APPENDICES

A.   Programme specification and Curriculum Map

B.   Module narratives

Appendix A

Appendix A.   Programme Specification and Curriculum Map
for the MSc/PG Dip/PG Cert in Person Centred Nutrition

1. Programme title	MSc/PG Dip/PG Cert in Personalised Nutrition
2. Awarding institution	Middlesex University
3. Teaching institution	Centre for Nutrition Education & Lifestyle Management CNELM
4. Programme accredited by	Nutritional Therapy Council NTC (to be confirmed)
5. Final qualification	MSc in Personalised Nutrition PG Dip in Personalised Nutrition PG Cert in Personalised Nutrition
6. Academic year	Jan-Dec 2014
7. Language of study	English
8. Mode of study	Distance

9. Criteria for admission to the programme
Applications are welcomed from mature students with a first science or health science degree. Students with a relevant nutrition diploma qualification combined with experience will be considered on an individual basis. A short bridging course from the undergraduate nutrition courses or a set assignment to demonstrate ability to study at Masters level will be recommended for such applicants. All students are interviewed prior to being offered a place on the course.
Assessment of Prior Learning: only applicants that have completed up to 80 credits of postgraduate nutritional therapy modules accredited by MU IWBL for CNELM in 2006 can apply to transfer credits towards the MSc, PG Dip or PG Cert. A 10 credit bridging module may be required to meet credit requirements.
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.

10. Aims of the programme

MSc in Personalised Nutrition aims to:

The primary aim of this programme is 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 healthcare provision and how a personalised approach challenges and complements the current population based healthcare paradigm
2. Further develop research mindedness, awareness and implementation of cutting edge research approaches to underpin an evidence base for a personalised nutrition approach.
3. Facilitate the development of novel research skills and approaches to help build an evidence base for nutritional therapy utilising cutting edge tools capable of addressing complexity
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. Enable students to demonstrate deep reflection for potential difficulties confounding individuals ability to implement and sustain diet and lifestyle change even when complex pathology may exist
6. Appreciate the skills required to assist individuals in sustaining healthful choices
7. Enable students to analyse, justify, critique, debate and review their ideas, strategies and actions
8. Promote independent life-long learning

PG Diploma in Personalised Nutrition aims to:

The primary aim of the Diploma in Personalised Nutrition is to offer an advanced course of study to graduates of nutritional therapy degree and diploma courses opportunities to focus in depth on specialist areas of nutrition to enhance their existing nutritional therapy practice further towards a personalised evidence-based approach; and to provide an opportunity for other graduates of science degrees to engage in the research principles and practices of a personalised nutrition approach to healthcare that can be taken back to their existing workplace or to follow-up or integrate postgraduate studies with a Practice Diploma facilitating practice as a nutritional therapist. Completion of this course is also designed to provide an opportunity to further study to MSc.

In addition points 1 and 4-8 above are implicit in the aims of this course.

PG Certificate in Personalised Nutrition aims to:

The primary aim of the Certificate in Personalised Nutrition is to offer graduates of nutritional therapy an opportunity to explore specialist areas of interest at an advanced level to further inform their practice towards a personalised evidence-based approach. It also provides an opportunity for other science degree graduates with an opportunity to explore personalised nutrition principles in an evidence-informed manner.

In addition points 4-8 are implicit in the aims of this course.

11. Programme outcomes	
A. Knowledge and understanding On completion of this programme the successful student will have knowledge and understanding of : **PG Cert Personalised Nutrition** **A1** Scientific 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 **PG Dip Personalised Nutrition** **A1-A4 Above** **A5** The type of evidence and research methodologies required to underpin personalised nutrition intervention strategies **A6** Advanced understanding of existing research paradigms and innovative methodologies as they relate to healthcare and personalised nutrition **MSc Personalised Nutrition** **A1-A6 Above** **A7** Implementation of a primary or secondary research project that helps towards the development of an evidence base for personalised nutrition	**Teaching/learning methods** Students gain knowledge and understanding through attendance at: lectures; web-cams; online lectures and other online resources; one-to-one supervision and group tutorials; reading; 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 history timelines, presentations, reflective writing, discussion, debate, research log and diary, research proposal, dissertation, viva voce
B. Cognitive (thinking) skills On completion of this programme the successful student will be able to: **PG Cert 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** Reflect on difficulties for individuals implementing and sustaining diet and lifestyle changes **B4** Demonstrate advanced problem solving skills **PG Dip Personalised Nutrition** **B1-B4 Above** **B5** Justify new research protocols for personalised nutrition in context of current research paradigms and models of healthcare **B6** Critically evaluate the role of new research methodologies and paradigms to personalised nutrition and use this understanding to critically evaluate published research and argue for alternative methodologies **B7** Critically appraise own work in relation to suitability of chosen methodology conclusions drawn **MSc Personalised Nutrition** **B1-7 Above** **B8** Reflect on personal development and reflexivity in the research process	**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 timelines, presentations, reflective writing, discussion, debate, research log and diary, research proposal, dissertation, viva voce

C. Practical skills On completion of the programme the successful student will be able to:	
PG Cert Personalised Nutrition **C1** Effectively use comprehensive databases to check for drug/nutrient/food interactions **C2** Construct detailed timelines for history taking and establishing future goals **C3** Formulate personalised nutrition plans underpinned by analysis of diet data using a reputable software tool and/or recognised food tables	**Teaching/learning methods** Students learn practical skills through diet and laboratory analysis, case history timelines, presentations, group work, one-to-one supervision
PG Dip Personalised Nutrition **C1-3 Above** **C4** Log research insights and maintain a Research Diary **C5** Design and justify a research proposal for generating clinical evidence for personalised nutrition **MSc Personalised Nutrition** **C1-5 Above** **C6** Contribute to the evidence base for personalised nutrition **C7** Act with initiative and access support within professional guidelines **C8** Verbalise research findings in a viva voce setting	**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 timelines, presentations, reflective writing, discussion, debate, research log and diary, research proposal, dissertation, viva voce

D. Graduate Skills On completion of this programme the successful student will be able to:-	
PG Cert Personalised Nutrition **D1** Communicate effectively in a range of complex and specialised contexts **D2** Acknowledge and respect the values and beliefs of peers, colleagues, tutors and individuals **D3** Present complex client and numerical diet data using a range of information technology formats **D4** Use personal reflection to analyse own actions **D5** Manage ethical dilemmas and seek resolution to formulate solutions	**Teaching/learning methods** Students learn graduate skills through coursework, group work, discussion, debate, feedback, reflection, presentations and independent research
PG Dip Personalised Nutrition **D1-D5 Above** **D6** Undertake substantial investigation that addresses the validity of evidence based research methodologies in the context of the theory and/or practice of personalised nutrition. **D7** Recognise and argue for advanced research methodology to support a personalised nutrition approach **MSc Personalised Nutrition** **D1-D7 Above** **D8** Display mastery of a personalised nutrition approach through selection and critical evaluation of advanced research methodologies	**Assessment** Students' graduate skills are assessed through essays, report writing, reflective practice, presentations, 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 module 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 programme includes one core module CNE711 to provide a context for the course and to prepare students completing research projects.

Students are strongly recommended to take the core module prior to other personalised nutrition modules. However, to enable entry to the course at the outset of term two students can start without the core module. Non-core modules will include an online webcam to a short introduction to the principles of Personalised Healthcare and Functional Medicine.

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 PG Diploma or PG Cert in Personalised Nutrition. Students completing a PG Diploma or PG Cert in Personalised Nutrition can reregister for a higher award. Students successfully completing the modules for which they are enrolled are entitled to the following exit awards: PG Cert Personalised Nutrition; PG Dip Personalised Nutrition or MSc Personalised Nutrition.

Year 1 Full Time	Jan - June	April – Sept Two of Three	July - December
	CND711 Personalised Nutrition & Research Paradigms **CND712** Personalised Nutrition Requirements	**CND721** Personalised Nutrition & Chronic Illness **CND722** Personalised Nutrition & Longevity **CND723** Personalised Sports Nutrition	**CND731** Research Dissertation
Part -Time Example	**Jan - June**	**April - Sept**	**July - December**
Year 1	**CND711** Personalised Nutrition & Research Paradigms	**CND722** Personalised Nutrition & Longevity **CND723** Personalised Sports Nutrition	
Year 2	**CND712** Personalised Nutrition Requirements		**CND731** Research Dissertation

12.2 Levels and modules

Starting in academic year 2010/11 the University is changing the way it references modules to state the level of study in which these are delivered. This is to comply with the national Framework for Higher Education Qualifications. This implementation will be a gradual process whilst records are updated. Therefore the old coding is bracketed below.

Level 4 (1)

COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
Students must take all of the following:	Students must also choose from the following at least:	
MSc Programme CND711 and CNE731	Three of Four CND712, 721, 722 OR 723	In order to progress through the programme of study, students are required to complete modules at 40% or above. Students, who fail a module may be allowed to progress but will be required to pass the failed module(s) at the next opportunity to continue on the programme).
PG Diploma CND711	Three of Four CND712, 721, 722 OR 723	
PG Certificate	Two of Four CND712, 721, 722 OR 723	

12.3 Non-compensatable 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% or higher. The final percentage awarded for coursework for each Module is detailed in the relevant Module Handbook. In order to progress through the Programme, students must meet the attendance requirements as indicated in the Programme Handbook.

15. Placement opportunities, requirements and support
This course does not include placements

16. Future careers
This programme enables existing nutritional therapists to advance their knowledge and skills in nutritional therapy by completing a focused advanced programme of study in the application of a personalised approach to nutritional therapy. It should further enhance their ability to work as independent practitioners in a small business setting. Graduates of the programme with other science or health science first degrees or higher should be able to apply the unique principles of personalised nutrition to a range of other disciplines. All graduates leaving with an MSc should be able to pursue research careers and/or to apply research to their practice helping to build an evidence base for personalised nutrition. Graduates of this course should also be able to apply their skills to a variety of business and teaching opportunities. Graduates of this course will be able to take additional study to meet the competencies to register to practice as a nutritional therapist

17. Particular support for learning
Access to CNELM library and online learning resources, The Nutrition Practitioner journal British Library , Royal Society of Medicine RSM library and the Nutri Centre library Online access to the RSM e-books, e-journals and search engines Science Direct Institute of Functional Medicine resources Natural Medicines and the Natural Standard Databases Health Food Manufacturer's Association online resources English language and mathematics support and support for students with disabilities Academic advice: Pathway leader, module leaders, session lecturers Coach Mentor Support by referral only Professional Mentor Student Support Manager IT and Administrative Support Access to Link Tutor and other relevant MU contacts

18. JACS code (or other relevant coding system)	B400
19. Relevant QAA subject benchmark group(s)	Subjects allied to medicine: Nutrition

20. Reference points

The following reference points were used in designing the programme:

1. QAA Benchmarks statements for Healthcare Programmes and Biosciences
2. SEEC Credit Level Descriptors for Higher Education (2010)
3. School of Health and Social Sciences, Complementary Health Science Programme Handbook
4. Middlesex University Regulations
5. Middlesex University Teaching & Assessment Policy & Strategy
6. Middlesex University Work Based Learning Research Methods WBS 4825
7. Middlesex University Work Based Learning Project Report
8. Middlesex University Learning & Quality Enhancement Handbook 2010/2011
9. The Framework for Higher Education Qualifications in England, Northern Ireland and Wales
10. Code of Practice for the Assurance of Academic Quality and Standards in Higher Education (2004-2007)
11. 21st Century Medicine: A New Model for Medical Education & Practice Institute for Functional Medicine
12. International Journal of Integrated Care, Volume 10, 29 January 2010 URL:http//www.ijic.org
13. Programme Handbook PG Dip/MS Orthopaedic Medicine
14. Programme Handbook PG Dip Herbal Medicine (Clinical Phytotherapy) (MU)
15. CNELM accredited postgraduate nutritional therapy courses (MU IWBL)
16. CNELM (MU validated) undergraduate courses in nutritional therapy and nutritional science
17. Health Food Manufacturer's Association (HFMA) European Legislation
18. Bloom's Taxonomy of Learning Domains http://www.nwlink.com/~donclark/hrd/bloom.html

21. Other information

This is the first MSc in Personalised Nutrition. The most innovative feature of this programme is that it directly provides an opportunity to distinguish between population based nutrition and person centred nutrition. The programme directly provides students with innovative research tools that they can use to help build an evidence base for a person centred approach. Person centred healthcare is an emerging paradigm in both mainstream and complementary medicine. This course uniquely addresses complexity in research as applied to personalised nutrition. Addressing complexity in healthcare is as relevant to the future integrity of mainstream medicine as it is to complementary medicine.

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 University Regulations.

PG Cert (PGC), PG Dip PGD) and MSc learning outcomes

Knowledge and understanding		Practical skills	
A1	Scientific basis for personalised nutrition **PGC, PGD, MSc**	C1	Effectively use comprehensive databases to check for drug/nutrient/food interactions **PGC, PGD, MSc**
A2	Biochemical functional imbalances underpinning illness and laboratory assessments to identify imbalances **PGC, PGD, MSc**	C2	Construct detailed timelines for history taking and establishing future goals **PGC, PGD, MSc**
A3	Nutrition requirements taking a personalised approach **PGC, PGD, MSc**	C3	Formulate personalised nutrition plans underpinned by analysis of diet data using a reputable software tool or recognised food tables **PGC, PGD, MSc**
A4	Personalised nutrition strategies across a wide range of contexts **PGC, PGD, MSc**	C4	Log research insights and maintain a research diary **PGD, MSc**
A5	The type of evidence and research methodologies required to underpin personalised nutrition intervention strategies **PGD, MSc**	C5	Design and justify research proposal for generating clinical evidence for personalised nutrition **PGD, MSc**
A6	Advanced understanding of existing research paradigms and innovative methodologies as they relate to healthcare and personalised nutrition **PGD, 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	Verbalise research findings in a viva voce setting **MSc**
Cognitive skills		Graduate Skills	
B1	Justify a personalised nutrition approach for a wide range of health issues taking social, cultural, ethical and financial factors into account **PGC, PGD, MSc**	D1	Communicate effectively in a range of complex and specialised contexts **PGC, PGD, MSc**
B2	Critically evaluate published research particularly when data is conflicting, contradictory and/or incomplete **PGC, PGD, MSc**	D2	Acknowledge the values and beliefs of peers, colleagues, tutors and individuals **PGC, PGD, MSc**
B3	Reflect on difficulties for implementing and sustaining diet and lifestyle change **PGC, PGD, MSc**	D3	Present complex client and numerical data using a range of information technology formats **PGC, PGD, MSc**
B4	Demonstrate advanced problem solving skills **PGC, PGD, MSc**	D4	Use personal reflection to analyse own actions **PGC, PGD, MSc**
B5	Justify a personalised nutrition approach in context of current research paradigms and models of healthcare **PGD, MSc**	D5	Manage ethical dilemmas and seek resolution to formulate solutions **PGC, PGD, MSc**
B6	Critically evaluate the role of new research methodologies and paradigms to personalised nutrition and use this understanding to critically evaluate published research and argue for alternative methodologies **PGD, MSc**	D6	Undertake substantial investigation that addresses the validity of evidence based research methodologies in the context of theory and/or practice of personalised nutrition **PGD, MSc**
B7	Critically appraise own work in relation to suitability of chosen methodology, result and conclusions drawn **PGD, MSc**	D7	Recognise and argue for a advanced research methodology to support a personalised nutrition approach **PGD**
B8	Reflect on personal development and reflexivity in the research process **PGD, MSc**	D8	Display mastery of a personalised nutrition approach through selection and critical evaluation of advanced research methodologies **MSc**

Curriculum map for *MSc Personalised Nutrition*

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

	Module Title	Module Code	Programme Outcomes														
			A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	B6	B7	B8
1	Personalised Nutrition & Research Paradigms	CND711	x				X	X			X	X	X	X	X		
2	Personalised Nutrition Requirements	CND712	x	X	X	X				X	X	X	X				
3	Personalised Nutrition & Chronic Illness	CND721	x	X	X	X				X	X	X	X				
4	Personalised Nutrition & Longevity	CND722	x	X	X	X				X	X	X	X				
5	Personalised Sports Nutrition	CND723	x	X	X	X				X	X	X	X				
6	Research Dissertation	CND731	x				X	X	X		X	X	X	X	X	X	X

	Module Title	Module Code	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8
1	Personalised Nutrition & Research Paradigms	CND711				X	X				X	X		X	X	X	X	
2	Personalised Nutrition Requirements	CND712	X	X	X						X	X	X	X	X			
3	Personalised Nutrition & Chronic Illness	CND721	X	X	X						X	X	X	X	X			
4	Personalised Nutrition & Longevity	CND722	X	X	X						X	X	X	X	X			
5	Personalised Sports Nutrition	CND723	X	X	X						X	X	X	X	X			
6	Research Dissertation	CND731				X		X	X	X	X	X		X	X	X	X	X