CROPPING SYSTEMS					
Module code CRP 801	**Student workload** 2 hours	**Credits** 1.125 ECTS credits	**Semester** 1st. Sem.	**Frequency** Each Session	**Duration** 1 Semester

1	**Types of courses** a) Class Work b) Seminars c) Students' Presentation	**Contact hours** 18 hours	**Independent study** 6 hours	**Class size** 3 students

5	**Prerequisites for participation** N/A
2	**Learning outcomes** The student should be able to make decisions on the best and effective way to grow crops within a given system. The student should be able to grom crops in a mixed and sole cropping system so as to get the best land equivalent ratio for crop production.
3	**Subject aims/Content** The aim of the module is to 1. Present the students with the principles of crop production in the context of a mixed farming system. **2.** To understand the various methods of producing crops under a controlled environments. Land tenure systems in West Africa, Soil and water conservation, Mechanized farming for various cropping systems e.g Agroforestry, Alley farming, Mixed vs sole cropping systems, Mixed farming, Zero-tillage farming (Conservation agriculture), Plantation agriculture and Organic Agriculture. Greenhouse (controlled environment) crop production, Agronomy of specific crops of importance to African food security. Crop protection, Crop nutrition. Thematic term papers and seminars on regional cropping systems of West Africa, developing resilient farming systems in West Africa etc.
4	**Teaching methods** Lectures, thematic term papers and seminars on regional cropping systems of West Africa, developing resilient farming systems in West Africa etc.
6	**Assessment methods** Continuous Assessment, Practical test Summative Assessment, Written end-of-the-semester examination
8	**This module is used in the following degree programmes as well** N/A
10	**Responsibility for module** Prof. F. O. Olasantan
11	**Other information** This course is a 2 unit course which translates to 24 hours contact in a 12-week semester https://www.sanfoundry.com/best-reference-books-cropping-systems-sustainable-agriculture/

SEED PRODUCTION					
Module code CRP 802	**Student workload** 2 hours	**Credits** (according to ECTS) 1.125 ECTS	**Semester** Second Sem.	**Frequency** Each Second Semester	**Duration** 1 Semester

1	**Types of courses**	**Contact hours**	**Independent study**	**Class size**
	a) Class Work b) Seminars c) Students' Presentation	18 hours	6 hours	3 students

5	**Prerequisites for participation** Basic course in Seed Science
2	**Learning outcomes** The Student would be acquainted with the underlying, principles in production and maintenance of good quality seeds
3	**Subject aims/Content** The aim of the module is to 1. Make students appreciate the various methods of hybrid seed produuction 2. Equip students with necessary skills to be able to determine and produce good quality seeds **3.** Develop students' problem-solving skills to propose appropriate response strategies of quality seed production National and regional variety release systems in West African countries; ECOWAS Harmonized seed laws. Conditions for seed production, Controlled seed multiplication, Evaluating and maintaining genetic purity during seed production; Seed Certification; Principles of seed processing, outlay of seed processing plants, Seed Pre-cleaning, conditioning, grading and sizing equipment and operations. Commercial seed treatments. Seed store and gene bank operation: seed germination testing, viability and quality control. Viability modelling, seed drying, packaging and transportation. Hybrid seed production: Genetic basis of hybrids, Population genetic analysis in hybrid production, Hybrid purity and GMO testing. Thematic term papers and seminars on specialized seed industries like organic seed production, Seed cooperatives, Public-private partnerships (PPP), National and regional seed business incentives, Farm management/cost benefit analysis and other topical seed enterprise development issues etc.
4	**Teaching methods** Lectures, case studies, group work, individual presentations, and discussions
6	**Assessment methods** Individual Presentations, Group Assignments, Continuous Assessment, Summative Assessment, Written end-of-the-semester examination

8	**This module is used in the following degree programmes as well** Master of Agriculture in Seed Technology
10	**Responsibility for module** Prof. M. A. Adebisi
11	**Other information** This course is a 2 unit course which translates to 24 hours contact in a 12-week semester https://www.amazon.com/Seed-Production-Principles-Miller-McDonald/dp/0412075512

PRINCIPLES OF CULTIVAR DEVELOPMENT						
Module code CRP 803	**Student workload** 3 hours	**Credits** (according to ECTS) 1.125 ECTS	**Semester** First Sem.	**Frequency** Each First Semester	**Duration** 1 Semester	
1	**Types of courses** a) Lecturess b) Seminars c) Students' Presentation	**Contact hours** 18 hours	**Independent study** 6 hours	**Class size** 4 students		
5	**Prerequisites for participation** N/A					
2	**Learning outcomes** The Student should be able to develop skills in the process of varietal identification, development and subsequent release.					
3	**Subject aims** The aim of the module is to 1. Make students appreciate the need to have improved cultivars 2. To Teach students the basic principles of cultivar development using conventional and Molecular techniques **3.** To acquaint students with the principles and procedures in varietal development and Release. Plant Genetic Resources, Line development and recurrent selection, Plant breeding methods-back crossing, cultivar developments for dicot and monocot crop plants, mutation breeding and hybridization, introduction to genetic engineering, exploiting cytological and genetic methods in crop improvement (induction and utilization of male sterility, polyploidy, double haploids breeding, apomixes), Variety release and variety integrity maintenance, Analysis of crosses, expectation for line cross means, heterosis, inbreeding depression, Marker based analysis; molecular markers, Genetic maps, Marker-trait association					
4	**Teaching methods**					

	Lectures, Practical, group work, individual presentations, and discussions
6	**Assessment methods** Continuous Assessment Test, Term paper, Written end-of-the-semester examination
8	**This module is used in the following degree programmes as well** N/A
10	**Responsibility for module** Prof. O. J. Ariyo
11	**Other information** This course is a 3 unit course which translates to 36 hours contact in a 12-week semester 1. *Principles of Cultivar Development*, vol. 1, Theory and Technique. JUSTIN JAMES R.; Fehr, Walter R. Soil Science: May 1988 - Volume 145 - Issue 5 - ppg 390 **2.** https://www.amazon.com/Principles-Cultivar-Development-Theory.../B00374RYXC

FIELD EXPERIMENTATION					
Module code CRP 804	**Student workload** 2 hours	**Credits** (according to ECTS) 1.125 ECTS	**Semester** Second Sem.	**Frequency** Each Second Semester	**Duration** 1 Semester

1	**Types of courses** a) Lectures b) Practical c) Students' Presentation	**Contact hours** 18 hours	**Independent study** 6 hours	**Class size** 4 students
5	**Prerequisites for participation** N/A			
2	**Learning outcomes** The student should be able to apply the appropriate design and layout agricultural experiments. Also, gain knowledge in data analysis and drawing of suitable inferences			
3	**Subject aims** The aim of the module is to 1. Make students appreciate the importance of statistics in field experimentation. 2 Eqiuip students with the necessary skills and techniques in the choice of appropriate design and drawing of appropriate inferences in field experimentation. Hypothesis testing**,** Experimental designs: Completely Randomized Design (CRD), Randomized Block Design (RBD), Latin Square Design, Factorial experiments, Split plots designs, Analysis of Variance (ANOVA) and Mean comparisons. Regression and correlation. Mixed models, confounding variables, Use of			

	statistical package programmes.
4	**Teaching methods** Lectures, Practical and discussions
6	**Assessment methods** Continuous Assessment Test, Term paper, Written end-of-the-semester examination
8	**This module is used in the following degree programmes as well** N/A
10	**Responsibility for module** Dr. E. O. Idehen
11	**Other information** This course is a 2 unit course which translates to 24 hours contact in a 12-week semester -Statistical Procedures for Agricultural Research, 2nd Edition. Kwanchai A. *Gomez*, Arturo A. *Gomez*. ISBN: 978-0-471-87092-0. Feb *1984*. 704 pages -Applied Statistics for Scientific Studies. T. A. T. Wahua. Afrika Link Publishers, university of Ibadan , Nigeria. ISBN: 978-2915-15-7

CROP PROTECTION AND PRODUCTIVITY					
Module code CRP 805	**Student workload** 2 hours	**Credits** (according to ECTS) 1.125 ECTS	**Semester** First Sem.	**Frequency** Each First Semester	**Duration** 1 Semester

1	**Types of courses**	**Contact hours**	**Independent study**	**Class size**
	a) Lectures b) Practical c) Students' Presentation	18 hours	6 hours	4 students

5	**Prerequisites for participation** N/A
2	**Learning outcomes** The student should be able to effectively manage fields from pests and diseases, using the best cost effective and environmentally friendly approach. The student will alson be able to apply molecular and plant tissue culture techniques in plant disease diagnosis.
3	**Subject aims** The aim of the module is to 1. To equip students with the skills in Sampling for nematodes and nematodes extraction from soil and plant. 2. To enable students, understand the methods of purification and identification of

	major plant pathogens (bacteria and fungi). 3. Assist students in the Identification of insect body parts Pests and pathogens in crop protection and productivity. Plant-nematode relations or interactions; population dynamics of nematodes; methods of nematode control in agricultural soils. Definition and categorization of insect pests; development of pest status. Economics of insect pest attack; forecasting Insect pest outbreak. Fungi diseases of national and international importance. Classification and nomenclature of plant parasitic fungi. Morphology, Biology and Ecology of fungi. Classification and properties of plant pathogenic bacteria. Growth, reproduction and genetics of plant pathogenic bacteria. Kinds of inoculum produced and dissemination. Bacteria diseases of national and international importance. The nature of viruses' growth and reproduction. The genetics of viruses. Kinds of inoculum produced. Dissemination, Virus diseases of national and international importance. Control measures, quarantine, cultural, chemical, host plant resistance, etc.in crop protection and productivity. Basic crop protection equipments, maintenance and repairs. **Practicals**:- Sampling for nematodes and nematodes extraction from soil and plant. Isolation, purification and identification of major plant pathogens (bacteria and fungi). Creation of insect museum of agricultural importance. Identification of insect body parts. Virus isolation and transmission. Virus purification. Application of molecular and plant tissue culture techniques in plant disease diagnosis.
4	**Teaching methods** Lectures, group work and Practical
6	**Assessment methods** Continuous Assessment Test, Term paper, Written end-of-the-semester examination
8	**This module is used in the following degree programmes as well** N/A
10	**Responsibility for module** Dr. (Mrs.) E. I. Ayo-John
11	**Other information** This course is a 2 unit course which translates to 24 hours contact in a 12-week semester https://www.elsevier.com/books/crop...and-crop-protection/.../978-0-444-82095-2

SOIL FERTILITY MANAGEMENT AND CROP NUTRITION

Module code	Student workload	Credits (according to ECTS)	Semester	Frequency	Duration
CRP 806	2 hours	1.125 ECTS	Second Sem.	Each Second Semester	1 Semester

1	Types of courses	Contact hours	Independent study	Class size
	a) Lectures b) Practicals c) Students' Presentation	18 hours	6 hours	4 students

5	**Prerequisites for participation** N/A
2	**Learning outcomes** The student should be able to characterize soils based on their fertility status and make recommendation for management of different types of soils based on crop requirements.
3	**Subject aims** The aim of the module is to 1. Demonstrate of the use of integrated soil fertility management. ion from soil and plant. 2. To equip students with the skills in Soil fertility evaluation; Soil characterization; Soil fertility mapping and Land use planning Essentiality of plant nutrition, Basic concepts in soil plant relationships Soil fertility and productivity Soil organic matter; Fertilizers and lime use; Organic fertilizer and compost production and use; Integrated soil fertility management: Cropping Systems, Biological fertilization; Soil fertility evaluation; Soil characterization; Soil fertility mapping and Land use planning
4	**Teaching methods** Lectures and Practical
6	**Assessment methods** Continuous Assessment Test, Term paper, Written end-of-the-semester examination
8	**This module is used in the following degree programmes as well** N/A
10	**Responsibility for module** Prof. C. O. Adejujigbe
11	**Other information** This course is a 2 unit course which translates to 24 hours contact in a 12-week semester *Plant Nutrition* and *Soil Fertility* Manual, Second Edition - CRC Press *Book. ... Reference* - 304 Pages - 10 B/W Illustrations

PHYSIOLOGY OF CROP PRODUCTION

Module code	Student workload	Credits	Semester	Frequency	Duration
CRP 807	2 hours	(according to ECTS) 1.125 ECTS	First Sem.	Each First Semester	1 Semester

1	Types of courses	Contact hours	Independent study	Class size
	a) Class Work b) Practicals c) Students' Presentation	18 hours	6 hours	4 students

5 Prerequisites for participation

N/A

2 Learning outcomes

The student would be able to understand the principles of physiological basis of crop production.

3 Subject aims

The aim of the module is to

1. Demonstrate of the use of models in crop production
2. To equip students with the skills in analysis of plant growth and related components

Physiological mechanism underlying crop yield: growth, development, assimilate partitioning and carbon economy, Canopy carbon assimilatory process and effect of environmental factors; light (Photosynthetic photon flux density), water and nutrient availability, Irradiance response curve model and analysis of canopy carbon assimilation, Canopy architecture and carbon assimilation, coefficient of extinction, LAI, Sunlighted leaf area, leaf orientation and canopy carbon assimilation, Leaf area duration, relative leaf growth rate, Canopy respiration and yield; growth and maintenance respiration, factors affecting them and implication towards yield, Carbon balance and yield, Stress physiology and ameliorative process, Water balance: water deficit and flooding. Physiology of crop response, adaptation and acclimation and its consequent on crop yield, water use efficiency and yield. Irrigation and yield, Energy balance: UV and other lethal electromagnetic radiation, shading. Physiology of crop response and effect on yield. Radiation use efficiency and yield. Nutrient response curve, indicating different zones of uptake; deficiency, poverty adjustment, luxury consumption and toxicity zone with emphasis on essential macro nutrients. Nutrient use efficiency; nutrient uptake and utilisation, dimensions of nutrient use efficiency (Agronomic, Partial factor productivity, Physiological, internal, recovery and economic nutrient efficiency). Iron and aluminium toxicity specifically in rice production and its implication on crop yield. Fertiliser application (inorganic and organic agriculture) and crop yield, Effect of reactive oxygen species on crop yield, Crop Ecophysiology and Introductory crop modelling, Environmental factors and crop yield, System theory, system dynamics concepts and principles, Crop simulation models in Agricultural research and management, Fundamentals of DSSAT model, Yield analysis of some selected field crops; yield component of some selected arable crops and its implication towards yield formation, Physiological bases of agronomic management practises; spacing, fertiliser application, irrigation, variation in planting date etc.

4 Teaching methods

Lectures, group work and Practical

6 Assessment methods

Continuous Assessment Test, Term paper, Written end-of-the-semester examination

8	**This module is used in the following degree programmes as well** N/A
10	**Responsibility for module** Dr. O. S. Sakariyawo
11	**Other information** This course is a 2 unit course which translates to 24 hours contact in a 12-week semester *Physiology of Crop Production*. Crop Science. By N K Fageria, V C Baligar, and , R B Clark. Food Products Press. Binghamton (New York): Haworth Press

AGRONOMY, ECOLOGY AND PHYSIOLOGY OF PASTURES					
Module code CRP 808	**Student workload** 3 hours	**Credits** (according to ECTS) 1.125 ECTS	**Semester** Second Sem.	**Frequency** Each Second semester	**Duration** 1 Semester

1	**Types of courses** a) Class Work b) Practical c) Students' Presentation	**Contact hours** 20 hours	**Independent study** 6 hours	**Class size** 4 students
5	**Prerequisites for participation** N/A			
2	**Learning outcomes** The student should be able to understand the underlying principles in the production of high quality pastures. Also, they should the genetics and mode of reproduction in various pastures in a bid to enhance hybridization of various species.			
3	**Subject aims/ Content** The aim of the module is to : 1. To equip students with the skills in quality pasture production 2. To enable students understand the genetics and agronomy of pastures Agronomy and adaptation of tropical pasture plants and their pattern of geographical distribution. Origin and domestication of forage plants. Genetic variation and mode of reproduction in pasture plants. Natural and sown pasture compared. Establishment and management of improved pastures - land requirement, land preparation, planting materials and planting, etc. Degradation and persistence of pastures. Role of legumes			

	in tropical pasture production. Pasture condition, species inter- relations environmental influences. Pasture as an ecosystem, species interrelationships and succession. Animal-soil-plant interactions. Influence of edaphic, physiographic and biotic factors in pasture productivity
4	**Teaching methods** Lectures, group work and Practical
6	**Assessment methods** Continuous Assessment Test, Term paper, Written end-of-the-semester examination
8	**This module is used in the following degree programmes as well** N/A
10	**Responsibility for module** Prof. O. M. Arigbede
11	**Other information** This course is a 3 unit course which translates to 36hours contact in a 12-week semester

PASTURE PRODUCTION, EVALUATION AND UTILIZATION					
Module code CRP 809	**Student workload** 3 hours	**Credits** (according to ECTS) 1.125 ECTS	**Semester** First Sem.	**Frequency** Each First Semester	**Duration** 1 Semester

1	**Types of courses** a) Class Work b) Practicals c) Students' Presentation	**Contact hours** 20 hours	**Independent study** 6 hours	**Class size** 4 students
5	**Prerequisites for participation** N/A			
2	**Learning outcomes** The students should be able to demonstrate skills in the effective production and management of Pastures			
3	**Subject aims/Content** The aim of the module is to 1. To equip students with the skills in quality pasture production and evaluation. 2. To acquint students with research methods and evaluation techniques of quality			

	pasture Role of pastures in animal production, factors influencing choice of species for sown pastures. Steps in pasture establishment and management - weed management, fertilizer management and grazing management. Pasture research methodology and evaluation techniques. Pasture quality evaluation and factors affecting quality. Animals and pasture measurements under experimentation and statistical analysis. Utilization techniques - *in situ* grazing and grazing systems, cut-and-carry system, conservation and utilization techniques
4	**Teaching methods** Lectures, group work and Practical
6	**Assessment methods** Continuous Assessment Test, Term paper, Written end-of-the-semester examination
8	**This module is used in the following degree programmes as well** N/A
10	**Responsibility for module** Prof. J. A. Olanite
11	**Other information** This course is a 3 unit course which translates to 36hours contact in a 12-week semester

ENGINEERING APPLICATION IN CROP/PASTURE PRODUCTION						
Module code CRP 810		**Student workload** 3 hours	**Credits** (according to ECTS) 1.125 ECTS	**Semester** Second Sem.	**Frequency** Each Second Semester	**Duration** 1 Semester
1	**Types of courses** a) Lectures b) Practicals c) Students' Presentation		**Contact hours** 24 hours	**Independent study** 6 hours	**Class size** 4 students	
5	**Prerequisites for participation** N/A					
2	**Learning outcomes** The student should be able to apply the basic field operations in a cost effective manner in the production of crops.					
3	**Subject aims/content**					

	The aim of the module is to : 1. To teach students the various method of mechanized crop production 2. To expose student to various irrigation methods and flood control. Field mechanization: Land clearing operations; Tillage operations – ploughing, harrowing, planting, ; Equipment for mechanized agricultural production – The tractor and accessory implements, Conservation agriculture equipment; Intensive mechanization equipment for large scale farming Irrigation: Classifications & types of irrigation system; Merits & demerits of irrigation system; Criteria for the selection of irrigation system; water use efficiency; Crop water requirements, crop coefficient, field water requirements, field irrigation methods; irrigation scheduling, conveyance structures, Soil, water and plant relationship Drainage: Principles of soil and land drainage; Surface drainage, drainage methods, crop row drain system, Subsurface drainage criteria, Drainage and erosion control, Drainage types and classifications; selection of drainage systems Soil and water conservation on cropland, Soil and water conservation on pasture and rangeland, Flood control: Causes of flood; Flood and the associated disasters; Identification of flood prone areas; Climate change and flood; Flood control techniques and facilities Farm structures for crop/ pasture production: Dams, canals and other hydraulic systems; Farm workshop for equipment servicing, repairs and maintenance; Storage structures for crops and hays, Selection criteria for location of farm structures and construction materials
4	**Teaching methods** Lectures, group work and Practical
6	**Assessment methods** Continuous Assessment Test, Practical Test Written end-of-the-semester examination
8	**This module is used in the following degree programmes as well** N/A
10	**Responsibility for module** Dr. P. O. O. Dada
11	**Other information** This course is a 3 unit course which translates to 36hours contact in a 12-week semester

CROP/PASTURE PROCESSING TECHNOLOGY

Module code	Student workload	Credits (according to ECTS)	Semester	Frequency	Duration
CRP 811	3 hours	1.125 ECTS	First Sem.	Each First Semester	1 Semester

1	Types of courses	Contact hours	Independent study	Class size
	a) Lectures b) Practicals c) Students' Presentation	36 hours	6 hours	4 students

5 Prerequisites for participation

N/A

2 Learning outcomes

Students will demonstrate the ability to reduce post-harvest losses in crop production; and create appropriate design concepts towards harvesting, processing and storage of agricultural produce.

3 Subject aims/content

The aim of the module is to:

1. To expose students to equipment for harvesting, processing and storage of farm produce.
2. To teach students the underlying principles in order to reduce post-harvest losses.

Crop/ Pasture Harvesting Equipment: Traditional harvesting equipment; tractor

Mounted harvesters; combine harvester, Principles and techniques of handling crop/ pasture production equipments

Primary processing equipment; Choppers, grain shellers and threshers, grain separators and sorters, dryers, pelletizers; Maintenance and servicing of the identified equipment;

Secondary processing equipment: Types and principle of operation of expellers,

extractors, extruders, hay balers; Maintenance and servicing of the identified

equipment;

Storage Facilities: Classification of storage systems, Traditional storage system – Bags, guard traditional crib, rhombus, etc; Improved storage system – Improved crib, Evaporative Coolant system; Modern storage system – Refrigeration, cold storage system, silo, ware house; cooling vans; Storage facilities for root and tuber crops – barn, shelf, pit or underground storage system, etc

4 Teaching methods

Lectures, group work and Practical

6 Assessment methods

Continuous Assessment Test, Practical Test and Written end-of-the-semester examination

8 This module is used in the following degree programmes as well

N/A

10 Responsibility for module

	Prof. B. A. Adewumi
11	**Other information** This course is a 3unit course which translates to 36 hours contact in a 12-week semester

NEW FRONTIERS IN CROP PRODUCTION					
Module code CRP 812	**Student workload** 2 hours	**Credits** (according to ECTS) 1.125 ECTS	**Semester** Second Sem.	**Frequency** Each Second Semester	**Duration** 1 Semester

1	**Types of courses** a) Lectures b) Practical c) Students' Presentation	**Contact hours** 24 hours	**Independent study** 6 hours	**Class size** 4 students
5	**Prerequisites for participation** N/A			
2	**Learning outcomes** The student should be able to demonstrate skills in basic molecular biology techniques and also to use molecular approaches to crop and pasture improvement.			
3	**Subject aims/content** The aim of the module is to: 1. To demonstrate the use molecular markers in crop improvement 2. To Bring students up-to-date with the use of molecular tools in crop hybridization 3. To appraise the use of tissue culture in genetic engineering of crops Marker Assisted Selection (MAS), DNA technology on tissue culture in Crop and forage production, Genetic Engineering, Genotyping and phenotyping of crop and pasture of essential attributes			
4	**Teaching methods** Lectures and Practical			
6	**Assessment methods** Continuous Assessment Test, Practical Test and Written end-of-the-semester examination			
8	**This module is used in the following degree programmes as well** N/A			
10	**Responsibility for module**			

	Dr. E. O. Idehen
11	**Other information** This course is a 2 unit course which translates to 24 hours contact in a 12-week semester Introduction to Plant Biotechnology, H. S. Chawla. Oxford& IBH Publishing Co. Pvt. Ltd. New Delhi

PASTURE IN FARMING SYSTEMS AND ENVIRONMENTAL MANAGEMENT						
Module code CRP 813		**Student workload** 3 hours	**Credits** (according to ECTS) 1.125 ECTS	**Semester** First Sem.	**Frequency** Each First semester	**Duration** 1 Semester
1	**Types of courses** a) Lectures b) Practical c) Students' Presentation		**Contact hours** hours	**Independent study** 6 hours		**Class size** 4 students
5	**Prerequisites for participation** N/A					
2	**Learning outcomes** The student should be able to effectively manage an integrated system of animals and crop production. Also, to be able to effective integrate legumes and pastures in plantation of animals and crops.					
3	**Subject aims/content** The aim of the module is to: 1. To expose students to sustainable use crop residues in in off season feeding of animals 2. To demonstrate the effect of climate change in a system of animals and crop production Role of crop-livestock system in sustainable production, role of legumes, integration of pastures in plantation and animal crops. Intensive feed garden, fodder bank system. Sustainable use of crop residues in enhancing dry season feeding. Animal grazing and crop productivity. Managing animals in crop production environments. Animal grazing and ecosystem stability, traditional animal production system, environmental health, and rural livelihoods. Effect of fire in natural pasture management. Ruminant production and global warming, desertification					
4	**Teaching methods** Lectures, group work and Practical					
6	**Assessment methods** Continuous Assessment Test, Practical Test and Written end-of-the-semester examination					

8	**This module is used in the following degree programmes as well** N/A
10	**Responsibility for module** Prof. A. O. Jolaoso
11	**Other information** This course is a 3 unit course which translates to 36 hours contact in a 12-week semester

BIOMETRICAL GENETICS					
Module code CRP 814	**Student workload** 2 hours	**Credits** (according to ECTS) 1.125 ECTS	**Semester** Second Sem.	**Frequency** Each Second semester	**Duration** 1 Semester

1	**Types of courses** a) Lectures b) Students' Presentation	**Contact hours** 24 hours	**Independent study** 6 hours	**Class size** 4 students
5	**Prerequisites for participation** N/A			
2	**Learning outcomes** The student should be able to identify the various sources of genetic variation and to exploit their uses. Also, to apply models to determine gene action in crops and implications of interaction between genotypes and environment.			
3	**Subject aims/content** The aim of the module is to: 1. The student should be able to identify the various sources of genetic variation and to exploit their uses. 2. To acquaint students with various models used in genetic improvement of crops. Sources of variation, Additive Dominance Model, Epistasis, Interraction, G x E, Line x tester analysis, Experimental population-BIPS, NC I, NC II, Diallel			
4	**Teaching methods** Lectures and group work			
6	**Assessment methods** Continuous Assessment Test and Written end-of-the-semester examination			
8	**This module is used in the following degree programmes as well** N/A			
10	**Responsibility for module**			

	Prof. O. J. Ariyo
11	**Other information** This course is a 2 unit course which translates to 24 hours contact in a 12-week semester Biometrical Genetics by Marther and Jinks