UNIVERSITY OF THE
FREE STATE
UNIVERSITEIT VAN DIE
VRYSTAAT
YUNIVESITHI YA
FREISTATA

UFS·UV
DIRECTORATE FOR INSTITUTIONAL
RESEARCH AND ACADEMIC PLANNING (DIRAP)
DIREKTORAAT VIR INSTITUSIONELE
NAVORSING EN AKADEMIESE BEPLANNING (DINAB)

21 April 2015

HEQSF reference number: H06/14516/HEQSF

Qualification reference number: 5300

Authorised Qualification name: Bachelor of Science in Agriculture

Directorate: Accreditation

Council on Higher Education

P.O. Box 94

Persequor Park

PRETORIA

0020

Email: heqsfonline@che.ac.za

Dear Colleagues

RESPONSE TO THE DEFERRAL OF THE HEQSF-ALIGNMENT AND ACCREDITATION

HEQSF review comment

"The design of the curriculum needs to be reviewed so that there is clarity with regard to compulsory and elective modules. There needs to be some explanation of the specialisation streams if applicable."

Response

It was difficult to express how the curriculum design is implemented and managed on the prescribed HEQSF-online format. Students have specific streams (specialisations) they can follow, for which the institution makes provision for different module codes to ensure students stay within their stream, even though the core of the curriculum remains the same. Because the upload did not allow us to indicate modules as compulsory and/or elective as well as the fact that the total tally at the end of the modular section will not reflect how the curriculum worked, it was loaded as electives. No space was provided to specify the rules of combination for the constituent modules and, where applicable, progression rules from one year to the next.

This Bachelor of Sciences in Agriculture, BSc (Agriculture) qualification makes provision for the following fields of interest, namely:

I. Agrometeorology
II. Agronomy
III. Soil Sciences
IV. Animal, Wildlife and Grassland Sciences
V. Food Science
VI. Plant Breeding and Plant Pathology

The first year of study provides students with the opportunity to develop a broad scientific foundation. These modules serve as the foundation for specialisation in the subsequent years. In the second year of study, majors are selected (at NQF Level 6), supplemented with modules from a supportive discipline. This provides students with the opportunity to select modules from related supportive disciplines to ensure a purposeful qualification. In the third and fourth years of study, students must specialise in either one of the major fields of interest mentioned above (at NQF Level 7 and 8), with at least a total of 64 credits completed for each major which require 128 credits on NQF Level 7 and 8. Each specialisation area also includes a research component in the fourth year awarding 32 credits. A student is required to complete a minimum of 128 credits in each year of study, to reach the total minimum credits of 512.

The following table outlines the curriculum:

UFS Module Code	UFS Module Name	Credits	NQF Level	Total Credits
YEAR 1				
Compulsory core modules				
BLGY1513	Introduction to Biology	12	5	128
CHEM1514	Chemistry	16	5	128
PHYS1534	Physics	16	5	128
MATM1534	Calculus	16	5	128
BLGY1643	The Interdependence of Plants and Life on Earth	12	6	128
ANIG1624	Introduction to Animal, Wildlife and Grassland Sciences	16	6	128
SCCS1624	Introduction to Soil, Crop and Climate Sciences	16	6	128
CHEM1644	Chemistry	16	6	128
CSIL1511	Basic Computer Literacy I	4	5	128
CSIL1521	Basic Computer Literacy II	4	5	128

Modules as part of specialisation areas (electives)				
AGEC1514	Agricultural Economics	16	5	128
AGEC1624	Agricultural Economics	16	6	128
YEAR 2				
Select 8 modules of 16 credits each in the major field of study				
AGEC1624	Agricultural Finance	16	6	128
AGEC2614	Farm Planning and Management	16	6	128
AGEC2624	Introduction to Agricultural Marketing	16	6	128
AGEG2624	Engineer principles in Agriculture Practices	16	6	128
ANIB2624	Introduction to Animal and Plant Breeding	16	6	128
ANIG2614	Introductory Ruminant Production	16	6	128
ANIG2624	Introductory Monogastric Production	16	6	128
BTNY2602	Field excursion 1	8	6	128
BTNY2616	Plant adaptations for survival on land	24	6	128
BTNY2626	Introductory plant development and biotechnology	24	6	128
BOCH2614	Biochemistry for agriculture and health sciences	16	6	128
DATA2614	Agricultural Datametry	16	6	128
DATA2624	Agricultural Datametry	16	6	128
ENTO2614	Introduction to Morphology, Anatomy and Bio-ecology of insects	16	6	128
ENTO2616	Functional Morphology & Anatomy, Classification & Identification and Evolutionary Biology of Insects	24	6	128
FSCC2612	Chemical analysis of food	8	6	128
FSCI2612	Introduction to food science	8	6	128
FSCC2622	Chemical analysis of food	8	6	128
FSCS2624	Food systems	16	6	128
GRAS2614	Grassland Ecology	16	6	128
IQMQ2622	Industrial Quality Assurance	8	6	128
CLIM2614	Fundamentals of Agrometeorology	16	6	128
CLIM2624	Agrometeorology for Farming Systems	16	6	128
CROP2614	Concepts in Crop Production	16	6	128
CROP2624	Winter Grain, Industrial and Diverse Crops	16	6	128
MCBP2616	Basic principles of microbiology	24	6	128
PLTB2613	Theoretical principles of plant breeding	12	6	128
PLTB2623	Applied principles of plant breeding	12	6	128
PPLG2624	Principle of plant pathology	16	6	128
SOIL2614	Soil Classification, Evaluation, and Land Use Planning	16	6	128
SOIL2624	Sustainable Soil and Water Management	16	6	128
ZLGY2626	Vertebrate Life and Evolution	24	6	128

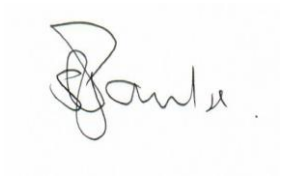
YEAR 3				
Select 8 modules of 16 credits each in the major field of study				
AGEC3714	Managerial Economics	16	7	128
AGEC3721	Seminar in Agricultural Economics	4	7	128
AGEC3724	Resource Economics	16	7	128
AGEC3734	Agribusiness Management	16	7	128
AGEC3744	Agricultural Policy and Development	16	7	128
AGMA3714	Business Management and Entrepreneurship	16	7	128
AGMA3724	Innovation Management	16	7	128
AGMA3734	Agribusiness Management	16	7	128
AGMA3744	Strategic Agricultural Management	16	7	128
AGMA3762	Seminar in Integrated Agricultural Management	8	7	128
DATA3722	Statistical Analyses	8	7	128
AGEC3714	Managerial Economics	16	7	128
AGEC3724	Resource Economics.	16	7	128
AGEG3714	Hydraulics	16	7	128
AGEG3724	Irrigation Systems and Irrigation Surveying	16	7	128
ANIB3714	Theory of Animal Breeding	16	7	128
ANIB3724	New Technologies in Animal Breeding	16	7	128
ANIG3714	Cattle Production Systems	16	7	128
ANIG3724	Sheep and Goat Production Systems	16	7	128
ANIG3734	Poultry Production Systems	16	7	128
ANIG3744	Pig Production Systems	16	7	128
ANIN3734	Fundamental and Experimental Animal Nutrition	16	7	128
ANIN3744	Properties of Feeds, Balancing Rations and Fodder Flow	16	7	128
ANIN3764	Applied Nutrition of Wild Herbivores and Carnivores	16	7	128
ANIP3714	Animal Anatomy and Physiology of Farm Animals	16	7	128
ANIP3724	Animal Health	16	7	128
BTNY3754	Plant molecular biotechnology	16	7	128
BTNY3744	Plant defence and biotechnology	16	7	128
ENTO3714	Advanced Insect Ecology	16	7	128
ENTO3754	Agricultural Entomology	16	7	128
ENTO3724	Applied Insect Pest Management	16	7	128
ENTO3744	Applied Insect Biochemistry and Pharmacology	16	7	128
FSCA3714	Food products from animals	16	7	128
FSCE3714	Food Enigneering	16	7	128
FSCB3724	Food Microbiology	16	7	128
FSCP3724	Food products from plants	16	7	128
GRAS3714	Applied Veld Management and Veld Evaluation	16	7	128
GRAS3724	Intensive Pasture Production	16	7	128

CLIM3714	Climate Data Analysis for Agrometeorological Services	16	7	128
CLIM3724	Climate Change and Variability	16	7	128
CROP3714	Summer Grain, Oil and Protein-Rich Crops	16	7	128
CROP3724	Vegetable Crops	16	7	128
PPLG3714	Mycological plant pathology	16	7	128
PPLG3734	Bacterial and viral plant pathology	16	7	128
PPLG3744	Ecology of plant pathogens	16	7	128
PLTB3714	Principles of quantitative genetics in plant breeding	16	7	128
PLTB3724	Breeding for abiotic stress tolerance	16	7	128
PLTB3744	Advanced Breeding Techniques	16	7	128
SOIL3714	Soil Fertility and Fertilization	16	7	128
SOIL3724	Soil Contaminants and Management	16	7	128
YEAR 4				
Select 8 modules of 16 credits each in the major field of study				
ANIB4814	Animal Breeding: Mixed Model Theory	16	8	128
ANIB4824	Animal Breeding: Practical Application	16	8	128
AGEC4814	Managerial Economics	16	8	128
AGEC4834	Agribusiness Management	16	8	128
AGEC4824	Resource Economics	16	8	128
AGEC4844	Agricultural Policy and Development	16	8	128
AGEG4824	Specialised Micro, Drip and Underground Irrigation Systems.	16	8	128
ANIG4803	Literature Review Animal, Wildlife and Grassland Sciences	16	8	128
ANIG4805	Research Project Animal, Wildlife and Grassland Sciences	16	8	128
ANIB4814	Animal Breeding: Mixed Model Theory	16	8	128
ANIN4834	Applied Monogastric Nutrition	16	8	128
ANIN4864	Applied Ruminant Nutrition	16	8	128
ANIP4814	Applied Reproduction Physiology in Farm Animals	16	8	128
ANIP4824	Growth and Lactation Physiology	16	8	128
FSCP4814	Food products from plants	16	8	128
GRAS4814	Production and Utilisation Ecology	16	8	128
GRAS4834	Defoliation Phenology and Physiology	16	8	128
GRAS4824	Advanced Veld Management	16	8	128
GRAS4844	Advanced Fodder Plant Evaluation	16	8	128
CLIM4814	Micrometeorology and Specialised Instrumentation	16	8	128
CLIM4824	Simulating Biophysical Interactions	16	8	128
CLIM4834	Physics and Dynamics of the Atmosphere	16	8	128
CLIM4844	Weather Analysis and Forecasting	16	8	128
CROP4814	Crop Physiology	16	8	128
CROP4824	Crop Development	16	8	128
CROP4834	Crop Nutrition and Water Relations	16	8	128

CROP4844	Weed Control	16	8	128
PLTB4814	Advanced quantitative genetics in plant breeding	16	8	128
PLTB4834	Marker-assisted breeding	16	8	128
PLTB4854	Breeding Program Management	16	8	128
PLTB4824	Quality and stress tolerance breeding	16	8	128
PLTB4806	Literature review Plant Breeding	24	8	128
PLTB4808	Research Project	32	8	128
PPLG4834	Epidemiologie en beheer van plantsiektes	16	8	128
PPLG4824	Plant-pathogen interactions	16	8	128
PPLG4844	Molecular plant pathology	16	8	128
SCCS4814	Research Methodology	16	8	128
PPLG4806	Literature review	24	8	128
PPLG4808	Research Project	32	8	128
SCCS4824	Literature Review	16	8	128
SOIL4814	Soil Chemical Principles and Applications	16	8	128
SOIL4824	Soil Physical Principles and Applications	16	8	128
SOIL4834	Soil Classification Principles and Applications	16	8	128
SOIL4844	Soil Biological Principles and Applications	16	8	128

Thank you for your consideration and continued support in relation to the response in relation the comments made by the accreditation panel. We trust that you will find this response adequate to validate its accreditation and HEQSF alignment.

Kind regards



Ms SJ Paulse

Deputy Director: Directorate for Research and Institutional Planning

Directorate for Institutional Research and Academic Planning
T: +27(0)51 401 2862
E: OliphantNM@ufs.ac.za

205 Nelson Mandela Drive
Park West
Bloemfontein 9301
South Africa

PO Box 339
Bloemfontein 9300
South Africa
www.ufs.ac.za

UNIVERSITY OF THE **FREE STATE**
UNIVERSITEIT VAN DIE **VRYSTAAT**
YUNIVESITHI YA **FREISTATA**