

## MODULE DESCRIPTOR

<b>MODULE TITLE</b>	Cellular Nutrition		
<b>Module Code</b>	44-7987-00S		
<b>Level</b>	7		
<b>Credit Points</b>	15		
<b>Indicative Assessment Components &amp; Percentage Weightings</b>	Coursework 50% Examination 50%		
<b>Pre-Requisite Modules (if applicable)</b>	None		
<b>Delivered according to Standard Academic Calendar</b>	Long: 2 semesters	Short: 1 semester	<b>Other delivery pattern:</b>
YES	NO	YES	None

### 1 MODULE AIMS

These are the aims of the module...

1. To provide you with a clear understanding of metabolic processes relevant to human nutrition.
2. To enable you to analyse and evaluate the limitations of metabolic adaptation.
3. To equip you with investigative skills relevant to cellular nutrition.

### 2 LEARNING OUTCOMES

By the end of the module you will be able to...

1. Interpret and communicate the nature and complexities of human metabolism in relation to nutrition.
2. Explain the biochemical nature of nutrition-related bioavailability, nutrient utilisation, nutrient-gene interaction, immunity and allergy.
3. Design, plan, conduct and report on investigations into relevant aspects of cellular nutrition.
4. Prepare, process, interpret and present information using a variety of formats including CIT in accordance with standard academic conventions.

### **3 INDICATIVE LEARNING, TEACHING AND ASSESSMENT ACTIVITIES**

The learning and teaching strategy is designed to promote a student centred approach to the acquisition of specialist knowledge through keynote lectures and seminars. A selection of practical sessions will be used to develop an understanding of core concepts relevant to cellular nutrition.

The principles and concepts of cellular nutrition will be delivered through a mix of lectures and seminars and will be supported by open learning (detailed below).

Students are expected to participate in supported open learning throughout the module. Supported open learning includes the reading of key texts, journal articles and additional paper-based materials.

Through a range of practical sessions students will gain an appreciation of cellular nutrition in terms of human metabolism and bioavailability/utilisation of nutrients.

The module will make use of a range of materials. Typically, students will have access to:

- A module "booklet" containing the module outline, details of the programme of study, directed readings and assessments;
- Specialist laboratory facilities and technical support;
- ICT applications;

### **4 INDICATIVE MODULE CONTENTS / TOPICS**

- The biological importance of metabolic processes such as the Krebs's cycle, glycolysis and gluconeogenesis.
- The effects of a range of environmental conditions on human metabolism, including the limitations of the adaptive response.
- The nature and extent of the metabolic demands of the human organism.
- The metabolic and physiological effects of altered nutrient supply and demand (including alterations in nutrient bio-availability and utilisation).
- Nutrient-gene interaction.
- Nutrition, immunity and allergy.

### **FURTHER INFORMATION ABOUT THIS MODULE**

- **FURTHER / ADDITIONAL INFORMATION IS AVAILABLE TO SUPPORT THIS MODULE, INCLUDING ASSESSMENT CRITERIA DETAILING HOW YOUR PERFORMANCE IN THE MODULE WILL BE MEASURED, HOW YOU WILL RECEIVE FEEDBACK, DETAILS OF LEARNING RESOURCES AND KEY READINGS**
- **THIS INFORMATION CAN BE FOUND IN:**
  - Module Handbook
  - Module Blackboard site
- **NOTE THAT THIS ADDITIONAL INFORMATION MAY BE SUBJECT TO CHANGE FROM YEAR TO YEAR**

