# CONSUMER SCIENCES FOOD & NUTRITION





FACULTY OF APPLIED SCIENCES

**20 HAND 24 BOOK** 

ENVISION2030

transparency • honesty • Integrity • respect • accountability

# HANDBOOK FOR 2024

FACULTY of

**APPLIED SCIENCES** 

DEPARTMENT of CONSUMER SCIENCES FOOD AND NUTRITION

#### IMPORTANT NOTICES

Your registration is in accordance with all current rules of the Institution. If, for whatever reason, you do not register consecutively for every year/semester of your programme, your existing registration contract with the Institution will cease. Your re-registration anytime thereafter will be at the discretion of the institution and, if permitted, will be in accordance with the rules applicable at thattime.

The rules in this departmental handbook must be read in conjunction with the General Rules (G Rules) contained in the DUT General Handbook for Students as well as the relevant Study Guides.

With respect to an appeal, your attention is specifically drawn to Rules G1(8) and (9), and to the process of dealing with student's issues.

#### STRATEGIC DIRECTION

#### **FACULTY OF APPLIED SCIENCES**

[Educate. Engage. Innovate.]

## VISION

Leading innovation through science and technology

#### MISSION STATEMENT

- Educate students
- Generate new scientific knowledge
- Engage communities

#### **VALUES**

- 1. **Accountability**: We take ownership of all activities, resources and tasks required of us. We deliver on our promises and responsibilities.
- 2. **Integrity**: We adhere to moral standards and principles. We are transparent and consistent in all our actions, and lead by example.
- 3. **Dedication**: We are committed to achieving our goals and expectations.
- Professionalism: We operate within clear boundaries with respect to our code of conduct.
- 5. **People Oriented**: We are committed to sustaining the morale and holistic development of staff and student. We value diversity in all forms.

# **DEPARTMENT OF CONSUMER SCIENCES FOOD AND NUTRITION**

#### VISION

Leading in applied consumer science food and nutrition education

#### MISSION STATEMENT

Develop adaptive graduates in consumer science food and nutrition to impact society

#### **VALUES**

Creativity

We initiate new and exciting ideas in everything we do

Accountability

We accept responsibility for our actions and commit to continuously improve everything we do

Collaboration

We work as a team and partner with others to achieve our goals

Excellence

We strive to be the best and approach every challenge with a determination to

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#### I. DEPARTMENTAL & FACULTY CONTACT DETAILS

All departmental queries to:

 Secretary:
 Miss N Blose

 Tel No:
 (031) 373 2322

 Fax No:
 (031) 373 2795

 Email:
 noxolob@dut.ac.za

Location of Department: S9 Level 3, Room 304, Steve Biko Campus

All Faculty queries to:

Faculty Officer:Ms G ShacklefordGeneral Enquiries No:031 373 2506Facsimile No:031 373 2175Email:dutfas@dut.ac.za

Location: Block S4 Level 3, Steve Biko Campus

Faculty Assistant:Mr S MasukuGeneral Enquiries No:031 373 3036Facsimile No:031 373 2175Email:spha@dut.ac.za

Location: Block S4 Level 3, Steve Biko Campus

**Executive Dean:** Prof S Singh

Executive Dean's Secretary:

Telephone No:

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Ms Nirvana Kemlall
031 373 2720
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Location: Between Block S6 and S7, Level 4,

Steve Biko Campus

#### 2. DEPARTMENTAL STAFF

# **Head of Department**

Dr Heleen Grobbelaar, PhD: Food and Nutrition (DUT)

#### Senior Lecturers

Dr Ashika Naicker, PhD: Nutrition (NWU)

Dr Nokuthula Vilakazi, PhD: Human Nutrition (UP)

#### Lecturers

Mrs Anjellah Reddy, MappSci: Food and Nutrition DUT)

Mrs Evonne Singh, MEd (UKZN)

Dr Onwaba Makanjana, PhD: Food and Nutrition (DUT)

Ms Lisebo Mothepu, MappSci: Food and Nutrition (DUT)

Mrs Sinenhlanhla Maphumulo, MappSci: Food and Nutrition

(DUT)

#### **Administrative Staff**

#### Senior Technician

Ms Jane Visagie, HDE: Home Economics (DOK)

#### **Technician**

Mrs Phindile Nzama, MappSci: Food and Nutrition (DUT)

Mrs Sindisiwe Nene, BTech: Consumer Science: Food and Nutrition (DUT)

# **Laboratory Assistants**

Mrs Camilla Govender, BTech: Consumer Science: Food and

Nutrition (DUT)

Ms Monica Lindiwe Nxumalo

Ms Zakithi Mhlongo, BTech: Consumer Science: Food and Nutrition

(DUT)

#### 3. DEPARTMENTAL INFORMATION

# 3.1 QUALIFICATIONS OFFERED BY THE DEPARTMENT

The following programmes are offered in this department:

| Qualification                                      | Qualification<br>Code | Important Dates   | SAQA<br>NLRD ID |
|--|-----------------------|-------------------|-----------------|
| Diploma in Consumer<br>Sciences Food and Nutrition | DICSFI                | From January 2020 | 110205          |
| Advanced Diploma in Consumer Sciences in Food      | ADCSFI                | From January 2020 | 110047          |
| Postgraduate Diploma in Food and Nutrition         | PGDFNI                | From January 2022 |                 |
| Masters of Applied Science in Food and Nutrition   | MSFNTI                | From January 2015 | 96786           |
| Doctor of Philosophy in Food and Nutrition         | DPFNTI                | From January 2015 | 97059           |

# 4. DIPLOMA IN CONSUMER SCIENCES IN FOOD AND NUTRITION (DICSFI)

# **Purpose of Qualification**

# Graduates of the Diploma in Consumer Sciences in Food and Nutrition

will be competent in the application of scientific based food and nutrition knowledge and culinary skills in a range of work activities. These include fresh product and recipe development; food retail; food production and foodservice; and nutrition advising; with the aim of improving consumer well-being. This qualification is semesterised and offered through a three-year programme.

# Programme outcomes:

Upon successful completion of this qualification, graduates will be able to :

- I. Apply theoretical and practical food and nutrition knowledge and culinary skills in the production, retail and service of food to improve consumer well-being;
- 2. Demonstrate a working knowledge of legislation in the Food and Nutrition fields to ensure quality, hygiene and safety of food for the well-being of consumers:
- 3. Demonstrate effective communication skills including the use of information technology within the Food and Nutrition field, to a variety of audiences.
- 4. Apply managerial principles in the operation of food production, food service and food retail;
- 5. Act as a responsible, productive and critical citizen and maintain a professional code of conduct and work ethic.

# 4.1 PROGRAMME STRUCTURE (3 YEAR) DICSFI

| THOONATHE STRUCTURE (STEAR) DIEST |  |                |         |                      |                |                   |  |  |  |
|-----------------------------------|--|----------------|---------|----------------------|----------------|-------------------|--|--|--|
| Code                              | Modules  | Study<br>Level | C<br>/E | Assessment<br>Method | HESQF<br>level | Module<br>Credits | Prerequisite<br>Modules  |  |  |
| NUTI 101                          | Nutrition IA   | la             | С       | Ex                   | 5              | 8                 | -  |  |  |
| FPSO 101                          | Food Production & Service<br>Operations IA   | la             | С       | CA                   | 5              | 8                 | -  |  |  |
| FSCP 101                          | Food: Science and Practice IA  | la             | С       | Ex                   | 5              | 16                | =  |  |  |
| FOCO 101                          | Food Communication I   | la             | С       | CA                   | 5              | 8                 | -  |  |  |
| CSTN 101                          | Cornerstone 101  | la             | С       | CA                   | 5              | 12                | -  |  |  |
| ICTL 101                          | Institutional General Education: Information and Communication Technology Literacy and Skills  | la             | С       | CA                   | 5              | 8                 | -  |  |  |
| A II 1771 100                     | N ID   | .,             |         | -                    | -              |                   |  |  |  |
| NUTI 102                          | Nutrition IB   | lb             | С       | Ex                   | 5              | 8                 | -  |  |  |
| FPSO 102                          | Food Production & Service<br>Operations IB   | lb             | С       | CA                   | 5              | 8                 | =  |  |  |
| FSCP 102                          | Food: Science and Practice IB  | lb             | С       | Ex                   | 5              | 20                | -  |  |  |
| APSC 101                          | Applied Sciences I   | Ιb             | С       | Ex                   | 5              | 8                 | -  |  |  |
| COBE 101                          | Consumer Behaviour I   | Ιb             | С       | Ex                   | 5              | 8                 | -  |  |  |
| ASWL 101                          | Faculty General Education:<br>: Applied Science and<br>Wellness  | lb             | E       | CA                   | 5              | 12                | -  |  |  |
|                                   |  |                |         |                      |                |                   |  |  |  |
| FSCP 201                          | Food: Science and Practice II<br>A   | 2a             | С       | Ex                   | 6              | 16                | Food: Science<br>and Practice IA<br>and IB                     |  |  |
| NUTI 201                          | Nutrition II A   | 2a             | С       | Ex                   | 6              | 8                 | Nutrition I A and I B  |  |  |
| FPSO 201                          | Food Production & Service<br>Operations IIA  | 2a             | С       | CA                   | 6              | 16                | Food<br>Production and<br>Service<br>Operations I A<br>and I B |  |  |
| FOMI 101                          | Food Microbiology I  | 2a             | С       | Ex                   | 5              | 8                 | -  |  |  |
| RQTH I0I                          | Institutional General Education: Student to select one module Elective I: Reflections on Quantitative Thinking Elective 2: Values in the Workplace | 2a             | E       | CA                   | 5              | 8                 | -  |  |  |

|                               | Let a 2 L L L  | 1  | 1 | 1  | 1 |     | ı  |
|-------------------------------|--|----|---|----|---|-----|--|
| LDSH 101                      | Elective 3: Leadership   |    |   |    |   |     |  |
| IASC 101                      | Faculty General Education:<br>: Introduction to<br>Applied Sciences  | 2a | E | CA | 5 | 12  | -  |
| FCCD 202                      | F 10: 10:  | 21 |   |    | , | 20  | Food: Science  |
| FSCP 202                      | Food: Science and Practice IIB   | 2b | С | Ex | 6 | 20  | and Practice IA<br>and IB  |
| NUTI 202                      | Nutrition IIB  | 2b | С | Ex | 6 | 12  | Nutrition I A<br>and I B   |
| FPSO 202                      | Food Production & Service<br>Operations IIB  | 2b | С | CA | 6 | 16  | Food<br>Production and<br>Service<br>Operations I A<br>and IB                  |
| FREO I 0 I                    | Food Retail Operation I  | 2b | С | CA | 5 | 8   | -  |
| FQUA 101                      | Food Quality Assurance I   | 2b | С | Ex | 6 | 8   | -  |
| FSCP 301                      | Food: Science and Practice<br>IIIA   | 3a | С | CA | 6 | 24  | Food: Science<br>and Practice II<br>A<br>Food: Science<br>and Practice II<br>B |
| NUTI 301                      | Nutrition IIIA   | 3a | С | CA | 6 | 12  | Nutrition IIA<br>and IIB   |
| FPSO 301                      | Food Production & Service<br>Operations IIIA   | За | С | CA | 6 | 16  | Food<br>Production and<br>Service<br>Operations IIA<br>and IIB                 |
| WWRK 101                      | Institutional General Education Elective III – WORLD OF WORK   | 3a | С | CA | 5 | 8   | -  |
| RASSIOI<br>ASSDIOI<br>ASCEIOI | Faculty General Education: Student to select one Elective 1: Role of Applied Science in Society Elective 2: Applied Science for Sustainable Development Elective 3: Community Development and Engagement | 3a | E | CA | 6 | 12  | -  |
| FCCD 202                      | 5 10 10  | 21 |   | 64 |   | 1.4 | F 10:  |
| FSCP 302                      | Food: Science and Practice<br>IIIB   | 3b | С | CA | 6 | 16  | Food: Science<br>and Practice II<br>A<br>Food: Science<br>and Practice II<br>B |
| NUTI 302                      | Nutrition IIIB   | 3b | С | CA | 6 | 8   | Nutrition IIA & IIB  |
| FPSO 302                      | Food Production & Service<br>Operations IIIB   | 3b | С | CA | 6 | 8   | Food<br>Production and<br>Service<br>Operations IIA<br>and IIB                 |
| FANP 202                      | Food and Nutrition Practice  | 3b | С | CA | 6 | 8   | -  |
|                               |  |    |   |    |   |     |  |

| EADD 202 | Food and Numician Ductors                                 | 21- |   | 64 | , | 0 | Foods Colones   |
|----------|---|-----|---|----|---|---|---|
| FAPR 202 | Food and Nutrition Project<br>II (Worksite-Based Project) | 3b  | С | CA | 6 | 8 | Food: Science<br>and Practice IIA<br>and IIB,<br>Nutrition IIA<br>and IIB<br>Food<br>Production and<br>Service<br>Operations IIA<br>and IIB |

#### 4.2 PROGRAMME RULES

# 4.2.1 Minimum Admission Requirements

In addition to DUT Rule G7, the following minimum entrance requirements and the selection criteria outlined in 4.2.2 apply for applicants with reference to (awaiting final approval):-

## 4.2.1.1 Academic Achievement

In line with the above, applicants' school leaving academic achievement must comply with one of the following:-

| Compulsory Modules              | NSC    | SC | SC |      |
|---------------------------------|--------|----|----|------|
| Compulsory Modules              | Rating | HG | SG | NCV  |
| English (home) OR               | 3      | E  | С  | 60%  |
| English (1st add).              | 4      |    |    | 00%  |
| Maths OR                        | 3      | E  | С  |      |
| Maths Literacy                  | 4      | _  | C  | 60%  |
| Accounting OR                   |        |    |    |      |
| Business Studies OR             |        |    |    |      |
| Consumer Studies OR             | 3      | -  | -  | -    |
| Physical Science OR             |        |    |    |      |
| Life Sciences/Biology           |        |    |    |      |
| Plus three other 20 credit      | 3      | _  | _  | _    |
| modules                         | 3      | _  | _  | _    |
| Science or Biology              | -      | E  | С  | -    |
| For the NCV: any three of       |        |    |    |      |
| the following modules:-         |        |    |    |      |
| food preparation, hospitality   |        |    |    |      |
| services, hospitality generics, |        |    |    |      |
| marketing, management and       | _      | _  | _  | 60%  |
| hospitality, finance economics  |        |    |    | 0070 |
| and accounting, process plant   |        |    |    |      |
| operations, physical science,   |        |    |    |      |
| process technology, process     |        |    |    |      |
| chemistry                       |        |    |    |      |

# 4.2.1.2 Admission Requirements based on Work Experience, Age and Maturity; and Recognition of Prior Learning

The DUT Rules G7(3), and G7(8) respectively, will apply. (Approved by Senate Rules Comm wef 2014/10)

## 4.2.1.3 Admission of International Students

The DUT's Admissions Policy for International Students and DUT Rules G4 and G7(5) will apply. (Approved by Senate Rules Comm wef 2014/10)



International students must meet the equivalent programme minimum entrance requirements as stated above. (Approved by Senate Rules Comm wef 2014/10)

#### 4.2.1.4 Admission of Students from Other Institutions

In addition to the relevant DUT Rules a transferring student will only be accepted if there are places available and the student has met the applicable entrance requirements of the university. (Approved by Senate Rules Comm wef 2014/10)

# 4.2.1.5 Additional Requirements for All Students

a) A prescribed chef's uniform and equipment kit.

## 4.2.2 Selection Criteria

In addition to the Minimum Admission Requirements), the following selection process will determine acceptance into the programme:

All applicants must apply through the Central Applications Office (CAO).

Initial shortlisting for selection is based on the applicant's academic performance in Grade 12. (Grade 11 or Grade 12 trial marks will be used for current matriculants) Initial selection will be based on the ranking of applicants who meet the minimum requirements.

Provisional acceptance is given to selected applicants awaiting the outcomes of the National Senior Certificate\* (NSC) results. Where the final NSC\* results do not meet the minimum entrance requirements for the programme, the provisional acceptance will be withdrawn.

Final selection for placement will be based on both the results of the above ranking process, as well as available places (refer to DUT Rule G5) (Approved by Senate Rules Comm wef 2020/11)

# 4.2.3 Pass requirements

In addition to the DUT Rules G12, G14 and G15, the following programme rules apply:

- 4.2.3.1 In addition to the general requirements for a year/semester mark as stipulated in Rule GI4 an GI5, the definition of the term "satisfactory attendance" shall include:
- 4.2.3.2~90% attendance of all practical classes in a subject. Exceptional circumstances may be reviewed by the Head of Department.
- 4.2.3.3 Attendance is compulsory at all functions, guest speaker sessions, organized short courses, outings and educational tours arranged by the department. (Any additional cost involved will be the responsibility of the student.)
- 4.2.3.4 Students will be required to arrive timeously at lectures and practicals. Students who arrive late will only be admitted at the lecturer's discretion on presentation of a valid reason.
- 4.2.3.5 The department reserves the right toverify any medical certificate.
- 4.2.3.6 Students will be required to participate in departmental promotions and functions outside of normal tuition times, which may take place off campus.
- 4.2.3.7 Laboratory rules shall applyto all students. Refer to relevant study guides.

- 4.2.3.8 For a continuous assessment subject. The **fral** mark for the subject comprises a mark obtained from work completed during the year/semester. There is no examination for the subject. A portion of this work is moderated and all is work retained by the department for a period of three (3) years as proof of performance. Details are in each subject study guide. If the final mark is a fail(less than 50%) the student will be required to re-register for and repeat that subject.
- 4.2.3.9 All doctor's, driver's license appointments etc., made for students must not clash with practicals and assessment dates.

# 4.2.4 Progression Rules

# 4.2.4.1 Promotion from Year I to Year 2:

The DUT Rule G16 applies

# 4.2.4.2 Promotion from Year 2 to Year 3:

The DUT Rule G16 applies

## 4.2.5 Exclusion Rules

In addition to DUT Rule G17, a student in the first year who fails 50% plus one of the modules, with an average of less than 40% in each module is not permitted to reregister in this programme. Deregistration from any modules is subject to the provision of DUT Rule G6A.

# 4.2.6 Interruption of Studies

Should a student interrupt their studies by more than three (3) years, the student will need to apply to the department for permission to reregister and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration.

# 4.2.7 Work Integrated Learning (WIL) Rules

In addition to Rule G28, and the requirements as detailed in the relevant Study Guides, the following programme rules apply.

WIL can only be undertaken if the student has passed the first and second year major subjects (Food and Food and Food Science Radice 3, Food Rodution and Sevice Operators 3 and Nutrition 3.

- 4.2.7.1 A student will undergo 3 months of work-integrated learning (WIL) as part of the third year of study.
- 4.2.7.2 The department undertakes to assist the student in obtaining suitable WIL placement.
- 4.2.7.3 A student who finds their own placement must ensure the workplace is approved by the department.

(Approved by Senate Rules Comm wef 2014/10)

#### 4.2.8 Code of Conduct

In addition to the Student Code of Conduct in the DUT General Handbook for Students, and the relevant requirements as stated in the appropriate Study Guides, the following rules apply:

#### 4.2.8.1 Conduct of Students in Practical Facilities

Strict adherence to instructions issued by technical, supervisory or academic staff is

required due to the need to ensure effective and safe practice in these facilities. Misconduct or disregard for instructions will be referred to the relevant disciplinary procedure.

(Approved by Senate Rules Comm wef 2014/10)

#### 4.2.8.2 Uniforms

Students must adhere to instructions issued by technical, supervisory or academic staff regarding the specific dress code required during practicals. Non- compliance will result in the student being denied access to the venue.

(Approved by Senate Rules Comm wef 2014/10)

#### 4.2.9 Attendance and Assessment

4.2.9.1 A student who, for any valid reason (Refer to Programme Rule 4.3.9.2 below), is absent from a particular practical or test, must provide written proof of the reason for the absence to the lecturer concerned, within five (5) working days of returning to the institution in order to be considered for a special assessment.

(Approved by Senate Rules Comm wef 2014/10)

4.2.9.2 The DUT Rule G13 (3) (a) which refers to special examinations also refers to special assessments set within departments for students who have missed coursework assessments. In these cases the department will determine the validity of the student's reason for not taking the assessment, and the nature of the special assessment. (Approved by Senate Rules Comm wef 2014/10)

# 4.2.10 Health and Safety

Students must adhere to all Health and Safety regulations both while at DUT and in WIL placements. Failure to do so will be treated as a breach of discipline. Refer to the appropriate Health and Safety policies.

(Approved by Senate Rules Comm wef 2014/10)

# 4.2.11 Registration with SAAFoST and SACA

Students will be registered as a student member with the South African Association of Food Science and Technology (SAAFoST) and with the South African Chefs Association (SACA). The SAAFoST registration is for the duration of the first qualification. The SACA membership is for two years, voluntary professional membership with SACA is encouraged in the third year of study.



# 5. ADVANCED DIPLOMA IN CONSUMER SCIENCES IN FOOD AND NUTRITION (ADCSFI)

# Purpose of the Qualification

The qualification aims at promoting consumer well-being by focusing on the application of scientific theoretical and practical food and nutrition knowledge in convenience food development, by developing food and nutrition training and research capacities. This programme presents an opportunity to specialize in either food safety and quality, or food marketing and communication.

# Programme outcomes:

Upon completion of this qualification the student should be able to:

- I. Apply scientific theoretical and practical food and nutrition knowledge in recipe and product development, contextualised nutrition concepts, training, and either food safety and quality or food marketing and communication.
- 2. Develop skills to undertake research within the field of food and nutrition.
- 3. Apply critical and creative problem-solving techniques within the food and nutrition field
- 4. Work effectively as an individual and in teams within organisations and communities
- 5. Develop professional, ethical and critical thinking practices

#### 5.1 PROGRAMME STRUCTURE

| Subject<br>Code      | Name of<br>Module   | Study<br>Level | C/E* | Assessment<br>Method | Module<br>Credits | HEMIS<br>credits | NQF<br>Level |
|----------------------|---|----------------|------|----------------------|-------------------|------------------|--------------|
| STST 401             | Statistics  | la             | С    | CA                   | 16                | 0.129            | 7            |
| NUTR401              | Nutrition   | la             | С    | EX                   | 28                | 0.226            | 7            |
| FMCO 401<br>FSAQ 401 | Student to select<br>one Elective 1:<br>Food Marketing<br>and<br>Communication<br>Elective 2: Food<br>Safety and<br>Quality | la             | E    | EX                   | 24                | 0.193            | 7            |
| FOFS 401             | Food and Food<br>Science  | lb             | С    | CA                   | 32                | 0.259            | 7            |
| FNTR 101             | Food and<br>Nutrition<br>Training   | lb             | С    | EX                   | 24                | 0.193            | 7            |

#### 5.2 PROGRAMME RULES

## **5.2.1 Admission Requirements**

In addition to DUT Rules G7 and G21C, applicants must be in possession of one of the following minimum admission requirement for entry into this programme:

• Diploma in Consumer Sciences in Food and Nutrition;

- National Diploma in Consumer Science: Food and Nutrition
- Or a recognised equivalent qualification

(Approved by Senate Rules Comm wef 2019/9)

## 5.2.2 Selection Criteria

In addition to the Admission Requirements, the following selection process will be applied for placement in the programme:

Selection into the qualification is based on the number of places in the programme Applicants will be ranked on academic performance.

Applicants apply directly to the Department of Food and Nutrition Consumer Sciences. The closing date for application is 30 October each year. (Approved by Senate Rules Comm wef 2019/9)

# 5.2.3 Duration of the programme

In accordance with DUT Rule G21C (2) and G21C (3) the duration of the programme is as follows: -

- The minimum duration is one year of full-time registered study
- Or two years of part-time registered study

# 5.2.4 Pass Requirements

The DUT Rules G12, G14 and G15 apply

# 5.2.5 Progression Rules

The DUT Rule G16 applies

#### 5.2.6 Exclusion Rules

The DUT Rules G17 and G21C (3) apply.

# 5.2.7 Interruption of studies

The DUT Rule G6B pertaining to interruption of studies will apply

# 6. POSTGRADUATE DIPLOMA IN FOOD AND NUTRITION (PGDFNI)

# Purpose of the qualification

This qualification complies with the purpose, nature and characteristics of a Postgraduate Diploma as indicated in the Higher Education Qualifications Sub-Framework (HEQSF), as it aims at promoting consumer well-being by focusing on the application of scientific theoretical food and nutrition knowledge as well as developing research capacities in the field of food and nutrition.

The theoretical deepening of food and nutrition knowledge will build upon the preceding knowledge base, which will enhance skills that can be applied in industry; furthermore, the qualification will adequately prepare the student for higher-level research. This qualification will promote and ensure a high level of theoretical engagement and intellectual independence, as well as the ability to relate knowledge to a range of contexts in order to undertake highly skilled work.

# Programme outcomes:

Upon completion of this qualification the student should be able to:

- I. Apply project management and research methodology skills to undertake a food and nutrition research project.
- 2. Undertake advanced reflection and development through engagement with theoretical knowledge of key concepts and principles related to food and nutrition.
- 3. Relate food and nutrition knowledge to multidisciplinary contexts in order to undertake highly-skilled and specialised work.
- 4. Critically analyse developments and address problems related to the food and nutrition fields of public health and sustainability.

## **6.1 PROGRAMME STRUCTURE**

| Subject<br>Code | Name of<br>Module                              | Study<br>Level | C/E* | Assessment<br>Method | Module<br>Credits | HEMIS<br>credits | NQF<br>Level |
|-----------------|--|----------------|------|----------------------|-------------------|------------------|--------------|
| FNPH801         | Food and Nutrition<br>Public Health            | la             | С    | CA                   | 24                | 0.200            | 8            |
| RMFN801         | Research<br>Methodology                        | la             | С    | CA                   | 20                | 0.167            | 8            |
| SUFN801         | Sustainable<br>Food and<br>Nutrition           | la             | С    | CA                   | 24                | 0.200            | 8            |
| FNPM802         | Food and<br>Nutrition<br>Project<br>Management | lb             | С    | Ex                   | 20                | 0.167            | 8            |
| FNRP802         | Food and<br>Nutrition<br>Research<br>Project   | lb             | С    | CA                   | 32                | 0.267            | 8            |

KEY: Assessment: Th= Theory, EX= Examination, Pr= Practical, CA = Continuous Assessment is no Final examination for these subjects/modules

#### **6.2 PROGRAMME RULES**

# **6.2.1 Admission Requirements**

In addition to Rule G22B, applicants must be in possession of one of the following minimum admission requirement for entry into this programme:

- Advanced Diploma in Consumer Science in Food and Nutrition
- Or a recognised equivalent qualification in a cognate field may satisfy the minimum submission requirements

(Approved by Senate Rules Comm wef 2020/11)

#### 6.2.2 Selection Criteria

In addition to the Admission Requirements, the following selection process will be applied for placement in the programme:

Selection into the qualification is based on the number of places in the programme Applicants will be ranked on academic performance

Applicants apply directly to the Department of Food and Nutrition Consumer Sciences. The



closing date for application is 30 October each year. (Approved by Senate Rules Comm wef 2020/11)

# 6.2.3 Duration of the programme

In accordance with DUT Rule G22B (2) and (3) the duration of the programme is as follows:

- The minimum duration is one year of full-time registered study
- The maximum duration is two years

(Approved by Senate Rules Comm wef 2020/11)

# 6.2.4 Pass requirement

The DUT Rule G16 applies (Approved by Senate Rules Comm wef 2020/11)

# **6.2.5 Progression Rules**

The DUT Rule G16 applies (Approved by Senate Rules Comm wef 2020/11)

## **6.2.6 Exclusion Rules**

In addition to DUT Rule G17, a student who fails three or more modules with an average of less than 40% in each of the failed modules is not permitted to re-register. Deregistration from any modules is subject to the provision of DUT Rule G6. (Approved by Senate Rules Comm wef 2020/11)

# 6.2.7 Interruption of studies

General Rule G6B applies (Approved by Senate Rules Comm wef 2020/11)

# 7. MASTEROF APPLIED SCIENCE IN FOOD AND NUTRITION (MSFNTI)

#### 7.1 PROGRAMME STRUCTURE

| Subject  | Subject Description                           | Period   | of | Assessment       | NATED |
|----------|---|----------|----|------------------|-------|
| RPFN 511 | Research Dissertation Full<br>Registration    | Annual   |    | Research Project | 1.000 |
| RPFN521  | Research Dissertation Successive Registration | Ailliuai |    | Research Froject | 1.000 |

#### 7.2 PROGRAMME INFORMATION

A qualified student will be able to conduct research in the food and nutrition consumer science fields to enhance the quality of life of the consumer.

## 7.3 PROGRAMME RULES

# 7.3.1 Minimum Admission Requirements

7.3.1.1 In addition to Rule G24 (1) applicants must be in possession of a Post Graduate Diploma in Food and Nutrition or equivalent qualification (Approved by Senate Rules Comm wef 2022/10)



#### 7.3.2 Selection Criteria

In addition to Rule G5, selection will be on the basis of academic performance as determined by a ranking system.

# 7.3.3 Pass Requirements

Students must have their research proposal and ethics approved, and their field work completed within the first year of registration. Failure to comply will result in exclusion from the programme unless there are extenuating circumstances. (Approved by Senate Rules Comm wef 2014/10)

# 7.3.4 Postgraduate Publications Requirements for Graduation

Master students are required to have:-

ONE publication submitted to a DHET approved journal; Prior to completion of the degree.

(Approved by Senate Rules Comm wef 2019/11)

# 8. DOCTOR OF PHILOSOPHY IN FOOD AND NUTRITION (DPFNTI)

#### 8.1 PROGRAMME STRUCTURE

| Subject  | Subject                              | Period of | Assessment       | NATED |
|----------|--------------------------------------|-----------|------------------|-------|
| RPFN611  | Research Thesis<br>Full Registration | Annual    | Research Project | 1.000 |
| RPFN 621 | Research Thesis<br>Full Registration | 7 tillual | research rioject | 1.000 |
| RPFN 631 | Research Thesis<br>Full Registration |           |                  |       |

#### 8.2 PROGRAMME INFORMATION

A qualified student will be able to apply advanced knowledge, skills, principles and methods to conduct independent, original research and to render a specialized professional service in Food and Nutrition, according to the needs of the University, the country and incompliance with international trends and standards to:

- respond to the needs of the community
- respond to the needs of business and industry
- respond to the needs of consumers

#### 8.3 PROGRAMME RULES

# 8.3.1 Minimum Admission Requirements

In addition to Rule G7 and G25 an applicant must be in possession of an MTech: Consumer Science: Food and Nutrition or equivalent.

(Approved by Senate Rules Comm wef 2014/10)

#### 8.3.2 Selection Criteria

In accordance with Rule G5, there is a limitation on the number of students that can be accepted in this programme.



# 8.3.3 Postgraduate Publications Requirements for Graduation

Doctoral students are required to have:-

- ONE publication accepted by a DHET approved journal and
- ONE publication submitted to a DHET approved journal; prior to completion of the degree

(Approved by Senate Rules Comm wef 2019/11)

#### 9 SERVICED MODULES

The servicing department's rules apply to all serviced subjects. The following subjects are serviced from this department:

| Serviced Programme             | Subject     | Module Code |
|--------------------------------|-------------|-------------|
| Diploma in Somatology (DISOMI) | Nutrition I | NTRT101     |
|                                | Nutrition 2 | NTRT201     |
|                                | Nutrition 3 | NTR1301     |

The following modules are serviced externally to this department:

| Servicing Department              | Serviced modules  | Module Code |
|-----------------------------------|---|-------------|
| Chemistry                         | Applied Sciences  | APSC 101    |
| Biotechnology and Food Technology | Food Microbiology I   | FOMI 101    |
| Information Technology            | Information and<br>Communication<br>Technology Literacy and<br>Skills | ICTL 101    |
| Language & Communication          | Food Communication I  | FOCO 101    |
| General Education Unit            | Cornerstone   | CSTN 101    |
| Sport Studies                     | Applied Science and Wellness  | ASWL 101    |

## 10 MODULE CONTENT

**NB.** Students are to read this section in conjunction with the relevant study guides.

**NB.** In view of the fact that Instructional Programmes and syllabi are constantly under review the programmes and syllabi appearing in this book are subject to alteration without prior notice.

# 10.1 DIPLOMA IN CONSUMER SCIENCES IN FOOD AND NUTRITION DICSFI

**NUTRITION IA (NUTI 101)** 

ASSESSMENT:

**Examination:** I x 3 hour paper

Course mark: Tests 60 %

Assignment 40 %



**SYLLABUS:** Introduction to nutrition; South African Food Based Dietary

Guidelines; Assessment of nutritional status using anthropometric measurements; Design meal and menus with reference to standards and recommendations for specific nutrients; Energy metabolism; The physiological functions of the human body, focusing on the circulatory,

endocrine, digestive and cardiovascular systems

# FOOD PRODUCTION AND SERVICE OPERATIONS 1A (FPSO 101) ASSESSMENT:

Continuous assessment: Tests 60%

Assignment 40%

Students, who fail, (i.e. who achieve a final mark of less than 50%) can

be re-assessed by:

A maximum of only 50% can be obtained on re-assessment All assessments and moderation practices will be aligned to DUT

assessment policy.

**SYLLABUS:** The food service Industry; Types of food service operations and

facilities; Food flow through the food service operation; Role of the food manager, production and service personnel; Cleaning, sanitation

and safety (Occupational health and safety act)

# **FOOD: SCIENCE AND PRACTICE 1A (FSCP 101)**

**ASSESSMENT:** 

**Examination:** I x 3 hour paper

Course mark: 25%Test + 25%Assignment + 25% Weekly practical mark + 25%

practical test

**SYLLABUS:** Theory: Introduction to food preparation; Introduction to food safety

and hygiene; Characteristics, structure, composition, properties (incl health properties; processing; quality, selection, storage, effect of heat and added substances; identification and solving of problems related to the following foods: vegetables, fruit, legumes, eggs, milk and milk products; Types and culinary application of herbs, spices and seasoning Practical: Application of weights, measures, temperature and pressure; Recipe structure and interpretation; culinary skills applicable to the plant origin foods listed above, including preparation and presentation;

Interpretation and presentation of an industry generated brief.

# **FOOD COMMUNICATION I (FOCO 101)**

**ASSESSMENT:** 

Continuous assessment: Tests 66,6%

Oral Presentation 33,4%

**SYLLABUS:** Process of Communication in the Workplace; Small group

Communication; Intercultural Communication; Report; Writing; Oral Communication; Written Communication: Correspondence and

Reports; 10 - 15% Flexible Content

**CORNERSTONE (CSTN 101)** 

ASSESSMENT:



**Continuous assessment:** A weekly blog written by each student 20%

Tutorial attendance (forfeited if student attends less than 80% of

tutorials) 10%
Visual artefact 15%
Written report 30%
Oral presentation 15%
Peer assessment. 10%

**SYLLABUS:** The module content will be developed around the concept of

journeys, across time, across space, and across human relationships; the first use of the concept will take the journey of the uMngeni River (which is close to all DUT campuses) as a metaphor. The module will

bring different disciplinary perspectives to this content.

# INFORMATION AND COMPUTER TECHNOLOGY LITERACY SKILLS (ICTL 101)

#### ASSESSMENT:

Continuous assessment: Students will regularly be subjected to short quizzes (written and

equally weighted) in their usual classes as set up by their module

facilitator, and these quizzes will count for half of the total mark. The other half will come from the continuous assessment of a capstone project (written report and oral presentation) undertaken by students

in groups of five to seven

**SYLLABUS:** Basics of ICTs Hardware, Software, and Users; Internet Search; Word

Processing; Spreadsheets; Presentations; Referencing; Security, Legal,

Ethical, and Societal Issues; Economics of ICTs

## **NUTRITION IB (NUTI 102)**

**ASSESSMENT:** 

**Examination:** I x 3 hour paper

Course mark: Tests 60 %

Assignment 40 %

**SYLLABUS:** Carbohydrates, Sugars and artificial sweeteners, non-starch

polysaccharides; Proteins, Vegetarianism; Lipids; Vitamins and

Minerals; Alcohol

# FOOD PRODUCTION AND SERVICE OPERATIONS 1B (FPSO 102) ASSESSMENT:

Continuous assessment: Tests 60% Assignment 40%

Students, who fail, (i.e. who achieve a final mark of less than 50%) can

be re-assessed by:

A maximum of only 50% can be obtained on re-assessment All assessments and moderation practices will be aligned to DUT

assessment policy.

**SYLLABUS:** Theory: Menu planning and writing; Food and Beverage costing and

pricing strategies; Food and beverage styles of service; Food and

beverage etiquette; Event planning

Practical: Demonstrate menu planning and costing; Demonstrate food



and beverage styles of service; Table setting; Coffee and wine service; Serving of customers

# **FOOD: SCIENCE AND PRACTICE IB (FSCP 102)**

**ASSESSMENT:** 

**Examination:** I x 3 hour paper

Course mark: 25%Test + 25%Assignment + 25% Weekly practical mark + 25%

practical test

**SYLLABUS:** Theory: Characteristics, structure, composition, properties,

processing, quality, selection, storage, effect of heat and added substances, identification and solving of problems related to the following foods: stocks and sauces, soups, meat, poultry, fish and shellfish, hydrocolloids; Beverages- teas, coffees and tisanes Practical: Culinary skills applicable to the animal origin foods listed above, including preparation and presentation; Entrepreneurial food

activity.

# APPLIED SCIENCES I (APSC 101)

**ASSESSMENT:** 

**Examination:** I x 3 hour paper

Course mark: Theory 60%
Practicals 40%

Comprehensive Report (40%) + I Theory of Prac Test (60%)

**SYLLABUS:** Theory of the principles of general chemistry are explained,

interpreted and applied in the following areas: Elements, Periodic Table, Atoms, Molecules, Compounds, Mixtures and Sub-Atomic Particles; Simple chemical formulae, Chemical equations and Valency and balancing chemical equations; Composition of air. Oxidation and Reduction with particular reference to food products and preparation; Acids and Bases, Salt formation and pH values of food products and ingredients; Carbon, Carbon monoxide, Carbon dioxide and Carbonates used in food industry; Water (hard and soft), Solutions, Emulsions, Suspensions, Colloids and Gels used in food industry. Practicals are conducted involving Acids and Bases, Salt formation and

pH values of food products and ingredients and properties of solutions and emulsions used in the food industry.

Fundamentals of organic chemistry are explained, interpreted and applied in the following areas: Hydrocarbons (Saturated and unsaturated) uses in food industry; Alcohols and phenols: Properties and uses in food industry; Aldehydes and ketones: Uses as artificial flavourants; Organic acids: Properties and uses in food industry; Esters (synthetic flavourants, and preservatives): occurrences and uses in

food industry; Aromatic compounds: Origin and structural formulae:

Properties and uses in food industry

# **FOOD: SCIENCE AND PRACTICE 11A (FSCP 201)**

ASSESSMENT:

**Examination:** I x 3 hour paper

Course mark: 25% Test

> 25% Practical's, average Practical test 25% 25% Assignment

**SYLLABUS:** Theory: Food processing: preservation (principles, methods, guidelines,

> faults and troubleshooting); additives; modified starches; packagingcontrolled atmospheric packaging; modified atmospheric packaging; Lipid chemistry and substitutes: Sugar chemistry and substitutes: Food Legislation (Food law and regulation in the South African and global

context, gaps in research).

Practical:

Culinary skills and experimentation of selected foods.

# **NUTRITION IIA (NUTI 201)**

ASSESSMENT:

**Examination:** I x 3 hour paper

Course mark: 60% Tests

> 40% Assignments/Presentation

SYLLABUS: Nutrition requirements for the maintenance and promotion of

> wellness throughout pregnancy, lactation, infancy, toddlers and adolescents; Nutrition during pregnancy and lactation; Nutrition from

infancy through to adolescents; Food allergies and intolerances.

# FOOD PRODUCTION AND SERVICE OPERATIONS 11A (FPSO 201) ASSESSMENT:

Continuous assessment: Theory tests 30%

Practical 50%

Practical assessment rubrics will be used to assess techniques, kitchen work and sensory quality of food items (formative assessment). (BoH) Practical assessment rubrics will be used to assess techniques, front of

house work and sensory quality of beverage items (formative

assessment). (FoH)

**SYLLABUS:** Theory: Food service facilities planning and design; The planning

> process; Space allowances and relationships of food production areas; Design factors and layout for food service work areas; Selection of large and small scale equipment; Types and features of food and beverage equipment; Maintenance and replacement of food service

equipment; Food styling

Practical:

Back of House: Plan and implement effective production systems using large scale equipment; Select a range of menu items to suit a variety of occasions, budgets and market; Incorporate food trends to provide target market with a variety of innovative foods; Convert recipes from household to mass production quantities; Compile food purchasing orders; Cost recipes accurately using prescribed format; Produce a

range of fresh cooked products; Minimise and manage food waste; Identify and correct common faults in a range of food products; Implement HACCP principles in a large scale food preparation facility; Maintain effective working relationships

Front of House: Plan and implement effective food service systems for a large scale food service facility: Select an appropriate range of service utensils and equipment for the service period; Prepare a range of service utensils for the service period; Use different strategies to create awareness of and promote the large scale facility; Demonstrate appropriate food and beverage service skills; Demonstrate effective and appropriate customer interaction during the service period; Produce a range of beverages according to guidelines; Implement HACCP principles in a large scale food service facility; Cash up and closing procedures are implemented effectively

# FOOD MICROBIOLOGY I (FOMI 101) ASSESSMENT:

**Examination:** I x 3 hour paper

Course mark: Control Tests 60%

> Assignments / Practical Tests/Reports 20% Oral Presentation

Practical assessment will be in the form of written practical reports

and pre/post-practical tests

**SYLLABUS:** Introduction to structure and functions of food-related

> microorganisms: Growth and control of microorganisms: Food Poisoning and Infections; Hygiene and Disinfection; Principles of Microbial spoilage; Principles of food preservation; Pest infestations

and their control; Food Fermentations

Key practicals will take place during practical sessions to demonstrate

an understanding of microbiological quality and safety of foods

# **FOOD: SCIENCE AND PRACTICE IIB (FSCP 202)**

**ASSESSMENT:** 

**Examination:** I x 3 hour paper

25% Course mark: Test

> Practical's, average 25% Practical test 25% Assignment 25%

**SYLLABUS:** Theory: Structure, composition, properties; standard proportions;

> quality; selection, storage, effect of heat/baking process, staling, identifying and solving problems related to the following foods: cereals, starches, baked products (all ingredients used in baking: flour and meal, sweeteners, fats and oil, raising agents, liquids, flavourings,

pre-mixes) and confectionary

Practical: Culinary skills and experimentation of selected foods listed above; Students are required to apply practical knowledge accumulated in IA, II B and IIA to expand culinary skills and for

experimental work in IIB; Entrepreneurial food activity

# **NUTRITION IIB (NUTI 202)**

**ASSESSMENT:** 

**Examination:** I x 3 hour paper

Course mark: Tests 60%

Assignments/Presentation 40%

**SYLLABUS:** Nutrition requirements for the maintenance and promotion of

wellness for adults and the elderly population; Nutrition for adults and the elderly population; Life expectancy, mortality rates and

burden of disease of South African Adults.

# FOOD PRODUCTION AND SERVICE OPERATIONS 11B (FPSO 202) ASSESSMENT:

Continuous assessment: Theory tests 30%

Practical 50% Assignment 20%

**SYLLABUS:** Theory: Production processes in a food service operation; Purchasing

and selection of suppliers; Receiving procedures; storage and inventory control in a food service facility; Production planning and

forecasting Practical:

Back of House: Plan and implement effective production systems using large scale equipment; Select a range of menu items to suit a variety of occasions, budgets and market; Incorporate food trends to provide target market with a variety of innovative foods; Convert recipes from household to mass production quantities; Compile food purchasing orders; Cost recipes accurately using prescribed format; Produce a range of fresh cooked products; Minimise and manage food waste; Identify and correct common faults in a range of food products; Implement HACCP principles in a large scale food preparation facility;

Maintain effective working relationships

Front of House: Plan and implement effective food service systems for a large scale food service facility; Select an appropriate range of service utensils and equipment for the service period; Prepare a range of service utensils for the service period; Use different strategies to create awareness of and promote the large scale facility; Demonstrate appropriate food and beverage service skills; Demonstrate effective and appropriate customer interaction during the service period; Produce a range of beverages according to guidelines; Implement HACCP principles in a large scale food service facility; Cash up and closing procedures are implemented effectively

# FOOD RETAIL OPERATION I

ASSESSMENT:

Continuous assessment: Tests 60%

Assignment 40%.

Students who fail (i.e. who do not achieve a final mark of less than

50%) can be reassessed by:



Sitting IX make-up test set on the whole semester work; and/or

resubmission of the assignment

**SYLLABUS:** Introduction to the world of business; The meaning of food retail;

Food retail functions: Various forms of food retailer: Food retail strategy; Organisational and operational functions in food retail; Layout, design and store image; Food Merchandise management;

Customer service

# **FOOD QUALITY ASSURANCE I (FQUA 101)**

ASSESSMENT:

**Examination:** I x 3 hour paper

Course mark: 60% Assignment/Presentation 40%

SYLLABUS: Hygiene: Personal, operational and environmental hygiene;

> Sanitation in the food industry; Types of disinfectants, cleaning agents and sanitizers used in food industry, disinfection and cleaning methods in food industry; Pre-requisite programmes; Legislation of food premises, foodstuffs SA Code of Practices: Hygiene Management, EU laws guiding food premises, training of staff and foodstuff laws. FSSC 22000 - recognized by the Global Food Safety Initiative Standard (GFSI); Overview of food quality and food safety; Factors influencing food safety & quality, distinction between food quality and food safety, common quality attributes of food and instance of hazards in food; Food safety programme; SANS 10330, Hazard Analysis and Critical Control Point (HACCP): Hazard Analysis, critical control points, critical limits, monitoring procedures, corrective action procedures, verification procedures (internal audit) and record keeping and documentation procedures. Good manufacturing practices (GMP), Standard Operating procedures (SOP's), Food quality programme; The quality management principles, ISO 9001 clauses, ISO 9001 sub-clauses. Control of nonconformities, traceability, retention samples, mock-recalls, allergen separation: taint potential, customer complaints and investigations; certificate of analyses and certificate of conformance, trending analyses of quality control.

# **FOOD: SCIENCE AND PRACTICE IIIA (FSCP 301)**

ASSESSMENT:

Continuous assessment: Test 40%

> Assignment 40% 20% Practical work

SYLLABUS: Theory: Recipe writing, structure, characteristics and format;

> Research current food trends; Meal and menu preparation; characteristics and types of menus; Costing, formulations and recipe downscaling is applied; Sensory analysis: role of sensory evaluation; types of tests; characteristics of trained

and untrained panellists; environment for sensory evaluation, sample preparation and coding; design a sensory evaluation sheet to meet the requirements of a brief; Food legislation and labelling, uses to consumer, identify South African acts that legislate over food, source and reference information from South African food legislation documents, define food additives and note its functions; Food packaging; compare functional characteristics of popular material, research packaging trends

Practical: Incorporate recipe writing principles and current food trends to develop food products that meet the requirements of a brief. Conduct recipe testing; Meal and menu preparation: dishes that reflect trends and the requirements for specified menu courses are selected and prepared. Recipe downscaling is applied; Prepare and code samples for sensory evaluation

# **NUTRITION IIIA (NUTI 301)**

**ASSESSMENT:** 

Continuous assessment: Test(s) 40%

Assignment(s) 60%

**SYLLABUS:** Nutrition related health issues within the SA context.

Rights – based approach to nutrition knowledge amongst consumers in SA; Nutrition education to consumers relating to current health issues; Nutrition Service Learning will take place in a community

setting.

# FOOD PRODUCTION AND SERVICE OPERATIONS IIIA (FPSO 301)

**ASSESSMENT:** 

Continuous assessment: Tests 60%

Assignments 40%

**SYLLABUS:** Financial planning and management of a food service

operation; Accounting procedures: Operational budget, income statement, balance sheets and ratio analysis; Financial accountability: reports and cost control;

Computers and the service process: Hardware, software

and reports, POS systems

# FOOD: SCIENCE AND PRACTICE IIIB (FSCP 302)

ASSESSMENT:

Continuous assessment: Test 20%

Practical 40% Assignment 40%

**SYLLABUS:** Theory: Food and cultural perspectives: international and

South African foods, state the food ingredients used in selected ethnic cuisines, cost recipe using prescribed formulation; Demonstration skills; characteristics, types of and methods: Introduction to market research and data

analysis

Practical: Select correct ingredients, use standard proportions, creativity and correct technique to prepare a range of dishes for selected cuisines; Demonstrate using good food communication skills to a target market; Design and administer questionnaire; implement findings to meet the requirements of a brief

# NUTRITION IIIB (NUTI 302)

**ASSESSMENT:** 

Continuous assessment: Test(s) 40%

Assignment(s) 60%

**SYLLABUS:** Nutrition in the food industry (including legislation and

fortification); Nutrition claims made by media and food manufacturers; Consumer/community nutrition guidance to interpret information on food labels; Economic food purchases and the advantages of becoming sustainable; Nutrition service learning will take place in a community

setting.

# FOOD PRODUCTION AND SERVICE OPERATIONS 111B (FPSO 302) ASSESSMENT:

Continuous assessment: Test(s) 40%

Assignment(s) 60%

**SYLLABUS:** Managerial principles: Planning, Organizing (authority,

responsibility, delegation, time management); Leading (decision making, leadership styles and traits, organisational behaviour, communication, motivation, teamwork), Control (Management performance); HR management: employment

processes and labour relations; Setting up a

business/Entrepreneurship: Formulating ideas; finding gaps and niches in the market and translating it to food products

# FOOD AND NUTRITION PRACTICE 11 (FANP 202) ASSESSMENT:

Continuous assessment: Test

Assignment 20 %

60 %

Presentation 20 %

SYLLABUS: Introduction to

Introduction to research methodology for an industry work-based project; Securing a position in the food and nutrition industry, CV formulation and covering letter, interview questions and techniques: Traits valued by employers:

questions and techniques; Traits valued by employers; Professional presence and the rules of work for success in the food and nutrition industry; Impact of different social and health problems in the food and nutrition workplace e.g. stress, alcoholism, discrimination, drug abuse, sexual abuse,

cultural diversity, conflict types and resolutions

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# FOOD AND NUTRITION PROJECT 11 (FSPR 202)

**ASSESSMENT:** 

| Continuous assessment: | Research project              | 70% | ٦ |     |
|------------------------|-------------------------------|-----|---|-----|
|                        | Presentation of the project   | 30% | } | 60% |
|                        | Monthly evaluation supervisor | 60% | ₹ |     |
|                        | Monthly reflection reports:   | 30% | l | 40% |
|                        | Structured interview          | 10% | ۲ |     |

**SYLLABUS:** Project Based Learning:

Students to demonstrate by means of project/s the integration of scientific-based food and nutrition knowledge in food production, food service, quality control and/or consumer guidance, food retail, community nutrition, recipe and product development acquired through project based

learning.

# 10.2 ADVANCED DIPLOMA IN CONSUMER SCIENCES IN FOOD AND NUTRITION (ADCSFI)

# STATISTICS (STST 401) ASSESSMENT

ASSESSMEN I

Continuous assessment: Tests: 70% Practical and Assignments: 30%

**SYLLABUS:** 

Types of data; Graphical methods; Numerical summaries; Descriptive for bivariate data; Categorical data (contingency tables); Quantitative data (scatter plots); Normal distribution; Probabilities, percentiles, z-score; Pearson's correlation coefficient; Simple linear regression; Sampling; Confidence intervals; One mean, proportion; Difference between two means, difference between two proportions; Hypothesis testing; Test of independence for two categorical

variables; chi-squared test for independence

# NUTRITION ASSESSMENT

Continuous assessment Final mark calculated as follows:

Tests 25% Assignments/Presentation 15% Research Project 60%

**SYLLABUS:** 

Assessment of nutritional status; Nutrition related health issues in South Africa including HIV / AIDS and TB; Planning, development, implementation and evaluation of nutrition education programmes; Food and nutrition security framework; Nutrition during a nutritional crises; Nutrition trends:

Diet trends; Functional foods; Genetically modified foods;

Supplementation; Position statements by public health organizations on

current health issues

# **FOOD SAFETY AND QUALITY (FSAQ 401)**

**ASSESSMENT:** 

**Examination:** I x 3 hour paper

Course mark: Test 60%

Assignment/Presentation 40%

**SYLLABUS:** Principles of food safety and quality assurance

South African and international food safety legislation e.g: HACCP, ISO standards, BRC standards; Food safety hazards

Risk assessment and root cause analysis. Recommend means to mitigate and control risks through cleaning and sanitation, traceability, HACCP, PRPs, Good Manufacturing and Good Agricultural Practices, and other quality assurance and

Manufacturing and Good Agricultural Practices, and other quality assurance and food safety elements Principles of risk assessment, framework of risk assessment, techniques used in risk assessment. Management of allergens in a food manufacturing. Allergen plans and policies in food manufacture to promote a culture of food safety. Food defense plans; Quality control strategies; Set up and assess food quality assurance plans. ISO 9000 control and quality specifications of raw materials (organoleptic, physical, chemical and microbiological) and finished products; sampling, evaluation of sensory properties and packaging. Controls for possible defects and process efficiencies in a food production run. Traceability. Mock recall. Trial production run. SOPs, Monitoring and recording information; Auditing of food safety management systems; Auditing and certification of food safety in the whole supply chain, application of audit principles and practices, initiation and preparation for an audit. Internal audits (gathering audit evidence) for continuous improvement,

report on audit findings including non-conformities. Conducting post-audit

activities

# FOOD MARKETING AND COMMUNICATION (FMCO 401) ASSESSMENT:

**Examination:** I x 3 hour paper

Course mark: Tests 60%

Assignments Practical 40%

SYLLABUS: Fundamentals of food marketing and communication; Marketing environment

and segmentation; Branding franchising packaging pricing and distribution; Global

markets, service marketing and marketing research; Product planning

development and strategies; Branding franchising and packaging; Pricing and distribution; Integrated marketing communication (promotions; digital); Product

styling for photography; Product promotion and presentations

# FOOD AND FOOD SCIENCE (FOFS 401) ASSESSMENT:

Continuous assessment: The final result will be calculated as follows:

Tests 50%
Recipe/Product development
Research project 40%
Practical work 10%

**SYLLABUS:** The theory and practical components are interlinked:

Theory: Food trends. International and national food drivers and directions of

food trends; Market research; Regulatory guidelines (product specific and food safety) and food ethics; Steps in recipe/product development; Sensory analysis: trained panel and consumer sensory analysis; Pricing, Packaging and Distribution; Nutritional analysis; Product specification: target market, product composition (food ingredient functionality), packaging, shelf life testing, food labelling. Practical: Development of product/s for the food industry. Application of food trends to food product development.

# **FOOD AND NUTRITION TRAINING (FNTR 401)** ASSESSMENT:

**Examination:** I x 3hr paper

Course mark: Theory test 60%

> Assignment presentation 40%

Course mark = 40% Exam mark = 60%

SYLLABUS: The education, training and development environment; Learning theories and principles; Determining training and development needs; Training systems and instruction techniques; Steps during the training process; Design and implementation of a training program for a target group; Evaluation and assessment of a training program; Legislation relating to training and development in South Africa

# 10.3 POSTGRADUATE DIPLOMA IN FOOD AND NUTRITION (PGDFNI)

# **FOOD AND NUTRITION PUBLIC HEALTH (FNPH 801)**

#### ASSESSMENT:

Final mark: The semester mark will be calculated using assessments in the form of:

2 Tests 50% 2 Assignments 50%

SYLLABUS: Global and national food and nutrition polices and programming;

Strategies for Health, Social and Behaviour Change (health promotion strategies, education, communication); Food and nutrition services in health care systems (food safety, food service, food control, CODEX); Management of Public Health Indicators (Incidence, Prevalence, epidemics, health care financing, laws and regulations)

# SUSTAINABLE FOOD AND NUTRITION (SUFN 801)

#### ASSESSMENT:

Final mark: 2 Tests 40%

2 Assignment 60%

SYLLABUS: Sustainable food systems (sustaining environment, climate change, crop production

including seed systems and availability, diversity, GMO etc., sustainable food and nutrition system); sustainable food production (mixed farming, crop rotation, timely planting, pesticides, etc.); water quality; sustainable industry practice; sustainable diets;

sustainable consumption and product development.

Food and nutrition security (rural vs. urban supply and demand; regional; awareness on better for you benefits, community participation, new developments in food and nutrition security, strategy to improve food security, sustainable development goals);

food economics (measuring food security with indicators); food access (availability, factors influencing choice) and food waste.

National and international food and nutrition policies

# **RESEARCH METHODOLOGY (RMFN 801)**

#### ASSESSMENT:

This is a continuous assessment module and the assessments are made up of assignments and a final project. In order to pass the continuous assessment module a minimum of 50% should be achieved as a final mark

The final result is calculated as follows:

Assignment I 30% Assignment 2 30% Final project 40%.

**SYLLABUS**: Research methods and protocol development; Planning a research

Project; Setting objectives for research; Literature reviews; Study design;

Population and sampling; Data collection and measurement; Data presentation, analysis and interpretation; Proposal development (Setting aims and objectives for the study, Literature review, Study design, population and sampling, Data collection and measurements)

## **FOOD AND NUTRITION PROJECT MANAGEMENT (FNPM 802)**

#### ASSESSMENT: I x 3 hr written exam

Semester Mark (SM) = The semester mark will be 4 assessments during the semester taking either the form of class tests and assignment. This will form 40% of the final

mark.
2 tests
I assignment

SYLLABUS: Fundamental concepts and principles of food and nutrition project management;

Budgetary aspects of a project; Ethics and risk factors; Project monitoring and evaluation

tools

## **FOOD AND NUTRITION RESEARCH PROJECT (FNRP 802)**

#### ASSESSMENT:

This is a continuous assessment module and the assessments are made up of assignments and a final project. In order to pass the continuous assessment module a minimum of 50% should be achieved as a final mark

The final result is calculated as follows: Assignments=50% + Final research report =50%). Resubmissions of two assignments will be allowed if a student achieved less than 50% in the assignments. A final mark of 50% must be achieved for the module in order to pass.

SYLLABUS: Introduction to field work and data collection; Application of research ethics during data collection; Application of research methods during interaction with research participants; Data analysis and presentation of research results; Writing a research report; Developing a scientific research poster