MINISTRY OF HIGHER EDUCATION, SCIENCE AND INNOVATION OF THE REPUBLIC OF UZBEKISTAN

KARSHI STATE TECHNICAL UNIVERSITY

"APPROVED"

Rector of Karshi State Technical University

_____Sh.K.Nematov

"___" _____2025

ECOLOGY AND ENVIRONMENTAL PROTECTION

MODULE GUIDE

Field of knowledge:	400000 –	Business, management and law
Field of education:	410000 –	Business and management
Field of study:	60410100 –	Economics

Module links

Module title:	ECOLOGY AND ENVIRONMENTAL PROTECTION
Code (if applicable)	EAMM2705
Courses (if applicable)	4
Module teaching semesters	7
Language	Uzbek
Curriculum relevance	Selective
Type of teaching, contact hours	Lecture, practical classes
Workload	Total workload: 150 hours. Auditory hours: 90 hours; lecture: 30 hours, practical lessons: 30 hours; Self-study: 90 hours
Credit points:	5
Recommended previous subjects	Chemistry, physics

Module objectives / expected learning outcomes	The objective is to teach students the theoretical foundations of ecology, the consequences of disrupting the balance between nature and society, improving the environmental management system, and increasing the efficiency of natural resource use. The task of the discipline is to elucidate the causes of environmental protection and ecological problems, the scientific principles of nature conservation, its means of protection, the application of effective methods, as well as to highlight environmental issues and the ecological aspects of environmental security and sustainable development. • Concepts are provided regarding ecology, the integrity of nature and society, the negative impact of anthropogenic factors on the biosphere, and nature conservation issues. It covers the early detection and prevention of environmental risks. It imparts modern knowledge on the importance of preserving the cleanliness of land, water, and air, preventing the extinction of plants and animals, and achieving sustainable development. Knowledge is also provided about the stages of ecology's development, its history, the role of Central Asian scholars, and ecological methods.
Content	As one of the core disciplines of ecology, it explores the scientific principles of ecological systems, natural resources, and environmental services that ensure the continuous and balanced progression of natural processes. This is a fundamental science that enables students to analyze the material, biological, and ecological foundations of the biosphere.
Study and exam requirements	**a) for a score of 90-100 points, the student's level of knowledge must meet the following requirements:** - fully cover the essence and content of the subject; - maintaining scientific and logical accuracy in the presentation of topics in science, avoiding scientific errors and confusion; - having a clear idea of the theoretical or practical significance of the subject materials on the subject; - can demonstrate the ability to think independently within the framework of the subject; - can answer the questions clearly and concisely; - thoroughly prepared for the summary; - complete and accurate completion of independent assignments; - has fully mastered laws and other regulatory legal acts related to the subject; - published a scientific article on one of the topics related to the subject; - can interpret historical processes; **b) for a score of 70-89.9, the student's level of knowledge must meet the following requirements:**

	- understands the essence and content of science, does not allow scientific and logical confusion in the presentation of topics in science; - understood the practical significance of the content of the subject; - fulfill assigned tasks and assignments within the framework of the curriculum; - can correctly answer questions on the subject; - has carefully formed a synopsis of the subject; - fully completed independent assignments in the subject; - has mastered laws and other regulatory documents related to the subject. **c) for a score of 60-69.9, the student's level of knowledge must meet the following requirements:** - having a general understanding of the subject; - if there is some confusion in the narrow coverage and presentation of topics in science; - if the presentation is not fluent; - obtaining vague and confusing answers to questions on the subject; - if the text on the subject is not well formulated. **d) with a score of 0-59.9 in the following cases, the student's level of knowledge may be assessed as unsatisfactory:** - no preparation for classes in the subject; - does not have any knowledge of the subject; - if it is noticeable that they have copied texts on the subject from others; - serious errors and confusions were made in the text on the subject; - if answers to questions related to the subject are not received; - if he doesn't know science.
Exam formats	Oral, written, test
Assessment Tools / Methods	Successfully completing course assignments and passing all current, midterm, and final assessments.
List of References	1. Richard O. Mines, Jr. "Environmental Engineering" This edition first published 2014, Wiley & Sons, Inc., Ill River Street, Hoboken, New Jersey, 2014, XII, 637 p. - ISBN 978-1-118-80145. 2. Qudratov O. Sanoatekologiyasi. O'quv qo'llanma.-T.:Chinor, 2005. 3. Цветкова Л.И., Алексеев М.И., Усанов Б.Р.и др. Экология, Учебник для ВТУЗов.-М.:издателство АСВ:, Химиздат, 2001. 4. O'zbekiston Respublikasi Qizil kitobi**2-T.-T.:**Chinor ENK, **2009.** 5. YodgorovaD.Sh., EgamberdievaL.Sh. Shahar

	ekologiyasi. Uslubiy qo‘llanma. Toshkent: O‘zMU nashriyoti, 2013. 6. Зайсев В.А. Промишленная экология. Учебной пособий.М: Наука, **2000**. 7. Tursunov X.T., Raximova T.U. Ekologiya. O‘quv qo‘llanma.T.: Chinor ENK, 2006. **Additional sources:** 8. Mirziyoyev Sh.M. Buyuk kelajagimizni mard va oliyjanob xalqimiz bilan birga quramiz. - T.: “O‘zbekistan” NMIU, 2017. - 488 b. 9. O‘zbekiston Respublkasini yanada rivojlantirish bo‘yicha Harakatlar strategiyasi to‘g‘risida. -T.:2017 yil 7 fevral, PF-4947-son farmoni. 10. Yu.Otaboyev Sh., Nabiyev N. Inson va biosfera. - Toshkent, 1995. 11. P.Tursunov X.T. «Ekologiya», Toshkent, Saodat RIA. 2007. O‘quv qo‘llanma. 12. Vnukov A.N. «Zashita atmosferi ot vibrosov energo obektov». Spravochnik. M.Energo atomizdat. 1999g. 13. Ibragimov N.I. va boshqalar «Ekologiya» Toshkent 2007. O‘quv qo‘llanma. 14. Otaboyev Sh., Malikov Z., Mamadaliev Sh., Mirsovurov M., Ekologiya. . O‘quv qo‘llanma. -Toshkent, 2011. *Information links:* 15. http: www.ecologye.ru 16. http: www.ecolog.com
Editors	1. **Z.Z.Uzakov** - KSTU, Head of the Department of "Ecology and Environmental Protection," Associate Professor. 2. **N.SH.Bozorova**. - KSTU, Associate Professor of the Department of "Agrochemistry and Ecology," Candidate of Pedagogical Sciences
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