

Level 4 (Year 1)

Summary of Module Content

Thinking Critically
Nutrition is a far-reaching and complex field of science with a range of external influences impacting on the integrity and consistency of information available not only to scientists and researchers but also to the general public. During this short initial 10 credit module you will have the opportunity to explore the importance of searching effectively for information online; what constitutes good science and why; and the challenges of providing information emanating from science in an ethical manner. You will also begin to think critically and reflectively about your own personal study objectives and needs and begin to consider a range of career pathways.
Nutritional Biochemistry
Nutritional biochemistry underpins nutritional science. This 40 credit module provides good time to engage with this exciting aspect of bioscience. Over the course of two terms you will have the opportunity to develop your understanding of the vital roles of macro, micro, phytonutrients and water in normal biochemical processes and begin to explore disordered biochemistry as it relates to environmental toxicity, obesity and genetics. Accurately collecting, recording, and interpretation of nutritional data is fundamental and you will have opportunities to analyse a range of diet and related data and present findings in a variety of useful formats relevant to future careers. You will have the opportunity to conduct and report on simple experiments and begin to consider scientific principles
Public Health Nutrition
Improving the health of the general public is a global socio-economic concern. This 30 credit module enables you to explore the importance of a range of key public health messages including: guidelines for nutrient intakes; 5-A-Day, requirements for vitamin D, fortification of bread with folic acid; salt and sugar intake; fat and cholesterol; weaning; food labels; physical activity; body measurements, inter-country variation. You should develop skills to disseminate public health messages in a socially relevant context and in a manner that the public can understand through the production of leaflets, articles and public-centred presentations. You will explore the notion of a 'well-balanced' diet, special diets, food storage, cooking, transport and farming methods and principles of food safety in context of hygiene and contaminants; agencies providing public health messages; the strengths and limitations of public health approaches and application to individuals.
Applied Physiology
You will be able to build on your knowledge of anatomy and physiology and focus on how the major body systems are controlled and integrated so that you can demonstrate a coherent understanding of the mechanisms that keep the body alive and functioning. This 20 credit module introduces concepts of Systems Biology and Functional Medicine with a view to enhancing your understanding of purpose and design and applied strategies to support organ reserve. You will have the opportunity to explore at some depth how changes in the hormonal and nervous systems can occur in response to stress and how this might impact on nutritional status
Dietary Education
This 20 credit module focuses on developing knowledge and skills to provide dietary education efficaciously. The module includes a variety of approaches across a range of social, ethical, and cultural contexts including vegan and vegetarian diets; Paleolithic diets; eating on a budget; nutrition in pregnancy, feeding babies, children and families; hypoallergenic, cardio and cancer protective diets; supporting mood and vitality. The boundaries, strength and limitations of dietary education is explored as are fundamental communication and coaching strategies in preparation for a dietary educator consultation following analysis of an individual's diet using software tools.

Level 5 (Year 2)

Summary of Module Content

<p>Applied Pathophysiological Reasoning (APR)</p> <p>Building upon the breadth of knowledge and skill gained during level 4 this 40 credit module taught over two terms provides you with the opportunity to review current medical paradigms and a systems biology approach to understanding health and disease. You will further explore the differences between population and personalised approaches to the management of chronic disease and the processes going wrong in the body that are common to many similar and disparate illnesses. The module has a major focus enabling you to reason about mechanisms that drive illness, repair processes, and the use of relevant assessments to gather and interpret individual biomarker data to help inform nutrition interventions. The module introduces differential diagnosis and the types of signs and symptoms 'red-flags' that merit referral to GPs.</p>
<p>Food Science & Safety</p> <p>This 20 credit module aims to provide you with knowledge of some of the key challenges facing nutrition professionals in the food industry. It will explore the concepts of food quality and safety with links to health issues beyond acute food poisoning. The legal and regulatory framework for food production and marketing will be reviewed. This module will also provide opportunity for you to explore how new developments in health and technology impact on food production and product innovation to offer foods with functional benefits.</p>
<p>Research Methods</p> <p>Developing discerning research skills are essential for the nutrition scientist. This 20 credit module complements APR and aims to further develop your understanding of the scientific method and the statistical approaches that underpin nutritional and biomedical research, the ability to reason cogently about pathology, and evidence based practice. You will develop skills to critically review research papers, apply search strategies that are systematic and use tools that can be used for the statistical analysis of research data.</p>
<p>Nutrition in Practice</p> <p>This module will explore how the nutrition profession has developed from its inception to date. You will be encouraged to examine the roles and influences of legislation, professional and regulatory bodies and political influences impacting on nutrition practice as it applies to clinical and industry settings. This module encourages you to consider business enterprise and engage in 50 hours of entrepreneurial online work experience; it encourages you to draw on your own experiences and those of your peers; to identify an area of nutrition practice of personal interest and consider the future opportunities and challenges that may lie ahead. To help you with this process you will be introduced to an expanded range of reflective models to further develop your reflective skills and work closely with your Professional Mentor individually and in groups.</p>
<p>Nutraceuticals & Pharmaceuticals</p> <p>Central to this module is gaining an understanding of drug-nutrient interactions with a view to justifying 'safe' nutritional interventions in context of upper safe limits. This module also follows on from APR and you will review the mechanisms of action of various drugs and nutraceuticals and their impact on physiology and disease intervention. You will explore the synergistic action of nutrients and drug/nutrient interactions through the analysis of their mechanisms of action on physiological processes and disease processes. Food law governing nutritional products will also be reviewed. Application of nutraceutical agents at both individual and population levels are considered.</p>

Level 6 (Year 3)

Summary of Module Content

Personalised Nutrition Interventions
Gaining a deep understanding of personalised and individualised nutrition as an approach to the prevention and management of functional imbalances and chronic disease is a main focus. You should develop an understanding of complexity in health and explore nutritional intervention strategies to support optimal function and healthy aging while taking into account social, cultural and ethical factors influencing health and wellbeing. This module draws on emerging scientific research from the field of nutrigenomics on the potential harmful effects of inappropriate nutrition, environmental toxins and lifestyle factors on a wide range of issues relating to human health.
Health Culture
This module aims to explore the changes in individual responsibility for health over the past century, at present and what the future might bring. In this context the module will explore inequalities in health care provision and the ability of individuals to assume such responsibility for their health. You will work with peers to analyse data, theorise and evaluate cultural drivers and barriers to change as well as critically and reflectively review your own leadership ideas and business practices to inform the design of engaging, ethical and sustainable change management interventions across a range of global community healthcare environments.
Research Project
Conducting research individually or as part of a group provides you with an opportunity to embrace the scientific literature at a deep level. You will work with a Research Supervisor throughout the process who will support you and at the same time encourage you to become an independent researcher from project planning through to final write-up of your project. Drawing on your learning from the course there will be a range of styles of project for you to consider. Whether conducting a piece of research independently or as part of a group all students are expected to produce their project written in the style, format and discipline compatible with published research and present their findings to their peers.
Herbal Products
The culinary use of herbs is part of day to day eating culture for many people. This module aims to expand on Nutraceuticals & Pharmaceuticals in relation to drug/nutrient interactions and will consider drug/nutrient/herbal interactions and the clinical applications and safety of a range of standardised extract herbal medicines and botanical based products. You will also explore herbal products from a legislative and political perspective and have the opportunity to prepare a detailed monograph suitable for use by industry and practitioners on a named herb.
Nutrition Enterprise
You will have the opportunity to prepare for your future career pathway building on your evaluation and learning from Nutrition in Practice as well as learning from level 6 modules. Whether seeking employment in the public sector or to start your own nutrition business, the module will encourage you to consider the value of business enterprise, entrepreneurship, intrapreneurship and the importance of global interconnectedness in the workplace. Based on a thorough understanding of the health and nutrition workplace environments, including corporate, clinical practice and community-based projects within local, national and international environments, opportunities will be provided for you to evaluate the actions required to attain your professional goals. This will be supported through the generation of a professional portfolio to demonstrate a range of experiences, competencies and skills in preparation for the workplace and via formulation of a network of contacts and work opportunities to enhance career options.