

Liverpool John Moores University

Title: Nutrition & Exercise Biochemistry
Status: Definitive
Code: **5107SSLN** (123090)
Version Start Date: 01-08-2021

Owning School/Faculty: Sport and Exercise Sciences
Teaching School/Faculty: Sport and Exercise Sciences

Team	Leader
Ian Davies	Y
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Academic Level: FHEQ5 **Credit Value:** 20 **Total Delivered Hours:** 42
Total Learning Hours: 200 **Private Study:** 158

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	12
Practical	24
Workshop	4

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Project write ups (2,500 words)	50	
Exam	AS2	Exam	50	2

Aims

To extend students' knowledge of biochemistry in relation to nutrition and exercise.

Learning Outcomes

After completing the module the student should be able to:

- 1 Evaluate the detailed regulation of biochemistry in both diet and exercise
- 2 Interpret the application of biochemistry with respect to nutritional and exercise status in health and disease
- 3 Analyse biochemical assessment in relation to nutrition and exercise
- 4 Analyse nutrigenetics and nutrigenomics in relation to systems biology

Learning Outcomes of Assessments

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

Report	1	2	3	4
Exam	1	2	3	4

Outline Syllabus

Biochemical framework relating to nutrition and exercise; detailed energy yielding pathways in response to nutrition and exercise e.g. aerobic and anaerobic glycolysis, □ oxidation, citric acid cycle, gluconeogenesis, glycogenesis, cori cycle; lipids and lipoproteins in health, disease, response to nutrition/exercise; systems biology introduction including genomics, proteomics, metabolomics and their use as biomarkers in health, disease and response to nutrition and exercise.

Learning Activities

Lectures and laboratory practical sessions will be the main form of student learning activities, but use of Blackboard with blended learning including quizzes, problem solving will be incorporated. Students will be required to carry out a project designed to investigate the effect of nutrition and exercise on a biochemical marker.

Notes

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