SYLLABUS

REGARDING THE QUALIFICATION CYCLE 2021/2022 - 2022/2023

Academic year 2021/2022

1. BASIC COURSE/MODULE INFORMATION

Course/Module title	**Forensic botany**
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	I degree
Profile	general academic
Study mode	stationary
Year and semester of studies	year I, sem. 1
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**
1	8			16					3

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	the possibility of using botanical analyzes in the judiciary
O2	plants and their fragments most often analyzed by forensic experts
O3	methods of collecting plant evidences

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 student knows the concepts of forensic botany, forensic palynology and algology	K_W01
LO_02	the student characterizes the morphology of pollen grains and diatoms, seeds, leaves, needles, shoots	K_W01
LO_03	the student correctly selects the research methods used for sampling various materials	K_U03
LO_04	the student can determine the botanical origin of honey	K_U06
LO_05	on the basis of the analysis of palynological and diatomaceous material, the student is able to assess probable place and time of the event	K_U02
LO_06	the student is ready to apply the acquired skills in solving problems in the field of forensics botany	K_K02

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

A. Lectures

Content outline
Fungi spores, pollen and diatoms as objects of forensic research
Poisonous plants and fungi and their identification
Usefulness of the analysis of plant macroremains in forensic botany

Descriptions of court cases when botanical research was used

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

Content outline
Sampling materials and preparation for pollen analysis
Identification of pollen grains
Detection of falsification in determining the botanical origin of the honey
Identification of plants based on their fragments
The spectrum of diatoms from various types of water bodies.

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 exam, observations during lectures and laboratory works	LECTURES, CLASSES
LO-03-07	A written and practical exam, observations during lectures and laboratory works	CLASSES

4.2 Course assessment criteria

Attendance is expected in all lectures, indoor workshops. Assessment for this course is carried out in many different ways. It takes into consideration both knowledge of the lecture but also critical thinking skills, technical skills, communication skills and collaborative 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	24
Other contact hours involving the teacher (consultation hours, examinations)	15
Non-contact hours - student's own work (preparation for classes or examinations, projects, etc.)	20
Total number of hours	59
Total number of ECTS credits	3

* 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:

- Coyle HM., Lee CL., Lin WY., Lee HC., Palmbach TM. 2005. Forensic botany: Using Plant evidence to aid in forensic death investigation. Forensic Science 46(4): 606-612
- Hall, Byrd. 2012. Forensic Botany. A practical guide. John Wiley & Sons, Ltd

Complementary literature:

- Verma K. 2013. Role of diatoms in the world of forensic science. J. Forensic Res. 4:2
- Mildenhall DC, Wiltshire PE, Bryant VM. 2006. Forensic palynology: why do it and how it works. Forensic Sci Int. 22;163(3):163-72. doi: 10.1016/j.forsciint.2006.07.012.

Approved by the Head of the Department or an authorised person