

Theoretical and practical courses-Ilam University of Medical Sciences

Introduction to the course: Environmental Health 3, the second semester of the academic year 2020-2021

School: Health Department: Environmental Health

Course and degree: Bachelor of Public Health, semester 4 days.

Time and place: Wednesday: 14.5-12.5

Number and type of unit (theoretical): 1 theoretical unit Name of the person in charge of the course (teacher): Faragh Kazem Beigi

Prerequisite courses: Environmental Health 2 Office

Address: School of Health

Phone and contact days: 09186149388

Email: fkazembeigi@gmail.com

General Objective of the lesson:

- Familiarity of students with the factors affecting food hygiene and food poisoning
- Familiarity of students with housing and health standards that must be observed in public places and housing and the adverse effects of unsanitary places
- Familiarity of students with different types of air pollutants and their sources of emission, as well as adverse effects that can have on humans and the environment.
- Familiarity with the dangers of ionizing radiation and ways to protect against them.

Specific or partial objectives of the course:

* **Specific or partial objectives of the lesson:** The specific objective is better to be written behaviorally (behavioral objective has the audience, behavioral verb, degree and criteria and conditions of performance)

After passing this unit, the student must:

- 1- Be able to know the definition of food hygiene and food contamination.
- 2- Can name foodborne illnesses.
- 3- Can explain the effect of different methods of food storage such as freezing, heating, drying, salting and smoking in eliminating or preventing the growth of microorganisms.
4. The student should be able to describe the general types of infections and food poisoning.

Explain about important food poisonings such as botulism, Staphylococcus aureus poisoning, Escherichia coli, Bacillus cereus, etc.

5- The student should be able to:

- Express the characteristics of a healthy milk according to the Iranian standard.

-Explain diseases transmitted from milk to humans such as tuberculosis, malaria, anthrax and salmonellosis.

-Describe hygienic methods of milk such as boiling, pasteurization and sterilization.

6- Be able to briefly explain the complications of living in inappropriate housing and human mental health issues.

7- Be able to name and briefly explain the housing hygiene of public places.

8- Can name physical factors such as light, heat, humidity, radiation, noise, noise pollution and explain each of them briefly.

9- Can understand the general concept of air pollution and be familiar with the history of air pollution.

10 - Be able to know the natural composition of the atmosphere, the structure of the atmosphere, the laws of gases, vapors and aerosols, particles, etc.

11- Be able to recognize global effects such as global warming, ozone depletion and acid rain and analyze the factors affecting it.

12 - Be able to know about ionizing and non-ionizing radiation and explain its production sources and applications

13- Can describe the dangers and protection against ionizing radiation.

14- Can explain the methods of disposal of nuclear waste

15- Can express the biological effects of ionizing and non-ionizing radiation

16- Can explain different dosimeters.

Student duties (student homework during the semester):

Presenting content in the form of a lecture

1- The student is obliged to have the necessary preparation in each session to answer the questions related to the previous sessions in written and oral form.

2 - Attend timely and active in class meetings and present points of view

The main sources of the lesson:

1- Amirbeigi H, Principles of Environmental Health. Tehran: Andisheh Rafi, 2003.

2- Ahmadi Moghadam M., Generals of Environmental Health, Tehran: Ayande Sazan: Shahr-e Ab, 2009-2010

3- Chpanoglass J .. Environmental Engineering. Translators: Sirius Ebrahimi, Mohammad Ali Ki Nejad. Sahand University of Technology, third edition, 2007.

4- Kargar M, Generals of Environmental Health, Andisheh Rafi, 2011

Teaching methods + teaching aids used:

Questions and answers about the material presented in previous sessions and written or oral exams. 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, Overhead and White).

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

End-of-semester exam + questions and answers + active attendance and participation in the classroom + project and presenting a total of 20 points

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 2 justified sessions of the classroom is not allowed. If the student has even one unjustified absence, the course will be deleted.

Schedule and predicted contents of each theory session

Session	Topic	Necessary preparation of students before the start of the class
1	Introduction and acquaintance with students, expression of class rules and regulations, attendance, necessary explanations about the lesson and expression of objectives, introduction of usable sources, characteristics of ionizing radiation, sources of their production, history, units of measurement	Written and oral questions and answers from the material presented in previous sessions
2	Review the previous session and ask questions from the previous session	
3	Biological effects of ionizing and non-ionizing radiation, ionizing radiation dosimeters, radiation protection methods, radioactive waste disposal methods	
4		
5	Review the previous session and ask questions from the previous session	
6	Definition of air pollution, history, sources of pollutants, characteristics of different types of pollutants, effects of pollution on humans, plants and objects,	
7	Review the previous session and ask questions from the previous session	
8	Methods and devices for controlling air pollutants, regulations and standards of air pollution	

