Programme Specification



1. Programme Title	MSc and PG Diploma in Personalised Nutrition								
2. Awarding institution	Middlesex University								
3. Teaching institution	NS3UK Ltd/ta CNELM								
4. Programme accredited by	(MSc/Dip) Nutritional Therapy Education Commission NTEC in conjunction with the CNELM Clinical Programmes								
5. Final qualification	MSc in Personalised Nutrition PGDip in Personalised Nutrition - Entry and Exit Award PG Cert Personalised Nutrition – Exit Award								
6. Academic year	Starting January 2022								
7. Language of study	English								
8. Mode of study	Distance Learning Full and Part-time								

9. Criteria for admission to the programme

Applications are welcomed from mature students with an undergraduate degree. Students with a relevant nutrition diploma qualification without a first degree in another subject combined with experience will be considered on an individual basis.

Applicants without a previous degree in nutrition, physiology or health/biomedical sciences will be asked to complete a Bioscience Entry Bridging Course comprising selected modules from CNELM's Level 3 and 4 Bioscience Entry Course. These modules are available for online study at CNELM. Nutrition diploma students may also be asked to complete an assignment to demonstrate ability to study at Masters level.

Recognition of Prior Learning (RPL): there is limited opportunity for RPL on this programme. Where English is not the first language students will need to demonstrate competency in written and verbal use of English at IELTS level 6.5 or equivalent.

All students are interviewed prior to being offered a place on the course.

10. Aims of the programme

MSc in Personalised Nutrition aims to:

The primary aim of this programme is to provide an advanced course of study in Personalised Nutrition to graduates of nutritional therapy and other science degree courses that directly support the development of an evidence base for a personalised nutritional therapy approach. In addition, the programme aims to:

- 1. Provide students with a knowledge and understanding of current population healthcare models and how a personalised approach challenges and complements this and the current evidence-based medicine paradigm.
- 2. Further develop research mindedness, awareness and implementation of new and emerging research approaches to underpin an evidence base for a personalised nutrition approach.
- 3. Develop research skills by utilising new and emerging research methods and approaches appropriate for building an evidence base for personalised nutrition.
- 4. Enhance critical thinking, problem solving and decision-making skills as individuals and as part of a team across a range of clinical and research contexts.
- 5. Develop skills of critical reflection and reflexivity by considering issues relevant to the design and implementation of nutrition programmes.

- 6. Provide an opportunity to develop a range of practical skills for implementing personalised nutritional interventions.
- 7. Enable independent lifelong learning by: developing students' ability to analyse, justify, critique, debate and review their ideas, strategies and actions; and by developing the student's ability to analyse and critically evaluate the scientific literature relevant to personalised nutrition.

Post Graduate Diploma (PGDip) in Personalised Nutrition aims to:

The primary aim of the Diploma in Personalised Nutrition is to offer an advanced course of study to nutrition graduates with opportunities to focus in depth on specialist areas of nutrition to enhance their existing practice. For other graduates, it provides an opportunity to engage in the research principles and practices of a personalised nutrition approach to healthcare that can be taken back to their existing workplace. It can also be combined with a Practice Diploma to facilitate practice as a Nutritional Therapist. Completion of this course is also designed to provide an opportunity to further progress to the MSc.

In addition, the programme aims to:

- 1. Provide students with a knowledge and understanding of current population healthcare models and how a personalised approach challenges and complements this and the current evidence-based medicine paradigm.
- 2. Enhance critical thinking, problem solving and decision-making skills as individuals and as part of a team across a range of clinical and research contexts.
- 3. Develop skills of critical reflection and reflexivity by considering issues relevant to the design and implementation of nutrition programmes.
- 4. Provide an opportunity to develop a range of practical skills for implementing personalised nutritional interventions.
- 5. Enable independent lifelong learning by: developing students' ability to analyse, justify, critique, debate and review their ideas, strategies and actions; and by developing the student's ability to analyse and critically evaluate the scientific literature relevant to personalised nutrition.

11. Programme outcomes

A. Knowledge and understanding

On completion of this programme the successful student will have knowledge and understanding of:

PGDip Personalised Nutrition

- **A1** The scientific and philosophical basis for personalised nutrition
- **A2** Biochemical functional imbalances underpinning illness and laboratory assessments to identify imbalances
- **A3** Nutrition requirements taking a personalised approach
- **A4** Personalised nutrition strategies across a wide range of contexts
- **A5** Existing EBM experimental and observational designs, different personalised EBM paradigms and related statistical methodologies and experimental and observational study
- **A6** The role that pathophysiological reasoning plays in clinical decision making in personalised healthcare and personalised nutrition designs as they relate to personalised nutrition and healthcare

MSc Personalised Nutrition

Teaching/learning methods

Students gain knowledge and understanding through distance: recorded and live streamed lectures; live webinars; online tutorials and other online resources; one-to-one online supervision and group tutorials; reading; forum discussion; group work; presentations; self-directed learning activities

Assessment Method

Students' knowledge and understanding is assessed by a variety of formative and summative assessments including: written assignments; essays, report writing, dietary analysis, diet recall, laboratory analysis, case histories presentations, reflective writing, discussion, debate, group work, research log and diary, research proposal, dissertation, conference presentation.

A1-A6 Above

A7 Implementation of a primary or secondary research project that contributes to an evidence base for personalised nutrition

B. Cognitive (thinking) skills

On completion of this programme the successful student will be able to:

PGDip Personalised Nutrition

- **B1** Justify a personalised approach for a range of health issues taking social, cultural, ethical and financial factors into account
- **B2** Critically evaluate published research particularly when data is conflicting and/or incomplete
- **B3** Use models of reflection to enhance critical evaluation in personal, interpersonal, organisational and research situations
- **B4** Demonstrate advanced problem-solving skills
- **B5** Critically evaluate and justify clinical approaches to personalised nutrition.
- **B6** Evaluate and justify the use of multivariate statistics to model the complexity of multivariate personalised nutrition interventions.
- **B7** Critically analyse the relationships between EBM, stratified, personalised and public health approaches to nutrition practice.

MSc Personalised Nutrition

B1-7 Above

B8 Critically appraise own work in relation to suitability of chosen methodology, results and conclusions drawn.

C. Practical skills

On completion of the programme the successful student will be able to:

PGDip Personalised Nutrition

- **C1** Effectively use comprehensive databases to check for drug/nutrient/food interactions
- **C2** Constructs personalised functional nutrition plans based on case history information and client goals.
- C3 Formulate personalised nutrition plans underpinned by analysis of diet data using a reputable software tool and/or recognised food tables
- **C4** Design and justify research proposals for generating or evaluating evidence to support clinical decision making in personalised nutrition
- C5 Contribute to the evidence base for personalised nutrition by designing search methodologies and applying critical evaluation tools to identify, analyse and evaluate data from the published biomedical literature.

MSc Personalised Nutrition

Teaching/learning methods

Students learn cognitive skills through problem solving, feedback, discussion, debate, reflection and research.

Assessment

Students' cognitive skills are assessed by a variety of formative and summative assessment including: written assignments; essays, report writing, dietary analysis, diet recall, laboratory analysis, case history assessment and analysis, online presentations, reflective writing, discussion, debate, group work, research log and diary, research proposal, dissertation.

Teaching/learning methods

Students learn practical skills through diet and laboratory analysis, case history analysis and construction of nutrition plans, presentations, construction of research proposals, research projects, group work, one-to-one supervision.

Assessment

Students' practical skills are assessed by a variety of formative and summative assessment including: written assignments; essays, report writing, dietary analysis, diet recall, laboratory analysis, case history assessments and analysis, online presentations, reflective writing, discussion, debate, group work, research log and diary, research proposal, dissertation.

C1-5 Above

C6 Contribute to the evidence base for personalised nutrition by formulating quantitative and qualitative methodologies that inform the design, analysis and evaluation of clinical tools and outcome measures of personalised nutrition

C7 Act with initiative and access support within professional guidelines

C8 Succinctly present research ideas, methodology and findings to others.

D. Graduate Skills

On completion of this programme the successful student will be able to:

PGDip Personalised Nutrition

D1 Communicate effectively in a range of complex and specialised contexts

D2 Acknowledge and respect the values and beliefs of peers, colleagues, organisations and individuals

D3 Present complex client and numerical diet data using a range of information technology formats

D4 Use personal reflection and reflexivity in personal, interpersonal, organisational and research situations

D5 Critically evaluate ethical issues and identify potential solutions

D6 Undertake substantial evidence-based investigations in personalised nutrition **D7** Justify the use and choice of multivariate statistics and advanced experimental and observational study designs in personalised

MSc Personalised Nutrition

D1-D7 Above

healthcare.

D8 Display mastery of a personalised nutrition approach through selection and critical evaluation of appropriate research methodologies

D9 Have the potential to give academic conference presentations of research ideas, methodology and findings.

Teaching/learning methods

Students learn graduate skills through coursework, group work, discussion, debate, feedback, reflection, presentations and independent research.

Assessment

Students' graduate skills are assessed through essays, report writing, reflective practice, presentations, and debate and research dissertation.

12. Programme structure (levels, modules, credits and progression requirements)

12. 1 Overall structure of the programme

This Full-Time level 7 MSc programme is delivered over four of five 30 credit modules, and one 60 credit research module; and this programme is spread over one year. Part-time pathway is a maximum of three years.

A student may change their mode of study or interrupt their studies for an agreed period of time without adverse effect on the grade or credit value of any completed assignment. If a student interrupts their studies for more than one year they may be required to review modules previously completed.

The MSc/PGDip programme includes one compulsory module CND711 to provide research foundations and to prepare MSc students for completing research dissertations. Applicants joining the programmes without a prior relevant nutrition background must also take CND712 as this module includes fundamental nutrition concepts.

The programme is structured to integrate the theory of personalised nutrition alongside application to a variety of situations and contexts enabling graduates of the course to use the qualification to enhance their career prospects across a range of work opportunities.

Applicants can register for an MSc in Personalised Nutrition, or a PGDip. Students completing a PGDip can reregister for a higher award. Students successfully completing the modules for which they are enrolled are entitled to the following Entry Awards: PGDip Personalised Nutrition or MSc Personalised Nutrition. Students on the MSc or PGDip in Personalised Nutrition that complete 60 credits and unable to continue their studies can apply for a PG Cert in Personalised Nutrition as an Exit Award. Similarly students on the MSc in Personalised Nutrition that have completed 120 credits and unable to continue their studies can apply for a PGDip in Personalised Nutrition as an Exit Award.

Year 1 Full Time	Jan - June/July	April – Sept/Nov Two of Three	July - January		
	CND711	CND721	CND731		
	Evidence Based Personalised Healthcare	Personalised Nutrition & Chronic Illness	Research Dissertation		
	CND712	CND722			
	Personalised Nutrition Requirements	Personalised Nutrition & Longevity CND723 Personalised Sports Nutrition			

Part -Time Example	Jan - June/July	April - Sept/Nov	July - January
Year 1	CND711 Evidence Based Personalised Healthcare	CND722 Personalised Nutrition & Longevity CND723 Personalised Sports Nutrition	
Year 2	CND712 Personalised Nutrition Requirements		CND731 Research Dissertation

Please note: There are opportunities to start the programme in Jan, April and Sept. The above examples are based on January starts. Students starting in September can achieve a PGDip Full-time but cannot complete an MSc full-time and need to register part-time. Students starting in January or April can complete the MSc full-time.

12.2 Levels and modules										
Level 7										
COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS								
Students must take all of the following:	Students must also choose from the following at least:	In order to progress through the programme of study, students are required to complete modules at 40% (MU Grade 16) or above. Students who fail a module may be allowed to progress but will be								

MSc Programme CND711 and CND731	Three of Four CND 712, 721, 722 OR 723	required to pass the failed module(s) at the next opportunity to continue on the programme.
PGDip CND711	Three of Four CND 712, 721, 722 OR 723	

12.3 Non-compensatabl	e modules (note statement in 12.2 regarding FHEQ levels)
Module level	Module code
Level 7	All modules taken must be passed

13. A curriculum map relating learning outcomes to modules
See curriculum map attached

14. Information about assessment regulations

All components of a module must be passed with a grade of 40% (MU Grade 16) or higher. The final percentage awarded for coursework for each Module is detailed in the relevant Module Narrative.

15. Placement opportunities, requirements and support (if applicable)

This course does not include placements

16. Future careers (if applicable)

The programme is principally intended for health practitioners and others who want to develop skills in evidence based personalised nutrition as well as skills appropriate for industry-based careers with Governmental and Non-Governmental Organisations in a variety of technical-based roles, teaching, writing, research or pursuing further academic study to PhD.

The content of the PGDip and MSc programmes are mapped against the Core Curriculum and National Occupational Standards for Nutritional Therapy. When taken together with CNELM's Nutritional Therapy Practice Diploma or Personalised Nutrition Practice Diploma, graduates of both programmes can go into Nutritional Therapy practice, apply to become a member of the professional body *British Association for Nutritional Therapy and Applied Nutrition (BANT)* and apply to register with the Voluntary Regulator the *Complementary & Natural Healthcare Council (CNHC)*. Membership and Registration with BANT and CNHC is the prerogative of BANT and CNHC and not CNELM. All requirements for registration and membership must be demonstrated.

The programme develops transferable graduate skills such as critical thinking, reflection, group work, collaboration, online working, use of nutritional software tools, presentation skills and designing healthcare research.

17. Particular support for learning (if applicable)

Access to CNELM online learning resources,

Online access to the RSM resources including :search engines, e-books, e-journals and videos

ScienceDirect journals

JASP/SPSS

Journal Club

Royal Society of Arts Journal, videos and other resources (open access online)

Natural Medicines Database

BANT Nutrition Database

Nutritics Food Analysis software

Health Food Manufacturer's Association online resources

English language and mathematics support and support for students with learning needs

British Library, Royal Society of Medicine RSM library,

Academic Support: Programme Leader, Module leaders, Research Supervisors, Research Manager, Research Director, Session lecturers

Support Services: Programme Managers, Student Support Manager, Coach Mentor Support (by referral only) Professional Mentor, IT and Administrative Support Access to Institution and University Link Tutor and other relevant MU contacts

18. JACS code (or other relevant coding system)	600B402
19. Relevant QAA subject benchmarks group(s)	Subjects allied to medicine: Nutrition

20. Reference points

The following reference points were used in designing the programme:

- 1. UK Quality Code for Higher Education, 2017 [online]. Available at: http://www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code [Accessed 12.04.18]
- QAA Subject Benchmark statements for Biosciences Nov 2015. [online]. Available at: http://www.qaa.ac.uk/en/Publications/Documents/SBS-Biosciences-15.pdf [Accessed 12.04.18]
- 3. QAA Subject Benchmark statements for Biomedical Sciences Nov 2015. [online]. Available at: http://www.qaa.ac.uk/en/Publications/Documents/SBS-Biomedical-sciences-15.pdf [Accessed 12.04.18]
- 4. QAA Subject Benchmark statements BSc & PgDip/MSc in Dietetics Oct 2017. [online]. Available at: http://www.qaa.ac.uk/en/Publications/Documents/SBS-Dietetics-17.pdf [Accessed 12.04.18]
- 5. QAA Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers Sept 2012. [online]. Available at: http://www.qaa.ac.uk/en/Publications/Documents/enterprise-entrepreneurship-guidance.pdf [Accessed 12.04.18]
- 6. The Framework for Higher Education Qualifications in England, Wales and Northern Ireland Aug 2008. [online]. Available at: http://www.qaa.ac.uk/publications/information-and-guidance/publication?PublD=2718#.Ws-Tn4jwbIU [Accessed 12.04.18]
- 7. SEEC Credit Level Descriptors for Higher Education 2016. [online]. Available at: http://www.seec.org.uk/wp-content/uploads/2016/07/SEEC-descriptors-2016.pdf [Accessed 12.04.18]
- 8. Bloom's Taxonomy and Revised Taxonomy of Learning Domains. [online]. Available at: http://www.johnbiggs.com.au/academic/solo-taxonomy/ [Accessed 12.04.18]
- 9. Solo Taxonomy of Structure of Observed Learning Outcomes. [online]. Available at: Armstrong, P Bloom's Taxonomy. Center for teaching. Available at: https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/ [Accessed 12.04.18]
- 10. Middlesex University Regulations and Learning & Quality Enhancement Handbook. [online] Available at: https://www.mdx.ac.uk/about-us/policies/academic-quality/handbook [Accessed 12.04.18]
- 11. CNELM Programme Subject Review for MSc Personalised Nutrition February 2017

- 12. Annual Monitoring, Programme Leader, Module Leader Reports and Student Feedback
- 13. Nutritional Therapy Education Commission Core Curriculum for Nutritional Therapy 2017. [online]. Available at: http://www.nteducationcommission.org.uk/trainers-1_8_3221778543.pdf [Accessed 12.04.18]
- 14. Skills for Health CNH8 Provide Nutritional Therapy to clients. [online]. Available at: https://tools.skillsforhealth.org.uk/competence/show/html/code/CNH8/ [Accessed 12.04.18]
- 15. Siemens, G., (2005). Connectivism: A Learning Theory for the Digital Age. International Journal
- 16. of Instructional Technology and Distance Learning. [Online] Available at: http://www.itdl.org/Journal/Jan_05/article01.htm [Accessed 12.04.18]
- 17. Lipman. M., (2003). Thinking in Education. 2nd Edition. Cambridge: Cambridge University Press.

21. Other Information

Personalised healthcare is an emerging paradigm, and this programme is the first MSc and PG Diploma in Personalised Nutrition. The most innovative feature of this programme is that it directly provides an opportunity to distinguish between public health nutrition, stratified nutrition and personalised nutrition. The programme directly provides students with innovative research tools that they can use to help build an evidence base for a personalised approach. This course uniquely addresses how more complex research designs need to be applied in evidence based personalised nutrition.

Please note programme specifications provide a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve if s/he takes full advantage of the learning opportunities that are provided. More detailed information about the programme can be found in the student programme handbook and the Middlesex University Regulations.

MSc and PGDip (PGD) learning outcomes

Knov	wledge and understanding	Practical skills									
A1	The scientific and philosophical basis for personalised nutrition PGD, MSc	C1	Effectively use comprehensive databases to check for drug/nutrient/food interactions PGD, MSc								
A2	Biochemical functional imbalances underpinning illness, and laboratory assessments to identify imbalances PGD , MSc	C2	Construct personalised functional nutrition plan based on case history information and client goals and establishing future goals PGD, MSc								
А3	Nutrition requirements taking a personalised approach PGD, MSc	СЗ	Formulate personalised nutrition plans underpinned by analysis of diet data using a reputable software tool or recognised food tables PGD, MSc								
A4	Personalised nutrition strategies across a wide range of contexts PGD, MSc	C4	Design and justify research proposals for generating or evaluating evidence to support clinical decision making in personalised nutrition PGD, MSc								
A5	Existing EBM experimental and observational designs, different personalised EBM paradigms and related statistical methodologies and experimental and observational study designs as they relate to personalised nutrition and healthcare PGD, MSc	CS	Contribute to the evidence base for personalised nutrition by designing search methodologies and applying critical evaluation tools to identify, analyse and evaluate data from the published biomedical literature PGD, MSc								
A6	The role that pathophysiological reasoning plays in clinical decision making in personalised healthcare and personalised nutrition, MSc	C6	Contribute to the evidence base for personalised nutrition MSc								
A7	Implementation of a primary or secondary research project that contributes to an evidence base for personalised nutrition MSc	C7	Act with initiative and access support within professional guidelines MSc								
		C8	Present research ideas methodology and findings to others MSc								
Cogr	nitive skills	Grad	uate Skills								
B1	Justify a personalised nutrition approach for a wide range of health issues taking social, cultural, ethical and financial factors into account PGD, MSc	D1	Communicate effectively in a range of complex and specialised contexts PGD, MSc								

B2	Critically evaluate published research particularly when data is conflicting, contradictory and/or incomplete PGD, MSc	D2	Acknowledge and critically analyse the assumptions, values and beliefs of peers, colleagues, organisations and individuals, tutors PGD, MSc
В3	Use models of reflection to enhance critical evaluation in personal, interpersonal, organisational and research situations PGD, MSc	D3	Present complex client and numerical data using a range of information technology formats PGD, MSc
B4	Demonstrate advanced problem-solving skills PGD, MSc	D4	Use personal reflection and reflexivity in personal, interpersonal, organisational and research situations PGD, MSc
85	Critically evaluate and justify clinical approaches to personalised nutrition PGD, MSc	D5	Critically evaluate ethical issues and identify potential solutions. PGD, MSc
B6	Evaluate and justify the use of multivariate statistics to model the complexity of multivariate personalised nutrition interventions. PGD, MSc	D6	Undertake substantial evidence-based investigations in personalised nutrition PGD, MSc
B7	Critically analyse the relationships between EBM, stratified, personalised and public health approaches to nutrition practice. PGD , MSc	D7	Justify the use and choice of multivariate statistics and advanced experimental and observational study designs in personalised PGD MSc
B8	Critically appraise own work in relation to suitability of chosen methodology, result and conclusions drawn PGD, MSc	D8	Display mastery of a personalised nutrition approach through selection and critical evaluation of appropriate research methodologies MSc
50		D9	Potential to give academic conference presentations of research ideas, methodology and findings. MSC

Curriculum Map for MSc and PG Dip

	Module Title	Module Code	Programme Outcomes															
			A 1	A 2	A 3	A 4	A 5	A 6	7	B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	
1	Evidence Based Personalised Healthcare	CND711	х				х	х			Х	x	X	х	х	х		
2	Personalised Nutrition Requirements	CND712	х	х	х	х			X	х	Х	X	х	х				
3	Personalised Nutrition & Chronic Illness	CND721	х	Х	х	х			χ	х	Х	x	х	х				
4	Personalised Nutrition & Longevity	CND722	х	х	х	х			X	х	х	x	X	х				
5	Personalised Sports Nutrition	CND723	х	х	х	х			X	х	х	x	X	х				
6	Research Dissertation	CND731	х				х	х	X		х	x	X	х	х	х	Х	

	Module Title	Module Code																		
			C 1	C 2	C 3	C 4	C 5	C 6	C 7	C 8	D 1	D 2	- 1	- 1	- 1	- 1	- 1	- 1	- 1	
1	Evidence Based Personalised Healthcare	CND711				х	х	Х			х	х		Х	х		х			
2	Personalised Nutrition Requirements	CND712	Х	Х	х		Х				х	х	х	Х	х	х				

3	Personalised Nutrition & Chronic Illness	CND721	х	Х	х		х				х	х	х	х)	×				
4	Personalised Nutrition & Longevity	CND722	х	Х	х		х				х	х	х	х)	×				
5	Personalised Sports Nutrition	CND723	х	х	х		х				х	х	х	х)	(X				
6	Research Dissertation	CND731				х	х	х	х	х	х	х		х)	×	X	>	()	(