**1. Module:** Plants andanimalsphylogeny bases.

**2. Module code:** БМН–6–3.1.20–1.5

**3. Module type:** normative.

**4. Term:** 8.

 **5. Modulevolume:** generallessonsquantity – 45 (ECTS credits – 1,5), auditorium lessons – 32 (lectures – 16, practical classes –16)

 **6 Lecturer:** Ruslan A. Yakymchuk – Candidate of Biological Science, assistant professor

 **7. Training results:**

During module studying students **should:**

**know:** plant andanimalorganismsorigin, plantsandanimals going outonland; plantandanimalcellcomparativedescription; typesofcell divisiondependingonthedegreeofplantandanimalorganismsorganization; reproductionofalllivingcreatures; water-plants-ancestorsofhighergeophytes; phyllogeneticconnectionsofofhigherplantsandanimals basicgroups; plantsandanimals evolutiondirections, plantsandanimalsancestors; evolutiongenerallineofplanandanimalworld.

**To be able**: tocomprehendandsummarizeplantsandanimalsphylogeny actualmaterial; toanalyseandsynthesizeknowledges, gotinthestudyprocessofthismaterial; todistinguishtheplantsandanimalsphyllogeneticconnections.

 **8. Trainingway:**auditoriumlessons

**9. Compulsorypreviousandsimultaneousmodules:** zoology, botany, evolutionalstudies.

**10. Module content:** Originofplantandanimalorganismsandtheirgoing out onland. Plantandanimalcell. One-celledandmulticellularorganisms. ofPlants andanimalsreproduction. Higherplantsbasicgroupsphyllogeneticconnections.Plantandanimalworld protection.Historicalandmodernclassificationsystemsandphyllogeneticchartsofcovering 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. Рослиннийсвіт/ за ред. Я.П. Дідуха — К.: Глобалконсалтинг, 2009.– 900 с.

**12. Trainingformsandmethods:** 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