

COURSES OFFERED TO M.SC. ZOOLOGY

SYLLABUS 2022- 2024

SEMESTER-I

S. No.	Course Name	Course Code	Credits
Major Courses (Total Credits = 10)			
1	Animal Physiology	ZOO 415	2
2	Structure and Function of Invertebrate	ZOO 416	2
3	Cell and Molecular Biology	ZOO 417	2
4	Cell and Molecular Biology & Animal Physiology Lab.	ZOO 418	2
5	Structure and Function of Invertebrate Lab.	ZOO 419	2
**Minor Courses (Total Credits =04)			
1	Entomology	ZOO 420	2
2	Ecology, Environment and Biodiversity	ZOO 421	2
3	Immunology	ZOO 422	2
**Vocational / Skill Courses (Total Credits =04)			
1	Advanced Techniques in Biology	ZOO 423	2
2	Basics of Wild Life Study	ZOO 424	2
3	Medical Microbiology	ZOO 425	2
Indian Knowledge system (Total Credits=02)			
1	Indian Knowledge System [#]	IKS	2
Interdisciplinary Course (Total Credits=02)			
1	Foundation Course in Ecology	ZOO 426	2
2	Introduction to Apiculture	ZOO 427	2

SEMESTER-II

S. No.	Course Name	Course Code	Credits
Major Courses (Total Credits = 12)			
1.	Cytogenetics	ZOO 465	2
2.	Comparative Anatomy of Vertebrate	ZOO 466	2
3	Biosystematics and Evolution	ZOO 467	2
4	Developmental Biology	ZOO 468	2
5	Cytogenetics and Developmental Biology Lab.	ZOO 469	2
6	Comparative anatomy of Vertebrate and Biosystematics Lab.	ZOO 470	2
**Minor Courses (Total Credits =04)			
1	Endocrinology and Neural Physiology	ZOO 471	2
2	Principles of Biochemistry	ZOO 472	2
3	Animal Behaviour	ZOO 473	2
**Vocational / Skill Course (Total Credits =02)			
1	Applied Zoology	ZOO 474	2
2	Histology and Histochemistry	ZOO 475	2
Indian Knowledge system (Total Credits=02)			
1	Traditional Uses of Animals for sustainable social and health welfare	ZOO 476	2
Interdisciplinary Course (Total Credits=02)			
1	Perspectives of Animal Behaviour	ZOO 477	2
2	Principles of Aquaculture	ZOO 478	2

SEMESTER-III

S. No.	Course Name	Course Code	Credits
***Major Courses (Elective Specialization) (Total Credits = 04)			
1a	Agricultural Entomology	ZOO 515	2
1b	Entomology Lab.	ZOO 516	2

2a	Fish Biology	ZOO 517	2
2b	Fish Biology Lab.	ZOO 518	2
3a	Advances in Molecular Biology	ZOO 519	2
3b	Advances in Molecular Biology Lab.	ZOO 520	2
Minor Courses (Research Methodology) (Total Credits = 04)			
1	Research Methodology	ZOO 521	4
Vocational / Skill Courses (Analysis of Data through Software) (Total Credits = 04)			
1	Application of Computer, GPS, Image Analysis and PAST in Research	ZOO 522	2
2	Role of Biostatistics in Research	ZOO 523	2
Review of Literature, Research Proposal (Total Credits = 08)			
1	Review of Literature	ZOO 524	4
2	Research Proposal Writing Skill	ZOO 525	4

SEMESTER- IV

S. No.	Course Name	Course Code	Credits
***Major Courses (Elective Specialization) (Total Credits = 04)			
1a	Medical Entomology	ZOO 565	2
1b	Medical Entomology Lab.	ZOO 566	2
2a	Advances in Fisheries and Aquaculture	ZOO 567	2
2b	Advances in Fisheries and Aquaculture Lab.	ZOO 568	2
3a	Molecular Genetics	ZOO 569	2
3b	Molecular Genetics Lab.	ZOO 570	2
Minor Courses (Total Credits = 04)			
1	Academic writings	ZOO 571	2

2	Paper Publications/Seminar, Conferences Presentation at National Level	ZOO 572	2
Vocational / Skill Courses (Analysis of Data through Software) (Total Credits = 04)			
1	Role of Artificial Intelligence in Animal Science Research	ZOO 573	2
2	Use of advanced software like: Biorender, GIS, Mendeley and Turnitin etc. in Research	ZOO 574	2
Dissertation (Total Credits = 08)			
1	M.Sc Dissertation (50% Dissertation and 50% Presentation and viva-voce)	ZOO 595	8

COURSES OFFERED TO PH.D. ZOOLOGY

S. No.	Course Name	Course Code	Credits
Core Compulsory			
1.	Research and Publication Ethics	CPE-RPE	2
2.	Pedagogy of Teaching Learning Process	PTLP-01	2
3.	Indian Traditional Knowledge and Practices	ITKP-01	2
4.	Basic Research Methodology	ZOO 601	4
Elective Courses			
5.	Advanced Research Tools and Techniques	ZOO 602	4
6.	Cell and Molecular Biology	ZOO 603	4
7.	Advances in Entomology and Management of Insect Pest	ZOO 604	4
8.	Advances in Fish and Fishery	ZOO 605	4

CERTIFICATE COURSES

APICULTURE AND SERICULTURE

S. No.	Course Name	Course Code	Credits
1.	Introduction To Apiculture	VAT-C-01/1	4
2.	Introduction To Sericulture	VAT-C-01/2	4
3.	Pests Of Honeybees and Silkworm and Their Management	VAT-C-01/3	4
4.	Apiculture Lab.	VAT-C-01/4	4
5.	Sericulture Lab.	VAT-C-01/5	4

CERTIFICATE COURSES

AQUACULTURE

S. No.	Course Name	Course Code	Credits
1.	Principles of Aquaculture	VAT-C-02/1	4
2.	Aquaculture Engineering	VAT-C-02/2	4
3.	Fish Pathology	VAT-C-02/3	4
4.	Fishery Lab.	VAT-C-02/4	4
5.	Advances in Aquaculture Lab.	VAT-C-02/5	4

गुणिलक्षण

विभागाध्यक्ष/Head
जंतु विज्ञान विभाग/Department of Animal Sciences
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Central University of Himachal Pradesh

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ACCORDING TO NEP-2020 GUIDELINE

SYLLABUS 2024 ONWARDS:

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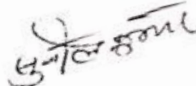
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3.	Fish Pathology	VAT-C-02/3	4
4.	Fishery Lab.	VAT-C-02/4	4
5.	Advances in Aquaculture Lab.	VAT-C-02/5	4


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