

Course title: <b>Biology and ecology code 0511</b> Kliknij lub naciśnij tutaj, aby wprowadzić tekst.		
Field of study:		
Type of study: <b>full-time studies</b>	The level of education: <b>first-cycle studies</b>	Education profile: <b>general academic</b>
Type of subject: Wybierz element.	Semester: Wybierz element.	Course language: <b>English</b>
Course type: <b>lecture, tutorials, laboratory</b>	Number of hours: <b>15L, 30T, 30Lab</b>	ECTS Credit points: <b>7</b>

## SYLLABUS

### COURSE OBJECTIVES

C.1. Kliknij lub naciśnij tutaj, aby wprowadzić tekst.

### PRELIMINARY COURSE REQUIREMENTS FOR KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Kliknij lub naciśnij tutaj, aby wprowadzić tekst.

### SUBJECT EDUCATIONAL EFFECTS

**EU 1** - Kliknij lub naciśnij tutaj, aby wprowadzić tekst.

### COURSE CONTENT

Form of classes - lectures	Hours
Life begins with cell	1
Molecular basis of genetics	2
Protein structure and functions	2
Prokaryotic cells and viruses	2
Eukaryotic cells	2
Mitochondrial genetics	1
Soil habitat	1
Soil biota	1
Molecular methods for studying soil ecology	1
Soil biogeochemical cycling of inorganic nutrients and metals	1
Test	1
Form of classes - tutorials	Hours
Biology: Bacteria	3
Biology: Fungi	3
Biology: Algae	3
Biology: Viruses	3
Test	2
Ecology: Environment and Ecology.	3

Ecology: Human impact on the environment	3
Ecology: Natural resources	3
Ecology: Energy	2
Ecology: Environmental pollution	3
Test	2
Current environmental issues of importance	<b>Hours</b>
Introduction to laboratory exercises, safety rules etc.	2
Plating by the method of grated plates of soils of various origins (Koh's dilution method), incubation	2
Qualitative and quantitative assessment of the grown microbial colonies	4
Qualitative evaluation under the microscope of selected fungi	5
Isolation of selected fungi on differentiating media	6
Preparation of biotic series of selected pairs of fungi	4
Results and processing of the obtained results	4
Defense of studies	3

### COURSE STUDY METHODS

1. blackboard
2. multimedia presentation
3. laboratory setup
4. the literature and instructions for laboratory classes

### METHODS OF ASSESMENT ( F - formative; S - summative)

F1. - activity in classes
F2. - evaluation of work during laboratory exercises
S1. - test
S2. - evaluation of the laboratory reports

### STUDENT WORKLOAD

Form of activity	Workload (hours)
Participation in lectures	14 h
Participation in classes	26 h
Laboratory	30 h
Participation in project classes	5 h
Participation in seminar	-
Preparation course on e-learning	-
Test	5 h
Entrance test for laboratory classes	15 h
Project's defence	-
Exam	-
Consultation hours	15 h
<b>DIRECT TEACHING, hours/ ECTS</b>	<b>110 h / 4,4 ECTS</b>

Preparation for tutorials	20 h
Preparation for laboratories	20 h
Preparation for projects	-
Preparation for seminars	-
Preparation for e-learning classes	-
Participation in e-learning classes	-
Working on project	-
Preparation for tests	25 h
Preparation for exam	-
<b>SELF-STUDY, hours/ ECTS</b>	<b>65 h / 2,6 ECTS</b>
<b>TOTAL (hours)</b>	<b>175 <math>\Sigma</math></b>
<b>TOTAL ECTS</b>	<b>7 ECTS</b>

**SUBJECT COORDINATOR (NAME, SURNAME, E-MAIL ADDRESS)**

1. Krzysztof Fijałkowski, krzysztof.fijalkowski@pcz.pl

**NAME OF LECTURER (s) (NAME, SURNAME, E-MAIL ADDRESS)**

1. Krzysztof Fijałkowski, krzysztof.fijalkowski@pcz.pl

**OTHER USEFUL INFORMATION**

1. All the information on the class schedule is posted on the student information board and online at: <https://is.pcz.pl/>.
2. The information about the consultation hours is provided to students on the first class meeting and posted online at <https://is.pcz.pl/>.
3. The information on course completion and grade is provided to students on the first class meeting.