**1. Module:** **Plants and animals phylogeny bases**

**2. Module code:** БМН––6––3.1.20–1.5

**3. Module type:** normative.

**4. Term:** 8.

**5. Module volume:** general lessons quantity – 45 (ECTS credits – 1,5), auditorium lessons – 32 (lectures – 16, practical classes –16)

**6 Lecturer:** Chorna Galyna Anatoliivna - candidate of biological sciences,assistant professor

**7. Training results:**

During module studying students **should:**

 **know:** plant and animal organisms origin, plants and animals going out on land; plant and animal cell comparative description; types of cell division depending on the degree of plant and animal organisms organization; reproduction of all living creatures; water-plants - ancestors of higher geophytes; phyllogenetic connectionsof of higher plants and animals basic groups; plants and animals evolution directions, plants and animals ancestors; evolution general line of plan and animal world.

**To be able**: to comprehend and summarize plants and animals phylogeny actual material; to analyse and synthesize knowledges, got in the study process of this material; to distinguish the plants and animals phyllogenetic connections.

**8. Training way:** auditorium lessons

**9. Compulsory previous and simultaneous modules:** zoology, botany, evolutional studies.

**10. Module content:** Origin of plant and animal organisms and their going out on land. Plant and animal cell. One-celled and multicellular organisms. of Plants and animals reproduction. Higher plants basic groups phyllogenetic connections. Plant and animal world protection. Historical and modern classification systems and phyllogenetic charts of covering seeds

**11. Recommended literature:**

1. Благовещенский А.В., Александрова Е.Г. Биохимические основы филогении высших растений. – М.: Наука, 1974. – 101 с.

2. История биологии с древнейших времен до начала ХХ века. – М.: Наука, 1972. – 536 с.

3. История биологии с начала ХХ века до наших дней. – М.: Наука, 1975. – 689 с.

 4. Червона книга України. Рослинний світ/ за ред. Я.П. Дідуха — К.: Глобалконсалтинг, 2009.– 900 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, control work

**14. Language:** Ukrainian