UZO-449 Economic Zoology

Introduction

Economic zoology is the study of the economic importance of animals, their products, and their impact on human society. The course may also include practical sessions such as field trips, laboratory work, and internships to provide hands-on experience to students. Additionally, students may be required to study the economic and social impact of animal production and management on human societies.

Course Objectives:

The objectives of an economic zoology course are to equip students with the knowledge and skills needed to understand the economic significance of animals and their products. Here are some of the specific objectives that may be covered in such a course:

- 1. To introduce students to the principles of animal production and management, including breeding, feeding, housing, and health management.
- 2. To provide students with an understanding of the role of animals in human societies, including their contribution to food security, income generation, and cultural practices.
- 3. To familiarize students with the different sectors of animal production and management, including livestock, poultry, fishery, beekeeping, and sericulture.
- 4. To teach students about the use of insects in agriculture, including their role as pollinators, predators, and pests.
- 5. To help students understand the principles of wildlife conservation and management, including the ecological and economic factors that influence the use of game animals.
- 6. To educate students about the impact of animal production and management on the environment and the importance of sustainable practices.
- 7. To introduce students to the concepts of biotechnology and genetic engineering in animal production and the ethical considerations related to their use.
- 8. To teach students about the behavior and welfare of animals, including the ethical issues related to their use in research and production.

Overall, the objective of an economic zoology course is to provide students with a comprehensive understanding of the role of animals in human societies, and to equip them with the knowledge and skills needed to contribute to the sustainable development of animal production and management.

Course Learning Outcomes:

On completion of the course, the students will be able to;

- 1. Acquire theoretical knowledge about economic zoology.
- 2. Compare different economic aspects of zoology.
- 3. **Collect** the field information of animal keeping
- 4. Evaluate the best benefits we can get from animal keeping.

Course Outline:

The course content of an economic zoology course typically covers a wide range of topics, including:

- 1. Animal domestication and breeding
- 2. Livestock production and management
- 3. Poultry production and management
- 4. Fishery production and management
- 5. Beekeeping and apiculture
- 6. Sericulture and silk production
- 7. Insect pests of crops and their control
- 8. Beneficial insects in agriculture
- 9. Wildlife conservation and management
- 10. Game management and hunting
- 11. Medical entomology and vector-borne diseases
- 12. Parasitology and zoonotic diseases
- 13. Aquaculture and mariculture
- 14. Biotechnology and genetic engineering in animal production

Teaching-Learning Strategies

Teaching will be a combination of class lectures, class discussions, and group work. Short videos /films will be shown on occasion.

Assignments

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination

Sessional Work:	25 marks
Midterm Exam:	35 marks
Final term Exam:	40 marks

Text and Reference Books:

- 1. John Blackwall Economic Zoology ISBN 9788187067047 Published by Goodreads.
- 2. Vinita Jaiswal, Kamal Kumar Jaiswal. 2014, Economic Zoology Published by PHI LEARNING PVT. LTD. ISBN 9788120348868
- 3. Herbert Osborn 2018. Economic Zoology: An Introductory Text-Book in Zoology, With Special Reference to Its Applications in Agriculture, Commerce and Medicine Published by Forgotten Books ISBN-10 : 1330007506
- 4. Jawaid Ashan 2010. A Hand Book On Economic Zoology. Published by S Chand and Co Ltd, ISBN 10: 8121908760
- 5. Aminul Islam 2016. A Textbook of Economic Zoology, Published by I.K International Pvt. Ltd. ISBN 9789384588809
- 6. Kamal Jaiswal, M.G. Ragunathan 2017. Economic Zoology [Apiculture, Sericulture And Aquaculture] Published by Narendra Publishing House, ISBN-13: 9789389660456

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Overall, the objective of an economic zoology course is to provide students with a comprehensive understanding of the role of animals in human societies, and to equip them with the knowledge and skills needed to contribute to the sustainable development of animal production and management.

Course Learning Outcomes:

On completion of the course, the students will be able to;

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Course Outline:

Field Visit to

- Animal Breeding Farms
- Poultry Farms
- Beekeeping and apiculture sites
- Sericulture and silk production sites
- Beneficial insects in agriculture
- Zoo
- Wildlife Protected areas
- Aquaculture and mariculture sites
- NIBGE or CAMB

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