SWAMI VIVEKANAND SUBHARTI UNIVERSITY
UGC Approved Meerut
NAAC A
AN ISO 21001: 2018 ORGANIZATION

OFFICE OF THE REGISTRAR
Gp Capt M Yakoob
M-in-D (Retd.), M.Tech.
REGISTRAR
registrar@subharti.org

Ref.No.U-508(i)/SVSU/2025/1690 Date:03.02.2025

NOTIFICATION

It is hereby notified for information of all the concerned that the Academic Council in its 34th meeting held on 25-07-2024 vide resolution No.34(10) has approved the following new ordinance as per CBCS system:

Ordinance No.V-136(A), relating to Bachelor of Science (B.Sc.) as per CBCS system

The copy of above is enclosed and shall be applicable from Academic Session 2022-23 onwards.

This issues with the approval of the Hon'ble Vice Chancellor.

03.02.2025
Registrar

Ref.No.U-508(i)/SVSU/2025/1690 Date: 03.02.2025

Copy forwarded to information of:

1. Hon'ble Vice-Chancellor
2. Controller of Examination
3. Dean-Academics
4. Director-IQAC
5. Dean-Faculty of Science (for compliance please)
6. CTO (with a request to upload the ordinance on University website)
7. Additional Registrar-Academics
8. Guard File

03.02.2025
Registrar

ORDINANCE NO: V (136-A)

CBCS BASED ORDINANCE RELATING TO BACHELOR OF SCIENCE (B.SC.) COURSES

EFFECTIVE FROM 2022-23

KERAL VERMA SUBHARTI COLLEGE OF SCIENCE

SWAMI VIVEKANAND SUBHARTI UNIVERSITY, MEERUT

KERAL SUBHARTI COLLEGE OF SCIENCE
DEAN
27/12/24
(Dr. Amit Kumar)

Ordinance No.- V (136A)

CBCS Based Ordinance relating to Bachelor of Science (B.Sc.) courses

Chapter-1
General

1. This ordinance may be called 'Ordinance Relating to Master of Science (M.Sc.) courses.
2. Choice Based Credit System applicable to all Under Graduate Three/Four Year Programmes.
3. It shall come into force from with effective from 2022-23.
4. This ordinance shall apply to all programmes leading to B.Sc. courses (B.Sc. Forensic Science, B.Sc. Bioinformatics & B.Sc. Animal Husbandry) as per the CBCS System.

Chapter-2
Eligibility for Admission

1. An applicant who has passed Intermediate Examination from any recognized Board with relevant subject & eligibility criteria will be eligible for admission in the first year of the B.Sc. courses.
2. The admission shall be based on the merit of Entrance examination and marks of qualifying examination (Intermediate). An applicant must hold the Certificate from a recognized Board with minimum 45 % marks (40% for SC/ST).

Chapter-3
Teaching course

1. The B.Sc. courses shall be of three/four years duration, divided into six/eight semesters.
2. The B.Sc. course is available in following streams:
    a. B.Sc. Forensic Science
    b. B.Sc. Bioinformatics
    c. B.Sc. Animal Husbandry
3. The study and evaluation schemes of the B.Sc. Forensic Science, B.Sc. Bioinformatics & B.Sc. Animal Husbandry courses are enclosed as an Annexure.
4. The Academic calendar shall be as follows

Ist and IIIrd & Vth semester : 1st August to 30th November,

Exam. : 1st to 15th Dec.

IInd, and IVth & VIth semesters : 1st January to 30th April,

Exam. : 1st to 15th May

Chapter-4
Attendance

1. The students are expected to attend all the classes and should not have less than 75% attendance in theory as well as in practical classes where held, to become eligible to appear for the university examination. Shortfall in attendance can, however be condoned in deserving cases to the extent of 10% by the Principal. If the short fall is more than 10% but not more than 15% the Principal may recommend deserving cases to the vice chancellor for condonation the order of the Hon'ble Vice-Chancellor in this regard shall be final.

SUBHARTI COLLEGE OF SCIENCE DEAN S.V.S.U. MEERUT KERAL VERMA

Vishal Kr.

Chapter-5
Examination

1. **ATTENDANCE:**

The students are expected to attend all the classes and should not have less than 75 % attendance in theory as well as in practical classes, wherever held, to become eligible to appear for the university examination. Short fall in attendance can, however be condoned in deserving cases to the extent of 10% by the Principal. If the short fall is more than 10% but not more than 15%, the Principal may recommend deserving cases to the Vice Chancellor for condonation. The order of the Vice Chancellor in this regard shall be final.

2. **EXAMINATION:** carrying 70% of total marks.

The entire course has to be completed within a maximum of six (06) yrs. from the date of original admission in the course.

All Courses offered by KVSCOS under B.Sc. programme will have an evaluation system within two components as:

1. Continuous Comprehensive Assessment (CCA) accounting for 30% of the final grade that a student gets in a course, and

End-Semester Examination (ESE) accounting for the remaining 70% of the final grade that the student gets in a course.

All Courses offered by KVSCOS under B.Sc. programme will have an evaluation system within two components as:

1. Continuous Comprehensive Assessment (CCA) accounting for 30% of the final grade that a student gets in a course, and

2. End-Semester Examination (ESE) accounting for the remaining 70% of the final grade that the student gets in a course.

A student will have to pass both the components i.e. CCA and ESE separately to become eligible to be declared successful in a course.

CONTINUOUS COMPREHENSIVE ASSESSMENT (CCA) :

Continuous Comprehensive Assessment (CCA) will be of 30 marks comprised:

Midterm written test / practical including in-between snap tests if any shall carry 20 marks independently in each subject.

A maximum of 10 marks in each subject shall be awarded for attending classes (theory / practical) as per the following norms:

85- 100% attendance	-	10 Marks
80- 84.99% attendance	-	9 Marks
75- 79.99% attendance	-	8 Marks
70 – 74.99 % attendance	-	7 Marks
65 – 69.99% attendance	-	5 Marks
60 – 64.99% attendance	-	3 Marks
51 - 59.99% attendance	-	2 Marks
50% attendance	-	1 Mark
Less than 50% attendance	-	0 Mark

END SEMESTER EXAMINATION (ESE):

The remaining 70% of the final grade of the student in a course will be assessed on the basis of an end semester examination (ESE) that will be for three hours duration and will cover the entire syllabus of the course.

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DEAN

The question papers for the ESE will be got set by the Controller of Examinations (COE) of the Swami Vivekanand Subharti University (SVSU) by a selected faculty panel.

Chapter-06

PAPER SETTING, EVALUATION RESULTS

PAPER SETTING: The work of setting the end semester examination papers and evaluation of scripts and conduct of the end semester practical examination shall be assigned to the course teachers as well as to outsiders, ordinarily in the ratio of 50:50 for internal and external valuation respectively.

RESULTS: The result shall be prepared at the end of each academic year of the course by aggregating the marks obtained in the theory and practical examinations in all the semesters of the course till date.

(a) A candidate shall be declared as passed at the end of an academic year if he/she secures minimum 40% marks in each theory & practical paper separately (including project reports and comprehensive viva) and 40% in aggregate.

(b) If a student obtained 40% marks in at least 50% of the papers (ignoring fractions) including project report, he/she will be provisionally promoted to the next year with carryover papers and will have to appear & obtain pass marks in carryover papers along with the subsequent regular examinations for the relevant semester.

(c) If a candidate fails in only one head/subject and having passed in all other head/subject of the given examination of the year than his/her deficiency of maximum five (05) marks may be fulfilled by grace marks after fulfilling the conditions given below:

(A) If a candidate fails in only one head/subject and having passed in all other heads/subjects of the given examination of a **semester*/year**, then his/her deficiency of marks may be fulfilled by grace marks under the following conditions:-

(i) Grace marks is not a matter of right of the student but is the discretion of the University.
(ii) Provided that the candidate has appeared in the main examination of the concerned course and falls short of pass marks by not more than five (05) marks in theory paper only. Benefit of above mentioned shall not be given to the candidate who had appeared in supplementary/special examination/carry over examination.
(iii) Further, benefit of grace marks may be given only to the candidate who will pass the entire concerned examination of the **semester*/year** after awarding the grace marks and not for the purpose of promoting the student to next year with back papers or for improvement of division or percentage.
(iv) If in a head/subject of an examination passing in Theory, Practical or sessional exams separately is mandatory, then the benefit of grace marks shall be given only in Theory examination of the University examination.
(v) The award of grace marks permissible shall be on the basis of 1 grace mark for every 05 marks secured by an examinee over and above the minimum passing aggregate marks of all subjects of the year.

(B) Awarding of Grace Marks shall be done as given below:-

Aggregate Marks Obtained over & above minimum passing marks	Permissible Grace Marks
1-5	1
6-10	2
11-15	3
16-20	4
21-25	5

(i) Total number of Grace marks given to the student will be marked with astrick (*) at the bottom of the marksheet.

* Grace mark in semester examination will be considered hereinafter.

(d) A student not covered by clause (a) to (c) above shall have the following options to complete his/her course -

(i) He/ she may take admission on payment of full annual course fee and repeat the entire year of study. He /She shall be treated as a regular student. Or

(ii) He /She may pay only University exam fee for the End Semester Examination and appear in the End Semester University exams directly. He /She shall not be allowed to attend classes and the Sessional marks obtained earlier shall be retained. Or

(iii) He /She may pay half of the annual course fee and attend classes. The sessional marks obtained by him/her earlier shall be retained. There will not be any requirement of minimum attendance for appearing in the University examination

(e) A student will not be promoted to the next academic year if the carryover papers are more than 50% at one point of time.

EVALUATION UNDER GRADING ASSESSMENT:

The minimum Grade/ Grade Point required to pass each paper in a semester examination under CBCS shall be Grade D/ Grade Point 4 in each theory paper/ Practical/Project (wherever applicable) in External Examination and Internal Assessment separately.

CALCULATION CRITERIA:-

To implement the following grading system, the colleges/campuses shall use the following UGC recommended 10 point grading system:

Marks (%)	Letter Grades	Grade Points (G)
85-100	A++ (Outstanding)	10
75 to < 85	A+ (Excellent)	9
70 to <75	A (Very Good)	8
65 to <70	B+ (Good)	7
60 to <65	B (Above Average)	6
50 to <60	C (Average)	5
40 to <50	D (Pass)	4
0 to <40	F (Fail)	0
	AB (Absent)	0

COMPUTATION OF SGPA AND CGPA:

(Si)= £ (Ci x Gi)/ £ Ci, where Ci is the number of credits of the ith course and Gi is the grade point scored by the student in the ith course.

CGPA=£(Ci x Si) / £ Ci where Si is the SGPA of the ith semester and Ci is the total number of credits in that semester.

The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

Chapter-07

POWER TO MODIFY

In the event of any emergent situation, if any deviation is considered necessary, the Vice Chancellor is authorized to modify the Ordinance. Subject to subsequent ratification by the Executive Council.

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BACHELOR OF SCIENCE

1. PROGRAMME OBJECTIVES:

Students, who choose **BACHELOR OF SCIENCE** Programme, develop the ability to think critically, logically and analytically and hence use mathematical reasoning in everyday life. Pursuing a degree in B.Sc will introduce the students to a number of interesting and useful ideas in preparations for a number of science careers in education, research, government sector, business sector and industry.

The programme covers the full range of science, from classical to modern courses.

To broaden the interest for interconnectedness between formerly separate disciplines one can choose from the list of Generic electives. Skill enhancement Courses enable the student acquire the skill relevant to the main subject. Choices from Discipline Specific Electives provides the student with liberty of exploring his interests within the main subject.

Of key importance is to develop professional skills. The well structured programme empowers the student with the skills and knowledge leading to enhanced career opportunities in industry, education and research.

2. OUTCOMES:

➢ PROGRAMME OUTCOME OF B.SC. FORENSIC SCIENCE:

1. Developing the working knowledge, Duties, Code of Conduct and other Mandates of Forensic Scientists through understanding and practical implementation of data depiction and crime report writing.
2. Knowledge of Codes, acts and provisions of the Constitution of India related to Forensic Science, acts governing socio-economic crimes and acts governing environmental crimes.
3. Developing the working knowledge of forensic instrumentation and laboratory techniques and be able to design and conduct independent work.
4. Knowledge about the significance and usefulness of biological fluids in crime investigations, Wildlife Forensics and Forensic Entomology.
5. Acquiring complete knowledge in the Science of Fingerprinting through the Development and preservation of fingerprint extracted from a crime scene and classification of the same.
6. An exposure to features involved in handwriting examination and acquiring knowledge in forensic engineering, forensic archeology and forensic intelligence.
7. A brief understanding about arson, explosives and bomb scene management; Analysis of petroleum products in forensic exhibits; Comparison and adulteration of petroleum products.
8. A firm foundation on firearms, firing mechanisms and their classification; Importance of firearm evidence; Characterization and significance of GSR.
9. Learning methods of identification of an individual by means of Forensic Anthropology; Exposure to concepts involved in facial reconstruction; Significance and application of somatoscopy and somatometry in Forensic Science.
10. Gaining knowledge in crime scene management involving homicide or suicide; Collection and documentation of evidence in death cases; Knowledge on significance of toxicological studies and NDPS in forensic science.
11. An exposure and understanding of the importance of examining questioned documents in crime cases. Fraud and forgery detection.
12. Knowledge on significance of toxicological studies in forensic science. A brief study on poisons, their classification, absorption and mode of action. Identification, classification, characterization and purification of NDPS.

➢ PROGRAMME OUTCOME OF B.SC. BIOINFORMATICS:

1. Understand the basic knowledge and concepts of computer science, life science, biotechnology and other related areas. Basic practical methodology is incorporated as practical sessions in Laboratory courses in each semester.
2. The program aims to utilize and understand biological databases to gather, store, retrieve, manage, analyze and integrate biological data for generating new knowledge.
3. Aware of recent scientific updates and advanced technologies for quality work and to fulfil the need of the hour throughout life.
4. Better understanding of dynamic biological processes and their understanding at molecular level enabled through and correlated using internet and Bioinformatics.
5. To develop skilled bioinformatics professionals who have life science background and who are simultaneously proficient in computational aspects.
6. Apply their knowledge in other advanced subject area like nano biotechnology, immune technology, and animal and plant biotechnology for the betterment and advancement of their professional career.

4. CURRICULUM/ STRUCTURE OF PROGRAMME OF BACHELOR OF SCIENCE

3.1 The programme shall be spread over three academic years, spread over six semesters comprising actual teaching for a minimum of 90 days in each semester.

3.2 The programme focuses on the following aspects:

a) Competency
b) Entrepreneurship
c) Skill Enhancement
d) Value Added Courses
e) Extracurricular activities

3.3 Choice Based Credit System (CBCS):

The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations, the UGC has formulated the guidelines to be followed.

The courses are divided into 3 categories, i.e. Core courses, ability enhancement compulsory courses and elective courses.

3.3.1. Core Course: A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.

3.3.2. Elective Course: Generally, a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.

3.3.2.1 Discipline Specific Elective (DSE) Course: Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective (to be offered by main discipline/subject of study).

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3.3.3. Ability Enhancement Compulsory Courses: The Ability Enhancement (AE) Courses may be of two kinds: AE Compulsory Course (AECC) and Skill Enhancement Courses (SEC). AECC courses (two) are the courses based upon the content that leads to knowledge enhancement. They [(i) Environmental Science, (ii) English/MIL Communication] are *mandatory* for all disciplines. SEC courses (minimum two) are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.

All core courses have a practical component, along with theory. Ability Enhancement courses are theory based and Skills Enhancement courses have theory with the practical component if required. However external practical evaluation is offered only for compulsory subjects.

3.4 The academic calendar shall be as follows:-

Ist , IIIrd Semester	Session - 1st Aug. to 30th Nov Exam - 1st Dec. to 15th Dec
IInd Semester	Session - 1st Jan. to 10th May Exam - 1st May to 15th May
IVth Semester	On Job Training- Dec. to May (6 months)

3.5: B.Sc. (Forensic Science/Bio-informatics/Animal Husbandry) is in Annexure I under CBCS from the academic year 2022-23

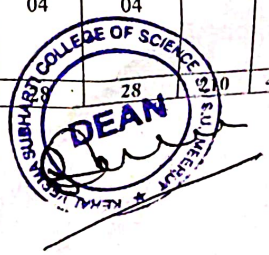
ANNEXURE- I

Table of B.Sc. (Forensic Science/Bio-informatics/ Animal Husbandry)programme Structure under CBCS from the academic year 2022-23:

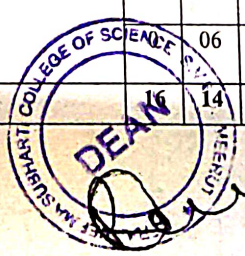
B.Sc. Forensic Science
Study and Evaluation Scheme (CBCS)
Annexure- 01

SCHEMES OF B.Sc. Hons. Forensic Science Under CBCS										
Course code	**Course Name**	**Course Type**	**Hrs/ Week**				**Credits**	**Marks**		
			L	**P**	**T**	**Total**		**CCA**	**ESE**	**TOTAL**
Semester-I										
BSC-FS-101	Introduction to Forensic Science	Core Course-I	04		0	04	04	30	70	100
BSC-FS-101 P	Introduction to Forensic Science Practical Lab	Core Course Practical-I		02		02	02	15	35	50
BSC-FS-102	Crime and Society	Core Course-II	04		0	04	04	30	70	100
BSC-FS-102 P	Crime and Society Lab	Core Course Practical-II		02		02	02	15	35	50
	To be chosen from the college list	Generic Elective/ Interdisciplinary Course	04		0	04	04	30	70	100
	To be chosen from the college list	Generic Elective/ Interdisciplinary Course		02		02	02	15	35	50
AEC-01	English	Ability enhancement Compulsory Course -I	02			02	01			
AEC-01P	English Practical	Ability enhancement Compulsory Course –I		02		02	01			
TOTAL			14	06	0	20	20	135	315	450
Semester-II										
BSC-FS-201	Criminal Law	Core Course	04		0	04	04	30	70	100
BSC-FS-201P	Criminal Law Lab	Core Course		02		02	02	15	35	50
BSC-FS-202	Forensic Psychology	Core Course	04		0	04	04	30	70	100
BSC-FS-202P	Forensic	Core Course		02		02	02	15	35	50

	To be chosen from the college list	Interdisciplinary Course								
	To be chosen from the college list	Generic Elective/ Interdisciplinary Course		02.		02	02	15	35	50
AEC-01	English	Ability enhancement Compulsory Course –I	02			02	01	30	70	100
AEC-01P	English Practical	Ability enhancement Compulsory Course –I		02		02	01	15	35	50
AEC-02	Environment	Ability enhancement Compulsory Course –II	02			02	02	30	70	100
TOTAL			16	08	0	24	22	210	490	700
Semester-III										
BSC-FS-301	Forensic Dermatoglyphics	Core course	04		0	04	04	30	70	100
BSC-FS-301P	Forensic Dermatoglyphics Lab	Core course		02		02	02	15	35	50
BSC-FS-302	Technological Methods in Forensic Science	Core course	04		0	04	04	30	70	100
BSC-FS-302P	Technological Methods in Forensic Science lab	Core course		02		02	02	15	35	50
BSC-FS-303	Criminalistics	Core course	04		0	04	04	30	70	100
BSC-FS-303P	Criminalistics Lab	Core course		02		02	02	15	35	50
	To be chosen from the college list	General Elective/ Interdisciplinary Course	04		0	04	04	30	70	100
	To be chosen from the college list	General Elective/ Interdisciplinary Course		02		02	02	15	35	50
BSC-FS-304S	Introduction to Biometry	Ability Enhancement Elective Course (AEEC-1)	04		0	04	04	30	70	100
Total			**20**	**08**	**00**	**28**	**28**	**210**	**490**	**700**
Semester-IV										
BSC-FS-401	Forensic Chemistry	Core Courses	04		0	04	04	30	70	100
BSC-FS-401P	Forensic Chemistry Lab	Core Courses		02		02	02	15	35	50
BSC-FS-402	Questioned Document	Core Courses	04		0	04	04	30	70	100
BSC-FS-402P	Questioned Document Lab	Core Courses		02		02	02	15	35	50
BSC-FS-403	Forensic Biology	Core Courses	04		0	04	04	30	70	100
BSC-FS-403P	Forensic Biology lab	Core Courses		02		02	02	15	35	50
	To be chosen from the college list	Generic Elective/ Interdisciplinary Course	04		0	04	04	30	70	100
	To be chosen from the college list	Generic Elective/ Interdisciplinary Course		02		02	02	15	35	50
BSC-FS-404S	Handwriting Identification &Recognition OR	Ability Enhancement Elective Course (AEEC-2) OR	04		0	04	04	30	70	100
BSC-FS-405S	Forensic Science and Society	Ability Enhancement Elective Course (AEEC-3)								
Total			**20**	**08**	**00**		**28**	**210**	**490**	**700**



Semester –V										
BSC-FS-501	Forensic Ballistics	Core Courses	04	0	0	04	04	30	70	100
BSC-FS-501P	Forensic Ballistics Lab	Core Courses	0	02	0	02	02	15	35	50
BSC-FS-502	Forensic Toxicology	Core Courses	04	0	0	04	04	30	70	100
BSC-FS-502P	Forensic Toxicology Lab	Core Courses	0	02	0	02	02	15	35	50
BSC-FS-503	Digital Forensics	Discipline Specific Elective (Any two along with associated Lab)	04	0	0	04	04	30	70	100
BSC-FS-503P	Digital Forensics Lab		0	02	0	02	02	15	35	50
BSC-FS-504	Economic Offences		04	0	0	04	04	30	70	100
BSC-FS-504P	Economic Offences Lab		0	02	0	02	02	15	35	50
BSC-FS-505	Forensic Serology		04	0	0	04	04	30	70	100
BSC-FS-505P	Forensic Serology Lab		0	02	0	02	02	15	35	50
Total			**20**	**10**	**0**	**30**	**30**	**180**	**420**	**600**
Semester-VI										
BSC-FS-601	Forensic Anthropology	Core Courses	04	0	0	04	04	30	70	100
BSC-FS-601P	Forensic Anthropology Lab	Core Courses	0	02	0	02	02	15	35	50
BSC-FS-602	Forensic Medicine	Core Courses	04	0	0	04	04	30	70	100
BSC-FS-602P	Forensic Medicine Lab	Core Courses	0	02	0	02	02	15	35	50
BSC-FS-603	Accident Investigations	Discipline Specific Elective (Any two along with associated Lab)	04	0	0	04	04	30	70	100
BSC-FS-603P	Accident Investigations Lab		0	02	0	02	02	15	35	50
BSC-FS-604	DNA Forensics		04	0	0	04	04	30	70	100
BSC-FS-604P	DNA Forensics Lab		0	02	0	02	02	15	35	50
BSC-FS-605	Dissertation			06	0	06	06	30	70	100
Total			**16**	**14**	**0**	**30**	**30**	**180**	**420**	**600**



Annexure- 02
Study and Evaluation Scheme (CBCS)
Bachelor of Science in Bioinformatics

	Course Code	Course Name	Course Type	Teaching Load/Week				Total Credits	Evaluation Scheme				Total
				L	P	T	Total		Sessional			ESE	
									CT	TA	Total		
Semester I	BBI 101	Basics of Biological Sciences	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 101P	Basics of Biological Sciences-Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 102	Introduction to Bioinformatics	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 102P	Introduction to Bioinformatics-Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 103	Fundamental of Information Technology	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 103P	Fundamental of IT-Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 104	Microbiology	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 104P	Microbiology-Lab	Practical	0	2	0	2	2	15	0	15	35	50
	AEC-01	English Communication	Ability enhancing	1	0	0	1	1	20	10	30	70	100
	AEC-01P	English Communication Lab	Practical	0	1	0	1	1	15	0	15	35	50
			Total	17	9	0	26	26	175	50	225	520	750

	Course Code	Course Name	Course Type	Teaching Load/Week				Total Credits	Evaluation Scheme				Total
				L	P	T	Total		Sessional			ESE	
									CT	TA	Total		
Semester II	BBI 201	Basics of Biochemistry	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 201P	Basics of Biochemistry-Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 202	Basics of Cell Biology	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 202P	Basics of Cell Biology-Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 203	Basics of Genetics	Core Course	4	0	0	4	4	20	10	30	70	100

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	BBI 203P	Basics of Genetics-Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 204	Bio-programming using C Language	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 204P	Bio-programming using C Language-Lab	Practical	0	2	0	2	2	15	0	15	35	50
	ACE-02	Environmental Science	Ability enhancing	2	0	0	2	2	20	10	30	70	100
			Total	18	8	0	26	26	160	50	210	490	700

	Course Code	Course Name	Course Type	Teaching Load/Week				Total Credits	Evaluation Scheme				Total
									Sessional			ESE	
				L	P	T	Total		CT	TA	Total		
Semester III	BBI 301	Microbiology and genetics	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 301P	Genetics Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 302	Biological database and data analysis	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 302P	Data analysis Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 303	Molecular biology	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 303P	Molecular biology Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 304	Computer graphics and visualizations	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 304P	Graphics Lab	Practical	0	2	0	2	2	15	0	15	35	50
			Total	16	8	0	24	24	140	40	180	420	600

	Course Code	Course Name	Course Type	Teaching Load/Week				Total Credits	Evaluation Scheme				Total
									Sessional			ESE	
				L	P	T	Total		CT	TA	Total		
Semester IV	BBI 401	Taxonomy and Phlogeny	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 401P	Phlogeny Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 402	Immonology	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 402P	Immonology Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 403	Genomics and proteomics	Core Course	4	0	0	4	4	20	10	30	70	100
	BBI 403P	Genomics and proteomics Lab	Practical	0	2	0	2	2	15	0	15	35	50
	BBI 404	Computer added drug designing	Core Course	4	0	0	4	4	20	10	30	70	100

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	BBI 404P	Drug designing Lab	Practical	0	2	0	2	2	15	0	15	35	50
			Total	16	8	0	24	24	140	40	180	420	600

Semester V

Course Code	Course Name	Course Type	Teaching Load/Week				Total Credits	Evaluation Scheme				Total
			L	P	T	Total		Sessional			ESE	
								CT	TA	Total		
BBI 501	Techniques for sequence and structure analysis	Core Course	4	0	0	4	4	20	10	30	70	100
BBI 501P	Sequence analysis Lab	Practical	0	2	0	2	2	15	0	15	35	50
BBI 502	Molecular modelling	Core Course	4	0	0	4	4	20	10	30	70	100
BBI 502P	Molecular modeling Lab	Practical	0	2	0	2	2	15	0	15	35	50
BBI 503	IPR's ,Bioethics and biosafety	Core Course	4	0	0	4	4	20	10	30	70	100
BBI 503P	IPR Lab	Practical	0	2	0	2	2	15	0	15	35	50
BBI 504	Introduction to C and DBMS	Core Course	4	0	0	4	4	20	10	30	70	100
BBI 504P	C++ Lab	Practical	0	2	0	2	2	15	0	15	35	50
		Total	16	8	0	24	24	140	40	180	420	600

Semester VI

Course Code	Course Name	Course Type	Teaching Load/Week				Total Credits	Evaluation Scheme				Total
			L	P	T	Total		Sessional			ESE	
								CT	TA	Total		
BBI 601	Plant & Animal Biotechnology	Core Course	4	0	0	4	4	20	10	30	70	100
BBI 601P	Plant & Animal Biotechnology Lab	Practical	0	2	0	2	2	15	0	15	35	50
BBI 602	Biostatistics	Core Course	4	0	0	4	4	20	10	30	70	100
BBI 602P	Biostatistics Lab	Practical	0	2	0	2	2	15	0	15	35	50
BBI 603	Recombinant DNA technology	Core Course	4	0	0	4	4	20	10	30	70	100
BBI 603P	RDT Lab	Practical	0	2	0	2	2	15	0	15	35	50
BBI 604	Relational data bases management systems	Core Course	4	0	0	4	4	20	10	30	70	100
BBI 604P	RDBMS Lab	Practical	0	2	0	2	2	15	0	15	35	50
HVE-01	Universal human value and professional ethics	Qualifying	2	0	0	2	2	15	0	15	35	50
		Total	16	8	0	24	24	140	40	180	420	600

HOD of Dept

Vishal

Annexure - 3
Study and Evaluation Scheme (CBCS)
B.Sc. (Animal Husbandry) I Sem

S.No.	Subject Code	Name of the subject	Periods				Evaluation Scheme		Total Marks	Credit
			Type	L	T	P	CCA	ESE		
THEORY SUBJECT I SEMESTER										
1.	BAH-101	Livestock Production and Management	Core	2	0	0	25	75	100	1
2.	BAH-102	Physiology of Circulatory and Respiratory System	Core	2	0	0	25	75	100	2
3.	BAH-103	Introductory Veterinary Anatomy	Core	2	0	0	25	75	100	2
4.	BAH-104	Anatomy of Digestive System	Core	2	0	0	25	75	100	1
5.	BAH-105	Physiology of Lactation	Core	2	0	0	25	75	100	1
Remedial Courses										
6.	BAH-106	Fundamentals of Soil Science	Core	2	0	0	25	75	100	1
7.	BAH-107	Forage Production I	Core	2	0	0	25	75	100	1
8.	BAH-108	Fundamentals of Rural Sociology and Educational Psychology	Core	2	0	0	25	75	100	1
9.	BAH-109	Design of Experiment for Animal Science	Core	2	0	0	25	75	100	1
10	BAH-110	Comprehension and Communication Skills in English	Core	2	0	0	25	75	100	1
Non Gradial Courses (Activity Based)										
11.	BAH -111 A BAH -111 B BAH -111 C	NSS/NCC/Physical Education & Yoga Practices	-	0	0	2	25	75	100	(0+2)
PRACTICAL I SEMESTER										
12.	BAH-101P	Livestock Production and Management Lab	Core	0	0	2	25	75	100	1
13.	BAH-102P	Physiology of Circulatory and Respiratory System Lab	Core	0	0	2	25	75	100	1
14.	BAH-103P	Introductory Veterinary Anatomy Lab	Core	0	0	2	25	75	100	1
15.	BAH-104P	Anatomy of Digestive System Lab	Core	0	0	2	25	75	100	1
16	BAH-106P	Fundamentals of Soil Science Lab	Core	0	0	2	25	75	100	1
17.	BAH-107P	Forage Production I Lab	Core	0	0	2	25	75	100	1
18.	BAH-108P	Fundamentals of Rural Sociology and Educational Psychology Lab	Core	0	0	2	25	75	100	1
19.	BAH-109P	Design of Experiment for Animal Science Lab	Core	0	0	2	25	75	100	1
	BAH-110P	Comprehension and Communication Skills in English Lab	Core	0	0	2	25	75	100	1
				20		20	500	1500	2000	24

B.Sc. (Animal Husbandry) II Sem

S.No.	Subject Code	Name of the subject	Periods				Evaluation Scheme		Total Marks	Credit
			Type	L	T	P	CCA	ESE		
THEORY SUBJECT II SEMESTER										
1.	BAH-201	Milk and Milk Products	Core	2	0	0	25	75	100	1
2.	BAH-202	Principles of Animal Nutrition	Core	2	0	0	25	75	100	1
3.	BAH-203	Principles of Animal Breeding	Core	2	0	0	25	75	100	1
4.	BAH-204	Principles of Animal Genetics	Core	2	0	0	25	75	100	1
5.	BAH-205	Physiology of Digestive System	Core	2	0	0	25	75	100	1
6.	BAH-206	Anatomy of Circulatory System	Core	2	0	0	25	75	100	1
7.	BAH-207	Physiology of Reproductive System	Core	2	0	0	25	75	100	1
8.	BAH-208	General Pathology	Core	2	0	0	25	75	100	1
9.	BAH-209	Veterinary Immunology	Core	2	0	0	25	75	100	1
10.	BAH-210	Endocrine System	Core	2	0	0	25	75	100	1
BASIC COURCES										
11.	BAH-211	Principles of Agricultural Economics	Basic	2	0	0	25	75	100	1
12.	BAH -212	Dimensions of Agricultural Extension	Basic	2	0	0	25	75	100	1
PRACTICAL II SEMESTER										
13.	BAH-201-P	Milk and Milk Products Lab	Core	0	0	2	25	75	100	1
14.	BAH-202-P	Principles of Animal Nutrition Lab	Core	0	0	2	25	75	100	1
15.	BAH-203-P	Principles of Animal Breeding Lab	Core	0	0	2	25	75	100	1
16.	BAH-204-P	Principles of Animal Genetics Lab	Core	0	0	2	25	75	100	1
17.	BAH-205-P	Physiology of Digestive System Lab	Core	0	0	2	25	75	100	1
18.	BAH-206-P	Anatomy of Circulatory System Lab	Core	0	0	2	25	75	100	1
19.	BAH-207-P	Physiology of Reproductive System Lab	Core	0	0	2	25	75	100	1
20.	BAH-208-P	General Pathology Lab	Core	0	0	2	25	75	100	1
21.	BAH-209-P	Veterinary Immunology Lab	Core	0	0	2	25	75	100	1
22.	BAH-210-P	Endocrine System Lab	Core	0	0	2	25	75	100	1
23.	BAH -211-P	Principles of Agricultural Economics	Core	0	0	2	25	75	100	1
24.	BAH -212-P	Dimensions of Agricultural Extension	Core	0	0	2	25	75	100	1
				24	00	24	600	1800	24	24 Credits

Study and Evaluation Scheme (NEP)
B.Sc. (Animal Husbandry) III Sem

S.No.	Subject Code	Name of the subject	Periods				Evaluation Scheme		Total Marks	Credit
			Type	L	T	P	CCA	ESE		
THEORY SUBJECT III SEMESTER										
1.	BAH-301	General Parasitology	Core	2	0	0	25	75	100	1
2.	BAH-302	Introductory Veterinary Pharmacology	Core	2	0	0	25	75	100	1
3.	BAH-303	Animal Reproduction	Core	2	0	0	25	75	100	1
4	BAH-304	Sheep and Goat Production	Core	2	0	0	25	75	100	1
5	BAH-305	Poultry Production	Core	2	0	0	25	75	100	1
6	BAH-307	Applied Animal Nutrition	Core	2	0	0	25	75	100	2
7	BAH-308	Systemic Pharmacology	Core	2	0	0	25	75	100	1
REMEDIAL COURSE										
8.	BAH -309	Agricultural Informatics	Remedial	2	0	0	25	75	100	1
10	BAH -310	Agricultural Finance and Management	Remedial	2	0	0	25	75	100	1
11.	BAH -311	Environmental Studies and Disaster Management	Remedial	2	0	0	25	75	100	2
PRACTICAL III SEMESTER										
12	BAH-301-P	General Parasitology Lab	Core	0	0	2	25	75	100	1
13.	BAH-302-P	Introductory Veterinary Pharmacology Lab	Core	0	0	2	25	75	100	1
14.	BAH-303-P	Animal Reproduction Lab	Core	0	0	2	25	75	100	1
15.	BAH-304-P	Sheep and Goat Production Lab	Core	0	0	2	25	75	100	1
16.	BAH-305-P	Poultry Production Lab	Core	0	0	2	25	75	100	1
17.	BAH-306	Analytical Techniques in Animal Nutrition Lab	Core	0	0	2	25	75	100	1
18.	BAH-307	Applied Animal Nutrition Lab	Core	0	0	2	25	75	100	1
19.	BAH -309	Agricultural Informatics Lab	Core	0	0	2	25	75	100	2
20.	BAH -310	Agricultural Finance and Management Lab	Core	0	0	2	25	75	100	1
21.	BAH -311	Environmental Studies and Disaster Management Lab	Core	0	0	2	25	75	100	1
TOTAL				20	0	20	500	1500	2000	23

Study and Evaluation Scheme (NEP)
B.Sc. (Animal Husbandry) IV Sem

S.No.	Subject Code	Name of the subject	Periods				Evaluation Scheme		Total Marks	Credit
			Type	L	T	P	CCA	ESE		
THEORY SUBJECT IV SEMESTER										
1.	BAH-401	Introductory Veterinary Microbiology	Core	2	0	0	25	75	100	2
2.	BAH-402	Preventive Medicines –I	Core	2	0	0	25	75	100	2
3.	BAH-403	Andrology and Artificial Insemination	Core	2	0	0	25	75	100	2
4.	BAH-404	Organic Livestock Farming	Core	2	0	0	25	75	100	1
5.	BAH-405	Dairy Microbiology	Core	2	0	0	25	75	100	1
6.	BAH-406	Molecular Genetics of Animals	Core	2	0	0	25	75	100	2
REMEDIAL COURSES										
7.	BAH-407	Forage Production II	Core	2	0	0	25	75	100	1
9.	BAH-408	Production Economics and Farm Management	Core	2	0	0	25	75	100	1
COMMON COURSES										
10	BAH-409	Communication Skills and Personality Development	AECC	2	0	0	25	75	100	1
PRACTICAL IV SEMESTER										
11	BAH-401-P	Introductory Veterinary Microbiology Lab	Core	0	0	2	25	75	100	1
12	BAH-402-P	Preventive Medicines –I Lab	Core	0	0	2	25	75	100	1
13	BAH-403-P	Andrology and Artificial Insemination Lab	Core	0	0	2	25	75	100	1
14	BAH-404-P	Organic Livestock Farming Lab	Core	0	0	2	25	75	100	1
15	BAH-405-P	Dairy Microbiology Lab	Core	0	0	2	25	75	100	1
17	BAH-407-P	Forage Production II Lab	Basic	0	0	2	25	75	100	1
18	BAH-408-P	Production Economics and Farm Management Lab	Basic	0	0	2	25	75	100	1
19	BAH -409-P	Communication Skills and Personality Development Lab		0	0	2	25	75	100	1
20	BAH-410	Practical Forage Production Lab	Basic	0	0	2	25	75	100	2
TOTAL				**18**	**0**	**18**	**450**	**1350**	**1800**	**23**

(Dr Amit Kumar)

Study and Evaluation Scheme (NEP)
B.Sc. (Animal Husbandry) V Sem

S.No.	Subject Code	Name of the subject	Periods				Evaluation Scheme		Total Marks	Credit
			Type	L	T	P	CCA	ESE		
THEORY SUBJECT V SEMESTER										
1.	BAH-501	Livestock Management	Core	2	0	0	25	75	100	1
2.	BAH-502	Veterinary Epidemiology	Core	2	0	0	25	75	100	1
3.	BAH-503	Para Veterinary Technician Skills	Core	2	0	0	25	75	100	1
4.	BAH-504	Livestock Breeding Systems	Core	2	0	0	25	75	100	1
5.	BAH-505	Livestock Hygiene	Core	2	0	0	25	75	100	1
6.	BAH-506	Livestock Economics and Marketing	Core	2	0	0	25	75	100	2
7.	BAH-507	Farm Animal Behavior	Core	2	0	0	25	75	100	1
8.	BAH-508	Pet Animal Management	Core	2	0	0	25	75	100	1
9.	BAH-509	Integrated Livestock Farming System	Core	2	0	0	25	75	100	1
REMEDIAL COURSES										
10.	BAH -510	Information and Communication Technology	Common	2	0	0	25	75	100	2
PRACTICAL V SEMESTER										
11.	BAH-501-P	Livestock Management	Core	0	0	1	25	75	100	1
12.	BAH-502-P	Veterinary Epidemiology	Core	0	0	1	25	75	100	1
13	BAH-503-P	Para Veterinary Technician Skills	Core	0	0	1	25	75	100	2
14	BAH-504-P	Livestock Breeding Systems	Core	0	0	1	25	75	100	1
15	BAH-505-P	Livestock Hygiene	Core	0	0	1	25	75	100	1
16	BAH-506-P	Livestock Economics and Marketing	Core	0	0	1	25	75	100	1
17	BAH-507-P	Farm Animal Behavior	Core	0	0	1	25	75	100	1
18	BAH-508-P	Pet Animal Management	Core	0	0	1	25	75	100	1
19	BAH-509-P	Integrated Livestock Farming System	Core	0	0	1	25	75	100	1
20	BAH-510-P	Information and Communication Technology	Common	0	0	1	25	75	100	1
				20	0	10	500	1500	2000	23

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Study and Evaluation Scheme (NEP)
B.Sc. (Animal Husbandry) VI Sem

S.No.	Subject Code	Name of the subject	Periods				Evaluation Scheme		Total Marks	Credit
			Type	L	T	P	CCA	ESE		
		THEORY SUBJECT VI SEMESTER								
1.	BAH-601	Animal Housing and Milking Systems	Core	2	0	0	25	75	100	2
2.	BAH-602	Livestock Farm Hygiene	Core	2	0	0	25	75	100	1
3.	BAH-603	Hatchery Management	Core	2	0	0	25	75	100	1
4.	BAH-604	Diversified Poultry Production	Core	2	0	0	25	75	100	2
5.	BAH-605	Abattoir Practices and Slaughter Byproduct Technology	Core	2	0	0	25	75	100	2
6.	BAH-606	Meat and Meat Product Technology (Including Poultry Product Technology)	Core	2	0	0	25	75	100	2
7.	BAH-607	Preventive Medicine-II	Core	2	0	0	25	75	100	1
8.	BAH-608	Veterinary Ethics and Jurisprudence	Core	2	0	0	25	75	100	2
		REMEDIAL COURSES								
9.	BCC-609	Entrepreneurship Development and Business Management	Common	2	0	0	25	75	100	1
		PRACTICAL VI SEMESTER								
10.	BAH-601-P	Animal Housing and Milking Systems Lab	Core	0	0	2	25	75	100	1
11.	BAH-602-P	Livestock Farm Hygiene Lab	Core	0	0	2	25	75	100	1
12.	BAH-603-P	Hatchery Management Lab	Core	0	0	2	25	75	100	1
13.	BAH-604-P	Diversified Poultry Product Lab ion	Core	0	0	2	25	75	100	1
14.	BAH-605-P	Abattoir Practices and Slaughter Byproduct Technology Lab	Core	0	0	2	25	75	100	1
15.	BAH-606-P	Meat and Meat Product Technology (Including Poultry Product Technology) Lab	Core	0	0	2	25	75	100	1
16.	BAH-607-P	Preventive Medicine-II Lab	Core	0	0	2	25	75	100	1
17.	BAH-610-P	Livestock Farm Practices Lab	Core	0	0	2	25	75	100	1
18.	BAH-611-P	Laboratory Diagnosis Lab	Core	0	0	2	25	75	100	2
				18	0	18	450	1350	1800	24

Vishal Kr.

Semester VII
Animal Husbandry Internship and Industrial Training
Credits = 20=0+20
Duration = 24 weeks

Component- I

Credit=10=0+10

BAH-701	Para Clinical Veterinary Skills	
	I. Medicine	Credit=05=0+05
	II. Animal Reproduction	Credit=05=0+05
	Total Credit =	**10=0+10**
Component- II **Credit=0+10=10**		
BAH-702	In Plant Training at livestock farm / Poultry Farm	Credit=05=0+05
BAH-703	In Plant Training at Feed Mill/Factory /Meat/Milk processing unit	Credit=05=0+05
	Total Credit =	**10=0+10**
Component I + Component II (Duration 24 weeks)		**20=0+20**

Sr.No.	Title of the Course	Credits
1	STUDENT READY - Placement in Industries	0+10
2	STUDENTREADY-Placementin Farm/Industries	0+10
	Total	**20 (0+20)**

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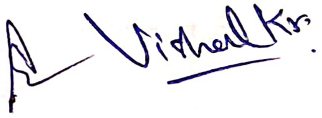
Placement in Farm/Company/Industry/Lab

1	Registration, Orientation and Placement	1 week
2	Actual AHWE placement in Farm/Company/Industry/Lab	8 weeks
3	Examination	1 week
	Total	**10 weeks**

Placement in Industry/Company/Lab

Placement in Industries

1	Orientation and Placement	1 week
2	Actual work in Industry	8 weeks
3	Examination	1 week
	Total	**10 weeks**



Student READY Programme

(RURAL AND ENTERPRENEURSHIP AWARENESS DEVELOPMENT YOJANA)

Students will have to register any two modules

BAH-801	Commercial Poultry Production	Credit=10=0+10
BAH-802	Commercial Production of Milk Products	Credit=10=0+10
BAH-803	Hatchery Management	Credit=10=0+10
Total Credit =		**20=0+20**
Total Semester Ist to VIIIth Semester		**180 Credits**

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