

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) Semester 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***U1101	<<Subject 2 Theory>>	2		2		20	30	50
	24Sc***U1102	<<Subject 2 Practical>>		2		4	20	30	50
Subject 3 T(2) + (T/P) (2) or T(4)	24Sc***U1101	<<Subject 3 Theory>>	2		2		20	30	50
	24Sc***U1102	<<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
Total			14	08	14	16			550

Level 4.5 (First Year) Semester 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***U2101	<<Subject 2 Theory>>	2		2		20	30	50
	24Sc***U2102	<<Subject 2 Practical>>		2		4	20	30	50
Subject 3 T(2) + P(2)	24Sc***U2101	<<Subject 3 Theory>>	2		2		20	30	50
	24Sc***U2102	<<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)	24CpCopU2011 / 24CpCopU2021 / 24CpCopU2031 / 24CpCopU2041 / 24CpCopU2051 / 24CpCopU2061 / 24CpCopU2071	Physical Education / Cultural Activities / NSS /NCC /Fine Arts / Applied Arts /Visual Arts / Performing Arts	2		2		20	30	50
Total			12	10	12	20			550

Level 5.0 (Second Year) Semester III

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	Total
Major Core T (2+2 or 4), (T/P) (2)	24ScZooU3101	Genetics and Histology of Mammals II	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
Total			14	08	14	16			550

Level 5.0 (Second Year) Semester IV

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	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 Apiculture		2		4	20	30	50
SEC T(2)	24ScZooU4601	Lab Course on Aquatic Biology		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
Total			10	12	10	24			550

Level 5.5 (Third Year) Semester V

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	Total
Major Core T (2+2+2+2 or 4 + 2+2 or 4 + 4), P (2+2 or 4)	24ScZooU5101	Evolution	2		2		20	30	50
	24ScZooU5102	Developmental Biology	2		2		20	30	50
	24ScZooU5103	Biochemistry	2		2		20	30	50
	24ScZooU5104	Human Physiology	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	Wildlife Conservation and Management	2		2		20	30	50
	24ScZooU5202	Lab Course on 24ScZooU5201		2		4	20	30	50
	OR								
	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 Wildlife Biology		2		4	20	30	50
FP (2)	24ScZooU5001	Field Project II		2		4	20	30	50
Minor (T/P) (2)	24ScZooU5302	Lab Course on Vector, Diseases and Control		2		4	20	30	50
Total			10	12	10	24			550

Level 5.5 (Third Year) Semester VI

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	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	Entomology	2		2		20	30	50
	24ScZooU6103	Molecular Biology	2		2		20	30	50
	24ScZooU6104	Endocrinology	2		2		20	30	50
	24ScZooU6105	Lab Course on 24ScZooU6101 & 24ScZooU6102		2		4	20	30	50
	24ScZooU6106	Lab Course on 24ScZooU6103 & 24ScZooU6104		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
	OR								
	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	On Job Training		4		8	40	60	100
Total			10	12	10	24			550

