# **DESCRIPTION OF THE COURSE OF STUDY**

| Course code           |         | 0912-7LEK-C3.3-P |  |  |  |  |  |  |  |
|-----------------------|---------|------------------|--|--|--|--|--|--|--|
| Name of the course in | Polish  | Parazytologia    |  |  |  |  |  |  |  |
|                       | English | Parasitology     |  |  |  |  |  |  |  |

#### 1. LOCATION OF THE COURSE OF STUDY WITHIN THE SYSTEM OF STUDIES

| 1.1. Field of study                             | medicine   |  |  |  |
|---|--|--|--|--|
| 1.2. Mode of study                              | Full-time  |  |  |  |
| 1.3. Level of study                             | Uniform Master's studies                             |  |  |  |
| 1.4. Profile of study*                          | General academic                                     |  |  |  |
| 1.5. Specialization*                            | lack   |  |  |  |
| 1.6. Unit running the course of study           | Faculty of Medicine and Health Sciences              |  |  |  |
| 1.7. Person/s preparing the course description  | Dr hab. n. med. Daniel Młocicki, dr Wioletta Adamus- |  |  |  |
|   | Białek , dr Rusłan Sałamatin                         |  |  |  |
| 1.8. Person responsible for the course of study | Dr hab. n. med. Daniel Młocicki, dr Wioletta Adamus- |  |  |  |
|   | Białek , dr Rusłan Sałamatin                         |  |  |  |
| 1.9. Contact                                    | wioletta.adamus-bialek@ujk.edu.pl                    |  |  |  |

#### 2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

| 2.1. Affiliation with the module                       | preclinical study                                 |
|--|---|
| 2.2. Language of instruction                           | English   |
| 2.3. Semesters in which the course of study is offered | 4 <sup>th</sup> semester                          |
| 2.4. Prerequisites*                                    | Microscopic techniques, basic concepts of general |
|  | biology   |

#### 3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

| 3.1. Form of classes               | Lecture: 15; classes:15; laboratories: 15                             |  |  |  |  |  |
|------------------------------------|---|--|--|--|--|--|
| 3.2. Place of classes              | Courses in the teaching rooms of the UJK                              |  |  |  |  |  |
| 3.3. Form of assessment            | Exam; credit with grade- lab.   |  |  |  |  |  |
| 3.4. Teaching methods              | Lecture – informative lecture, teaching supported by the computer.    |  |  |  |  |  |
|                                    | classes- laboratory classes, teaching supported by the computer.      |  |  |  |  |  |
|                                    | Demonstration with instruction, practical classes.                    |  |  |  |  |  |
| 3.5. Bibliography Required reading | 1. Human Parasitology 4/e, ELSEVIER, 2012, Bogitsh, Carter,           |  |  |  |  |  |
|                                    | Oeltmann,   |  |  |  |  |  |
|                                    | 2. Buczek A (red.). 2010. Parasitology for medical students           |  |  |  |  |  |
| Further reading                    | 1. Study Guide. Medical parasitology, 2009, Wydawnictwo UMP w         |  |  |  |  |  |
|                                    | Poznaniu, Majewska, Anna C.; Nowosad                                  |  |  |  |  |  |
|                                    | 2. Guerrant R. L. 2005. Tropical Infectious Diseases. Elsevier Health |  |  |  |  |  |
|                                    | Sciences, Philadelphia  |  |  |  |  |  |

# 4. OBJECTIVES, SYLLABUS CONTENT AND INTENDED TEACHING OUTCOMES

4.1. Course objectives (for all form of classes)

- C1 acquaintance with the biology of discussed parasites.
- C2 acquaintance with anatomical and morphological structure of selected parasites.
- C3 acquaintance with the role and importance of parasites for animals and humans.
- C4 acquaintance with the diagnostic and methods of treatment of parasitic invasion.

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C5 – acquaintance with the rules of collection and storage of material for testing for the presence of parasites.
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**4.2. Detailed syllabus** (for all form of classes)

lectures: the definition of parasitism. A host-parasite system. Physiological adaptation of the parasite to the host. Defense mechanisms occurring in a host – parasite system. Protozoology medical attention. Medical

Helminthology. Medical arachnoentomology. Reproduction, growth, development cycles of parasites belonging to various taxonomic groups. The geographic scope of the parasite – host system.

classes: discussion of selected species of parasites including the systematic assignment, induced by parasitosis and methods of their diagnosis and treatment.

| Code | A student, who passed the course  | Relation to<br>teaching<br>outcomes |  |  |  |  |
|------|---|-------------------------------------|--|--|--|--|
|      | within the scope of <b>KNOWLEDGE</b> :  |                                     |  |  |  |  |
| W01  | knows the epidemiology of infections with viruses, bacteria as well as fungal and parasites infections, including geographical range of their occurrence; | C.W13.                              |  |  |  |  |
|      | knows invasive human forms or stages of development of selected parasitic fungi,  |                                     |  |  |  |  |
|      | protozoa, helminths and arthropods, including geographical coverage of their  |                                     |  |  |  |  |
| W02  | W02 occurrence;   |                                     |  |  |  |  |
| W03  | understands the functional principle of the parasite - host pair and knows the basic symptoms of illnesses caused by parasites;                           | C.W16.                              |  |  |  |  |
| W04  | knows and understands the basics of microbiological and parasitological diagnosis;  | C.W18.                              |  |  |  |  |
|      | within the scope of <b>ABILITIES</b> :  |                                     |  |  |  |  |
| U01  | operates the optical microscope, also making use of immersion;  | A.U1.                               |  |  |  |  |
| U02  | recognizes the most common human parasites on the basis of their construction, life cycles and symptoms of the disease;                                   | C.U7.                               |  |  |  |  |
| U03  | prepares a microscopic formulation and recognizes pathogens under a microscope;   | C.U9.                               |  |  |  |  |

| 4.4. Methods of assessment of the intended teaching outcomes |   |                            |  |                             |   |   |                                |   |  |   |   |  |                                   |   |  |                                      |   |  |                    |   |  |
|--|---|----------------------------|--|-----------------------------|---|---|--------------------------------|---|--|---|---|--|-----------------------------------|---|--|--------------------------------------|---|--|--------------------|---|--|
|  |   | Method of assessment (+/-) |  |                             |   |   |                                |   |  |   |   |  |                                   |   |  |                                      |   |  |                    |   |  |
| Teaching   | Exam<br>oral/written*<br>Form of<br>classes |                            |  | Test*<br>Form of<br>classes |   |   | Project*<br>Form of<br>classes |   |  | Effort<br>in class*<br>Form of<br>classes |   |  | Self-study*<br>Form of<br>classes |   |  | Group<br>work*<br>Form of<br>classes |   |  | Others*            |   |  |
| outcomes<br>(code)   |   |                            |  |                             |   |   |                                |   |  |   |   |  |                                   |   |  |                                      |   |  | Form of<br>classes |   |  |
|  | L   | С                          |  | L                           | С |   | L                              | С |  | L   | С |  | L                                 | С |  | L                                    | С |  | L                  | С |  |
| W01  | +   |                            |  |                             | + |   |                                |   |  |   |   |  |                                   |   |  |                                      |   |  |                    |   |  |
| W02  | +   |                            |  |                             | + |   |                                |   |  |   |   |  |                                   |   |  |                                      |   |  |                    |   |  |
| W03  | +   |                            |  |                             | + |   |                                |   |  |   |   |  |                                   |   |  |                                      |   |  |                    |   |  |
| W04  | +   |                            |  |                             | + |   |                                |   |  |   |   |  |                                   |   |  |                                      |   |  |                    |   |  |
| U01  |   |                            |  |                             |   |   |                                |   |  |   | + |  |                                   |   |  |                                      |   |  |                    |   |  |
| U02  |   |                            |  |                             | + | + |                                |   |  |   |   |  |                                   |   |  |                                      |   |  |                    |   |  |
| U03  |   |                            |  |                             |   |   |                                |   |  |   | + |  |                                   |   |  |                                      |   |  |                    |   |  |

| 4.5. Crit                     | eria of a | ssessment of the intended teaching outcomes  |
|-------------------------------|-----------|--|
| Form of<br>classes            | Grade     | Criterion of assessment  |
| (                             | 3         | 61% to 68%   |
| ) (L                          | 3,5       | 69% to 76%   |
| ure                           | 4         | 77% to 84%   |
| lecture (L)                   | 4,5       | 85% to 92%   |
| Ι                             | 5         | 93% to 100%  |
|                               | 3         | 61% to 68%   |
| C)*                           | 3,5       | 69% to 76%   |
| s ((                          | 4         | 77% to 84%   |
| classes (C)*                  | 4,5       | 85% to 92%   |
| cla                           | 5         | 93% to 100%  |
| tical<br>ses                  | 3         | From 61% to 68% Learning programme content on the basic level, replies chaotic, leading questions necessary.               |
| Practical<br>classes<br>(PC)* | 3,5       | From 69% to 76% Learning programme content on the basic level, answers systematized, requires assistance from the teacher. |

| 4   | From 77% to 84% Learning programme content on the basic level, answers systematized, independent. Solving of problems in typical situations.                           |
|-----|--|
| 4,5 | From 85% to 92% The scope of presented knowledge exceeds the basic level based on the supplementary literature provided. Solving of problems in new complex situations |
| 5   | From 93% to 100% The scope of presented knowledge exceeds the basic level based on independently acquired scientific sources of information                            |

### • Thresholds are valid from 2018/ 2019 academic year

### Conditions for obtaining credit:

1. Condition for admission to the examination is the completion of all classes (including written tests) as well as presence in all lectures.

2. Practical and theoretical knowledge required, not only the current subject, but also aspects previously discussed and related to the course subject.

3. All students will be assessed during each class.

4. The grade, including insufficient can be improved only once within 14 days, during subsequent classes. Test correction will be performed within two weeks.

5. Study Regulations do not allow an unexcused absence. An unexcused absence can be fulfilled during next class.6. The assistant conducting classes with the group of students is responsible for the above mentioned organizational matters.

7. A final written exam.

## Criteria for evaluation of oral answer

1. Provision of a comprehensive answer to the problem (task)

2. Skill of integration of knowledge from allied domains (disciplines)

- 3. Independence and/or creativity in the presentation of the scope of problems, proposals of solutions
- 4. Presentation of the current knowledge related with the discipline (domain)

5. Recognition of problems resulting from the task

### Criteria for evaluation of written answer

1. Compliance with the essence of the subject matter of work (task) /

2. Provision of a comprehensive answer to the problem (task) /

3. Skill of integration of knowledge from allied domains (disciplines) /

4. Independence and/or creativity in the presentation of the scope of problems

5. Presentation of the current knowledge related with the discipline (domain), pertinent selection of literature.

## 5. BALANCE OF ECTS CREDITS - STUDENT'S WORK INPUT

| Category  | Student's workload<br>Full-time<br>studies |
|---|--|
| NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER<br>/CONTACT HOURS/ | 45   |
| Participation in lectures*  | 15   |
| Participation in classes, seminars, laboratories*                               | 30   |
| Preparation in the exam/final test*   |  |
| Others*   |  |
| INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/                              | 30   |
| Preparation for the lecture*  |  |
| Preparation for the classes, seminars, laboratories*                            | 15   |
| Preparation for the exam/test*  | 5  |
| Gathering materials for the project/Internet query*                             | 10   |
| Preparation of multimedia presentation  |  |
| Others*   |  |
| TOTAL NUMBER OF HOURS   | 75   |
| ECTS credits for the course of study  | 3  |

Accepted for execution (date and signatures of the teachers running the course in the given academic year)

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