The discipline designation	**Beekeeping**
The semester(s) in which the discipline is taught	7
Responsible teacher	Mavlanov Khudargan , Biology science teacher. Biology sciences doctor
Language of education	Uzbek
Relation to the curriculum	Elective
Study load (including contact hours, IWS)	Total work load: 120 hours Contact hours lecture 20 hours practical lesson 20 hours seminar 20 hours IWS 60
ECTS	4
Prerequisites	Zoology
The semester(s) in which the discipline is taught	The aim of the discipline is to give an idea of beekeeping, their origin, ecological connections, adaptation of bees to life, the bee family and their life cycle. **The results of the education** - define beekeeping as a science; -describe all morphological, anatomical, physiological and environmental aspects of bees; - determine the systematic position of bees; -compare important breeds and their characteristics; - give an idea of the methods of reproduction, care and breeding of bees; - consider the organization of a bee farm and equipment for it; - reveal the role of beekeeping in solving problems of economics, agriculture and medicine; - identify beekeeping products and determine their importance for human health; - determine the role of bees in nature as pollinators of cultivated plants; - name diseases and parasites of bees and measures to combat and prevent diseases;
The content of the lesson	The content 1.The goals and objectives of the subject Beekeeping 2. External and internal structure of insects 3. Biology of the bee family. Composition of a bee family. Bee colony polymorphism 4. The study of bee breeds 5. The physiology of bees 6. Bee nutrition 7. Reproduction, care of bees, selection in beekeeping 8. Ecology of bees 9. The diseases and parasites of bees 10.Methods of breeding and transplanting bees 11. Breeding a young bee colony 12. The importance of bees in nature and for humans

	13.Preparing bees for winter. Proper organization of wintering of bees and their protection. 14. Technologies for the production of beekeeping products 15.Organization and equipment of a bee farm.
The form of the examination	Oral
The requirements for the education and examinations	Full mastery of theoretical and methodological concepts related to beekeeping and bee breeding, the ability to correctly reflect the results of analysis, independent observation of the processes and concepts being studied, completing tasks given in current, intermediate forms of control and responding orally at the final control When creating Final test questions, deviations from the content of the discipline program are not allowed. The bank of Final test questions for each subject is discussed at the meeting and approved by the head of the department. When compiling Final test tickets, the Final test question bank is used; the number of questions in the ticket should be in a 50/50 ratio, depending on the content of classroom and independent learning. No later than 1 week before the start of the final control, tickets approved by the head of the department, enclosed in an envelope, are sealed by the dean's office and opened 5 minutes before the start of the exam in the presence of students. The student who has chosen the Final test ticket is given 5-10 minutes to prepare and 10-15 minutes to answer the Final test questions orally. On average, 20 minutes are spent per student. When forming the composition of the oral examination commission, 1 commission member is approved for every 15 students. The student's Final test score is posted on the electronic platform on the same day. Student(s) who are dissatisfied with the Final test results may submit a written or oral appeal within 24 hours of the release of the Final test results. Complaints submitted after 24 hours from the publication of the Final test results will not be accepted. The teacher who taught the students in this subject is not involved in the process of conducting the exam and checking the students' answers.
References	1. B.A. Kakharamonov and others "Beekeeping" Tashkent - 2012. 2. A.I.Isamukhammedov, H.L. Nikadambaev "Fundamentals of beekeeping development" Tashkent. “Sharq” publishing house, 2013. 3. F.G. Yumagujin, V.R. Tuktarov, M.G. Giniyatullin, V.N. Sattarov. The fundamentals of beekeeping: The manual /– Ufa: publishing house Bashkirskiy GAU, 2020. - 148 p.
Scope of assessment criteria and procedure	**CURRENT CONTROL** **Purpose:** Determining and assessing the student's level of knowledge, practical skills, and competencies on course topics. **Instructions:** The student's activity in daily classes is assessed through the student'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 student'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 students. **Form and procedure of independent education:** ndependent 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 determine the level of mastery of the student'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. **Requirements:** The student must have passed the current control, intermediate control and independent learning assignments by the deadline for the final control type in the relevant subject. A student 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. Also, a student 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.

A student 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.

Final control form: The final examination in this subject will be conducted in written form.

If the final examination is conducted in written form, the requirements for assessment must also be reflected.

Criteria for assessing student knowledge

5 stars	100 points		Evaluation criteria
5	90-100	Excel lent	When a student 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 student 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 student 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 student 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 procedure

Control type	Total points allocated	Control (task) form	Distribution of points	Qualifying score
Current control	30 points	System tasks	20 points (divided by the number of tasks)	18 points
		Student 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
	** **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.*				