

Minutes of the 5th Meeting of The Board of Studies



COLLEGE OF VET. SCI & ANI. HUSBANDRY

ABDUL WALI KHAN UNIVERSITY MARDAN

December 04, 2020

AGENDA

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Agenda Item 3

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Agenda Item 1

The Four-Years BS Degree Program in Animal Sciences as per HEC Undergraduate Education Policy 2020

Decision:

After thorough deliberation, the Board of Studies recommended the following Bachelor of Studies (4-Years) Degree Program in Animal Sciences as per HEC Undergraduate Education Policy 2020, for further approval of the Board of Faculty and Academic Counsel.

Title of Degree: BS (4-Years) Animal Sciences

Program Duration:	04 years
Number of Semesters:	08
Semester Duration:	16—18 weeks
Number of Courses per Semester:	5-6
Course Load per Semester:	15-18 Credit Hours
Total Number of Credit Hours:	126
Total Number of Courses:	42
Number of General Education Courses:	13
Number of Arts and Humanities Courses:	02
Number of Social Sciences Courses:	02
Number of Natural Sciences Courses:	02
Number of Expository Writing Courses:	03
Number of Civilizational Studies Courses:	02
Number of Quantitative Reasoning Courses:	02
Number of Minor Courses:	05
Number of Major Courses:	26

Note: In addition to these courses, students will have to

- i. complete an internship program, of at least 9-week duration, generally during the summer.
- ii. enroll in at least **one non-credit extracurricular program for at least 4 semesters**, a minimum of 4 hours per week, in one or more of the following three areas
 - a. entrepreneurship
 - b. youth clubs
 - c. sports

**Scheme of Studies of Four-Years BS Degree Program in Animal Sciences
as per HEC Undergraduate Education Policy 2020**

Semester	Course Code	Course Title	Credit Hours	Course Type
1st	EW-301	English composition and comprehension (Eng-I)	3(3-0)	Expository Writing
	CV-301	Islamic Studies/Ethics	3(3-0)	Civilizational Studies
	QR-301	Basic Mathematics	3(3-0)	Quantitative Reasoning
	ANS-301	Management of Dairy Animals (Disciplinary)	3(2-1)	Minor
	ANS-302	Introduction to Animal Physiology (Disciplinary)	3(2-1)	Major
	Total Credit Hours			15
2nd	EW-302	Communication and presentation skills (Eng-II)	3(3-0)	Expository Writing
	CV-302	Pakistan Studies	3(3-0)	Civilizational Studies
	NS-309	Introductory Biochemistry	3(2-1)	Natural Sciences
	SS-303	Human Psychology	3(2-1)	Social Sciences
	ANS-351	Nutrient Requirements of Farm Animals (Disciplinary)	3(2-1)	Minor
	ANS-352	Introduction to Animal Reproduction (Disciplinary)	3(2-1)	Major
Total Credit Hours			18	
3rd	EW-303	Technical Report Writing (Eng-III)	3(3-0)	Expository writing
	QR-302	Introduction to Information & Communication Technology	3(2-1)	Quantitative Reasoning
	NS-310	Introduction to Environmental Sciences	3(2-1)	Natural Sciences
	AH-301/ AH-310	Aesthetic studies/ Basic Chinese Language	3(3-0)	Arts and Humanities
	ANS-401	Introduction to Farm Animal Health (Disciplinary)	3(2-1)	Major
	Total Credit Hours			15
4th	SS-000	Marketing	3(2-1)	Social Sciences
	ANS-451	Fundamentals of Mechanized Farming (Disciplinary)	3(2-1)	Major
	Biotech-554	Research Methodology and skill enhancement	3(3-0)	Major
	AH-302/ AH-310	Introduction to Philosophy/ Chinese Language and society	3(3-0)	Arts and humanities
	ANS-452	Animal Anatomy and Histology	3(2-1)	Major
	Total Credit Hours			15
5th	ANS-501	Principles of Poultry Nutrition	3(2-1)	Major
	ANS-502	Introduction to Poultry Science	2(1-1)	Major
	ANS-503	Principles of Animal Breeding	3(2-1)	Major
	ANS-504	Feeding of Farm Animals	3(2-1)	Minor
	ANS-505	Principles of Small Ruminant Production	3(2-1)	Major
	ANS-506	Farm Practices	1(0-1)	Major
	ANS-507	Introductory Molecular Genetics	2(1-1)	Major
Total credit hours			17	

6th	ANS-551	Equine and Camel Production	3(2-1)	Major
	ANS-552	General Pathology	2(1-1)	Major
	ANS-553	Poultry Feeding Practices	3(2-1)	Major
	ANS-554	Introduction to Epidemiology	3(2-1)	Major
	ANS-555	Poultry Farm Management	3(2-1)	Major
	ANS-556	Farm Practices	1(0-1)	Minor
	ANS-557	Post-Harvest Protection of Cereals	2(1-1)	Major
	Total credit hours		17	
7th	ANS-601	Biosafety and Biosecurity	3(2-1)	Major
	ANS-602	Principles of Meat Production	2(1-1)	Major
	ANS-603	Behavior and Welfare of Farm Animals	2(1-1)	Minor
	ANS-604	Feed Evaluation, Formulation and Processing Technology	3(2-1)	Major
	ANS-605	Poultry Hygiene and Disease Prevention	3(2-1)	Major
	ANS-606	Farm Practices	1(0-1)	Major
	ANS-607	Fish and Fisheries of Pakistan	3(2-1)	Major
	ANS-608	Introduction to Agricultural Extension	3(2-1)	Major
	Total Credit Hours		20	
8th	INT-651	Internship	6(0-6)	Major
	Total Credit Hours		06	
	Accumulative		123	

Agenda Item 2

The Two Years Associate Degree Program in Biotechnology as per HEC Undergraduate Education Policy 2020

Decision:

After thorough deliberation, the Board of Studies recommended the following Two Years Associate Degree Program in Biotechnology as per HEC Undergraduate Education Policy 2020, for further approval of the Board of Faculty and Academic Counsel.

Title of Degree: Associate Degree in Science (Biotechnology)

Program Duration: 02 years

Number of Semesters: 04

Semester Duration: 16—18 weeks

Number of Courses per Semester: 5-6

Course Load per Semester: 15-18 Credit Hours

Total Number of Credit Hours: 63

Total Number of Courses: 21

Number of General Education Courses: 13

Number of Arts and Humanities Courses: 02

Number of Social Sciences Courses:	02
Number of Natural Sciences Courses:	02
Number of Expository Writing Courses:	03
Number of Civilizational Studies Courses:	02
Number of Quantitative Reasoning Courses:	02
Number of Minor Courses:	02
Number of Major Courses:	06

Note: In addition to these courses, students will have to

- i. completing a 9-week summer internship any time after their first semester, or a work attachment for a total of up to 360 hours during their course duration.
- ii. fulfil the PLL requirement by signing up for an extracurricular "lab" of 4 hours a week for 2 semesters, in one of the following three areas: entrepreneurship, youth clubs, or sports.

Scheme of Studies of the Two-Years Associate Degree Program in Animal Sciences as per HEC Undergraduate Education Policy 2020

Semester	Course Code	Course Title	Credit Hours	Course Type
1st	EW-301	English composition and comprehension (Eng-I)	3(3-0)	Expository Writing
	CV-301	Islamic Studies/Ethics	3(3-0)	Civilizational Studies
	QR-301	Basic Mathematics	3(3-0)	Quantitative Reasoning
	ANS-301	Management of Dairy Animals (Disciplinary)	3(2-1)	Minor
	ANS-302	Introduction to Animal Physiology (Disciplinary)	3(2-1)	Major
	Total Credit Hours			15
2nd	EW-302	Communication and presentation skills (Eng-II)	3(3-0)	Expository Writing
	CV-302	Pakistan Studies	3(3-0)	Civilizational Studies
	NS-309	Introductory Biochemistry	3(2-1)	Natural Sciences
	SS-303	Human Psychology	3(2-1)	Social Sciences
	ANS-351	Nutrient Requirements of Farm Animals (Disciplinary)	3(2-1)	Minor
	ANS-352	Introduction to Animal Reproduction (Disciplinary)	3(2-1)	Major
Total Credit Hours			18	
3rd	EW-303	Technical Report Writing (Eng-III)	3(3-0)	Expository writing
	QR-302	Introduction to Information & Communication Technology	3(2-1)	Quantitative Reasoning
	NS-310	Introduction to Environmental Sciences	3(2-1)	Natural Sciences
	AH-301/ AH-310	Aesthetic studies/ Basic Chinese Language	3(3-0)	Arts and Humanities

	ANS-401	Introduction to Farm Animal Health (Disciplinary)	3(2-1)	Major
	Total Credit Hours		15	
4th	SS-000	Marketing	3(2-1)	Social Sciences
	ANS-451	Fundamentals of Mechanized Farming (Disciplinary)	3(2-1)	Major
	Biotech-554	Research Methodology and skill enhancement	3(3-0)	Major
	AH-302/ AH-310	Introduction to Philosophy/ Chinese Language and society	3(3-0)	Arts and humanities
	ANS-452	Animal Anatomy and Histology	3(2-1)	Major
	Total Credit Hours		15	
	Cumulative total Credit hours		63	

Note: the course contents etc. of all these courses are same as for Four-Years BS Program in Biotechnology

It was further decided that affiliated colleges will have freedom to choose the general education courses from the pool of course given below.

Bridging Semester

Semester	Course Code	Course Title	Credit Hours	Course Type
Bridging Semester	ANS-301	Management of Dairy Animals (Disciplinary)	3(2-1)	Minor
	ANS-302	Introduction to Animal Physiology (Disciplinary)	3(2-1)	Major
	ANS-351	Nutrient Requirements of Farm Animals (Disciplinary)	3(2-1)	Minor
	ANS-352	Introduction to Animal Reproduction (Disciplinary)	3(2-1)	Major
	ANS-401	Introduction to Farm Animal Health (Disciplinary)	3(2-1)	Major
	ANS-451	Fundamentals of Mechanized Farming (Disciplinary)	3(2-1)	Major
	ANS-452	Animal Anatomy and Histology	3(2-1)	Major
	Total Credit Hours		21	

**Subjects Pool for Two Year Associate Degree Program in Biotechnology
Abdul Wali Khan University Mardan
(Undergraduate Education Policy-2020 Higher Education Commission Pakistan)**

Courses Categories	LIST OF GENERAL EDUCATIONAL COURSES		Courses/Credit Hours Requirement
A. General Education Courses	A1. Breadth courses		
	Arts and Humanities	AH-301: Aesthetic Studies AH-302: Introduction to Philosophy AH-303: Sociolinguistics AH-304: Urdu AH-305: Islamic History & Culture AH-306: Islamic Morals and Self Purification AH-307: Arabic Language AH-308: History of Pakistan AH-309: Pashtu Language and Society AH-310: Basic Chinese Language AH-311: Classical Poetry AH-312: Foundations of Literary Theory & Criticism AH-313: Introduction to Home Economics AH-314: Creative Arts	
Social Sciences	SS-301: CPEC Role in Planning & Development of Pakistan SS-302: Current Affairs SS-303: Human Psychology SS-304: Introduction to Political Science SS-305: International Trade SS-306: Principles of Management SS-307: Cultural History of Pakistan SS-308: Introduction to Tourism & Hospitality SS-309: Sustainable Tourism SS-310: Western Political Philosophy SS-311: Introduction to Social Work SS-312: Pakistan Movement and Political History SS-313: Introduction to Economics SS-314: Introduction to International Relations SS-315: Environmental Psychology SS-316: Muslim Political Philosophy SS-317: Public International Law SS-318: Philosophical basis of Physical Education SS-319: Sports Biomechanics SS-320: Introduction to Sociology SS-321: Sociology of Health SS-322: Gender Studies SS-323: Human Rights Law SS-324: Constitutional Development in Pakistan SS-325: Introduction to Social Anthropology	Two subjects of 6 Credit Hours (3 C.Hs each) will be selected from the list	

	SS-326: Foreign Policy of Pakistan SS-327: General Methods of Teaching SS-328: Evaluation Techniques in Education SS-329: Curriculum Development SS-330: Introduction to Mass Communication SS-331: Mass Media in Pakistan SS-332: Introduction to Social Media SS-333: International Communication and Reporting SS-334: Muslim Struggle for Pakistan (1857 – 1947) SS-335: Political History of Pakistan (1947-to date) SS-000: Marketing	
Natural Sciences	NS-301: Every day Science-I NS-302: Every day science-II NS-303: Introduction to Physics NS-304: Introduction to Chemistry NS-305: Introduction to Botany NS-306: Introduction to Zoology NS-307: Fundamentals of Computer Programming NS-308: Introduction to Geology NS-309: Introductory bio-chemistry NS-310: Introduction to Environmental Sciences NS-311: Fundamentals of Geography NS-312: Fundamentals of Ecology NS-313: Geomorphology NS-314: Microbiology	Two subjects of 6 Credit Hours (3 C.Hs each) will be selected from the list
Total Sub-A1	Courses: 06	18
A2. Functional Skills Courses		
Expository Writing	EW-301: English composition and comprehension (Eng-I) EW-302: Communication and presentation skills (Eng-II) EW-303: Technical report writing (Eng-III)	Three Courses of 9 C.Hs (3 Credit Hours each) will be included in Scheme of Studies by all Departments
Quantitative Reasoning	QR-301: Basic Mathematics QR-302: Introduction to Information & Communication Technology QR-303: Logic & Critical Reasoning QR-304: Introduction to Statistics QR-305: Basic Statistical Inferences QR-306: Probability and Statistics QR-307: Calculus-I QR-308: Calculus-II	Two subjects of 6 Credit Hours (3 C. Hs each) will be selected from the list (those departments which teach statistics in two

		QR-309: General Ability	semesters should choose QR-304 & QR-305, other should choose QR-306
	Total Sub-A2	Courses 05	15
	A3. Civilizational Courses		
		CV-301: Islamic Studies/Ethics CV-302: Pakistan Studies	Two subjects of 6 Credit Hours (3 C.Hs each) will be selected from the list
	Total Sub-A3	Courses: 02	06
LIST OF DISCIPLINARY COURSES			
B. Disciplinary courses	Major and Minor Subjects of Biotechnology	Subject 1: Ecology, Biodiversity & Evolution Subject 2: Introduction to Biotechnology Subject 3: Microbiology Subject 4: Agriculture Biotechnology Subject 5: Molecular Biology Subject 6: Molecular Diagnostics Subject 7: Classical Genetics Subject 8: Research Methods and skill enhancement	03 03(2-1) 03 (2-1) 03 (2-1) 03 (2-1) 03 (2-1) 03 (3-0)
	Total Sub-B	Courses: 08	21
	Grand Total (A+B)		63

Agenda Item 3

Scheme for Bridging of the students who want to join BS (4-Years) Degree Program after completion of Two-Years Associate Degree/BSc

Decision:

For those students who want to enroll in four years BS degree program in Biotechnology, after completing two years associate degree program/BSc, the Board of Studies recommended that to such students the following courses will be offered in zero semester, before semester 5th of the Four Years BS Program, if they have not studied these courses in two years Associate Degree/BSc

Program. The same will be placed for further approval of the Board of Faculty and Academic Counsel.

Total Number of Courses:	06
Total Number of Credit Hours:	18
Program Duration:	6 months
Number of Semesters:	01
Semester Duration:	16—18 weeks
Number of Courses per Semester:	06
Course Load per Semester:	18 Credit Hours

**Scheme of Bridge courses for Four Years BS Degree in Biotechnology
Department of Biotechnology AWKUM**

Semester	Course Code	Course Title	Credit Hours	Course Type
0	Biotech-303	Ecology, Biodiversity & Evolution	3(3-0)	Minor
	Biotech-301	Introduction to Biotechnology	3(2-1)	Major
	Biotech-401	Microbiology	3(2-1)	Minor
	Biotech-456	Molecular Biology	3(2-1)	Major
	Biotech-555	Molecular Diagnostics	3(2-1)	Major
	Biotech-602	classical genetics	3(2-1)	Major
	Total Credit Hours		18	
	Accumulative Credit Hours		18	6 Courses

Agenda Item 4

Determination of the eligibility of the dropping out/outgoing students of BS 4-years Program for the two years Associate Degree

Decision: it was decided that the policy issued by the Director academics and Research will be followed in order to determine the eligibility of dropping out/outgoing students of the four Years BS degree program.