

Liverpool John Moores University

Title: Fundamentals of Nutrition & Metabolism
Status: Definitive
Code: **5509SSLNBF** (124743)
Version Start Date: 01-08-2018

Owning School/Faculty: Sports Studies, Leisure and Nutrition
Teaching School/Faculty: Blackpool & Fylde College

Team	Leader
Sally Starkey	Y

Academic Level: FHEQ5
Credit Value: 20
Total Delivered Hours: 48
Total Learning Hours: 200
Private Study: 152

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	23
Practical	8
Seminar	8
Workshop	9

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Artefacts	Essay	Magazine Article 2000 words	40	
Report	Reports	Lab Report presentation 20 mins.	60	

Aims

This module will focus on nutrition and metabolism through the human lifetime. The module will investigate and review current evidence on the effect of lifestyle (diet, exercise) on metabolism across the lifespan. It will consider muscle physiology, adaptive responses, nutrition and metabolism in healthy, physically active

individuals, and in sedentary individuals, or those with a variety of disease conditions. The module will also interrogate current research in rehabilitation via exercise, nutrition and drug therapy.

Learning Outcomes

After completing the module the student should be able to:

- 1 Critically review the importance of physiology, nutrition and metabolic function for public health.
- 2 Interpret the application of biochemistry and physiology with respect to nutritional and exercise status in health and disease.
- 3 Combine the theory and practice of common research methods and techniques for physiological assessment and the measurement of human metabolism.

Learning Outcomes of Assessments

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

Magazine Article 2000 word	1	2	3
Report presentation 20 mins	1	2	3

Outline Syllabus

Important biological molecules, enzymes, co-factors and vitamins and their roles in human metabolism.

Control of synthesis of macromolecules such as protein, RNA and DNA.

Metabolism of amino acids, lipids and carbohydrates and the integration of their metabolism.

Homeostasis and the control of metabolism.

Homeostasis of micronutrient metabolism.

Energy metabolism.

Gene-nutrient interactions.

Acid-base and fluid homeostasis and its importance in controlling metabolism.

Acquired and inherited metabolic disorders.

Nutrition through the human life-cycle.

Learning Activities

Study skills techniques

Lecture based workshops and seminars

Presenting information in practical environments

Peer and Self-reflection

Laboratory Workshops/Observations

Online Resources

VLE Forums online

Performance analysis tools

Evaluating case studies

Notes

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The presentation is in the form of a student led seminar. The seminar focus will centre on a pre-identified area of contemporary nutrition and is expected to contain elements of transmission, peer engagement and a comprehensive plenary.