

Subject name	Animals of Uzbekistan.
Subject/module code	ET404
Semester(s) in which the subject is taught.	7- semester
Responsible teacher	<i>Sanayeva Lola Shukurbayevna. Candidate of Biological Sciences, Acting Associate Professor.</i>
Language of instruction	<i>Uzbek</i>
Link to curriculum	<i>Optional</i>
Teaching hours (including contact hours, independent study)	Total hours-120. Lecture hours-20 Practical hours-20 Seminar -20 Independent study hours-60
ECTS	4
Prerequisites/Relationship to Subjects	Zoology
Subject Objective/Learning Outcomes	<p>The purpose of teaching science is to form a scientific worldview of students towards living beings by explaining the structure, reproduction, origin and practical significance of animals in their minds, and to develop their love for nature and the animal world.</p> <p>The task of science is to form knowledge and skills in students about the structure and function of animal cells, tissues, organs and organisms, reproduction, development, life, and systematics of animals; to develop their skills in observing animals in nature, identifying the main systematic groups and species</p>
Course content (topics)	<p>I. Main theoretical part (lectures).</p> <p>Topic 1. Topic: General information about the animals of Uzbekistan</p> <p>Topic 2. Topic: Main systematic groups of animals</p> <p>Topic 3. Topic: Arthropods. Insects and their importance.</p> <p>Topic 4. The role of fishing in the fauna of our republic.</p> <p>Topic 5. Aquatic and terrestrial inhabitants of the fauna of Uzbekistan</p> <p>Topic 6. Diversity of reptiles.</p> <p>Topic 7. Birds of Uzbekistan and their importance.</p> <p>Topic 8. Species of mammals and their importance</p> <p>Topic 9. Convention on biological diversity and its conservation</p> <p>Topic 10. Specially protected natural areas.</p> <p>III. Instructions and recommendations for seminar sessions</p> <p>The following topics are recommended for seminar sessions:</p> <ol style="list-style-type: none"> 1. General information about the animals of Uzbekistan 2. The main systematic groups of animals 3. Arthropods. Insects and their importance. 4. The role of fishing in the fauna of our republic. 5. Aquatic and terrestrial inhabitants of the fauna of Uzbekistan 6. Diversity of reptiles. 7. Birds of Uzbekistan and their importance. 8. Species of mammals and their importance 9. Convention on Biological Diversity and its Conservation 10. Specially protected natural areas. <p>III. Independent learning and independent work.</p> <p>The competence of independent learning serves students' independent self-development, increasing the effectiveness of professional activity. Students perform independent work on their own through a mobile device,</p>

in the traditional form under the guidance of a teacher, and in the electronic form under the guidance of a teacher.

Recommended topics for independent learning:

1. Aquarium fish, main species of breeding.
2. Sharks, structural features, distribution and importance.
3. Skates, structure, life and importance.
4. Fishing, its economic importance.
5. Life and economic importance of acclimatized fish in the water bodies of Uzbekistan.
6. Fish caught in the water bodies of Uzbekistan.
7. Fishing in the seas and oceans.
8. Rare and endangered fish of the water bodies of Uzbekistan.
9. Reproduction and care of offspring of fish.
10. Life and significance of aquatic and terrestrial animals found in the fauna of Uzbekistan.
11. Origin and evolution of aquatic and terrestrial animals.
12. Poisonous snakes of Uzbekistan, their distribution and significance.
13. Snakes, main features of their structure and lifestyle.
14. Lizards, the life of the main species of the fauna of Uzbekistan.
15. Crocodiles: structure and lifestyle, main species, distribution.
16. The main features of the structure, types, distribution of turtles.
17. Seasonality in the life of birds, its causes and significance.
18. Migratory birds, the life of the main species.
19. Resident birds, the life of the main species.
20. Flying birds, the life of the main species.
21. The life of the main species of passerine birds.
22. The life of the main species of chickens.
23. Waterfowl, structure and lifestyle.
24. The structure and life of waterfowl.
25. Insectivorous birds, their importance in nature and human life.
26. The origin and evolution of birds.
27. Birds of prey, their importance as natural sanatoriums.
28. Rare and endangered birds, their protection.
29. Care of the offspring of birds.
30. Life of egg-laying mammals.
31. Felines, life and distribution.
32. Canines, life and distribution.
33. Rodents, main types, importance.
34. Fish of Uzbekistan
35. Birds of Uzbekistan
36. Mammals of Uzbekistan
37. External structure of bony fish
38. Internal structure and skeleton of bony fish
39. Development and diversity of fish
40. External structure of aquatic and terrestrial animals
41. Skeleton and muscles of aquatic and terrestrial animals.
42. Internal structure of aquatic and terrestrial animals, reproduction and development.
43. External structure of reptiles
44. Internal structure of reptiles
45. Diversity of reptiles
46. External structure and plumage of birds
47. Structure of bird eggs. nesting and hatching of birds
48. Diversity of birds

	<p>49. External structure of mammals 50. Internal structure of mammals 51. Diversity of mammals 52. Waterfowl, structure and life. 53. Fishing in the seas and oceans. 54. Aquarium fish, main species of breeding. 55. Fishing, its economic importance. 56. Canidae, life and distribution. 57. Sedentary birds, life of main species. 58. Rodents, main species, importance. 59. Life and economic importance of acclimatized fish in the water bodies of Uzbekistan. 60. Birds of prey, their importance as natural sanatoriums.</p>
Exam form	<p>It is important to assess the theoretical and practical knowledge of students during current, intermediate and final control in the subject.</p> <p>1. Current control is aimed at assessing the activity shown by students during the lesson, their practical skills and ability to use software. The student's mastery of the course topics, as well as constructive interpretation and analysis of the educational material, development of module-specific skills, acquisition of practical skills (in terms of quality and the specified number) and competencies, solving problem situations aimed at applying professional practical skills, teamwork, preparation of presentations, etc. The student's activity in daily lessons is assessed through the preparation of. Forms of current control: activity in lessons, preparation of educational materials, work with sources within the subject, use of educational technologies, teamwork, preparation of presentations, test.</p> <p>2. Intermediate control. During the semester, lectures are held 2 times based on the number of hours of study. The intermediate examination is evaluated with 20 points on a 100-point system. Students who score 60% of the points allocated for the intermediate and current examination are allowed to take the final examination.</p> <p>3. Final examination. The final examination is carried out at the end of the course and is aimed at assessing the general knowledge and skills of students. The final examination is held at the end of the semester to determine the level of mastery of the student's theoretical knowledge and practical skills in the relevant subject. The final examination ticket contains 5 questions, and the answers to each question are evaluated with a maximum of 10 points.</p>
Educational outcomes and exam requirements	<p>Complete mastery of theoretical and methodological concepts on the subject, correct reflection of the results of the analysis, independent thinking about the processes being studied, and completion of assignments in current and intermediate forms of assessment, as well as assignments for final assessment.</p> <p>The student must have passed the current control, intermediate control and independent learning assignments in the relevant subject within the established period.</p> <p>A student who has not passed the current control, intermediate control and independent learning assignments, as well as who has scored points in the range of “0-29.9” for these assignments and types of control, will not be included in the final type of control.</p> <p>Also, a student who has missed 25 or more percent of the classroom hours allocated to the subject without an excuse will be expelled from this subject, will not be admitted to the final exam and will be considered not to have mastered the relevant credits in this subject.</p>

	A student who has not passed the final exam or who has not passed the final exam and has scored between "0-29.9" for this type of exam is considered to be in academic debt.
Recommended readings	<p>1. Main literature</p> <ol style="list-style-type: none"> 1. Mavlyanov.O., Khurramov.Sh., “Invertebrates of Uzbekistan”. T.: “Mekhnat”, 1998 2. Mavlyanov.O., Khurramov.Sh., Eshova.Kh., “Invertebrates of Uzbekistan”. T.: “National Encyclopedia of Uzbekistan” 2006 3. Mavlyanov.O., Khurramov.Sh., Norboev.Z., “Invertebrates of Uzbekistan”. T.: “Uzbekistan” 2002 4. Kulmamatov.A. “Field practice in the zoology of invertebrates”. T.: “Teacher” 2004 5. Muminov.V.A., Eshova.Kh.S., Rakhimov.M.S. “Invertebrates: Practical exercises on animals of Uzbekistan. T.: 2005. 6. Dadaev S., Saparov BIRDS “Animals of Uzbekistan”. T.: “Cholpon Publishing House”. 2011. 7. Dadaev S., Toychiev S., Haydarova P. “Vertebrates: Laboratory exercises on animals of Uzbekistan”. National Society of Philosophers of Uzbekistan Publishing House 2006. 8. Dadayev S., Mavlonov O. “Animals of Uzbekistan”. T.: “ECONOMICS-FINANCING” 2008. 9. Lakhanov J.L. “Vertebrates: Animals of Uzbekistan”. T.: “Uzbekistan Center for Biological and Biological Sciences” 2005. <p>Additional literature</p> <ol style="list-style-type: none"> 1. Toychiev.S., Toshmonov.N., “Cytology, Embryology, Histology” T.: 2005 2. Toychiev.S., Tashmonov.N., Faizullaev.S., "Citology, embryology, histology" T.: 2004. 3. Potapov.I.L "Zoology s osnovamy ekologiiivotnyx". M.: "Academy. 2001". <p>Electronic educational resources</p> <ol style="list-style-type: none"> 1. www.tdpu.uz 2. www.pedagog.uz 3. www.physiology.ru/handbooks.html 4. www.curator.ru/e-books/b22.html