UNIWERSYTET IM. ADAMA MICKIEWICZA W POZNANIU

Fundamentals of the Theory of Evolution

Educational subject description sheet

Basic information

Study programme
Liberal Arts and Sciences (English programme)

Speciality
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Organizational unit
Faculty of History

Study level
First-cycle programme

Study form
Full-time

Education profile
General academic

Didactic cycle
2023/24

Subject code
18LENS.18K.02969.23

Lecture languages
English

Course type
Obligatory

Block
Major subjects

Subject coordinator	Jacek Radwan
Lecturer	Jacek Radwan

Period	**Activities and hours**	**Number of ECTS points**
Semester 4	• Lecture: 30, Exam	4

Goals

Code	Goal
C1	getting student acquainted with main lines of evidence of evolution
C2	developing student's understanding of natural selection as a powerful scientific theory explaining evolution of biodiversity on earth
C3	developing student's understanding of the mechanisms of adaptation by natural selection
C4	developing student's ability to interpret biological facts and processes in the light of theory of evolution

Entry requirements

There are no prerequisites.

Subject learning outcomes

Code	Outcomes in terms of	Learning outcomes	Examination methods
Knowledge – Student:			
W1	student understands the theory and mechanisms of natural selection	LEN_K1_W10	Written exam
W2	student understands the role of evolutionary processes in shaping biodiversity	LEN_K1_W08	Written exam
Skills – Student:			
U1	student can interpret biological and social phenomena in light of evolutionaty theory	LEN_K1_U06	Written exam

Study content

No.	Course content	Subject learning outcomes	Activities
1.	Evidence for biological evolution.	W2, U1	Lecture
2.	Fundamentals of evolutionary theory: adaptations as a result of natural selection; genetic theory of natural selection; the role of genetic drift.	W1, U1	Lecture
3.	Levels of selection, kin selection, sexual selection and conflict, evolutionary geme theory.	W1, U1	Lecture
4.	Evolution of biodiversity: evolution of life history and ageing; speciation	W2, U1	Lecture

Additional information

Activities	Teaching and learning methods and activities
Lecture	Lecture with a multimedia presentation of selected issues, Conversation lecture

Activities	Credit conditions
Lecture	Passing the exam. Grade scale: very good (bdb; 5.0): achievement by the student of at least 90% of the expected learning outcomes good plus (+db; 4.5): achievement by the student of at least 80% of the expected learning outcomes good (db; 4.0): achievement by the student of at least 70% of the expected learning outcomes Sufficient plus (+dst; 3.5): Achievement of expected learning outcomes by the student at a minimum of 60%. Sufficient (dst; 3.0): Achievement of at least 50% of the expected learning outcomes. unsatisfactory (ndst; 2.0): the student does not achieve the expected learning outcomes.

Literature

Obligatory

1. Futuyma, J.D., & Kirkpatrick M., Evolution (4th Ed.), Sinauer Associates, Sunderland, MA 2018.

Optional

1. Dawkins R., The Blind Watchmaker. Penguin Science, Penguin Books, Harlow, England 2006.

Calculation of ECTS points

Activities	**Activity hours***
Lecture	30
Reading the indicated literature	90
Student workload	**Hours** 120
Number of ECTS points	**ECTS** 4

* academic hour = 45 minutes

Efekty uczenia się dla kierunku

Kod	Treść
LEN_K1_U06	The graduate can use knowledge of the humanities, social sciences, and sciences to diagnose and evaluate developments in society
LEN_K1_W08	The graduate knows and understands the processes of development of the sciences and selected issues of contemporary research
LEN_K1_W10	The graduate knows and understands the processes of development of experimental sciences and selected issues of contemporary research