Biology, Specialization: Medical Biology (BSc) – study schedule (2017/2018)

(Language of instruction: English)

Cw- classes, K- conversation classes, T- field classes, $\,S-$ seminar, the others – laboratory, E- examination, C- credit, $\,Cwg-$ credit without grade, Cag- credit with grade included in average final grade

1st semester

| Courses | No.of hours | Lecture | Classes | Form of course completion | Credits ECTS |
|---|----------------|---------|---------|---------------------------------|-----------------|
| ^A General and inorganic chemistry with elements of analytical chemistry | 75 | 30 | 45 | E | 6 |
| Physics with elements of biophysics | 60 | 20 | 40 | Е | 5 |
| Mathematics with elements of statistics | 60 | 30 | 30 K | E | 5 |
| Мусоlоду | 45 | 15 | 30 | С | 3 |
| Intellectual property protection | 15 | 15 | - | С | 1 |
| Training | 8 | 8 | - | Cwg | 1 |
| Information technology | 30 | - | 30 | С | 2 |
| Physical education | 30 | - | 30 Cw | С | - |
| Developmental biology | 30 | 15 | 15 | С | 2 |
| Microbiology | 60 | 30 | 30 | E | 5 |
| | 413 | | | | 30 |

2nd semester

| Courses | No.of hours | Lecture | Classes | Form of course completion | Credits ECTS |
|--|----------------|---------|---------|---------------------------------|-----------------|
| ^A Physical chemistry | 30 | 30 | - | С | 1.5 |
| ^A The elements of organic chemistry for biology students | 60 | 30 | 30 | E | 5 |
| Foreign language B2 | 30 | - | 30 | С | 1.5 |
| Human anatomy | 60 | 30 | 30 | С | 3.5 |
| General and taxonomic botany | 75 | 30 | 45 | E | 6 |
| Botany and zoology field classes | 60 | - | 60 | С | 3 |
| General and taxonomic zoology with principles of taxonomy | 90 | 30 | 60 | E | 7.5 |
| Parasitology | 30 | 15 | 15 | С | 2 |
| | 435 | | | | 30 |

Total: 848 h, 60 ECTS

3rd semester

| Courses | No.of hours | Lecture | Classes | Form of course completion | Credits ECTS |
|---|----------------|---------|-----------|---------------------------------|-----------------|
| Animal physiology – an extensive course | 90 | 30 | 60 | E | 7.5 |
| Foreign language B2 | 30 | - | 30 | С | 1.5 |
| Environmental protection – an extensive course | 60 | 30 | 15 + 15 T | Cag | 3 |
| Biochemistry | 90 | 30 | 60 | Е | 7.5 |
| Genetics with elements of human genetics | 60 | 30 | 30 | E | 5 |
| Radiology | 15 | 15 | - | С | 1 |
| Environmental toxicology | 60 | 30 | 30 | Cag | 4.5 |
| | 405 | | | | 30 |

4th semester

| Courses | No.of hours | Lecture | Classes | Form of course completion | Credits ECTS |
|---|----------------|---------|----------|---------------------------------|-----------------|
| Cell biology – an extensive course | 90 | 30 | 60 | E | 7.5 |
| Ethics | 15 | 15 | - | С | 1 |
| ^A The history of philosophy with elements of natural philosophy | 30 | 30 | - | E | 2.5 |
| Foreign language B2 | 30 | - | 30 | С | 1.5 |
| Basics of individual entrepreneurship | 10 | - | 10 K | С | 0.5 |
| Evolutionary biology | 30 | 15 | 15 K | С | 2 |
| Molecular biology with elements of molecular diagnostics | 60 | 30 | 30 | Е | 5 |
| Ecology | 75 | 30 | 40 + 5 T | E | 6 |
| Elements of pathophysiology | 15 | 15 | - | С | 1 |
| Basics of pharmacology | 45 | 15 | 30 K | С | 3 |
| | 400 | | | | 30 |

Total: 805 h, 60 ECTS

5th semester

| Courses | No.of hours | Lecture | Classes | Form of course completion | Credits ECTS |
|---|----------------|---------|---------|---------------------------------|-----------------|
| Genetic engineering – a basic course | 45 | 15 | 30 | Cag | 3.5 |
| Foreign language B2 | 30 | - | 30 | Е | 3.5 |
| Specialization practical training | 3 w. | | | Cwg | 4 |
| Academic lecture | 15 | 15 | - | С | 1 |
| Biochemistry of nutrition | 15 | 15 | - | С | 1 |
| Applied biology in medicine | 40 | - | 40 | С | 3 |
| Biological basics of herbal medicine | 70 | 30 | 40 | E | 6 |
| Human evolution | 30 | 15 | 15 K | С | 1.5 |
| Physical basis of instrumental diagnostics and physiotherapy | 30 | 20 | 10 | с | 1.5 |
| Human immunology with elements of virology | 60 | 30 | 30 | Е | 5 |
| | 335 | | | | 30 |

6th semester

| Courses | No.of hours | Lecture | Classes | Form of course completion | Credits ECTS |
|---|----------------|---------|---------|---------------------------------|-----------------|
| Biotechnology | 30 | 30 | - | С | 1.5 |
| Plant physiology – an extensive course | 90 | 30 | 60 | E | 8 |
| Mechanisms of evolution | 30 | 15 | 15 K | Е | 2.5 |
| Thesis + final exam | | | | E | 3 |
| Seminar | 45 | - | 45 S | С | 3 |
| Pharmacological botany | 75 | 30 | 40 + 5T | Cag | 6 |
| Human ecology | 30 | 15 | 15 K | С | 1.5 |
| Biomaterial engineering in medicine | 15 | 15 | - | С | 1 |
| Biochemical methods in clinical analysis | 45 | 15 | 30 | С | 3.5 |
| | 360 | | | | 30 |

Total: 695 h, 60 ECTS

Final count: 2348 h, 180 ECTS

Module at choice 58 ECTS – 32%:

A or B courses **15 ECTS**: (*Chemia fizyczna*^A **or** Physical chemistry^B**1.5 ECTS**; *Chemia ogólna i nieorganiczna z el. chemii analitycznej*^A **or** General and inorganic chemistry with elements of analytical chemistry^B**6 ECTS**; *Elementy chemii organicznej dla biologów*^A **or** The elements of organic chemistry for biology students^B**5 ECTS**; The history of philosophy with elements of natural philosophy^A **or** Contemporary problems in philosophy^B**2.5 ECTS**).

The others 43 ECTS (specialization courses 39; seminar 3; academic lecture 1).