

Liverpool John Moores University

Title: Principles of Human Nutrition
Status: Definitive
Code: **4003SPS** (129006)
Version Start Date: 01-08-2021

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

Team	Leader
Katie Lane	Y
Abdulmannan Fadel	

Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 42
Total Learning Hours: 200 **Private Study:** 158

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	20
Practical	10
Seminar	10

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Written essay (2,500 words)	50	
Exam	AS2	Online Exam (2 hours)	50	2

Aims

The module will help students develop knowledge of the importance of nutrition to human health introducing the subject of nutritional recommendations in terms of energy and nutrients. Students will gain an overview of the chemistry, function and properties of nutrients and the consequences of inadequate intakes.

Learning Outcomes

After completing the module the student should be able to:

- 1 Identify the functions and sources of major nutrients and the consequences of inappropriate intakes.
- 2 Explain Dietary Reference Values in the context of a nutritionally adequate diet.
- 3 Explain basic aspects of nutrition chemistry including organic chemistry and the chemistry of food components.

Learning Outcomes of Assessments

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

Written essay (2,500 words)	1	2	3
Online Exam	1	2	3

Outline Syllabus

Energy and the Macronutrients:

Nutrition and Energy; Fats; Protein; Carbohydrates; Oxygen and water.

The Micronutrients:

Water soluble vitamins; Fat soluble vitamins.

Learning Activities

The module consists of lectures, workshops, practicals and Canvas discussion boards. The seminars will support in class lectures and enable students to develop analytical and research skills. The Canvas discussion boards will enable students to research other related topics and share their findings with each other. The practicals will give a food-based approach to the macronutrients.

Notes

The Association for Nutrition (AfN) competencies covered in this module include:

CC1a The human/ animal body and its functions, especially digestion, absorption, excretion, respiration, fluid and electrolyte balance, cardiovascular, neuro-endocrine, musculoskeletal and haematological systems, immunity and thermoregulation, energy balance and physical activity.

CC1c What nutrients are (including water & oxygen).

CC1d Nature and extent of metabolic demand for nutrients.

CC1e How nutrients are used by the body (either human or animal) consequences of deficiency and assessment of nutritional status.

CC1f Non-nutrient components of foods, feeds and drinks that affect diet and health including alcohol for either human or animal systems.

CC1g Nutrient analysis: calculating nutrient contents of foods, feeds and diets of an individual or group of individuals or animals, justifying choice of a method of dietary assessment for a specific stated purpose.

CC1i Nutrition in health and disease, consequences of an unbalanced diet for either human or animal systems.

CC1l Ability to plan, conduct, analyse and report on investigations into an aspect of nutrition in a responsible, safe and ethical manner.

CC4a Principles and methods of measurement and estimation of energy balance; energy expenditure physical activity and fitness; body mass; body composition; how body mass and energy balance are controlled for either human or animal systems.