

*Progressive Education Society's*  
**Modern College of Arts, Science and Commerce (Autonomous),  
Shivajinagar, Pune 5**

**(An Autonomous College Affiliated to Savitribai Phule Pune University)**

# **Framework of Syllabus**

**For**

**B. Sc. (Zoology)**

Choice Based Credit System (CBCS) Syllabus  
Under National Education Policy (NEP)  
**To be implemented from Academic Year 2024-2025**

**Level:- 4.5 (First Year) Sem:I**

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	Total
Subject 1 T(2)+ (T/P) (2) or T(4)	24ScZooU1101	Systematics & Diversity of Life - Protists to Chordates	2		2		20	30	50
	24ScZooU1102	Lab Course on 24ScZooU1101		2		4	20	30	50
Subject 2 T(2)+ (T/P) (2) or T(4)	24Sc***U1201	<<Subject 2 Theory>>	2		2		20	30	50
	24Sc***U1202	<<Subject 2 Practical>>		2		4	20	30	50
Subject 3 T(2)+ (T/P) (2) or T(4)	24Sc***U1301	<<Subject 3 Theory>>	2		2		20	30	50
	24Sc***U1302	<<Subject 3 Practical>>		2		4	20	30	50
IKS T(2)	24CpCopU1901	Generic IKS	2		2		20	30	50
GE/OE (T/P) (2)	24ScZooU1401	Preventive Medicine	2		2		20	30	50
SEC (P) (2)	24ScZooU1601	Lab Course on Aquaculture		2		4	20	30	50
AEC T(2)	24CpCopU1701 / 24CpCopU1702	MIL-I (Hindi) / MIL-I (Marathi)	2		2		20	30	50
VEC T (2)	24CpCopU1801	Environmental Science	2		2		20	30	50
<b>Total</b>			14	08	14	16			550

**Level:- 4.5 (First Year) Sem:II**

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	Total
Subject 1 T(2)+ T/P(2) or T(4)	24ScZooU2101	Cell Biology and Histology	2		2		20	30	50
	24ScZooU2102	Lab Course on 24ScZooU2101		2		4	20	30	50
Subject 2 T(2)+ P(2)	24Sc***U2201	<<Subject 2 Theory>>	2		2		20	30	50
	24Sc***U2202	<<Subject 2 Practical>>		2		4	20	30	50
Subject 3 T(2)+ P(2)	24Sc***U2301	<<Subject 3 Theory>>	2		2		20	30	50
	24Sc***U2302	<<Subject 3 Practical>>		2		4	20	30	50
GE/OE (T/P)(2)	24ScZooU2401	Lab Course on Public Health and Hygiene		2		4	20	30	50
SEC P(2)	24ScZooU2601	Lab Course on Vermitechnology		2		4	20	30	50
AEC T(2)	24CpCopU2703	English Communication Skills I	2		2		20	30	50
VEC T(2)	24CpCopU2801	Democracy, Election and Governance	2		2		20	30	50
CC(2)	24CpCopU2001/	Physical Education /	2		2		20	30	50

	24CpCopU2011 / 24CpCopU2021 / 24CpCopU2031 / 24CpCopU2041 / 24CpCopU2051 / 24CpCopU2061 / 24CpCopU2071	Cultural Activities / NSS / NCC / Fine Arts / Applied Arts / Visual Arts / Performing Arts							
<b>Total</b>			12	10	12	20			550

**Level:- 5.0 (Second Year) Sem:III**

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2 or 4), (T/P)(2)	24ScZooU3101	Genetics	4		4		40	60	100
	24ScZooU3102	Lab Course on 24ScZooU3101		2		4	20	30	50
VSC P(2)	24ScZooU3501	Lab Course on Beekeeping		2		4	20	30	50
IKS (T/P)(2)	24ScZooU3901	Ancient Knowledge of Animal use in India	2		2		20	30	50
FP P(2)	24ScZooU3002	Field Project I		2		4	20	30	50
Minor (T/P)(2+2 or 4)	24ScZooU3301	Applied Zoology	2		2		20	30	50
	24ScZooU3302	Lab Course on 24ScZooU3301		2		4	20	30	50
GE/OE (T/P) (2)	24ScZooU3401	Insect Pest and Vector Biology and Management	2		2		20	30	50
AEC T(2)	24CpCopU3703	English Communication Skills II	2		2		20	30	50
CC T(2)	24CpCopU3001	Online Course on Yoga	2		2		20	30	50
<b>Total</b>			14	08	14	16			550

**Level:- 5.0 (Second Year) Sem:IV**

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2 or 4), (T/P)(2)	24ScZooU4101	Comparative Anatomy and Physiology of Chordates	4		4		40	60	100
	24ScZooU4102	Lab Course on 24ScZooU4101		2		4	20	30	50
VSC P(2)	24ScZooU4501	Lab Course on Sericulture		2		4	20	30	50
CEP P(2)	24ScCopU4003	Community Engagement Project		2		4	20	30	50
Minor (T/P)(2+2 or 4)	24ScZooU4301	Food Nutrition and Health	2		2		20	30	50
	24ScZooU4302	Lab Course on 24ScZooU4301		2		4	20	30	50

GE/OE (T/P) (2)	24ScZooU4401	Lab Course on Ornamental Fresh Water Fish Culture		2		4	20	30	50
SEC T(2)	24ScZooU4601	Lab Course on Animal Tissue Culture		2		4	20	30	50
AEC T(2)	24CpCopU4701 / 24CpCopU4702	MIL-II (Hindi) / MIL-II (Marathi)	2		2		20	30	50
CC T(2)	24CpCopU4001	Health and Wellness	2		2		20	30	50
<b>Total</b>			10	12	10	20			550

**Level:- 5.5 (Third Year) Sem:-V**

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2+2+2 or 4 + 2+2 or 4 + 4) P(2+2 or 4)	24ScZooU5101	Developmental Biology	2		2		20	30	50
	24ScZooU5102	Evolution	2		2		20	30	50
	24ScZooU5103	Biochemistry	2		2		20	30	50
	24ScZooU5104	Entomology	2		2		20	30	50
	24ScZooU5105	Lab Course on 24ScZooU5101 & 24ScZooU5102		2		4	20	30	50
	24ScZooU5106	Lab Course on 24ScZooU5103 & 24ScZooU5104		2		4	20	30	50
Major Elective (T/P) (2+2 or 4)	24ScZooU5201	Human Physiology	2		2		20	30	50
	24ScZooU5202	Lab Course on 24ScZooU5201		2		4	20	30	50
	24ScZooU5203	Microbiology, Parasitology & Immunology	2		2		20	30	50
	24ScZooU5204	Lab Course on 24ScZooU5203		2		4	20	30	50
VSC P(2)	24ScZooU5501	Lab Course on Toxicology		2		4	20	30	50
FP (2)	24ScZooU5001	Field Project II		2		4	20	30	50
Minor (T/P) (2)	24ScZooU5302	Vector, Diseases and Control	2		2		20	30	50
<b>Total</b>			12	10	12	20			550

**Level:- 5.5 (Third Year) Sem:-VI**

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2+2+2 or 4+2+2 or 4+4) P(2+2 or 4)	24ScZooU6101	Ecology	2		2		20	30	50
	24ScZooU6102	WildLife Conservation and Management	2		2		20	30	50
	24ScZooU6103	Molecular Biology	2		2		20	30	50
	24ScZooU6104	Endocrinology	2		2		20	30	50
	24ScZooU6105	Lab Course on 24ScZooU6103 & 24ScZooU6104		2		4	20	30	50

	24ScZooU6106	Lab Course on 24ScZooU6101 & 24ScZooU6102		2		4	20	30	50
Major Elective (T/P) (2+2 or 4)	24ScZooU6201	Neuroscience	2		2		20	30	50
	24ScZooU6202	Lab Course on 24ScZooU6201		2		4	20	30	50
	24ScZooU6203	Biostatistics & Bioinformatics	2		2		20	30	50
	24ScZooU6204	Lab Course on 24ScZooU6203		2		4	20	30	50
VSC P(2)	24ScZooU6501	Lab Course on Biotechniques		2		4	20	30	50
OJT (2)	24ScZooU6004	<a href="#">On Job Training</a>		4		8	40	60	100
<b>Total</b>			10	12	10	24			550