

SCHEME AND SYLLABUS

FOR

- UG Certificate in Zoology: 1 year
- UG Diploma in Zoology: 2 years
- UG Degree in Zoology: 3 years
- UG (honours with research) in Zoology: 04 years
- UG (honours) in Zoology: 04 years

Under

National Education Policy 2020

Department of Zoology, School Of Life Sciences
Guru Ghasidas Vishwavidyalaya, Bilaspur (CG)

2023-2024

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25/08/2023

Suvarshan
25/08/2023

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Scheme and Syllabus for UG Courses in Zoology

**Department of Zoology, School of Life Sciences,
Guru Ghasidas Vishwavidyalaya, Bilaspur**

Semester	Courses	Name of courses	Number of courses	Level	Credits	Total Credits
I	Major	Animal diversity of non chordates (Protista to Pseudocoelomate)	1	2	3	20
		Lab Course			1	
	Minor	Animal diversity of non chordates (Protista to Pseudocoelomate) To be offer for students of other departments	1	2	3	
		Lab Course			1	
	Multid.	Elementary Biology -I To be offer for student of other disciplines (except Natural and Physical Sciences)	1	1	3	
	SEC	Aquaculture To be offer for student of Zoology/other departments at university level	1	1	2	
					Lab Course	
VAC	History of Indian science (Understanding India) To be offer for student of Zoology/other departments at university level	2	1	2+2		
AEC	Language To be offered by Hindi/English Department for student of Zoology	1	1	2		
II	Major	Animal diversity of non chordates (Coelomates)	1	2	3	20
		Lab Course			1	
	Minor	Animal diversity of non chordates (Coelomates) To be offer for student of other departments	1	2	3	
		Lab Course			1	
	Multid.	Elementary Biology -II To be offer for student of other disciplines (except Natural and Physical Sciences)	1	1	3	
	SEC	Apiculture To be offer for student of Zoology/other departments at university level	1	1	2	
					Lab Course	
VAC	Food nutrition and health (Health & wellness) To be offer for student of Zoology/other departments at university level	2	1	2+2		
AEC	Language To be offered by Hindi/English Department for student of Zoology	1	1	2		

The student must complete the 4 credit vocational course/Internship during summer term to get UG Certificate if he wishes to exit the program after first 2 semesters.

III	Major	Diversity of chordates	2	3	3	20		
		Lab Course			1			
		Cell biology			3			
		Lab Course			1			
	Minor	Diversity of chordates	1	3	3			
		To be offer for student of other departments Lab Course			1			
	Multid.	Elementary Biology-I/ Elementary Biology-II To be offer for student of other disciplines (except Natural and Physical Sciences)	1	1	3			
SEC	Sericulture	1	1	2				
	To be offer for student of Zoology/other departments at university level Lab Course			1				
AEC	Language To be offered by Hindi/English Department for student of Zoology	1	1	2				
IV	Major	Physiology of regulatory life process	3	3	3	20		
		Lab Course			1			
		Fundamental biochemistry			4			
		Lab Course			1			
		Ecosystem dynamics and conservation			4			
		Lab Course			1			
	Minor	Physiology of regulatory life process	1	3	3			
		To be offer for student of other departments Lab Course			1			
	/	Medical diagnostics			3			
		To be offer for student of Zoology/other departments at university level Lab Course			1			
	Vocational	Language To be offered by Hindi/English Department for student of Zoology	1	1	2			
	<p>The student must complete the 4 credit vocational course/Internship either after first year or second year during summer term to get UG Diploma if he wishes to exit the program after first 4 semesters.</p>							
	V	Major	Physiology of basic life process	3	4		4	21
Lab Course			1					
Bioinstrumentation			4					
Lab Course			1					
Principle of genetics and evolution			4					
Minor		Physiology of basic life process	1	4	3			
		To be offer for the student of other departments Lab Course			1			
		Ornamental fish culture			3			
		To be offer for the student of Zoology/other departments at university level Lab Course			1			
Internship	During Winter Break	-	-	2				
VI	Major	Parasitology and immunology	3	4	4	19		
		Lab Course			1			
		Elements of molecular biology			4			
		Lab Course			1			

		Reproductive and developmental biology			4	
		Lab Course			1	
	Minor	Comparative anatomy of vertebrates	1	4	3	
	/	To be offer for the student of other departments				
		Lab Course			1	
	Vocational	Histological techniques and light microscopy			3	
		To be offer for the student of Zoology/other departments at university level				
		Lab Course			1	

The students wish to exit after six semester upon securing 120 credits will be awarded UG degree in relevant subject/discipline

After sixth semester, there will be two steams :(I) UG (Honours with research) and (II) UG (Honours). The students who will secure 75% and above may opt for UG (Honours with research).

(I) Course structure for UG (Honours with research)

VII	Major	Parasitology and immunology	3	5	4	19	
		Lab Course			1		
		Comparative endocrinology			4		
		Lab Course			1		
		Neuroscience			4		
		Lab Course			1		
Minor/ Vocational		Parasitology and immunology	1	5	3		
		Lab Course			1		
VIII	Major	Research methodology and biostatistics	1	5	4	21	
		Lab Course			1		
	Minor/ Vocational		Research methodology and biostatistics	1	5		3
			Lab Course				1
	Research project/ Dissertation		-	-	12		

(II) Course structure for the UG (Honours)

VII	Major	Parasitology and immunology	3	5	4	20
		Lab Course			1	
		Comparative endocrinology			4	
		Lab Course			1	
		Neuroscience			4	
		Lab Course			1	
Minor / Vocational		Parasitology and immunology	1	5	3	
		Lab Course			1	
		Seminar			-	
VIII	Major	Research methodology and biostatistics	2	5	4	20
		Lab Course			1	
		Applied zoology			4	
		Lab Course			1	
	Minor		Research methodology and biostatistics	2	5	

Vocational	Lab Course			1
	Applied zoology			4
	Lab Course			1
Seminar		-	-	2

As per NEP-2020, Department of Zoology will offer minor course, multidisciplinary course, ability enhancement course (AEC), skill enhancement course (SEC), value added course (VAC) and vocational course to students of other departments.

Similarly, student of Department of Zoology will study these courses from the courses offered by other departments/ as per university decision.

Pool for minor course, multidisciplinary course, AEC, SEC, VAC and vocational course will be given by University.

Two AEC courses are compulsory in first 2 semesters (One in each semester).

Three SEC courses are compulsory in first 3 semesters (One in each semester).

Three Multidisciplinary courses are compulsory in first 3 semesters (One in each semester).

Four VAC courses are compulsory in first 2 semesters (Two in each semester).

One vocational course for certificate course and diploma courses, three vocational courses for 3/4 year degree are compulsory.

List of minor course, multidisciplinary course, AEC, SEC, VAC and vocational course offered by the department of zoology in university pool is as follows:

S No	Multidisciplinary course	VAC	Vocational courses
1	Brain and neurological disorders	History of Indian science (Understanding India)	Medical diagnostics
2	Vectors, diseases and management	Food nutrition and health (Health & wellness)	Ornamental fish culture
3	Fundamentals of public health	-----	Histological techniques and light microscopy
S No	SEC	Minor courses	
1	Aquaculture	Animal diversity of non chordates (Protista to Pseudocoelomate)	
2	Sericulture	Animal diversity of non chordates (Coelomates)	
3	Apiculture	Diversity of chordates	
4	-----	Physiology of regulatory life process	
5	-----	Physiology of basic life process	


Department may offer at least one paper in whole UG program on MOOC's platform and it will be compulsory to all students.


Summer and/or winter internship: duration will be 2-4 weeks (minimum 90 working hours).

Abbreviations:


AEC= Ability enhancement course; SEC= Skill enhancement course; VAC= Value added course

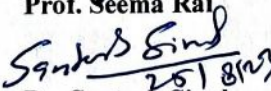
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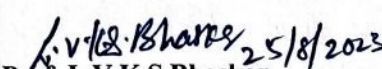

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