledge of the relationship between food and the chemistry of living systems. In order to appreciate how organic chemistry and an understanding of the major molecules in living systems helps better understand the composition and properties of foods, as well as key principles in human nutrition. Evidence from this module may contribute to WoW certification.