UNIVERSITY OF PLYMOUTH
Faculty of Medicine and Dentistry

School of Biomedical Sciences

Programme Specification

BSc (Hons) Nutrition, Exercise and Health (4455)

2018/19

1. BSc (Hons) Nutrition, Exercise and Health

Final award title

BSc (Hons) Nutrition, Exercise and Health

Level 4 Intermediate award title(s)

Certificate of Higher Education

Level 5 Intermediate award title(s)

Diploma of Higher Education

UCAS code BC46
JACS code B400

2. Awarding Institution: University of Plymouth

Teaching institution(s): University of Plymouth

3. Accrediting body(ies) Association for Nutrition

4. Distinctive Features of the Programme and the Student Experience

Our ethos is: to promote an understanding of the biological basis and research evidence for the interacting contributions of nutrition and physical activity to human health.

Key Features are:

- a strong foundation in the major disciplines underpinning exercise and nutritional sciences,
- focuses on the interactive effect of nutrition and physical activity on public health,
- develops practical skills, critical awareness and proficiencies required for professional competence,
- interdisciplinary teaching that addresses contemporary issues in lifestyle-related health,
- benefits from collaboration with the School of Psychology and the School of Health Professions at the University,
- equips graduates with knowledge and professionalism for a variety of nutrition and fitness related careers.

The contributions of eating behaviour and physical activity to health are becoming increasingly clear. In particular, diet-related diseases such as obesity, type 2 diabetes and cardiovascular disease and cancer have been linked to both nutrition and exercise. Government, private and public sector agenda recognise the importance of these interacting features of lifestyle in preventing and treating chronic disease and career paths in this field demand the multi-disciplinary evidence based approach that is a feature of this programme.

The structure of the programme initially aims to develop students' abilities in the fundamental areas underpinning nutrition and exercise science - physiology, biochemistry, psychology- and introduces students to the multi-disciplinary areas of human nutrition and exercise. Students also start to develop the key graduate and professional skills for study and employment. In year two, students further develop their knowledge of physiology, metabolism, immunology and psychology within the more applied contexts of nutrition, exercise and health. Students also develop competencies in skills for professional practice. In the final year, the focus is on the interacting roles of activity and eating behaviours on health through the lifespan, in relation to chronic health conditions and in health promotion. All students undertake a personal research project.

The course aims to equip graduates with the knowledge, skills and professional competencies to seek employment in a range of settings. Specifically, employment could be within the food or fitness industries; with government, local authority or community initiatives in health promotion, lifestyle education or public health; or self-employment as nutritionist, personal trainer or lifestyle advisor. More generally, the knowledge and transferable skills gained throughout the course will also prepare graduates to progress to further study for Masters programmes in health professions, sports/exercise science or to research.

The School of Biomedical Sciences has a system of student support which is regarded as an excellent model in the University. A tutorial system for pastoral support is co-ordinated by a Senior Tutor who has an overview of student problems, attendance, progression and disabled student's' issues, and who acts as a link between the students, tutors and other student support agencies within the University. Our personal tutorial system is designed to provide academic support and guidance as well as pastoral care. Module briefings, provided at the start of each year, make clear the nature and expectations of modules. Expectations for assessments are described and enhanced by cross-reference to the School generic marking criteria.

Student work is normally returned within four weeks after submission. As well as being categorically graded, work is accompanied by feedback indicating strengths, weaknesses and guidance on improving performance. This may include structured feedback sheets, annotations and debriefing sessions. Students are encouraged to seek further advice as necessary.

5. Relevant QAA Subject Benchmark Group(s)

All programmes in the School conform to the academic standards set out in The Quality Assurance Agency for Higher Education subject benchmark statements for honours degrees. The Benchmark Statement for Biomedical sciences is available at:

http://www.qaa.ac.uk/quality-code/subject-benchmark-statements

6. Programme Structure

A complete stage of study consists of 120 credits. At all stages students study compulsory or 'core' modules, with a choice of one from two options at final year. A student must pass 120 credits to complete the Level and progress or graduate.

The pass requirement for each module is 40%. No compensation is allowed in all core School of Biomedical Science modules as these modules assess core competencies for the Association of Nutrition accreditation and all elements need to be passed at 40%. Optional modules and psychology modules must be passed at 40% but compensation is allowed between exam and coursework elements with ≥ 30% in coursework and examination elements.

6.1 Stage One: Level 4

BSc (Hons) Nutrition, Exercise and Health - Stage One

<table>
<tr><td colspan="2">BHCS1001
Biomedical Investigation and Experimentation (20cr)</td><td rowspan="6">BHCS1011
Study skills and personal development (0cr)</td></tr>
<tr><td>BHCS1002
Human Anatomy and Physiology: Cells to Systems (20cr)</td><td>BHCS1003
Human Metabolism (20cr)</td></tr>
<tr><td colspan="2">Inter-semester break</td></tr>
<tr><td colspan="2">PSYC108PP
Psychobiological and Cognitive Aspects of Health Behaviour (20cr)</td></tr>
<tr><td>BHCS1010
Introduction to Human Nutrition (20cr)</td><td>BHCS1006
Infection and Immunity (20cr)</td></tr>
</table>

6.2 Stage Two: Level 5

BSc (Hons) Nutrition, Exercise and Health- Year Two

<table>
<tr><td>BHCS2023

Exercise Physiology (20cr)</td><td>BHCS2022

Nutritional Science 1 (20cr)</td><td>BHCS2021

Nutritional and Exercise Epidemiology (20cr)</td><td rowspan="4">BHCS2027
Placements and Employability (0Cr)</td></tr>
<tr><td colspan="3">Inter-semester break</td></tr>
<tr><td>BHCS2024

Applied Exercise Science (20cr)</td><td>BHCS2025

Nutritional Science 2 (20cr)</td><td>PSYC204

Applied Topics in Health and Cognition (20cr)</td></tr>
</table>

6.3. Stage Three (optional placement year)

Students have the option to take a placement between Stage two and four. The university will support students who wish to undertake a placement year, however placement places are not guaranteed.

Placements are introduced at the beginning of Stage two in timetabled sessions in BHCS2027 that detail potential placement providers and discuss the benefits of taking a placement. These sessions give important insight into applying for a placement and details the university processes involved. Acquisition of an appropriate placement is the responsibility of individual students but is facilitated by the university placements office and school placements co-ordinator.

Placements must be a minimum of six months full-time or part-time equivalent in a relevant setting.

Support for students on placement comes from the School's placement co-ordinator, academic staff nominated as placement tutors and the university's placement office. Tutors perform an on-site visit to ensure student welfare and progress. Students on placement also enrol on BHCS3030 that provides a framework in which they undertake a research project, conceptualise the skills learned and reflect on the relevance of their learning experience to the programme aims and their future careers.

Successful completion leads to the University's Certificate of Industrial Experience.

6.4 Stage Four: Level 6

BSc (Hons) Nutrition, Exercise and Health- Stage Four

<table>
<tr><td rowspan="4">BHCS3001

Personal Research Project (40cr)</td><td>BHCS3025

Physical Activity, Nutrition and Public Health (20cr)</td><td>BHCS3022

Contemporary Issues in Human Health (20cr) (optional)</td><td>PSYC392
Current Topics in Applied Psychology (20cr) (optional)</td><td rowspan="4">BHCS3031

Personal development and employability (0cr)</td></tr>
<tr><td colspan="3">Inter-semester break</td></tr>
<tr><td>BHCS3024

Diet Exercise and Chronic Disease (20cr)</td><td colspan="2">BHCS3023

Athletic Performance, Sport and Nutrition (20cr)</td></tr>
</table>

7. Programme Aims

We aim to deliver a programme that:

- offers a relevant and contemporary curriculum in nutrition and exercise sciences, enriched by the scholarly activity of staff,
- provides plentiful opportunities for practical work and experiential learning applicable to work as a Nutritionist
- challenges, stimulates, enthuses and encourages students to achieve their potential.

In addition, the programme has the following specific aims:

- To provide a sound foundation in the disciplines underpinning nutrition and exercise sciences.
- To provide a critical evidence-based approach to how nutrition and physical activity interact in health and disease so that students become critical, rational and creative thinkers.
- To deliver a sound underpinning in the applications of psychology to the understanding of health related behaviours.
- To produce graduates with the professional competencies to gain employment in a range of health-related positions demanding the ability to integrate knowledge of the nutritional, exercise and behavioural sciences.
- To encourage students to become confident, adaptable and independent learners, who are intellectually inquisitive and equipped for life-long learning.

8. Programme Intended Learning Outcomes

The BSc (Hons) Nutrition, Exercise and Health programme has been constructed to emphasise how the promotion of health and prevention and management of chronic disease through lifestyle change requires a multi-disciplinary approach based on the knowledge and advances in the biosciences. In designing the programme, we have paid particular attention to the demands of career- paths in this field, feedback we have received from potential employers, the requirements of The Association for Nutrition and the National Subject Benchmark Statement for Biomedical Sciences (2015). The curriculum will ensure that students graduating with an Honours degree will meet at least the ‘threshold’ standards required for a general award.

8.1. Knowledge and understanding

On successful completion graduates should have developed:

1) Knowledge of the role of nutrition, exercise and the wider biomedical sciences in contributing to knowledge of human health and chronic disease.
2) Appreciation of the application of nutritional sciences to healthcare, the relationship to healthcare professionals and ethical implications.
3) Understanding of the scientific importance of current advances in knowledge in the nutrition and exercise field which are enriched by staff research and scholarship.
4) Appreciation of the philosophical underpinnings of science and the importance of the progression from description and pattern seeking through to scientific advancement by hypothesis testing.
5) Understanding and integration of a range of bioscience disciplines from molecular, cellular to whole organism and population levels and their applications to aspects of human health and disease.

8.2. Cognitive and intellectual skills

On successful completion graduates should have developed the ability to:

1) Understand the contested and developing nature of knowledge and identify and evaluate alternative hypotheses and viewpoints in nutrition and exercise science.
2) Assess the reliability and validity of evidence.
3) Develop reasoned and informed arguments.
4) Identify, formulate and resolve problems.
5) Synthesise information from disparate sources.
6) Interpret a particular case in the context of generalised or abstract concepts, and vice versa.
7) Think logically, creatively and critically, and formulate and test scientific hypotheses.

8.3. Key and transferable skills

On successful completion graduates should have developed the ability to:

1) Select and use appropriate communication and information technologies, including the Internet, word-processing, graphics, spreadsheets and specialist dietary analysis and statistical software packages.
2) Communicate effectively through the spoken word and in a variety of written and graphical formats.
3) Work independently and organise his/her own learning.
4) Search for, retrieve, sift, select and order information from a variety of sources.
5) Collate, analyse and interpret data in quantitative and qualitative forms.
6) Participate effectively and supportively in groups, meeting obligations to others.
7) Transfer skills and apply them in new contexts.
8) Reflect on his/her own learning and evaluate personal strengths and weaknesses.

8.4. Employment related skills

On successful completion graduates should have developed qualities and transferable skills necessary for employment in a range of employment settings applicable to an Associate Nutritionist. Specific skills include:

1) Team working and interpersonal skills.
2) A flexible approach to learning and working.
3) An awareness of the importance of motivation, enthusiasm, initiative, and proactivity.
4) Planning and organisation skills.
5) Personal development planning skills.
6) Professional conduct and an understanding of ethics and professional values for a Nutritionist

8.5. Practical skills

On successful completion graduates should have developed the ability to:

1) Plan, design, execute and report on an original research investigation in the field of nutrition/ exercise.
2) Apply concepts and principles of nutritional knowledge to new issues and situations.
3) Select and apply appropriate techniques in nutrition and exercise science, and interpret and present their results, in the following contexts:

a. laboratory work
b. manual and computer-based analysis of quantitative and qualitative data

4) Demonstrate the practice of a range of laboratory skills relating to in cellular, physiological, microbiological, nutritional and biochemical aspects of biomedical science.
5) An awareness of ethical practice and ethical approval processes, good laboratory practice, quality control and assurance, health and safety policies, and risk assessment.

9. Admissions Criteria, including APCL, APEL and DAS arrangements

We welcome applications to our courses from people who will derive the greatest benefit from studying here. We consider a variety of qualifications and experience and assess every application on its own merits and the applicant's ability to complete the course selected. We are looking for people who have a commitment and enthusiasm to learn, and a determination to make a significant contribution to society when they graduate. All applicants must have GCSE (or equivalent) Maths and English at Grade C or above (or 4+ on new grading system).

Entry Requirements for BSc (Hons) Nutrition, Exercise and Health	
A-level	Normal minimum entry requirements are 120 points to include grade B in Biology and another science subject – this can include Mathematics, Physics, Chemistry, Environmental Science/Studies, Psychology, Geography, Geology, Applied Science, PE and Food and Nutrition. Students who are not sure of their eligibility for this programme are encouraged to contact Admissions admissions@plymouth.ac.uk
GCSE	Grade 4 or above in Maths and English Language
BTEC National Certificate/Diploma	18 Unit BTEC National Diploma/QCF Extended Diploma: DDM Applied Science or Sport Science acceptable provided at least six specialist units in Biology and Science
Access to Higher Education	Pass a science Access to HE Diploma (Science based) with at least 33 credits at Level 3, all of which are Biology and Science based units, to include at least 15 credits in Biology with Merit, and 18 credits in Science at Merit
International Baccalaureate	28 points including 5 at Higher Level Biology or Chemistry
Progression from Human Biology with Foundation Year	Students need to achieve an overall mark of at least 60% with at least 60% in Biology elements. Students not meeting these requirements may be considered on completion of a successful interview.

Direct entry into stage 2

Students successfully completing the FdSc Health and Nutrition at Truro and Penwith College are permitted direct entry to stage 2 of the programme. This is a two year foundation course that covers the basic science underpinning and nutrition covered by stage 1 of the BSc (Hons) Nutrition Exercise and Health.

English Language Requirements

Students are required to produce evidence of English language ability. This will normally be the equivalent of:

- GCSE Grade C (or 4+ on new grading system) or above in English language;
- IELTS score of 6.5 or above with at least 6.0 in each element.
- Equivalencies are detailed on the website: https://www.plymouth.ac.uk/international/how-to-apply/international-students-entry-requirements

Accreditation of Prior Certificated Learning (APCL) and Assessment of Prior Experiential Learning (APEL)

The University's regulations for Accreditation of Prior Certificated Learning (APCL) and Assessment of Prior Experiential Learning (APEL) are set out in the 'University Academic Regulations'.
https://www.plymouth.ac.uk/student-life/academic-regulations
We may also consider admission on the basis of work or life experience.
We welcome evidence of prior learning and experience from applicants. Due to the range and mixture of prior qualification and experience applications presenting such evidence will be considered on an individual basis by the Admissions Tutor in consultation with the programmes lead.

10. Progression criteria for Final and Intermediate Awards

Nutrition, Exercise and Health is offered as a single subject, leading to BSc (Hons) Nutrition, Exercise, and Health. The programme is modular and is offered full-time. The full-time programme takes a minimum of three years to complete. Most students complete a stage of study each year; thus stage 1 is completed in the first year, stage 2 in the second and stage 4 in the third. In addition, students may undertake an optional work experience placement year between Stages 2 and 4. This does not contribute credits to the degree award but leads to the University's *Certificate of Industrial Experience*.

Progression to stage two (year two) or award of Certificate of Higher Education requires 120 credits at level 4 to include the pattern of modules specified in 6.1.

Progression to final year or award of Diploma of Higher Education requires 240 credits at level 4 and 5 to include the pattern of modules specified in 6.2.

BSc (Hons) Nutrition Exercise and Health: 360 credits, including 120 credits at level 6, 120 further credits at level 5 or above and 120 credits at level four (accredited award).

BSc Nutrition Exercise and Health: 320 credits, including 80 credits at level 6, 120 further credits at level 5 or above and 120 credits at level four. This award is not accredited and does not qualify the graduate as an Associate Nutritionist with the Association for Nutrition.

Students are not normally allowed to transfer from Nutrition, Exercise and Health to other degree courses in the School of Biomedical Sciences at the end of Stage 1, or from other degree courses in the university on to Nutrition, Exercise and Health (with the exception of BSc (Hons) Dietetics).

11. Progression routes into Medicine and Dentistry - Graduate Entry

Students who have achieved a 1st in the BSc (Hons) Nutrition Exercise and Health programme can apply to join the BMBS or BDS programmes through UCAS. The degree needs to have been awarded no more than two years preceding application. Students selecting this entry route do not need to sit the Graduate Medical Schools Admissions Test (GAMSAT). Offers are subject to interview performance and all offers will be conditional. For non-academic conditions please refer to the course entry requirements page of the relevant degree programme.

12. Exceptions to Regulations

Core School of Biomedical Sciences modules are not compensatable and students are required to pass all elements within modules at 40%. (This does not apply to optional and Psychology modules). This is a requirement of the Association for Nutrition. Otherwise the School of Biomedical Sciences operates under the standard University of Plymouth assessment and progression regulations. These are available on the University web site at: www.plymouth.ac.uk.

13. Transitional Arrangements

A new programme structure was implemented in summer 2015. From Summer 2017, two additional 0 credit modules, BHCS1011 Study skills and personal development and BHCS3031 Personal development and employability, were introduced to support and enhance student employability.

14. Mapping and Appendices:

Appendix 1: Intended Programme Learning Outcomes Map

Appendix 2: Assessment vs Modules Mapping

Appendix 3: Competency Requirements for Programme Accreditation with AfN

Appendix 1: Intended programme learning outcomes mapped against modules

Programme Learning Outcome	Related Core Modules
Subject knowledge and understanding On completion graduates should have developed:	
1. Knowledge of the role of biosciences in contributing to knowledge of human health and chronic disease.	BHCS1010, BHCS1002, BHCS1003, BHCS2022, BHCS2025, BHCS2021, BHCS3024, BHCS3025, BHCS3022
2. Appreciation of the application of biosciences to healthcare, the relationship to healthcare professionals and ethical implications	BHCS2022, BHCS2024 BHCS3025, BHCS3001
3. Understanding of the scientific importance of current advances in knowledge in specialised areas which are enriched by staff research and scholarship	BHSC3024, BHCS3025, BHCS3023, BHCS3022, BHCS3001
4. Appreciation of the philosophical underpinnings of science and the importance of the progression from description and pattern seeking through to scientific advancement by hypothesis testing, and critical evaluation of data.	BHCS1001, BHCS2022, BHCS3001
5. Understanding and integration of a range of bioscience disciplines from molecular to whole organism and population levels and their applications to aspects of human health and disease.	All modules

Intellectual skills On completion graduates should have developed skills to be able to:	
1. Recognise and apply subject-specific theories, paradigms, concepts or principles.	BHCS1010, BHCS2022, BHCS2023, PSYC108PP, PSYC204, PSYC392
2. Analyse, synthesise and summarise information critically, including published research or reports	BHCS1001, BHCS2022, BHCS2023, BHCS3001, BHCS3022
3. Obtain and integrate several lines of subject-specific evidence to formulate and test hypotheses	BHCS1010, BHCS2022, BHCS3001
4. Apply subject knowledge and understanding to address familiar and unfamiliar problems	BHCS1010, BHCS2022, BHCS3001, PSYC108PP
5. Recognise the moral and ethical issues of investigations and appreciate the need for ethical standards and professional codes of conduct.	BHCS3023, BHCS3001, BHCS 3022, BHCS2022, BHCS2024
Graduate and transferable skills On completion graduates should have developed the ability to:	
1. Select and use appropriate communication and information technologies, including the Internet, word-processing, graphics, spreadsheets and specialist dietary analysis software packages.	General IT and communication – all modules. Spreadsheets – BHCS1001, BHCS2022, BHCS3001. Dietary analysis software BHCS1010, BHCS3023.
2. Communicate effectively through the spoken word and in a variety of written and graphical formats.	All modules
3. Work independently and organise his/her own learning.	All modules
4. Search for, retrieve, sift, select and order information from a variety of sources.	All modules
5. Collate, analyse and interpret data in quantitative and qualitative forms.	BHCS1001, BHCS2022, BHCS2025, BHCS2023, BHCS3001
6. Participate effectively and supportively in groups, meeting obligations to others.	BHCS1010, PSYC108PP, BHCS2023
7. Transfer skills and apply them in new contexts.	Stage 4 modules
8. Reflect on his/her own learning and evaluate personal strengths and weaknesses to progress own personal and professional development	BHCS1011, BHCS3031, BHCS2027.

Numeracy skills Graduates should be able to: 1. Receive and respond to a variety of sources of information: textual, numerical, verbal, graphical 2. Carry out sample selection; record and analyse data in the field and/or the laboratory; ensure validity, accuracy, calibration, precision, replicability and highlight uncertainty during collection 3. Prepare, process, interpret and present data, using appropriate qualitative and quantitative techniques, statistical programmes, spreadsheets and programs for presenting data visually 4. Solve problems by a variety of methods, including the use of computers	BHCS1001, PSYC108PP, BHCS1010, BCHS2022, BHCS2023, BHCS3001 PSYC108PP, BHCS2023, BHCS2025, BHCS3001 BHCS 1001, BHCS1010, BHCS2023, BHCS2025, BHCS3001 BHCS1001, BHCS2022

Practical skills On completion graduates should be able to:	
1. Plan, design, execute and report on an original biological research investigation.	BHCS3001
2. Undertake field and/or laboratory investigations with human participants in a responsible, safe and ethical manner. For example, students must pay due attention to risk assessment, and ethical approval.	BHCS3001, BHCS3023, BHCS 2022, BHCS2023, BHCS2025, BHCS2024
3. Apply concepts and principles of biological knowledge to new issues and situations.	Stage 4 modules
4. Select and apply appropriate techniques, and interpret and present their results, in the following contexts: • laboratory work • manual and computer-based analysis of quantitative and qualitative data	BHCS1002, BHCS1003, BHCS1006, BHCS 2022, BHCS2023, BHCS2025, BHCS2024 BHCS1001, BHCS1010, BHCS2022, BHCS 3001
5. Demonstrate the practice of a range of laboratory skills relating to in cellular, physiological (particularly exercise), microbiological, nutritional and biochemical aspects of bioscience.	BHCS1002, BHCS1003, BHCS1006, BHCS1010, BHCS 2022, BHCS2023, BHCS2025, BHCS2024
Communication, presentation and information technology skills Graduates should be able to:	
1. Communicate about their subject appropriately to a variety of audiences using a range of formats and approaches, using appropriate scientific language	All modules written for scientific audience lay audience: BHCS3025 (orally), BHCS2023 (written) Scientific audience orally: BHCS3022, BHCS3001 (poster), BHCS2021, BHCS1001
2. Cite and reference work in an appropriate manner, including the avoidance of plagiarism	All modules
3. Use the internet and other electronic sources critically as a means of communication and a source of information.	All modules
Interpersonal and teamwork skills Graduates should be able to:	
1. Identify individual and collective goals and responsibilities and perform in a manner appropriate to these roles, in particular those being developed through practical, laboratory and/or field studies	PSYC108PP, BHCS1010, BHCS2022, BHCS2023, BHCS2025
2. Recognise and respect the views and opinions of other team members; negotiating skills	PSYC108PP, BHCS1010, BHCS2022, BHCS2023, BHCS2025, BHCS3022
3. Evaluate performance as an individual and a team member; evaluate the performance of others	BHCS1001, PSYC108PP, BHCS3022
4. Develop an appreciation of the interdisciplinary nature of science and of the validity of different points of view.	BHCS3035, BHCS3022

Self-management and professional development skills Graduates should be able to: 1. Develop the skills necessary for self-managed and lifelong learning (eg working independently, time management, organisational, enterprise and knowledge transfer skills) 2. Identify and work towards targets for personal, academic and career development 3. Develop an adaptable, flexible and effective approach to study and work	BHSC1001, BHCS2022, BHCS3001, BHCS3023 BHSC1001, BHCS2022, BHCS3001, BHCS3023, BHCS3025 All modules

Appendix 2: Assessment vs Modules Mapping

Module Code	Module Title	Credit	Exam		Coursework		Practice
			E1	T1	C1	A1	P1
Stage 1 (Level 4): Nutrition, Exercise & Health							
BHCS1001	Biomedical Investigation and Experimentation	20			75		25
BHCS1002	Human Anatomy and Physiology: Cells to Systems	20	50		50		
BHCS1003	Human Metabolism	20	50		50		
BHCS1006	Infection and Immunity	20	50		50		
BHCS1010	Introduction to Human Nutrition	20	50		50		
PSYC108	Psychobiological and Cognitive Aspects of Health Behaviour	20			100		

Module Code	Module Title	Credit	Exam		Coursework		Practice
			E1	T1	C1	A1	P1
Stage 2 (Level 5): Nutrition, Exercise & Health							
BHCS2021	Nutritional and Exercise Epidemiology	20			50		50
BHCS2022	Nutritional Science 1	20	50		50		
BHCS2023	Exercise Physiology	20	50		50		
BHCS2024	Applied Exercise Science	20			100		
BHCS2025	Nutritional Science 2	20	50		50		
PSYC204	Applied Topics in Health and Cognition	20			100		

Module Code	Module Title	Credit	Exam		Coursework		Practice
			E1	T1	C1	A1	P1
Stage 3 (Level 6): Nutrition, Exercise & Health							
BHCS3001	Personal Research Project	40			90	P/F	10
BHCS3022	Contemporary Issues in Human Health	20	30		70		
BHCS3023	Athletic Performance, Sport and Nutrition	20			100		
BHCS3024	Diet, Exercise and Chronic Disease	20	50		50		
BHCS3025	Physical Activity, Nutrition and Public Health	20	50				50
PSYC392	Current Topics in Applied Psychology	20			100		

Appendix 3: Mapping to Competency Requirements for Programme Accreditation with AfN

Core Competency 1 - Science

Knowledge and understanding of the scientific basis of nutrition. Understanding nutritional requirements from the molecular through to the population level - for either human or animal systems.

AREAS OF KNOWLEDGE & SKILLS TO BE COVERED	RELEVANT PROGRAMME MODULE(s), and DOCUMENT REFERENCE
CC1a - The human 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	BHCS1002, BHCS1006 (immunity), BHCS2022 (energy balance) BHCS2023 (physical activity)
CC1b - Mechanisms for the integration of metabolism, at molecular, cellular and whole body levels	BHCS1003, BHCS2022, BHCS2025
CC1c - What nutrients are (including water & oxygen)	BHCS1003 and BHCS1010
CC1d - Nature and extent of metabolic demand for nutrients	BHCS1003, BHCS2022, BHCS2025, BHCS2023 and BHCS3023
CC1e - How nutrients are used by the body, consequences of deficiency and assessment of nutritional status	BHCS1010
CC1f - Non-nutrient components of foods and drinks that affect diet and health including alcohol	BHCS1010 and BHCS3024
CC1g - Nutrient analysis: calculating nutrient contents of foods and diets of an individual or group of individuals, justifying choice of a method of dietary assessment for a specific stated purpose	BHCS1010, BHCS3023
CC1h - Digestion, absorption, transportation and storage of nutrients and non-nutrient components of foods	BHCS1002, BHCS1010

Core Competency 1 - Science (continued)

AREAS OF KNOWLEDGE & SKILLS TO BE COVERED	RELEVANT PROGRAMME MODULE(s) and DOCUMENT REFERENCE
CC1i - Nutrition in health and disease, consequences of an unbalanced diet	BHCS1010, BHCS2022, BHCS2025 and BHCS3024
CC1j - Nature of common conditions that require dietary manipulation or can affect physical activity, such as obesity, diabetes, hypertension, cardiovascular disease, cancer etc.	BHCS2025 and BHCS3024
CC1k - How nutritional needs change with age, gender, physical activity, lifestyle etc.	BHCS1010, BHCS2022 and BHCS3023
CC1l - Ability to plan, conduct, analyse and report on investigations into an aspect of nutrition in a responsible, safe and ethical manner	BHCS2022, BHCS2025 and BHCS3023
CC1m - Ability to carry out sample selection and to ensure validity, accuracy, calibration, precision, replicability and highlight uncertainty during collection in accordance with the basic principles of good clinical practice	BHCS2022, BHCS3001
CC1n - Ability to obtain, record, collate, analyse, interpret and report nutrition-related data using appropriate qualitative and quantitative research and statistical methods in the field and/or laboratory and/or intervention studies, working individually or in a group, as is most appropriate for the discipline under study	BHCS2022, BHCS2023 and BHCS3001
CC1o - Prepare, process, interpret and present data, using appropriate qualitative and quantitative techniques, statistical programmes, spreadsheets and programs for presenting data visually	BHCS1001, BHCS2022 and BHCS3001
CC1p - Health research methods, dietary nutrition methodologies and nutritional epidemiology	BHCS2022 and BHCS2021
CC1q -Theories of and development of practical skills in communication and learning	BHCS1001, BHCS3023, BHCS3025, BHCS3001

Core Competency 2 - Food Chain

Knowledge and understanding of the food chain and its impact on food choice. Integrating the food supply with dietary intake.

AREAS OF KNOWLEDGE & SKILLS TO BE COVERED	RELEVANT PROGRAMME MODULE(s) and DOCUMENT REFERENCE
CC2a - Food commodities (staple foods, main sources of key nutrients, novel foods etc.) within UK and/or internationally	BHCS1010
CC2b - Effect on chemical composition and nutritional quality of food and diet of: - methods of food production, preparation, preservation, fortification and format - sources of food supply - methods of cooking & storage	BHCS1010
CC2c - Familiarity with and/or development of practical skills involved in the methods to analyse the composition of foods	BHCS1010
CC2d - Ability to formulate ideas and opinions concerning food, nutrients, non-nutrient components of food and nutrition effectively and appropriately	BHCS1010
CC2e - Understanding of issues associated with food sustainability.	BHCS1010

Core Competency 3 - Social/Behaviour

Knowledge and understanding of food in a social or behavioural context, at all stages of the lifecourse.

AREAS OF KNOWLEDGE & SKILLS TO BE COVERED	RELEVANT PROGRAMME MODULE(s) and DOCUMENT REFERENCE
CC3a - Food and nutrition and health policy (at global, national and local level)	BHCS1010 and BHCS3025
CC3b - Significance of evaluation of nutrition in maintaining and driving public health agendas	BHCS3025
CC3c - Factors that affect an individual's, communities' and population groups' nutritional needs and practices	BHCS1010 and BHCS3025
CC3d - Religious and cultural beliefs and practices that impact on food, nutrition and health	BHCS1010 and BHCS3025
CC3e - Consideration of financial/social and environmental circumstances on diet and nutritional intake	BHCS1010, BHCS3025
CC3f - Theories and application of methods of improving health, behaviour and change	BHCS3025
CC3g - Design and implementation of intervention projects and programmes, methods for monitoring and evaluating effectiveness and efficiency	BHCS3025
CC3h - Theories of nutrition health education and nutrition health promotion	BHCS3025
CC3i - Ability to design/formulate a diet to meet a specification appropriate for a stated situation for an individual, human or animal, or group of humans or animals.	BHCS3023

Core Competency 4 - Health/Wellbeing

Understanding how to apply the scientific principles of nutrition for the promotion of health and wellbeing of individuals, groups and populations; recognising benefits and risks.

AREAS OF KNOWLEDGE & SKILLS TO BE COVERED	RELEVANT PROGRAMME MODULE(s) and DOCUMENT REFERENCE
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	BHCS2022, BHCS2023 and BHCS2024
CC4b - Theory and methods of investigating the dietary, nutrient and activity patterns of the general population, sub groups and the individual	BHCS1010, BHCS2021 and BHCS3023
CC4c - Scientific basis of the safety and health promoting properties of nutrients and non-nutrient components of food, based on knowledge of the metabolic effects of nutrients, anti-nutrients, toxicants, additives, pharmacologically active agents (drugs); nutrient-nutrient interactions, nutrient-gene interactions, 'nutraceuticals', functional foods, and any other metabolically active constituents of foods and the diet	BHCS1006 (food safety) BHCS1010 BHCS3024 (drugs, nutrient-gene interactions and functional foods)
CC4d - Scientific basis for the measurement and estimation of nutritional requirements, dietary reference values for the general population	BHCS1010
CC4e - Understanding the general principles underpinning, and strengths and limitations of, common methods of assessment of nutritional status including clinical, anthropometric, dietary, biochemical, physiological, and functional methods	BHCS2022
CC4f - Understanding the general principles and methods associated with determining the efficacy, health attributes, health claims, safety, and legal aspects of foods, drinks and supplements	BHCS1010
CC4g - Ability to recognise strengths and weaknesses in dietary, nutrition and health research methods, in order to understand the limitations of the scientific basis of nutritional knowledge	BHCS1010, BHCS2022, BHCS2025, BHCS2021, BHCS3023, BHCS3024, BHCS3025 and BHCS3001

Core Competency 4 - Health/Wellbeing (continued)

CC4h - Ability to integrate knowledge and understanding from a variety of sources to identify or propose solutions in one of the following areas: Improvement of human health or improvement of the welfare and/or productivity of animals or improvement of food production and sustainability	BHCS2022, BHCS2025, BHCS2021, BHCS3024, BHCS3025 and BHCS3001

Core Competency 5 – Professional Conduct

Understanding of Professional Conduct and the nutritionists' Code of Ethics along with evidence of good character.

AREAS OF KNOWLEDGE & SKILLS TO BE COVERED	RELEVANT PROGRAMME MODULE(s) and DOCUMENT REFERENCE
CC5a - Ethics and values of professions.	BHCS2022, BHCS3001
CC5b - AfN Code of Ethics and Statement of Professional Conduct	BHCS2022 and BHCS3001
CC5c - Legal context of nutrition practice; including current UK legislation and guidelines to providing information to individuals	BHCS3001
CC5d - Responsibilities and accountability in relation to the current European and National legislation, national guidelines, local policies and protocols and clinical/corporate Governance in relation to nutrition	BHCS1010, BHCS2022, BHCS3001
CC5e - Can recognise the moral and ethical issues of investigation and appreciate the need for ethical standards and professional codes of conduct applicable to both interventional and observational studies	BHCS2022, BHCS3025, BHCS3023, and BHCS3001
CC5f - The relevance of the research governance framework	BHCS2022
CC5g - Intellectual property issues	BHCS2022

Mapping template 2 - indicates how modules contribute to the delivery of the Core Competencies

	Module Title																									
Year, level, credit value and status (Core [C] or Optional [O]	**Example**: Introductory Chemistry	BHCS 1001 Biomedical investigation & experiment	BHCS1002 Human anatomy & physiology	BHCS1003 Human metabolism	BHCS1006 Infection and Immunity	BHCS1010 Introduction to Human Nutrition	PSYC 109 PP Psychobiological and cognitive aspects of health behaviour	BHCS1011 Study skills & personal develpt.		BHCS2021 Nutritional Exercise Epidemiology	BHCS2022 Nutritional Science 1	BHCS2023 Exercise Physiology	BHCS2024 Applied Exercise Physiology	BHCS2025 Nutritional Science 2	PSYC204 Applied Topics in Health & Cognition	BHCS2027 Placements and Employability		BHCS3030 Biomedical Sciences: Professional Practice and Placement			**Example**: Research project	BHCS3001 Research Project	BHCS3022 Contemporary Issues in Human Health	BHCS3023 Athletic Performance, Sport and Nutrition	BHCS3024 Diet, Exercise and Chronic Disease	BHCS3025 Physical Activity, Nutrition and Public Health	PSYC392 Current Topics in Applied Psychology	BHCS3031 Personal Development and Employability
Year	**1**	1	1	1	1	1	1	1		2	2	2	2	2	2	2		3			**3**	3	3	3	3	3	3	3
Level	**4**	4	4	4	4	4	4	4		5	5	5	5	5	5	5					**6**	6	6	6	6	6	6	6
Credit Value	**20**	20	20	20	20	20	20	0		20	20	20	20	20	20	0		0			**20**	40	20	20	20	20	20	0
Status	**C**	C	C	C	C	C	C			C	C	C	C	C	C						**C**	C	op	C	C	C	op	
Indicate the modules that contribute to Core Competencies with "x"																												
CC1a	**x**		**x**		**x**						**x**	**x**									**x**							
CC1b				**x**							**x**			**x**														
CC1c	**x**			**x**		**x**																						
CC1d				**x**							**x**	**x**		**x**										**x**				
CC1e						**x**																						
CC1f						**x**																			**x**			
CC1g						**x**															**x**			**x**				
CC1h			**x**			**x**																						
CC1i						**x**					**x**			**x**											**x**			
CC1j														**x**											**x**			
CC1k						**x**					**x**										**x**			**x**				
CC1l											**x**			**x**										**x**				

	Module Title																											
Year, level, credit value and status (Core [C] or Optional [O]	**Example:** Introductory Chemistry	BHCS 1001 Biomedical investigation & experiment	BHCS1002 Human anatomy & physiology	BHCS1003 Human metabolism	BHCS1006 Infection and Immunity	BHCS1010 Introduction to Human Nutrition	PSYC 109 PP Psychobiological and cognitive aspects of health behaviour	BHCS1011 Study skills & personal develpt.		BHCS2021 Nutritional Exercise Epidemiology	BHCS2022 Nutritional Science 1	BHCS2023 Exercise Physiology	BHCS2024 Applied Exercise Physiology	BHCS2025 Nutritional Science 2	PSYC204 Applied Topics in Health & Cognition	BHCS2027 Placements and Employability		BHCS3030 Biomedical Sciences: Professional Practice and Placement			**Example:** Research project	BHCS3001 Research Project	BHCS3022 Contemporary Issues in Human Health	BHCS3023 Athletic Performance, Sport and Nutrition	BHCS3024 Diet, Exercise and Chronic Disease	BHCS3025 Physical Activity, Nutrition and Public Health	PSYC392 Current Topics in Applied Psychology	BHCS3031 Personal Development and Employability
Indicate the modules that contribute to Core Competencies with "x"																												
CC1m											x											x						
CC1n											x	x										x						
CC1o		**x**									x											**x**						
CC1p										x	x																	
CC1q		x																				**x**		**x**		**x**		
CC2a						X																						
CC2b						X																						
CC2c						X																						
CC2d						X																						
CC2e						X																						
CC3a						**x**																				**x**		
CC3b																										**x**		
CC3c						**x**																				**x**		
CC3d						**x**																				**x**		
CC3e						**x**																				**x**		
CC3f																										**x**		
CC3g																										**x**		
CC3h																										**x**		
CC3i																								**x**				

	Module Title																									
Year, level, credit value and status (Core [C] or Optional [O]	**Example**: Introductory Chemistry	BHCS 1001 Biomedical investigation & experiment	BHCS1002 Human anatomy & physiology	BHCS1003 Human metabolism	BHCS1006 Infection and Immunity	BHCS1010 Introduction to Human Nutrition	PSYC 109 PP Psychobiological and cognitive aspects of health behaviour	BHCS1011 Study skills & personal develpt		BHCS2021 Nutritional Exercise Epidemiology	BHCS2022 Nutritional Science 1	BHCS2023 Exercise Physiology	BHCS2024 Applied Exercise Physiology	BHCS2025 Nutritional Science 2	PSYC204 Applied Topics in Health & Cognition	BHCS2027 Placements and Employability		BHCS3030 Biomedical Sciences: Professional Practice and Placement			**Example**: Research project	BHCS3001 Research Project	BHCS3022 Contemporary Issues in Human Health	BHCS3023 Athletic Performance, Sport and Nutrition	BHCS3024 Diet, Exercise and Chronic Disease	BHCS3025 Physical Activity, Nutrition and Public Health	PSYC392 Current Topics in Applied Psychology	BHCS3031 Personal Development and Employability
Indicate the modules that contribute to Core Competencies with "x"																										
CC4a											x	x	x													
CC4b						x				x														x		
CC4c					**x**	**x**																				
CC4d						x																				
CC4e											x															
CC4f						x																				
CC4g						x				x	x			x								x		x	x	x
CC4h										x	x			x								x			x	x
CC5a											x											x				
CC5b											x											x				
CC5c																						x				
CC5d						x					x											x				
CC5e											x											x		x		x
CC5f											x															
CC5g											x															