

BSc (Hons) in Human Nutrition and Dietetics

Aims and Rationale of the Programme

The Human Nutrition and Dietetics programme aims to give you a multidisciplinary understanding of human nutrition and dietetics including: the scientific basis of nutrition; the food chain; the role of food within social and behavioural contexts; the relation of nutrition to health and disease at individual and public health policy levels. This is a fully accredited career-oriented programme that will enable you to gain a broad foundation in all key areas of biological science and nutrition while developing a wide range of scientific skills to prepare you for employment or further study in nutrition science. The programme has a strong emphasis on hands-on practical work, and one quarter of the assessment in the first two years is practical based. All students have practicum of 29 weeks in recognized hospitals. In addition, there is a double project in the final year. This programme is validated by the University of Greenwich.

Year 1

Fundamentals of Biochemistry
Fundamental Biology and Physiology
Basic Chemistry for Life Sciences
Basic Principles of Nutrition
Practical and Professional Skills
Placement 1

Year 2

Physiological Systems and Regulation
Metabolism and Disease
Human Nutrition 2
Nutritional Epidemiology & Health Promotion
Research and Professional Skills
Genetics
Diet Therapy
Placement 2

Year 3

Project
Advanced Diet Therapy
The Psychology and Clinical Aspects of Eating Food
Public Health Nutrition
Placement 3
Pharmacology

Entry Requirements

The standard entry requirement for the BSc (Hons) Human Nutrition and Dietetics will include:

- High School Certificate of a minimum average grade of 15.0
- IELTS Score - min. 6.0, or
- TOEFL 243 (or 550 paper-based)

Students who do not meet these entry criteria will be required to attend the Extended BSc Hons Science programme (Foundation year) as this is approved by the University but must pass this programme with an overall average of 60%.

Attendance

3 years full-time
4 years part-time

Assessment

Written assignments, examinations, practical assignments in the laboratory and presentations.

Careers

On completion of the programme the successful graduate will enjoy a wide variety of opportunities in public health, nutrition, health education and promotion. Job opportunities are also available in private nutrition research institutes, teaching, food and health journalism, consumer groups, food retailers or the food industry and as free lancers.

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Selected Course Descriptions

Fundamental Biology and Physiology

Aims: To provide a background to the structure, growth, division, evolution and death of viruses, prokaryotic and eukaryotic cells, and to introduce the genetics of eukaryotes. To give the theoretical basis of methods for studying cells and their components. To provide a fundamental grounding in the organisation and regulation of physiological processes.

Basic Chemistry for Life Sciences

Aims: To provide students with the basic chemical concepts essential for the life sciences. To introduce students to the principles of chemical bonding and intermolecular interactions. To provide students with a basic knowledge of organic chemistry, chemical reactions and equilibria, visible spectroscopy and chromatography.

Basic Principles of Nutrition

Aims: To provide students with a basic knowledge of the elements and science of human nutrition. To introduce students to the biochemistry of the classes of nutrients. To enable students to identify the chemical composition of food commodities and food sources of these nutrients and their fate within the body. Introduce students to the concept of energy, energy balance and dietary requirements.

Fundamentals of Biochemistry

Aims: To introduce students to the structure and properties of carbohydrates, lipids, proteins and nucleic acids and to the relationship between structure and biological function. To introduce the fundamental science of enzymes as biological catalysts and the role of cofactors. To describe the central dogma of molecular biology: gene replication, transcription and translation. To introduce the concept of ethics in scientific research.

Physiological Systems and Regulation

Aims: To develop students' understanding of the roles and limitations of homeostatic control and regulation; To examine the factors which contribute to the integrated control of representative examples of different physiological systems.

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Metabolism and Disease

Aims: To provide an introduction to basic concepts in metabolism and the principles of metabolic pathways. To provide students with information on core metabolic pathways. To discuss relationships with metabolism and core disease pathways.

Advanced Diet Therapy

Aims: This module aims to further develop and extend students clinical knowledge and expertise beyond the module Diet Therapy. This module provides advanced knowledge in the field of dietary management of the upper and lower digestive diseases, liver, biliary and pancreatic diseases, cancer, eating disorders, neurological diseases, and conditions of hypermetabolism. The aim is for students to study the diet therapy of people who suffer from these illnesses, (combining knowledge from biochemistry, metabolism and physiology) and to implement appropriate dietary interventions on an individual and group basis.

Project

Aim: To provide an opportunity for personal development in applying prior theoretical and practical learning to a specific project and to demonstrate the ability to carry out a sustained piece of work. The topic of the project will be the subject of negotiation between the student and the designated supervisor.