Theoretical and practical course plan form - Ilam University of Medical Sciences

Introduction to the course: Environmental Ecology Semester: Second2020-2021

Faculty: Health

Department: Environmental Health Engineering Course

Name and Number: Energy and Environment

Field and Degree: Discontinuous Bachelor of Environmental Health Engineering - Semester 1

Day and time: Tuesday 16-14

Number and type of unit (theoretical / practical): 1 theoretical unit

Lecturer name: Faragh Kazem Beigi

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Detailed lesson objectives:

1- Name the students of different energy sources

2- Interpret the energy cycle

3- Know the characteristics of each energy source.

4. Explain the role of energy in economics and politics.

5- The student should know the amount of energy consumption in Iran.

6- Know the amount of energy consumption in the world

7- Be able to compare energy consumption in Iran and the world

8- Can have an explanation of the consumption of new types of energy in the future.

9- The student should know the nature of different types of energy

10- Get acquainted with the health problems caused by consuming each of the energies.

11- Get acquainted with the environmental problems caused by the consumption of each energy.

12- Have his / her own interpretation about the excessive effects of fossil fuels on the health of the society in the future.

13- Have its own interpretation of the excessive effects of fossil fuels on the environment and living things in the future.

14- The student should get acquainted with the types of non-renewable energy.

15- Know the advantages and disadvantages of using each of the energies.

16- Describe the contaminants of each of them.

17- Know the problems of using any of the non-renewable fuels.

18. Describe the method of extracting each of the non-renewable energies.

19- The student should get acquainted with different types of renewable energy.

20- Know the advantages and disadvantages of using each of the energies.

21- Describe the possible contaminations of each of them.

22- Know the benefits of using each of the renewable energies.

23. Describe the method of extracting each of the non-renewable energies.

The main sources of the lesson:

1- Energy in the 21st century, Mohammad Malakootian, Majid Hashemi

2- Introduction to Energy and environment, Paulih- Fiehiv, 1992

Teaching methods + teaching aids used:

Questions and answers about the material presented in previous sessions and written or oral exams. The teaching method is implemented in the form of lectures, questions and answers and group discussions in the form of critical thinking using the facilities of appropriate educational technology (PowerPoint, virtual and video and whiteboard, etc.).

Student duties (student homework during the semester):

1. The student is obliged to be ready in each session to answer the questions related to the previous sessions in writing and orally.

2. Attend class on time

3. The students of the class are divided into groups of 3 and the topics of the course are divided between the groups in order to collect the necessary materials about the topics from the introduced sources and present them in the class. It is necessary for each group to coordinate the materials related to the desired session with the teacher up to two days before the class and provide a copy of the prepared materials to the other groups so that other groups can be ready to participate in the discussion in class. . The readiness of the presenter group and the syntax of the participation of other groups in the discussion are evaluated and scored.

Methods and time of assessment and evaluation of the student and the bar related to each evaluation:

- Class 2 written and oral exams

- Prepare material and present in class 1 score

- Prepare visit report 1score

- Intermediate exam 4 score

- End of the semester exam 12 score

Lesson rules and expectations from students:

1- The active participation of the student along with observing the relevant order and principles, respecting the manners of the class and other students, as well as the correct use of teaching aids and materials are essential.

2- The presence of students in extraordinary classes is essential. The time of the mentioned classes will be informed in advance to the class representative and the education department of the faculty.

3- According to the current regulations of the university, absence from more than 4 sessions of the classroom is not allowed. Obviously, this figure also includes justified absence.

Introduction form of theoretical and practical courses - Ilam University of Medical Sciences

Schedule for presenting the first semester curriculum 2020-2021

Session	Topic	Lecturer	Preparing students before class
1	Name the types of energy sources Interpret the energy cycle Know the characteristics of each energy source. Describe the role of energy in economics and politics.	Kazem Beigi	Written and oral questions and answers from the content presented in the meetings
2	The student should know the amount of energy consumption in Iran. Know the amount of energy consumption in the world Can compare energy consumption in Iran and the world Be able to explain the consumption of new types of energy in the future.		
3	The student should know the nature of different types of energy Familiarize yourself with the health problems caused by consuming each of the energies. Get acquainted with the environmental problems caused by the consumption of each energy. Have your own comment on the unreasonable effects of fossil fuels on future community health. Have your own interpretation of the uncontrolled effects of fossil fuels on the environment and living things in the future.		
4	Students become familiar with non-renewable energy types. Know the advantages and disadvantages of using each of the energies. Describe the contaminants of each of them. Know the problems of using any of the non-renewable fuels. Describe the method of extracting each of the non-renewable energies.		
5	Students become familiar with different types of renewable energy. Know the advantages and disadvantages of using		

	each of the energies. Describe the possible contaminants of each of them. Know the benefits of using any renewable energy. Describe the method of extracting each of the non-renewable energies.		
6	Students will be introduced to the effects of energy use on the environment. Know the difference in the effect of different energies. Explain how each of the energies affects the environment. Explain how to reduce the effects of waste energy on the environment		
7	The student should get acquainted with the nature of greenhouse gases. Know the different methods of removing them. Learn more about the problems of these gases. Can choose better methods from different options. Know the ways to improve the performance of the process of using different types of energy.		
8	Explain the importance of environmental assessment. Students will be familiar with a variety of environmental assessment methods for energy resources. Describe the possible effects of producing different types of energy. Describe ways to control energy consumption.		
9	Describe ecological pyramids.		
10	Write the relationship between the environment and health and the factors that affect it.		
11	Explain the indicators of health and hygiene. Describe the applications of ecology in the field of medicine and health.		
12	Human ecology, human relations with the environment, demography and its importance, social, economic and political environment, concept and value of population charts, determination and measurement		
13	Human ecology, human relations with the environment, demography and its importance, social, economic and political environment, concept and value of population charts, determination and measurement		
14	Know the ecological study of the health and disease hypothesis. Express the different stages of human health and talent for maintaining health.		
15	Improve health indicators.		

16	Explain the relationship between environment and health and environmental factors affecting health status. Interpretation of figures and information obtained and assessment of environmental factors		
17	Final exam		