**1. Module: Man Ecology**

**2. Module code**: ХЕ\_6\_3.1.11\_1.5

**3. Module type:** Compulsory

**4. Term:** 5

 **5. Module volume:** general lessons quantity – 45 (ECTS credits – 1,5), auditorium lessons – 28 hours (lectures – 8, laboratory classes – 20)

 **6. Lecturer:** Goncharenko Hanna Yevdokymivna – candidate of biological sciences, assistant professor

 **7. Training results:**

During module training student should**:**

**know:** subject, object and tasks of man ecology, basic abiotic factors of influence, on human organism, influence of physical parameters. Microelements and carcinogen influence peculiarities on the human organism, ways of receipt of elements- pollution in the man organism, negative factors of influence on a man, physical and chemical factors of environment pollution, ecological factors of health of man, adaptation of man, to the stress factors, ecologic-demographic state of humanity.

**To be able:** To analyse adaptation processes, acclimatization, homoeostasis of organism environment and condition of environment, to determine the optimum and possible microclimate parameters, find out influence of air pollution, drinking-water, food products on man’s health, to solve problem of avoidance of the transgene-modified components of food use, to find out the mutual people influence (micro- and macro populations) and environment.

**8. Training methods:** auditorium lessons

**9. Compulsory previous and simultaneous modules:**

• biology

• ecology bases

• nature protection

• valeology

**10. Module content:** A man as biological creature and climatic factors role in its vital functions. History of of man ecology development. A concept of atmospheric pressure, natural radiation. Calculation method of natural terms coefficient. Influence of environment pollution on the man organism. Basic factors of atmospheric pollution. Radiation pollution, concept „noise”, sound-waves, ultra and infra sounds, noise influence on the man organism. Water as major factor of environment. Basic sources of soil pollution. Rational organization peculiarities of labour activity.

Особливості раціональної організації трудової діяльності.

**11. Recommended literature:**

1. Микитюк О.М. Екологія людини. / Микитюк О.М., Злотін О.З., Бровдій В.М. – Харьків: ХДПУ“ОВС”, 2000. – 207 с.
2. Нікберг І.І. Гігієна з основами екології. Підручник./ Нікберг І.І., Сергета І.В., Цимбалюк Л.І. — К.: Здоров’я, 2001. — 504 с.
3. Хижняк М.І. Здоров’я людини та екологія. / Хижняк М.І., Нагорна А.М. – К.: Здоров’я, 1995. – 228 с.

**12. Training forms and methods:** lectures, laboratory classes, individual training research work, individual work

**13. Evaluative methods and criteria:**

* Current control (70 %): oral questioning, individual work
* Total control (30 %, credit): testing, reference work

 **14. Language:** Ukrainian