Study Program: Biology

Type and level of studies: Bachelor studies

Course name: Embriology with histology

Lecturer: Branković S. Slavko

Status: Compulsory

ECTS: 6

Attendance Prerequisites:

Course aims

The aim of this course is to introduce to students the basic principles of the biology of animal development i.e., embryology, as well as structure and function of animal tissues and organs.

Course outcome

The students have acquired knowledge about the evolutionary development of sexuality, the ways of controlling and managing the embryonic development, as well as knowledge of the histological structure of tissues and organs.

Course content

Theoretical part:

Introduction to developmental biology. Methods in embryology and histology. Sexual behaviour of animals. The development of sex cells - spermatogenesis and oogenesis of cells. Fertilisation and ooplasmic segregation. Processes after fertilisation, Gene expression in early development. Furrowing and blastulation. Morula and blastula. Gastrulation and formation of primary rudiments of organs. Embryonic adaptations. Histological differentiation. Organogenesis. Growth. Metamorphosis. Regeneration. Aging and death. Tissues of general characteristics and division. Epithelial tissue. The connective tissue. Muscle tissue. Nervous tissue. Microscopic anatomy (organology). Receptor cells and senses.

Practical Part: Exercises, Other forms of teaching, research work

Introduction to structural characteristics of animal tissues (epithelial tissue, connective tissues, nerve tissue, muscle tissue) and organs using permanent histological preparations for light microscopy.

Literature

- 1. Ћурчић, Б., 1990. Развиће животиња. Завод за уџбенике и наставна средства. Београд.
- 2. Гроздановић-Радовановић, Ј., 1980. Хистологија. Научна књига. Београд.
- 3. Јакшић, П. и Савић, Г., 1997. Развиће животиња. Универзитет у Приштини. Приштина.
- 4. Костић, А., 1953. Основи хистолошке технике. Медицинска књига. Београд.
- 5. Шербан, Н., 1995. Покретне и непокретне ћелије. Савремена администрација. Београд.

6. Швоб, М., 1974. Хистолошке и хистохемијске методе. Свјетлост. Сарајево

| Number of a | Other classes | | | |
|-------------|----------------------|----------------|---------------|--|
| Lectures: 2 | Practical classes: 2 | Other forms of | Students' | |
| | | teaching: | research work | |

Teaching methods

Theoretical classes, practical classes, term tests.

| Assessment (maximum 100 points) | | | | | |
|---------------------------------|--------|--------------|--------|--|--|
| Course assignments | points | Final exam | points | | |
| activity during lectures | | written exam | 20 | | |
| practical classes | 10 | oral exam | 50 | | |
| Term test/s | 20 | | | | |
| Seminar/s | | | | | |
| Total | 30 | | 70 | | |