J. S. M. College, Alibag

Department of Zoology

Syllabus Outcome

Sr.	Class	Course	Desired Outcome
No.			
1	F.Y.B.Sc. SEM I	USZO101 Wonders of Animal World, Biodiversity and its Conservation	 Curiosity will be ignited in the mind of learners, to know more about the fascinating world of animals which would enhance their interest and love for the subject of Zoology. Learners would appreciate treasure of Biodiversity, its importance and hence would contribute their best for its conservation. Minds of learners would be impulsed to think differently and would be encouraged ipso facto to their original crude ideas from the field of biological sciences.
2	F.Y.B.Sc. SEM I	USZO102 Instrumentation And Animal Biotechnology	 Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions. Learners would understand recent advances in the subject and their applications for the betterment of mankind; and that the young minds would be tuned to think out of the box. Students will be skilled to select and operate suitable instruments for the studies of different components of Zoology of this course and also of higher classes including research.
3	F.Y.B.Sc SEM-II	USZO201 Ecology and Wildlife Management	 It would allow learners to study about nature of animal population, specific factors affecting its growth and its impact on the population of other life form. Learners will grasp the concept of interdependence and interaction of physical, chemical and biological factors in the environment and will lead to better understanding about implications of loss of fauna specifically on human being, erupting spur of desire for conservation of all flora and fauna. Learners would be inspired to choose career options in the field of wild life conservation, research, photography and ecotourism.
4	F.Y.B.Sc SEM-II	USZO202 Nutrition, Public Health And Hygiene	 Healthy dietary habits would be inculcated in the life style of learners in order to prevent risk of developing health hazards in younger generation due to faulty eating habits. Promoting optimum conservation of water, encouragement for maintaining adequate personal hygiene, optimum use of electronic gadgets, avoiding addiction, thus facilitating achievement of

5	S.Y.B.Sc SEM-III	USZO301 Fundamentals of Genetics, Chromosomes and Heredity, Nucleic acids	 the goal of healthy young India in true sense. Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases. Learner would comprehend and apply the principles of inheritance to study heredity. Learner will understand the concept of multiple alleles, linkage and crossing over. Learner will comprehend the structure of chromosomes and its types. Learner will understand the mechanisms of sex determination. Learner would be able to correlate the disorders linked to a particular sex chromosome. Learner will understand the importance of nucleic acids as genetic material. Learner would comprehend and appreciate the regulation of gene expressions.
6	S.Y.B.Sc SEM-III	USZO302 Nutrition and Excretion, Respiration and Circulation, Control and Coordination of Life Processes, Locomotion and Reproduction.	 Learner would understand the increasing complexity of nutritional, excretory and osmoregulatory physiology in evolutionary hierarchy. Learner would be able to correlate the habit and habitat with nutritional, excretory and osmoregulatory structures. Learner would understand the increasing complexity of respiratory and circulatory physiology in evolutionary hierarchy. Learner will be able to correlate the habit and habitat of animals with respiratory and circulatory organs. Learner would understand the process of control and coordination by nervous and endocrine regulation. Learner would be amazed by various locomotory structures found in the animal kingdom. Learner would be acquainted with various reproductive strategies present in animals.
7	S.Y.B.Sc SEM-III	USZOE1303 Ethology, Parasitology, Economic Zoology	 Learner would gain insight into different types of animal behaviour and their role in biological adaptations. Learner would be sensitized to the feelings which are instrumental in social behaviour. Learner would understand the general epidemiological aspects of parasites that affect humans and take simple preventive measures for the same. Learner would comprehend the life cycle of specific parasites, the symptoms of the disease and its treatment.

			 Learner would gain knowledge on animals useful to mankind and the means to make the most of it. Learner would learn the modern techniques in animal husbandry. Learner would pursue entrepreneurship as a career.
8	S.Y.B.Sc SEM-IV	USZO401 Origin and Evolution of Life, Population Genetics and Evolution, Scientific Attitude, Methodology, Scientific Writing and Ethics in Scientific Research	 Learner will gain insights into the origin of life. Learner will analyse and critically view the different theories of evolution. Learner would understand the forces that cause evolutionary changes in natural populations Learner would comprehend the mechanisms of speciation Learner will be able to distinguish between microevolution, macroevolution and megaevolution. The learner would develop qualities such as critical thinking and analysis The learner will imbibe the skills of scientific communication and he/she will understand the ethical aspects of research.
9	S.Y.B.Sc SEM-IV	USZO402 Cell Biology, Endomembrane System and Biomolecules.	 Learner would acquire insight into the composition of the transport mechanisms adopted by the cell and its organelles for its maintenance and composition of cell. Learner would appreciate the intricacy of endomembrane system. Learner would understand the interlinking of endomembrane system for functioning of cell The learner will realize the importance of biomolecules and their clinical significance.
10	S.Y.B.Sc SEM-IV	USZOE1403 Comparative Embryology, Aspects of Human Reproduction, Pollution and its effect on organisms.	 Learner will be able to understand and compare the different types of eggs and sperms Learner will be able to understand and compare the different pre- embryonic stages Learners will able to understand human reproductive physiology Learners will become familiar with advances in ART and related ethical issues. The learners will be sensitized about the adverse effects of pollution and measures to control it.



Department of Zoology
Head of Zoology Dept.

J. S. M. College, Alibas
Dist. Raigad

Head