BSc (Hons) Nutritional Sciences – 3 years full-time SC527 (Under Review)

1. Context and Objectives

Nutrition has become a topic of great interest for a wide population from healthcare professionals to consumers. Nutritional Sciences explore the metabolic and physiological responses of the body to diet. Much remains to be learned about how the optimal functioning of the body is influenced by diet. Addressing these problems requires nutritionists to work with specialists in various healthcare areas.

Nutritional Sciences encompass both preventive and curative aspects of human health and address various health conditions and diseases with the aim of improving the nutritional status of an individual or population while promoting a good quality of life.

This programme offers key knowledge and appropriate skills and prepare the student in the field of Nutritional Sciences. Nutritional Sciences continue to be of paramount importance in the preventive side of medicine leading to Medical Nutrition Therapy, which has acquired much popularity due to the increasing number of cases of non-communicable diseases as well as other nutrition-related diseases worldwide.

2. Learning Outcomes

By the end of this programme, graduates will have developed knowledge, abilities and skills to:

- integrate theoretical knowledge acquired during lectures and practicals into nutritional interventions,
- develop critical thinking skills that will assist them in the nutritional assessment as well as in the nutritional management of diseases,
- develop analytical skills, which are of fundamental importance in nutrition research and proximate analysis for product development and food safety,
- acquire food production and food processing knowledge and techniques through lectures and practical,
- undergo placements to appraise the theory and practice in nutrition-related institutions and acquire knowledge from the operations/procedures of food industries and related settings,
- appreciate the micronutrient and macronutrient demands of individuals and populations for optimal health,
- develop an understanding of nutrition in health, disease and across the lifecycle,
- understand the functional roles of herbs, spices, dietary supplements and nutraceuticals to achieve optimal health,
- develop good scientific communication and acquire information literacy skills, including the ability to research, summarise and reference it in an academically rigorous way as well as to evaluate the scientific literature.

3. Teaching and Learning Methods

This programme will be covered by lectures, self-study, tutorials, online activities, student led seminars and other learning activities such as field trips, group work, flipping classroom and active learning. Methods such as directed study, study tasks, role play, computer-based learning, workshops and case-based learning will also be utilised for content delivery. Group and individual discussion will be strongly encouraged.

4. Entry Requirements

General

As per General Entry Requirements for admission to the University of Mauritius for undergraduate degrees.

Programme (specific)

Credit in at least five subjects (School Certificate) including Biology, Chemistry and Mathematics or any other equivalent qualification(s).

Pass at GCE 'A' Level (or any other equivalent qualification(s)) in three science subjects including Chemistry. Food Studies and Mathematics will count as science subjects. Those not holding Biology at 'A' level will need to take Foundation Course in Biology during the first year of the programme. Minimum 'A'-level score should be a 16-aggregate score.

5. Programme Duration (Full Time)

	Normal	Maximum
BSc (Hons) Nutritional Sciences	3 Years	5 Years

6. Minimum credits Required

BSc (Hons) Nutritional Sciences

Minimum LCCS credits required for Award of degree: 224

For each Academic Year

Year of Study	Number of LCCS credits (Notional Learning
	Hours)
1	72 (2340)
2	78 (1980)
3	74 (2040)
Total	224 (6360)

Maximum LCCS credits per semester (including Retake Modules, but excluding Exempt Modules) – 48 Minimum LCCS credits per semester - 6

Breakdown of notional learning hours

The total notional learning hours for the 3 years full time programme will be comprised of the following:

Learning activity	Notional Learning Hours
Contact teaching	960
Self-study	1920
Other learning	3480
Total	6360

7. Assessment and Deadlines

Each module will be assessed over 100 marks (expressed as %) with details as follows:

Assessment of a module will be based on a written examination (2-hour duration for 6 LCCS Credit modules) and on continuous assessment done during the semester. The continuous assessment will count for 40% of the overall percentage mark for the module, except where the structure makes for other specific provision(s). Continuous assessment is based on practicals, and/or assignments and should include at least 1 class test. Modules will be assessed at the end of the semester in which they are taught. Candidates should attain an overall total of 50% to pass a module.

Practical Work and Continuous Assessment

a. Assessment of Foundation Course

The assessment for Foundation Course in Biology will be based on both written examination and on continuous assessment(s). Successful completion of the Foundation course will result in a Grade S.

b. Modules including a Practical Component

Year 1	Year 2	Year 3
NTS 1101 (1)	NTS 2102 (3)	NA
NTS 1102 (1)	NTS 2103 (3)	
NTS 1202 (1)	NTS 2104 (3)	
NTS 1204 (1)	NTS 2202 (3)	
NTS 1205 (1)		
NTS 1206 (1)		

Continuous assessment for the theory part of modules will be in the form of assignment (30%) and should include at least one class test (10%). The overall pass mark for the written examination and continuous assessment for practical work and theory work will be 50%.

There will be no practical exams in any module.

c. Modules not including a practical component

Continuous assessment for modules not including a practical component may be in the form of assignment(s) but should include at least one class test. The overall pass mark for the written examination and continuous assessment will be 50%.

d. Modules assessed solely on continuous assessment

Year 1	Year 2	Year 3
NA	NTS 2104(3)	NTS 3203(5)

Continuous assessment will be in the form assignment(s) and/or seminar(s) and/or practical(s) and should include at least 1 class test. The overall pass mark for the above modules will be 50%.

e. <u>Research Project</u>

The final year research project (NTS 3000Y(5)) will be assessed based on the written dissertation and a *Viva Voce*.

The weightage for the research project is as follows:

Written dissertation	-	90% of research project
Viva Voce	-	10% of research project

f. Placement

Students will be required to participate in placements for duration of six (6) weeks and three (3) weeks during year 2 and 3, respectively. The placements are compulsory. The placement will be in recognised clinical settings and/or food production companies and/or food processing companies and/or any other related institution.

Assessment

• Candidates will have to ensure 80% attendance and should submit a satisfactory portfolio at the end of each placement. Successful completion of each placement will result is a Grade S.

8. List of Modules

Code	Module name	Code	Module name
HLS 1101(1)	Foundation Course in Biology	AR 1	
Semester 1		Semester 2	
HLS 1104(1)	Human Anatomy and Physiology	NTS 1201(1)	Maternal and Child Nutrition
NTS 1101(1)	Introduction to Nutritional Biochemistry	NTS 1202(1)	Analysis and Chemistry of Foods
NTS 1102(1)	Nutrition, Counselling and Health Promotion	NTS 1203(1)	Nutrition and Metabolism
NTS 1103(1)	Nutritional Problems of Developing Nations and Food Policy	NTS 1204(1)	Food Technology and Food Production
NTS 1104(1)	Human Nutritional Needs	NTS 1205(1)	Food for Contemporary living
NTS 1105(1)	Food Marketing	NTS 1206(1)	Physicochemical and Biological Aspects of Food
	YE	CAR 2	
Semester 1		Semester 2	
HLS 2101(3)	Human Pathology	NTS 2201(3)	Psychology for Nutritional Sciences
HLS 2102(3)	Health Research Methods and Statistics	NTS 2202(3)	Nutritional Assessment and Food Habits
NTS 2101(3)	Nutrition Throughout Adolescence, Adulthood and Old Age	NTS 2203(3)	Nutrition Education and Diet Change
NTS 2102(3)	Microbiology of Foods	NTS 2204(3)	Endocrine Regulation and Physiological Control for Nutritional Sciences
NTS 2103(3)	Food Processing and Preservation	NTS 2205(3)	Herbals, Homeopathy and Dietary Supplements
NTS 2104(3)	Nutrition Science Laboratory	NTS 2001Y(3)	Placement I (6 Weeks)
	YE	<u>AR 3</u>	
Semester 1		Semester 2	
NTS 3000Y(5)	Project	NTS 3000Y(5)	Project
NTS 3101(5)	Health Consequences of Under and Over- Nutrition	NTS 3201(5)	Nutrition Related Diseases
NTS 3102(5)	Functional Foods	NTS 3202(5)	Sports Nutrition, Diet and Lifestyle
NTS 3103(5)	Food Quality Assurance	NTS 3203(5)	Current Nutrition Issues
NTS 3104(5)	Macronutrients and Micronutrients in Human	NTS 3204(5)	Public Health Nutrition
	Health	NTS 3001Y(5)	Placement II (3 Weeks)

9. Programme Plan

BSc (Hons) Nutritional Sciences. (C = Contact hours; S = Self-Study; O = Other learning activities (Including practical); NA = Not Applicable)

Code	Module name	Contact Teaching (Hours) L/P	Self-Study (hours)	Other Learning Activities	Total Learning	LCCS credits
HLS 1101	Foundation Course in Biology	20/10	60	90*	180	0
TILD TIOT	Toundation Course in Diology	YEAR 1	00	70	100	0
		Semester 1				
HLS 1104 (1)	Human Anatomy and Physiology	30	60	90	180	6
NTS 1101 (1)	Introduction to Nutritional Biochemistry	20/10	60	90*	180	6
NTS 1102 (1)	Nutrition, Counselling and Health Promotion	30	60	90*	180	6
NTS 1103 (1)	Nutritional Problems of Developing Nations and Food Policy	30	60	90	180	6
NTS 1104 (1)	Human Nutritional Needs	30	60	90	180	6
NTS 1105 (1)	Food Marketing	30	60	90	180	6
		Semester 2				
NTS 1201 (1)	Maternal and Child Nutrition	30	60	90	180	6
NTS 1202 (1)	Analysis and Chemistry of Foods	20/10	60	90*	180	6
NTS 1203 (1)	Nutrition and Metabolism	30	60	90	180	6
NTS 1204 (1)	Food Technology and Food Production	20/10	60	90*	180	6
NTS 1205 (1)	Food for Contemporary living	25/5	60	90**	180	6
NTS 1206 (1)	Physicochemical and Biological Aspects of Food	20/10	60	90*	180	6
Sub-total		390	780	1170	2340	72
		YEAR 2				
		Semester 1				
HLS 2101 (3)	Human Pathology	30	60	90	180	6
HLS 2102 (3)	Health Research Methods and Statistics	30	60	90	180	6
NTS 2101 (3)	Nutrition Throughout Adolescence, Adulthood and Old Age	30	60	90	180	6
NTS 2102 (3)	Microbiology of Foods	20/10	60	90*	180	6
NTS 2103 (3)	Food Processing and Preservation	20/10	60	90**	180	6
NTS 2104 (3)	Nutrition Science Laboratory	15/15	60	90***	180	6
	· · ·	Semester 2	•	•		
NTS 2201 (3)	Psychology for Nutritional Sciences	30	60	90	180	6
NTS 2202 (3)	Nutritional Assessment and Food Habits	25/5	60	90**	180	6
NTS 2203 (3)	Nutrition Education and Diet Change	30	60	90	180	6
NTS 2204 (3)	Endocrine Regulation and Physiological Control for Nutritional Sciences	30	60	90	180	6
NTS 2205 (3)	Herbals, Homeopathy and Dietary Supplements	30	60	90	180	6
NTS 2001Y(3)	Placement I (6 Weeks)					12
Sub-total		330	660	990	1980	78
		YEAR 3			- / • •	
		Semester 1				
NTS 3000Y(5)	Project					
NTS 3101 (5)	Health Consequences of Under and Over-nutrition	30	60	90	180	6
NTS 3102 (5)	Functional Foods	30	60	90	180	6
NTS 3103 (5)	Food Quality Assurance	30	60	90	180	6
NTS 3104 (5)	Macronutrients and Micronutrients in Human Health	30	60	90	180	6
	•	Semester 2		I		
NTS 3000Y(5)	Project			600	600	20
NTS 3201 (5)	Nutrition Related Diseases	30	60	90	180	6
NTS 3202 (5)	Sports Nutrition, Diet and Lifestyle	30	60	90	180	6
NTS 3203 (5)	Current Nutrition Issues	30	60	90	180	6
NTS 3204 (5)	Public Health Nutrition	30	60	90	180	6
NTS 3001Y(5)	Placement II (3 Weeks)	-				6
Sub-total		240	480	1320	2040	74
GRAND TOTA	L	960	1920	3480	6360	224

*An additional of 20 hours of practical will be covered as part of other learning activities. **An additional of 5 hours of practical will be covered as part of other learning activities. ***An additional of 45 hours of practical will be covered as part of other learning activities.