

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

1. Introduction

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.

2. Rationale and Objectives

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.

2.1 Specific Programme Objectives

- 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, proximate analysis and for product development.
- Acquire food production and food processing knowledge and techniques through lectures and practicals.
- Undergo placements and training in nutrition-related institutions and acquire knowledge from the operations/procedures of food industries.
- Develop good communication skills throughout the programme.

3. General Entry Requirements

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

4. Programme Requirements

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)

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

6. Minimum Credits Required for Awards

| | |
|---------------------------------|-------------|
| BSc (Hons) Nutritional Sciences | 109 credits |
|---------------------------------|-------------|

7. Assessment

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 3 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 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%.

Research Project

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 |
| <i>Viva Voce</i> | - | 10% of research project |

8. 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 in a Grade S.

9. Grading Structure

Note: the pass mark for all modules is 50%

Under the GPA, the following grade point and their grade-point equivalent are used:

| Letter grade | Grade point | Percentage Mark |
|----------------|-------------|-----------------|
| A ⁺ | 4.00 | ≥80 |
| A | | 70≤X<80 |
| B | 3.00 | 60≤X<70 |
| C | 2.00 | 50≤X<60 |
| F | 0.00 | <50 |
| N | NA | |

10. Classification of Award

The degree of classification will be based on CPA at the end of the programme as follows:

| CPA (%) | CLASSIFICATION | |
|------------------|--|--------------|
| ≥ 70 | 1 st Class | With Honours |
| $60 \leq X < 70$ | 2 nd Class 1 st Division | |
| $50 \leq X < 60$ | 2 nd Class 2 nd Division | |
| < 50 | No award | |

11. Repeat and Termination of Registration

If the CPA of a student is < 50 for 2 consecutive semesters of the same academic year, the student will have to repeat the entire academic year, and retake modules as and when offered. However, s/he will not be allowed, to retake modules for which Grade C or above has been obtained.

Students will be allowed to repeat only once over the entire duration of the Programme of Studies.

Registration will be terminated if the CPA of the student remains below 50 at the end of an academic year and the student has already repeated one year of study.

A student's registration will lapse at the end of the semester in which s/he has successfully completed the minimum requirements for the award of the degree.

A student who repeats a module must submit new assignment(s), take part in the class test and re-take the examinations.

12. Method of Delivery

Throughout the course, a variety of teaching methods and strategies will be employed to ensure that students are adequately acquiring and developing appropriate concepts, knowledge and skills.

The modules will be delivered through lectures, seminars, group discussion, tutorials, practicals as well as problem-solving exercises. 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.

13. List of Modules

| Code | Module name | Code | Module name |
|----------------------|--|-------------------|---|
| HLS 1101(1) | Foundation Course in Biology | | |
| <u>YEAR 1</u> | | | |
| 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 |
| <u>YEAR 2</u> | | | |
| 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) |
| <u>YEAR 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 Health | NTS 3204(5) | Public Health Nutrition |
| | | NTS 3001Y(5) | Placement II (3 Weeks) |

14. Programme Plan

BSc (Hons) Nutritional Sciences. (L = Lectures; P = Practical; NA = Not Applicable)

| Code | Module name | L/P | Credits |
|-------------------|---|-------|---------|
| HLS 1101 | Foundation Course in Biology | 35/20 | 0 |
| YEAR 1 | | | |
| Semester 1 | | | |
| HLS 1104 (1) | Human Anatomy and Physiology | 45/0 | 3 |
| NTS 1101 (1) | Introduction to Nutritional Biochemistry | 30/30 | 3 |
| NTS 1102 (1) | Nutrition, Counselling and Health Promotion | 30/30 | 3 |
| NTS 1103 (1) | Nutritional Problems of Developing Nations and Food Policy | 45/0 | 3 |
| NTS 1104 (1) | Human Nutritional Needs | 45/0 | 3 |
| NTS 1105 (1) | Food Marketing | 45/0 | 3 |
| Semester 2 | | | |
| NTS 1201 (1) | Maternal and Child Nutrition | 45/0 | 3 |
| NTS 1202 (1) | Analysis and Chemistry of Foods | 30/30 | 3 |
| NTS 1203 (1) | Nutrition and Metabolism | 45/0 | 3 |
| NTS 1204 (1) | Food Technology and Food Production | 30/30 | 3 |
| NTS 1205 (1) | Food for Contemporary living | 40/10 | 3 |
| NTS 1206 (1) | Physicochemical and Biological Aspects of Food | 30/30 | 3 |
| YEAR 2 | | | |
| Semester 1 | | | |
| HLS 2101 (3) | Human Pathology | 45/0 | 3 |
| HLS 2102 (3) | Health Research Methods and Statistics | 45/0 | 3 |
| NTS 2101 (3) | Nutrition Throughout Adolescence, Adulthood and Old Age | 45/0 | 3 |
| NTS 2102 (3) | Microbiology of Foods | 35/20 | 3 |
| NTS 2103 (3) | Food Processing and Preservation | 30/30 | 3 |
| NTS 2104 (3) | Nutrition Science Laboratory | 15/60 | 3 |
| Semester 2 | | | |
| NTS 2201 (3) | Psychology for Nutritional Sciences | 45/0 | 3 |
| NTS 2202 (3) | Nutritional Assessment and Food Habits | 40/10 | 3 |
| NTS 2203 (3) | Nutrition Education and Diet Change | 45/0 | 3 |
| NTS 2204 (3) | Endocrine Regulation and Physiological Control for Nutritional Sciences | 45/0 | 3 |
| NTS 2205 (3) | Herbals, Homeopathy and Dietary Supplements | 45/0 | 3 |
| NTS 2001Y(3) | Placement I (6 Weeks) | | 4 |
| YEAR 3 | | | |
| Semester 1 | | | |
| NTS 3000Y(5) | Project | | |
| NTS 3101 (5) | Health Consequences of Under and Over-nutrition | 45/0 | 3 |
| NTS 3102 (5) | Functional Foods | 45/0 | 3 |
| NTS 3103 (5) | Food Quality Assurance | 45/0 | 3 |
| NTS 3104 (5) | Macronutrients and Micronutrients in Human Health | 45/0 | 3 |
| Semester 2 | | | |
| NTS 3000Y(5) | Project | | 10 |
| NTS 3201 (5) | Nutrition Related Diseases | 45/0 | 3 |
| NTS 3202 (5) | Sports Nutrition, Diet and Lifestyle | 45/0 | 3 |
| NTS 3203 (5) | Current Nutrition Issues | 45/0 | 3 |
| NTS 3204 (5) | Public Health Nutrition | 45/0 | 3 |
| NTS 3001Y(5) | Placement II (3 Weeks) | | 2 |