SYLLABUS

REGARDING THE QUALIFICATION CYCLE 2021/2022 - 2022/2023

Academic year 2021/2022

1. BASIC COURSE/MODULE INFORMATION

Course/Module title	**AEROBIOLOGY**
Course/Module code *	
Faculty (name of the unit offering the field of study)	College of Natural Sciences
Name of the unit running the course	Institute of Biology and Biotechnology
Field of study	Biology
Qualification level	II degree
Profile	general academic
Study mode	stationary
Year and semester of studies	year Ist or IInd, sem. 2th or 4th
Course type	Specialized course
Language of instruction	English
Coordinator	Prof. dr hab. Idalia Kasprzyk
Course instructor	Prof. dr hab. Idalia Kasprzyk

* - as agreed at the faculty

1.1.Learning format – number of hours and ECTS credits

Semester (n0.)	Lectures	Classes	Colloquia	Lab classes	Seminars	Practical classes	Internships	others	**ECTS credits**
2nd or 4th	14			14					2

1.2. Course delivery methods

- conducted in a traditional way
- involving distance education methods and techniques

1.3. Course/Module assessment (an exam, pass with a grade, pass without a grade)

2. PREREQUISITES

Good communication, reading and writing English; knowledge of: general and systematic botany,

3. Objectives, Learning Outcomes, Course Content, and Instructional Methods

3.1. Course/Module objectives

O1	Morphology of pollen grains and fungal spores.
O2	The influence of abiotic parameters on airborne fungal spores and pollen grains.
O3	The use of aerobiology in practice

3.2. Course/Module Learning Outcomes (to be completed by the coordinator)

Learning Outcome	The description of the learning outcome defined for the course/module	Relation to the degree programme outcomes
LO_01	the graduate defines in depth of the leavel the basic concepts of aerobiology.	K_W01
LO_02	The graduate explains in detail the relationship between the weather, climate and the occurrence of pollen grains and fungal spores in the air.	K_W01
LO_03	the graduate is fluent in the use of scientific literature and uses specialist terminology in English	K_U08, K_U11

3.3. Course content (to be completed by the coordinator)

A. Lectures

Content outline
Methods in aerobiology
Fungal spores, pollen grains –structure and function
Seasonal and daily concentration of sporomorphs in the air
The influence of meteorological parameters on the aerobiological phenomena
Application of aerobiological results in medicine, agriculture and forensic

B. Classes, tutorials/seminars, colloquia, laboratories, practical classes

Content outline
The identification of pollen grains of selected plants
The identification of chosen pathogenic and allergenic fungal spores
Methods of sampling and microscopy
Scanning microscopic slides from different periods of the season

3.4. Methods of Instruction

e.g.

Lecture: a problem-solving lecture/a lecture supported by a multimedia presentation/ distance learning
Classes: text analysis and discussion/project work (research project, implementation project, practical project)/ group work (problem solving, case study, discussion)/didactic games/ distance learning
Laboratory classes: designing and conducting experiments

Lecture: Audio/video presentations.

Classes: practical laboratory work, discussion

4. Assessment techniques and criteria

4.1 Methods of evaluating learning outcomes

Learning outcome	Methods of assessment of learning outcomes (e.g. test, oral exam, written exam, project, report, observation during classes)	Learning format (lectures, classes,…)
LO_01-02	A written and practical test, an observation during a lecture and a laboratory work	LECTURES, CLASSES
LO_03	A written and practical exam, an observation during a lecture and a laboratory work	LECTURES, CLASSES

4.2 Course assessment criteria

Attendance is expected in all lectures, indoor workshop. Assessment for this course is done in many different ways. It takes into account both the knowledge from the lectures, analytical and critical thinking, laboratory work skills and communication skills.

5. Total student workload needed to achieve the intended learning outcomes – number of hours and ECTS credits

Activity	Number of hours
Scheduled course contact hours	28

Other contact hours involving the teacher (consultation hours, examinations)	7
Non-contact hours - student's own work (preparation for classes or examinations, projects, etc.)	15
Total number of hours	50
Total number of ECTS credits	2

* One ECTS point corresponds to 25-30 hours of total student workload

6. Internships related to the course/module

Number of hours	n.a.
Internship regulations and procedures	n.a.

7. Instructional materials

Compulsory literature: • **KASPRZYK I. SMITH M. 2015. MANUAL FOR AEROBIOLOGY. WYD. UNIV.RZESZOW., RZESZÓW**
Complementary literature: Sofiev M., Bergmann K.C. (Eds.) 2013. Allergenic Pollen. A Review of the Production, Release, Distribution and Health Impacts. Springer

Approved by the Head of the Department or an authorised person