University of Pretoria Yearbook 2017

BDietetics (10139003)

Duration of study	4 years
Total credits	819
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Programme information

The programme extends over four academic years during which period a student receives practical training as a student dietician at an institution or institutions approved for this purpose by the University.

After admission to the first year of study, each student in Dietetics must register as a student in Dietetics with the Health Professions Council of South Africa.

Students are required to complete at least four weeks applicable elective training (Code DTT 380) under the supervision of a dietician at an institution approved for this purpose by the University, after the first semester of the third year of study and prior to the commencement of the fourth year of study.

Note: A revised curriculum is being phased in for the programme. The revised first year of study will be followed for the first time in 2015, the second year in 2016, the third year in 2017 and the fourth year in 2018.

Students who enrolled for the BDietetics degree programme prior to 2105 will complete the degree under the old curriculum.

Admission requirements

- The following persons will be considered for admission: a candidate who is in possession of a certificate that is deemed by the University to be equivalent to the required Grade 12 certificate with university endorsement; a candidate who is a graduate from another tertiary institution or has been granted the status of a graduate of such an institution; and a candidate who is a graduate of another faculty at the University of Pretoria.
- Life Orientation is excluded in the calculation of the APS.
- Grade 11 final examination results, the NBT results as well as a Value-added Questionnaire will be used for the provisional admission of prospective students.
- Admission to Health Sciences programmes is subject to a selection process.
- The applications of international candidates who come from countries that have medical schools will not be considered for placement in the MBChB programme except where intergovernmental agreements are in place.
- For selection purposes the sum of the results in six subjects, including English, Mathematics and Physical Science, is calculated.
- Candidates, please note that your APS may not drop with more than two points in your final school examination results in order to maintain your provisional admission.
- P?LEASE NOTE that compliance with the minimum admission requirements does not necessarily guarantee admission to any programme in this Faculty.
- Selection queries may be directed to healthapplications@up.ac.za.

Minimum requirements

Achievement level												APS
English				Mathematics				Physical Science				
NSC/IEB	HIGCSE	AS-Level	A-Level	NSC/IEB	HIGCSE ?	AS-Level	A-Level	NSC/IEB	HIGCSE	AS-Level	A-Level	
4	3	D	D	4	3	D	D	4	3	D	D	25

Additional requirements

Also consult General Regulations.

Other programme-specific information

Exemption from the examination in (FAR) Pharmacology 381, 382
Exemption from the examination can be granted if a student who obtained a module mark of at least 60%, exercises the option to accept it as the final mark.

Examinations and pass requirements

i. Each paper (Paper 1 and 2) of the written examination for Medical nutrition therapy 323, 411 and 480 (MNX 323, 411, 480) as well as the practical examination for MNX 411 must be passed individually with a subminimum of 40%.
ii. Each paper written for the second examination opportunity in Medical nutrition therapy 323, 411 and 480 (MNX 323, 411, 480) as well as the practical examination for MNX 411 (second examination opportunity) must be passed individually with a subminimum of 50%.

- In accordance with the stipulations of the General Regulations, no minimum year or semester mark is needed for admission to the examination, and all registered students are admitted to the examination automatically.
- The final mark for a specific module in Nursing Science, Physiotherapy, Radiography, Occupational Therapy and Human Nutrition (at least 50% is required to pass) is calculated from the examination mark as well as the mark compiled from the evaluation of a student during continuous, objective and controlled assessment opportunities during the course of the quarter/semester/year. At least one formal assessment per module is set as the minimum norm, and students will be exposed on a continuous and regular basis to self-directed assignments in order to promote reflective learning.
- In the case of modules with practical components, students are required to also comply with the applicable attendance requirements with regard to acquiring practical skills before a pass mark can be obtained for the module.
- There are two main examination opportunities per annum, the first and second examination. In respect of first-semester modules, the first examination opportunity is in May/June and the second examination opportunity in July. In respect of second-semester modules, the first examination opportunity is in October/ November and the second examination opportunity in November/December of the same year. Where students need to work additional clinical hours to be allowed to do a second examination, the Head of Department will determine the second examination opportunity.
- Only two examination opportunities per module are allowed. If a student fails a module at the second

examination opportunity, the module must be repeated.

- A second examination opportunity in a module is granted to students in the following cases:

  - If a student obtains a final mark of less than 50% in the relevant module at the first examination opportunity and thus fails.

  - If a student does not obtain the subminimum in the examination, as required for a specific module.

  - If a student does not sit the examination in a module at the first examination opportunity due to illness or extraordinary circumstances.

- Students intending to sit the second examination due to the reasons mentioned above, must register for the second examination opportunity 24 hours after the results have been made public.
- If a student fails a module at the first examination opportunity, the examination mark obtained in the relevant module at the second examination opportunity will be calculated as the final mark. The marks obtained with continuous evaluation during the course of the quarter/semester/year will not be taken into calculation. If the student passes the module at the second examination opportunity, a maximum of 50% is awarded as a pass mark to the module in question.
- If a student could not sit the examination in a module at the first examination opportunity due to illness or extraordinary circumstances, the continuous evaluation mark, together with the examination mark obtained in the module in question at the second examination opportunity, will be calculated as the final mark obtained in the module.
- The School of Healthcare Sciences applies the General Regulations, according to which a student requiring a limited number of modules to complete his or her degree, may in terms of faculty regulations, be admitted to a special examination in the modules in question.

Promotion to next study year

- A student must pass in all the prescribed core modules of a specific year of study to be promoted to a subsequent year of study. A student can only be promoted to a subsequent year of study if the student has not failed more than two fundamental modules of seven weeks each per semester or one module of 14 weeks per semester. A non-negotiable prerequisite for admission to the final year of study is pass marks in all the core and fundamental modules of the preceding years of study. Refer to the programmes for fundamental modules in each discipline.
- A pass mark refers to a final mark of at least 50%.
- Modules with practical and clinical training credits cannot be passed unless all the prescribed clinical hours and practical activities have been completed to the satisfaction of the head of department.
- The Chairperson of the examination moderating meeting may, after assessing the student’s total profile, grant special approval to be promoted to the next year of study.
- The exception is the Department of Human Nutrition, where the regulations as applicable in the Faculty of Natural and Agricultural Sciences regarding the modules presented by that Faculty, are relevant.
- Modules can only be taken in advance or repeated if it can be accommodated in the existing examination timetable.
- A student who must repeat a year of study may, with the approval of the Chairperson of the examination moderating meeting and the head of department concerned, be allowed to take fundamental modules of the subsequent year, if he/she complies with all the prerequisites for the relevant modules. No adjustment to existing timetables will be allowed.

The following fundamental modules are relevant:

- Department of Nursing Science: SLK 110, 120; FSG 251,252
- Department of Physiotherapy: SOH 254; FSG 251, 252, 261, 262; SLK 210, ANP 210; GMB 252, 253, 254; FAR 381, 382
- Department of Occupational Therapy: ZUL 110; SEP 110; SLK 210, 220; FSG 251, 252, 261, 262; ANP 210; RPD 481, GNK 286
- Department of Human Nutrition: FLG 211, 212, 221, 222; BCM 251, 252, 261, 262; FAR 381, 382, VDS 322; VDB 321
- Department of Radiography: FSG 251, 252, 262; GNK 286; ANP 210.

Practical/clinical/internship information

Internship training (second semester of the final year of study)
The three compulsory semester modules (CNT 480, MNX 480 and FSS 480) jointly form the internship training and must be taken simultaneously.

Pass with distinction

The degree is conferred with distinction on a student who has obtained at least 75% in the following modules: CNT 411, 480 jointly, as well as MNX 411, 480 jointly, and FSS 480.

Curriculum: Year 1

Minimum credits: 134

Choose between Sepedi SEP 110 and Zulu ZUL 110

Fundamental modules

General chemistry 117 (CMY 117)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	Final Grade 12 marks of at least 60% for Mathematics and 60% for Physical Sciences.
Contact time	1 practical per week, 4 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Chemistry
Period of presentation	Semester 1

Module content

General introduction to inorganic, analytical and physical chemistry. Atomic structure and periodicity. Molecular structure and chemical bonding using the VSEOR model. Nomenclature of inorganic ions and compounds. Classification of reactions: precipitation, acid-base, redox reactions and gas-forming reactions. Mole concept and stoichiometric calculations concerning chemical formulas and chemical reactions. Principles of reactivity: energy and chemical reactions. Physical behaviour gases, liquids, solids and solutions and the role of intermolecular forces. Rate of reactions: Introduction to chemical kinetics.

General chemistry 127 (CMY 127)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	Natural and Agricultural Sciences students: CMY 117 GS or CMY 154 GS Health Sciences students: none
Contact time	1 practical per week, 4 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Chemistry
Period of presentation	Semester 2

Module content
Theory: General physical-analytical chemistry: Chemical equilibrium, acids and bases, buffers, solubility equilibrium, entropy and free energy, electrochemistry. Organic chemistry: Structure (bonding), nomenclature, isomerism, introductory stereochemistry, introduction to chemical reactions and chemical properties of organic compounds and biological compounds, i.e. carbohydrates and aminoacids. Practical: Molecular structure (model building), synthesis and properties of simple organic compounds.

People and their environment 112 (MGW 112)

Module credits	6.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	1113000, 10139001, 10130001 and (admission into relevant field, APS of 34 and 70% obtained in Mathematics in the Grade 12 examination)
Contact time	4 lectures per week
Language of tuition	Module is presented in English
Academic organisation	Sociology
Period of presentation	Semester 1

Module content
This module comprises basic psychology and sociology concepts relevant to Medicine, and to Dentistry, in the case of BChD students.
Basic psychiatric concepts are also taught.

Molecular and cell biology 111 (MLB 111)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	Refer to Regulation 1.2: A candidate who has passed Mathematics with at least 50% in the Grade 12 examination
Contact time	4 lectures per week, 1 practical per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Genetics
Period of presentation	Semester 1

Module content
Introductory study of the ultra structure, function and composition of representative cells and cell components. General principles of cell metabolism, molecular genetics, cell growth, cell division and differentiation.

Sepedi for beginners 110 (SEP 110)

Module credits	12.00

Service modules	Faculty of Education Faculty of Health Sciences
Prerequisites	No prerequisites.
Contact time	2 lectures per week, 1 discussion class per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	African Languages
Period of presentation	Semester 1 and Semester 2

Module content

*For absolute beginners only.
*Only students from the School of Healthcare Sciences may take this module during semester 2. All other students must take this module during semester 1. Also note that students from the School of Healthcare Sciences, who already possess the language skills taught in this module, may write an exemption examination.
The acquisition of basic Sepedi communicative skills with emphasis on everyday expressions and suitable high frequency vocabulary, within specific social situations.

isiZulu for beginners 110 (ZUL 110)

Module credits	12.00
Service modules	Faculty of Education Faculty of Health Sciences
Prerequisites	No prerequisites.
Contact time	1 discussion class per week, 2 lectures per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	African Languages
Period of presentation	Semester 1 and Semester 2

Module content

*For absolute beginners only
*Only students from the School of Healthcare Sciences may take this module during semester 2. All other students must take this module during semester 1. Students from the School of Healthcare Sciences, who already possess the language skills taught in this module, may write an exemption examination.
The acquisition of basic isiZulu communicative skills with emphasis on everyday expressions and suitable high frequency vocabulary, within specific situations.

Academic information management 101 (AIM 101)

Module credits	6.00

Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Economic and Management Sciences Faculty of Humanities Faculty of Law Faculty of Health Sciences Faculty of Natural and Agricultural Sciences Faculty of Theology Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Information Science
Period of presentation	Semester 1

Module content

Find, evaluate, process, manage and present information resources for academic purposes using appropriate technology. Apply effective search strategies in different technological environments. Demonstrate the ethical and fair use of information resources. Integrate 21st-century communications into the management of academic information.

Academic information management 111 (AIM 111)

Module credits	4.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Economic and Management Sciences Faculty of Humanities Faculty of Law Faculty of Health Sciences Faculty of Natural and Agricultural Sciences Faculty of Theology
Prerequisites	No prerequisites.
Contact time	MAMELODI, 2 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Information Science
Period of presentation	Semester 1

Module content

Find, evaluate, process, manage and present information resources for academic purposes using appropriate technology.

Academic information management 121 (AIM 121)

Module credits	4.00

Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Economic and Management Sciences Faculty of Humanities Faculty of Law Faculty of Health Sciences Faculty of Natural and Agricultural Sciences Faculty of Theology Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	2 lectures per week, MAMELODI
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Informatics
Period of presentation	Semester 2

Module content

Apply effective search strategies in different technological environments. Demonstrate the ethical and fair use of information resources. Integrate 21st-century communications into the management of academic information.

Academic English for Health Sciences (BCur, BDietetics, BOH, BOccTher, BRad and BPhysT) 121 (ELH 121)

Module credits	6.00
Service modules	Faculty of Health Sciences
Prerequisites	No prerequisites.
Contact time	1 discussion class per week, 2 lectures per week
Language of tuition	Module is presented in English
Academic organisation	Unit for Academic Literacy
Period of presentation	Semester 1

Module content

Academic reading as well as academic writing and presentation skills, based on the approach followed in the healthcare sciences. **Presented to students in Health Sciences only.*

Academic English for Health Sciences122 (ELH 122)

Module credits	6.00
Service modules	Faculty of Health Sciences
Prerequisites	No prerequisites.
Contact time	2 lectures per week, 1 discussion class per week
Language of tuition	Module is presented in English
Academic organisation	Unit for Academic Literacy

Period of presentation	Semester 2

Module content

Study of specific language skills required in the Health Care Sciences, including interviewing and report-writing skills. *Presented to students in Health Sciences only. (BCur, BDietetics, BOH, BOT, Brad, BPhysT)*

Academic orientation 110 (UPO 110)

Module credits	0.00
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Health Sciences Dean's Office
Period of presentation	Year

Core modules

Anatomy of the torso 161 (ANA 161)

Module credits	6.00
Prerequisites	No prerequisites.
Contact time	1 discussion class per week, 3 lectures per week, 1 practical per week
Language of tuition	Module is presented in English
Academic organisation	Anatomy
Period of presentation	Quarter 3

Module content

A systematic approach to the anatomy of the thorax and its contents, the abdomen and its contents and the pelvis and its contents (organs, vascular systems, nerve supply, lymph drainage, muscles and joints), as well as surface anatomy, with the use of wet specimens. Introductory histology includes the histology of the lungs, liver and kidneys.

Physics for biology students 131 (PHY 131)

Module credits	16.00
Service modules	Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	Refer to Regulation 1.2: A candidate must have passed Mathematics with at least 50% in the Grade 12 examination
Contact time	1 practical per week, 4 lectures per week, 1 discussion class per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Physics
Period of presentation	Semester 1

Module content
Units, vectors, one dimensional kinematics, dynamics, work, equilibrium, sound, liquids, heat, thermodynamic processes, electric potential and capacitance, direct current and alternating current, optics, modern physics, radio activity.

Basic food preparation 111 (VDS 111)

Module credits	6.00
Service modules	Faculty of Health Sciences
Prerequisites	No prerequisites.
Contact time	1 lecture per week, 1 discussion class per week, 0.5 practical per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Consumer Science
Period of presentation	Semester 1

Module content
Module 1: Basic food preparation and food preparation techniques. Mise en place, weighing and measurement techniques, equipment and terminology as applied in food preparation. History of the foodservice industry and contemporary chefs. Basic food quality control.
Module 2: Food preparation basics of the following: stocks, soups and sauces

Basic food preparation 121 (VDS 121)

Module credits	6.00
Service modules	Faculty of Health Sciences
Prerequisites	VDS 111
Contact time	1 practical per week, 1 lecture per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Consumer Science
Period of presentation	Semester 2

Module content
Module 1: Principles and practices of food preparation and cooking techniques. Mise en place, weighing and measurement techniques, equipment and terminology as applied in food preparation. Basic food quality control.
Module 2: Food preparation basics of the following: starches and cereals

Dietetic profession 110 (DTT 110)

Module credits	8.00
Prerequisites	No prerequisites.
Contact time	1 discussion class per week, 2 lectures per week
Language of tuition	Module is presented in English

Academic organisation	Human Nutrition
Period of presentation	Semester 1

Module content

Philosophy, development and challenges of the dietetic profession in a South African context.

Integrated healthcare leadership 120 (IHL 120)

Module credits	8.00
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Academic organisation	Nursing Science
Period of presentation	Semester 2

Module content

Multidisciplinary team work. Healthcare systems and legislation. Determinants of health. Introduction to healthcare models (e.g. community-based care, family-centred care, etc.). Professionalism, Ethical principles. Management of diversity. NB: Only for School of Healthcare Sciences students.

Curriculum: Year 2

Minimum credits: 221

Fundamental modules

Introduction to proteins and enzymes 251 (BCM 251)

Module credits	12.00
Service modules	Faculty of Health Sciences
Prerequisites	[CMY117 GS] and [CMY127 GS] and [MLB111 GS]
Contact time	2 lectures per week, 90 minute practical per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Biochemistry
Period of presentation	Semester 1

Module content

Structural and ionic properties of amino acids. Peptides, the peptide bond, primary, secondary, tertiary and quaternary structure of proteins. Interactions that stabilise protein structure, denaturation and renaturation of proteins. Introduction to methods for the purification of proteins, amino acid composition, and sequence determinations. Introduction to enzyme kinetics and enzyme inhibition. Allosteric enzymes, regulation of enzyme activity, active centres and mechanisms of enzyme catalysis. Examples of industrial applications of enzymes. Practical training in laboratory techniques and Good Laboratory Practice. Techniques for the quantitative and qualitative analysis of biological molecules. Processing and presentation of scientific data.

Carbohydrate metabolism 252 (BCM 252)

Module credits	12.00
Service modules	Faculty of Education Faculty of Health Sciences
Prerequisites	[CMY117 GS] and [CMY127 GS] and [MLB111 GS]
Contact time	90 minute practical per week, 2 lectures per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Biochemistry
Period of presentation	Semester 1

Module content

Biochemistry of carbohydrates. Thermodynamics and bioenergetics. Glycolysis, citric acid cycle and electron transport. Glycogen metabolism, pentose-phosphate pathway, gluconeogenesis and photosynthesis. Practical training in study and analysis of metabolic pathways and enzymes. Scientific method and design: Hypothesis design and testing, method design and scientific controls.

Lipid and nitrogen metabolism 261 (BCM 261)

Module credits	12.00

Service modules	Faculty of Health Sciences
Prerequisites	[CMY117 GS] and [CMY127 GS] and [MLB111 GS]
Contact time	2 lectures per week, 90 minute practical per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Biochemistry
Period of presentation	Semester 2

Module content

Biochemistry of lipids, membrane structure, anabolism and catabolism of lipids. Nitrogen metabolism, amino acid biosynthesis and catabolism. Biosynthesis of neurotransmitters, pigments, hormones and nucleotides from amino acids. Catabolism of pureness and pyrimidines. Therapeutic agents directed against nucleotide metabolism. Examples of inborn errors of metabolism of nitrogen containing compounds. The urea cycle, nitrogen excretion. Practical training in scientific writing skills: evaluation of a scientific report. Techniques for separation and analysis of biological molecules

Biochemical principles of nutrition and toxicology 262 (BCM 262)

Module credits	12.00
Service modules	Faculty of Health Sciences
Prerequisites	[CMY117 GS] and [CMY127 GS] and [MLB111 GS]
Contact time	2 lectures per week, 90 minute practical per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Biochemistry
Period of presentation	Semester 2

Module content

Biochemistry of nutrition and toxicology. Proximate analysis of nutrients. Review of energy requirements and expenditure. Respiratory quotient. Requirements and function of water, vitamins and minerals. Interpretation and modification of RDA values for specific diets, eg growth, exercise, pregnancy and lactation, aging and starvation. Interactions between nutrients. Comparison of monogastric and ruminant metabolism. Cholesterol, polyunsaturated, essential fatty acids and dietary anti-oxidants. Oxidation of fats. Biochemical mechanisms of water- and fat-soluble vitamins and assessment of vitamin status. Mineral requirements, biochemical mechanisms, imbalances and diarrhoea. Biochemistry of xenobiotics: absorption, distribution, metabolism and excretion (ADME); detoxification reactions: oxidation/reduction (Phase I), conjugations (Phase II), export from cells (Phase III); factors affecting metabolism and disposition. Toxic responses: tissue damage and physiological effects, teratogenesis, immunotoxicity, mutagenesis and carcinogenesis. Examples of toxins: biochemical mechanisms of common toxins and their antidotes. Antibiotics and resistance. Natural toxins from fungi, plants and animals: goitrogens, cyanogens, cholineesterase inhibitors, ergotoxin, aflatoxins Practical training in analyses of nutrients, fatty acids separations, antioxidant determination, and enzyme activity measurements, PO ratio of mitochondria, electrophoresis, extraction, solubility and gel permeation techniques.

Introductory and neurophysiology 211 (FLG 211)

Module credits	12.00

Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	CMY 117, CMY 127, MLB 111 and PHY 131
Contact time	2 lectures per week, 1 practical per week
Language of tuition	Module is presented in English
Academic organisation	Physiology
Period of presentation	Semester 1

Module content

Orientation in physiology, homeostasis, cells and tissue, muscle and neurophysiology, cerebrospinal fluid and the special senses.
Practical work: Practical exercises to complement the theory.

Circulatory physiology 212 (FLG 212)

Module credits	12.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	CMY 117, CMY 127, MLB 111 and PHY 131
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Module is presented in English
Academic organisation	Physiology
Period of presentation	Semester 1

Module content

Body fluids; haematology; cardiovascular physiology and the lymphatic system. Practical work: Practical exercises to complement the theory.

Lung and renal physiology, acid-base balance and temperature 221 (FLG 221)

Module credits	12.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	FLG 211 and FLG 212
Contact time	2 lectures per week, 1 practical per week
Language of tuition	Module is presented in English
Academic organisation	Physiology
Period of presentation	Semester 2

Module content

Structure, gas exchange and non-respiratory functions of the lungs; structure, excretory and non-urinary functions of the kidneys, acid-base balance, as well as the skin and body temperature control.
Practical work: Practical exercises to complement the theory.

Digestion, endocrinology and reproductive systems 222 (FLG 222)

Module credits	12.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	FLG 211 and FLG 212
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Module is presented in English
Academic organisation	Physiology
Period of presentation	Semester 2

Module content

Nutrition, digestion and metabolism; hormonal control of the body functions and the reproductive systems. Practical work: Practical exercises to complement the theory.

Medical microbiology 252 (GMB 252)

Module credits	6.00
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Medical Microbiology
Period of presentation	Quarter 2

Module content

Infection, immunity and basic bacteriology.
Introduction and basic principles of infection, sterilisation and the immune system. Bacterial cells and the classification of disease-causing bacteria.

Medical microbiology 253 (GMB 253)

Module credits	6.00
Prerequisites	FLG 211 GS, FLG 212 GS
Contact time	2 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Medical Microbiology
Period of presentation	Quarter 3

Module content

Systemic bacteriology.
Commonly occurring bacterial infections and the bacteria that cause them.

Medical microbiology 254 (GMB 254)

Module credits	6.00

Prerequisites	FLG 211 GS, FLG 212 GS
Contact time	2 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Medical Microbiology
Period of presentation	Quarter 4

Module content

Fungi, parasitology and virology.
Commonly occurring fungal, viral and parasite infections and infestations, and the organisms that cause them.

Core modules

Human nutrition 210 (HNT 210)

Module credits	27.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	2nd-year status
Contact time	1 discussion class per week, 1 lecture per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Semester 1

Module content

Application of scientific principles in human nutrition.
Standards, guidelines and food composition tables.

Human nutrition 220 (HNT 220)

Module credits	24.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	FLG 211 GS FLG 212 GS BCM 253 BCM 254 BCM 255 BCM 256 VDG 250 HNT 210
Contact time	3 lectures per week, 1 discussion class per week
Language of tuition	Module is presented in English
Academic organisation	Human Nutrition
Period of presentation	Semester 2

Module content

Human nutrition in the life cycle: Nutritional screening, nutritional needs, nutrition problems and prevention thereof, growth monitoring and meal/menu planning.

Food commodities and preparation 210 (VDS 210)

Module credits	18.00

Service modules	Faculty of Health Sciences
Prerequisites	VDS 121
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Consumer Science
Period of presentation	Semester 1

Module content

Module 1: The study of different food systems with regard to food preparation. Physical and chemical properties and the influence of the composition in food preparation.
Module 2: Food preparation basics of the following: soups and sauces, fruit and vegetables; salads; frozen desserts; gelatine.
Module 3: Origin and development of food habits; Factors influencing habits and choice; Dynamics of food habits. Influence of religion on food habits. Food habits of different ethnic groups.

Food commodities and preparation 221 (VDS 221)

Module credits	18.00
Service modules	Faculty of Health Sciences
Prerequisites	VDS 210
Contact time	3 lectures per week, 1 practical per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Consumer Science
Period of presentation	Semester 2

Module content

Module 1: The study of different food systems with regard to food preparation. Physical and chemical properties and the influence of the composition in food preparation.
Module 2: Food preparation basics of the following: meat; poultry; fish, legumes, eggs and milk, baked products (whole spectrum); leavening agents.
Module 3: The influence of culture on cuisines. Study of the cuisines of selected African, European and Eastern countries.

Integrated healthcare leadership 210 (IHL 210)

Module credits	8.00
Prerequisites	IHL 112/2/3/4, IHL 120
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Academic organisation	Nursing Science
Period of presentation	Semester 1

Module content

Principles of project management. Communication principles. Health promotion and education, advocacy and literacy. Counselling for health behaviour change. NB: Only for School of Healthcare Sciences students.

Nutrition education 223 (DTT 223)

Module credits	12.00
Contact time	1 discussion class per week, 1 lecture per week
Language of tuition	Module is presented in English
Academic organisation	Human Nutrition
Period of presentation	Semester 2

Module content

A total diet approach to communicating food and nutrition messages using theoretical fameworks, including planning and evaluation of content as well as presentation skills.

Curriculum: Year 3

Minimum credits: 242

Fundamental modules

Pharmacology 381 (FAR 381)

Module credits	18.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	FLG 211, FLG 212, FLG 221, FLG 222 GS
Contact time	2 lectures per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Pharmacology
Period of presentation	Semester 1

Module content

Introduction, receptors, antagonism, kinetic principles, drugs that impact upon the autonomic and central nervous system, pharmacotherapy of hypertension, angina pectoris, myocardial infarction, heart failure, arrhythmias, and epilepsy. Diuretics, glucocorticosteroids, local anaesthetics, anaesthetic drugs, analgesics, iron and vitamins, oncostatics and immuno suppressants.

Pharmacology 382 (FAR 382)

Module credits	18.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	FAR 381, FLG 211, FLG 212, FLG 221, FLG 222 GS
Contact time	2 lectures per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Pharmacology
Period of presentation	Semester 2

Module content

Hormones, drugs that act on the histaminergic, serotonergic, and dopaminergic receptors. Pharmacotherapy of diabetes mellitus, schizophrenia, depression, obesity, anxiety, insomnia, gastro-intestinal diseases. Anticoagulants, antimicrobial drugs.

Core modules

Dietetic counselling 310 (DTT 310)

Module credits	20.00
Prerequisites	3rd-year status
Contact time	1 discussion class per week, 2 lectures per week

Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Semester 1

Module content

Theory of counselling. Interviewing: Interview; the consultation process; verbal, written and non-verbal communication to clients, patients, employees as individuals or groups in different stages of the life cycle in health and disease in homogenic and trans/multi-cultural situations by means of applicable theoretical frameworks.

Clinic and discussion class 320 (DTT 320)

Module credits	6.00
Prerequisites	DTT 310
Contact time	1 discussion class per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Semester 2

Module content

Practice training: Management of a dietetics clinic. Practising the consultation process and practice management in a dietetics clinic.

Nutritional assessment 313 (NTA 313)

Module credits	40.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	3rd-year status
Contact time	1 discussion class per week, 1 practical per week, 4 lectures per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Semester 1

Module content

Evaluation of nutritional assessment.
Nutrition care process, overview of evaluation of nutritional status. Scientific principles of evaluation of nutritional status; nutritional screening; clinical, biochemical and dietary evaluation of nutritional status. Practice training: practising of theoretical principles of nutrition status evaluation in hospital/clinic and/or skills laboratory.

Food service management 321 (VDB 321)

Module credits	18.00
Service modules	Faculty of Health Sciences

Prerequisites	Natural and Agricultural Sciences students: VDS 322 #
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Consumer Science
Period of presentation	Semester 2

Module content

Planning and layout of food service units for different food service systems. Equipment for food services. Factors influencing the choice and purchasing of equipment for different food service units. Hygiene and safety in food services. management in food service systems. Financial management in food services.

Large-scale food production and restaurant management 322 (VDS 322)

Module credits	31.00
Service modules	Faculty of Health Sciences
Prerequisites	VDS 210 and VDS 221
Contact time	3 lectures per week, 3 practicals per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Consumer Science
Period of presentation	Semester 2

Module content

Module 1: Restaurant management. Table setting, table serving, wine service, food and wine pairing, beverage management
Module 2: Menu planning for different food service systems and styles of food service.
Module 3: Large scale food procurement, consumption and storage.
Practical work: Principles of large-scale food preparation and the practical application thereof in a practical restaurant situation. Recipe formats and adjustment applicable to large-scale food preparation. Work scheduling and the practical exposure to the use of large scale catering equipment in a real life situation.

Medical nutrition therapy 310 (MNX 310)

Module credits	9.00
Prerequisites	3rd-year status
Contact time	1 discussion class per week, 2 lectures per week
Language of tuition	Module is presented in English
Academic organisation	Human Nutrition
Period of presentation	Semester 1

Module content

Introduction to the origin of diseases as a consequence of programmed changes that occur during impaired intrauterine growth and development. Aetiology and clinical manifestations of under-nutrition/PEM; principles and practices of medical nutrition therapy in under-nutrition/PEM; impact and influence of worm infestation. Congenital heart disease and special problems related to children with congenital heart disease. Relationship between malnutrition and Aids; role of nutrition in immunity within the context of HIV/Aids; clinical signs, symptoms and problems associated with Aids and guidelines for the alleviation of these symptoms; nutritional related problems of medication used by Aids patients. Appropriate practical assignments and case studies.

Medical nutrition therapy 323 (MNX 323)

Module credits	34.00
Prerequisites	3rd-year status
Contact time	2 discussion classes per week, 4 lectures per week
Language of tuition	Module is presented in English
Academic organisation	Human Nutrition
Period of presentation	Semester 2

Module content

Relationships between obesity, hypertension, cardiovascular disease, insulin resistance and concomitant health risks. Aetiology, pathophysiology and manifestation(s) of type 1 and type 2 Diabetes Mellitus, gestational diabetes and impaired glucose tolerance; principles and practices of medical nutrition therapy of diabetes mellitus integrated with medical/pharmacological treatment; dietary treatment/prevention of complications; dietary adaptations when exercising and life style/behaviour modification. Aetiology and clinical manifestations of cardiovascular; principles and practices of medical nutrition therapy in CVD. Aetiology and clinical manifestation(s) of renal disease conditions; principles and practices of medical nutrition therapy in renal conditions (nephritic syndrome, nephrotic syndrome, acute and chronic renal failure, nephrolithiasis). Nutrient-drug interactions. Metabolic response to acute and chronic stress. Principles of special nutritional care, special feeding methods and products required for injured/critically ill patients. Appropriate practical assignments and case studies

Integrated healthcare leadership 310 (IHL 310)

Module credits	8.00
Prerequisites	IHL 111/2/3/4, IHL 120, IHL 210, IHL 221/2/3/4
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Academic organisation	Nursing Science
Period of presentation	Semester 1

Module content

Community needs assessment. Community development. Planning and implementation of collaborative community-based interventions. Application of principles of monitoring and evaluation. NB: Only for School of Healthcare Sciences students.

Research methodology for healthcare sciences 300 (RHC 300)

Module credits	30.00
Prerequisites	IHL 110, IHL 121/2/3/4; (ELH 121 and 122); AIM 111 or 101
Contact time	2 practicals per week, 2 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Nursing Science
Period of presentation	Year

Module content

Concepts of research; research process; research studies appraisal; planning and developing literature review; developing research idea and research question; research principles in designing research proposal; research proposal writing

Community nutrition 321 (CNT 321)

Module credits	10.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	3rd-year status
Contact time	Community Engagement, 2 lectures per week
Language of tuition	Module is presented in English
Academic organisation	Human Nutrition
Period of presentation	Semester 2

Module content

Community nutrition practice within the larger public health realm. Nutrition within primary healthcare. Nutrition and community development as well as project planning and management.

Curriculum: Final year

Minimum credits: 222

Core modules

Community nutrition 411 (CNT 411)

Module credits	25.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	4th-year status
Contact time	4 lectures per week, Community Engagement, 1 discussion class per week
Language of tuition	Module is presented in English
Academic organisation	Human Nutrition
Period of presentation	Semester 1

Module content

Global nutrition challenges e.g. food security, protein-energy and micronutrient malnutrition, non communicable diseases of lifestyle, etc. Public health approaches and general nutrition interventions to address these challenges. Nutrition program development including assessment, analysis and interventions in the South African context as well as Nutrition Policy formulation

Internship training in community nutrition 480 (CNT 480)

Module credits	35.00
Prerequisites	CNT 411
Contact time	Five times 8hrs per day for 7 weeks, Community Engagement
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Semester 2

Module content

Academic service learning project in community-based programme development (i.e. planning, implementation and evaluation). Facility-based primary healthcare service delivery.

Dietetic profession 411 (DTT 411)

Module credits	5.00
Prerequisites	4th-year status
Contact time	1 discussion class per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Semester 1

Module content

Dietetic profession

Integration in dietetics 480 (DTT 480)

Module credits	4.00
Prerequisites	4th-year status
Contact time	1 seminar per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Semester 2

Module content

*Attendance module only

Advanced human nutrition 411 (HNT 411)

Module credits	18.00
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	4th-year status
Contact time	1 discussion class per week, 3 lectures per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Semester 1

Module content

Seminars and case studies (theory and practical application): Eating behaviour, eating disorders, nutrient/nutrition supplementation, sports nutrition, vegetarianism, food safety, nutrition of the disabled, prevention of non-communicable disease of lifestyle; nutrition and immunity; nutrition and genetics.

Medical nutrition therapy 411 (MNX 411)

Module credits	35.00
Prerequisites	4th-year status
Contact time	3 discussion classes per week, 6 lectures per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Semester 1

Module content

The role of diet and nutrition in the aetiology and treatment of diseases of the gastrointestinal tract and related organs, metabolic disorders and gout, diseases of neurological origin, prematurity and paediatric disease conditions. Nutritional care of physiological trauma and cancer. Nutrient-drug interactions. Appropriate practical assignments and case studies (practising the nutrition care process).

Internship training in medical nutrition therapy 480 (MNX 480)

Module credits	50.00
Prerequisites	MNX 411
Contact time	5 discussion classes per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Semester 2

Practice management 461 (PRS 461)

Module credits	5.00
Prerequisites	4th-year status
Contact time	1 lecture per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Quarter 4

Module content

Administration and finances (personal and business).

Internship training in food service system management 480 (FSS 480)

Module credits	35.00
Prerequisites	No prerequisites.
Contact time	5 discussion classes per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Human Nutrition
Period of presentation	Semester 2

Research in healthcare sciences 400 (RHC 400)

Module credits	10.00
Prerequisites	RHC 300
Contact time	1 practical per week, 1 lecture per week
Language of tuition	Module is presented in English

Academic organisation	Nursing Science
Period of presentation	Year

Module content

Conducting process of obtaining ethics clearance, data collection, data analysis, research report writing.

The information published here is subject to change and may be amended after the publication of this information. The General Regulations (G Regulations) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the General Rules section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.