

Name of the discipline	Evolution of Plants and Animals
Semester(s)	3
Responsible teacher	Mavlanov Khudargan, Biology science teacher . Biology sciences doctor
Language of teaching/learning	Uzbek
Connection to the curriculum	Elective
Academic workload (including contact hours and self-study)	Total workload: 180 hours Contact hours Lectures 30 hours Practical sessions 30 hours Self-study 120 hours
ECTS	6
Prerequisites	Botany, Zoology, Development of the organic world and anthropology, Conceptual foundations of Biology.
Discipline objectives / learning outcomes	<p>Goals and objectives</p> <p>The goal of the discipline is to enhance the scientific and methodological preparation of master's masters, to develop their knowledge, skills, and abilities in teaching the evolution of plants and animals.</p> <p>Learning outcomes:</p> <ul style="list-style-type: none"> - to manage modern approaches and innovations in teaching Evolution of plants and animals; - to assess modern educational resources in classes on Evolution of plants and animals; - to debate in classes on Evolution of plants and animals based on modern requirements; - to analyze innovative activities in education; - to manage modern approaches and innovative technologies; - to experiment in teaching and conducting scientific research in the field of Evolution of plants and animals; - to assess knowledge of the discipline of Evolution of plants and animals; - to determine the unity and consistency of the content, means, methods, and forms of Evolution of plants and animals discipline; - to use educational resources in classes on Evolution of plants and animals; - to possess skills in processing, summarizing, and conveying information about the content of education to master's masters; - to evaluate modern innovative pedagogical technologies in classes on Evolution of plants and animals; - to calculate the statistical assessment of the reliability of the results of various types of biological research on Evolution of plants and animals based on modern requirements; - to interpret modern approaches and innovations in professional activities; - to be able to use educational, scientific, and popular science literature, as well as the Internet.
Contents of classes	<ol style="list-style-type: none"> 1. Goals and objectives of the science of plants and animals evolution. 2. The origin of cyanobacteria. 3. The origin and evolution of algae. 4. The origin and evolution of algae.

	<p>5. The origin and evolution of algae and ferns.</p> <p>6. The origin and evolution of horsetails.</p> <p>7. Origin and evolution of angiosperms.</p> <p>8. The emergence of angiosperms.</p> <p>9. Aromorphoses and idioadaptations in the plant world.</p> <p>10. The main stages of animal evolution.</p> <p>11. Evolution of invertebrates.</p> <p>12. Evolution of invertebrates.</p> <p>13. Evolution of vertebrates.</p> <p>14. Basic aromorphoses and idioadaptations in the animal world.</p> <p>15. Origin of domestic animals.</p>
The exam format	Oral
Requirements for education and exams	<p>When creating questions, deviation from the content of the course curriculum is not allowed. The question bank for each discipline is discussed and approved at a department meeting by the the head of department</p> <p>When composing exam cards, the exam question bank is used. The number of questions in the card should be in a 50/50 ratio, depending on the content of face-to-face classes and self-study.</p> <p>No later than 1 week before the start of the final assessment, exam cards approved by the head of department are placed in an envelope, sealed by the dean and opened 5 minutes before the start of the exam in the presence of masters.</p> <p>The master who chooses an exam card is given 5-10 minutes for preparation and 10-15 minutes for oral answering of exam questions. On average, 20 minutes are allocated per master.</p> <p>When forming the composition of the oral exam committee, 1 member of the committee is approved for every 15 masters. The master's assessment for the exam is posted on the electronic platform on the same day.</p> <p>Masters dissatisfied with the results of the exam can submit a written or oral appeal within 24 hours from the moment the exam results are published. Complaints submitted after 24 hours from the moment the exam results are published will not be accepted.</p> <p>The teacher who taught the masters the discipline is not allowed to participate in the exam process or the grading of masters' answers.</p>
Bibliography	<p>1. By Roland W. Scholz. Environmental Literacy in Science and Society: From Knowledge to Decisions. New York, USA, 2011; Hardback, 631 pp.</p> <p>2. Андреев И.Ш., Л.С. Родман. – Ботаника. М. Учебник для с/х институтов. “Колос” 2003.</p> <p>3. Dadaev S., Saparov Q. Zoologiya. “Iqtisod- moliya” Toshkent 2008.</p> <p>4. Долгачева В.С. Ботаника М. Учебник для пед. институтов. Академия 2003.</p> <p>5. Laxansev J.L. – Umurtqalilar zoologiyasi.. Oliy o‘quv yurtlari uchun darslik. T. 2005</p> <p>6. Mavlonov. O.M. Toshmanov. N.J. Sanaev L.Sh. Zoologiya (Umurtqasiz hayvonlar) “Voriz - nashriyoti” Toshkent 2013.</p> <p>7. A.T. G‘ofurov. Organik olamning rivojlanishi va antropologiya 1-qism. Toshkent 2016.</p> <p>8. То‘хтаев A.S. “O‘simliklar anatomiyasi va morfologiyasi”-Т. “TDPU” 2001.</p> <p>9. Шарова И.Х. “Зоология беспозвоночных”. Учебник для вузов. М. Владос. 2002.</p> <p>10. Хомутов А.Э.. Антропология. Высшее образование. Ростов на Дону. Феникс. 2003</p> <p>11. Харитонов В.М., Ожогова А.П., Година И. З., Хрисанфова Ё. Н., Басевич В.А. Антропология. М. Владос. 2003.</p>

<p>Scope of assessment criteria and procedure</p>	<p>CURRENT CONTROL Purpose: Determining and assessing the master's level of knowledge, practical skills, and competencies on course topics. Instructions: The master's activity in daily classes is assessed through the master's mastery of course topics, as well as constructively interpreting and analyzing the educational material, developing module-specific skills, acquiring practical skills (in terms of quality and the specified number) and competencies, solving problem situations aimed at applying professional practical skills, working in a team, preparing presentations, etc. Current control form: Activity in lessons Preparing educational materials Working with sources within the subject Using educational technologies Working in a team Preparing presentations Working with projects INTERMEDIATE CONTROL Purpose: Assessing the master's knowledge and practical skills and level of mastery of lecture material after completing the relevant section of the course. Form and procedure of intermediate control: Midterm examination is held during the semester during the training sessions after the completion of the relevant module of the curriculum of the subject. Midterm examination is held once in written form within the framework of this subject. Midterm examination questions cover all topics of the subject. Independent learning: Purpose: Independent learning is aimed at fully covering the content of this course, expanding the theoretical knowledge acquired, and establishing independent learning activities for masters. Form and procedure of independent education: Independent work assignments are completed in the form of an educational project, presentation, case study, problem solving, information search, digest, colloquium, essay, article, abstract, etc. Completed assignments for independent study are placed in the electronic system and checked based on the anti-plagiarism program and evaluated by the subject teacher. In this case, the uniqueness of the completed assignment should not be less than 60%, otherwise the assignment will not be accepted for assessment. The number of independent work assignments, depending on the nature of the subject, should not be less than 3 for one subject (module). Independent work assignments account for 60% of the points allocated for current and intermediate control. Independent learning task 1: Preparation of project work based on independent learning topics Independent learning task 2: Preparing sample video lessons based on specialized subject topics. Independent learning task 3: Preparation of open lesson plans in specialized subjects using interactive methods. Independent learning task 4: Analysis of educational normative documents for specialized subjects and preparation of presentations. FINAL CONTROL Purpose: The final examination is held at the end of the semester to</p>
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	<p>determine the level of mastery of the master's theoretical knowledge and practical skills in the relevant subject. The final examination is held at a specified time according to the examination schedule created by the Registrar's Office on the electronic platform.</p> <p>Requirements: The master must have passed the current control, intermediate control and independent learning assignments by the deadline for the final control type in the relevant subject.</p> <p>A master who has not passed the current control, intermediate control and independent learning assignments, as well as who has received a score in the range of "0-29.9" for these assignments and control types, is not included in the final control type.</p> <p>Also, a master who has missed 25 percent or more of the classroom hours allocated to a subject without a reason is excluded from this subject and is not included in the final control type and is considered not to have mastered the relevant credits in this subject.</p> <p>A master who has not passed or was not included in the final control type and has received a score in the range of "0-29.9" for this type of control is considered to be an academic debtor.</p> <p>Final control form: The final examination in this subject will be conducted in written form.</p> <p>If the final examination is conducted in written form, the requirements for assessment must also be reflected.</p>					
Criteria for assessing master knowledge	5 stars	100 points		Evaluation criteria		
	5	90-100	Excellent	When a master is considered to be able to make independent conclusions and decisions, think creatively, observe independently, apply the knowledge he has gained in practice, understand, know, express, and narrate the essence of the subject (subject), and have an idea about the subject (subject)		
	4	70-89,9	Good	When the master is considered to be able to observe independently, apply the knowledge he has gained in practice, understand, know, express, and narrate the essence of the subject (subject), and has an idea about the subject (subject)		
	3	60-69,9	Satisfactory	When the master is found to be able to apply the knowledge he has gained in practice, understands, knows, can express, and narrate the essence of the subject (subject), and has an idea about the subject (subject)		
	2	0-59,9	Unsatisfactory	When it is determined that the master has not mastered the science program, does not understand the essence of the science (subject), and does not have an idea about the science (subject)		
Course evaluation criteria and	Control type		Total points allocated	Control (task) form	Distribution of points	Qualifying score

procedure	Current control	30 points	System tasks	20 points (divided by the number of tasks)	18 points
			Master activity (in seminars, practical, laboratory classes)	10 points	
	Intermediate control	20 points	Supervision: Written work	10 points	12 points
			System tasks	10 points (divided by the number of tasks)	
	Final inspection	50 points	Written assignment (5 questions)	50 points (10 points per question)	30 points
	<i>* Note: 60% of the points allocated for current and intermediate control are allocated to independent work assignments. Independent work assignments are evaluated as system assignments through the electronic platform.</i>				