

Course title: ORNITHOLOGY

ECTS credit allocation (and other scores): 2

Semester: summer

Level of study: ISCED-6 - first-cycle programmes (EQF-6)

Branch of science: Natural sciences

Language: English

Number of hours per semester: 30 h.

Course coordinator/ Department and e-mail: Jacek J. Nowakowski; Department of Botany and Evolutionary Ecology; jacek.nowakowski@uwm.edu.pl

Type of classes: classes and lectures

Substantive content

CLASSES: Conducting field observations using binoculars and telescopes, making a description and identifying the species using a key or atlas (methodology for recognizing birds in the field). Forest birds - Birds of the open landscape - Birds of water ecosystems and wetlands (field observations). Birds monitoring methods (field exercises).

LECTURES Contemporary views on the origin, evolution and systematics of birds; phylogeny of birds. Methods of field research: basic observer's equipment. Species recognition in field conditions: morphology (size and silhouette, topographic anatomy), voices, behaviour (way of moving, types of fly), tracks and sings. Geographical and ecological distribution of birds. Review of birds inhabiting different habitats: species identification; distribution in Poland; habitat selection, biology and ecology. Birds of water habitats. Birds of open habitats: grasslands and wetlands. Birds of forests. Birds of urban area. Methods of bird research and monitoring.

LEARNING PURPOSE: To acquaint students with the modern systematics of birds, selected aspects of evolution, ecology and biology. Getting to know field study methods and conducting ornithological observations on species recognition and estimation of population number.

On completion of the study programme the graduate will gain:

KNOWLEDGE: student knows the origin, evolution and systematics of birds, geographical and ecological distribution of birds, bird topography.

SKILLS: student conducts observation in the field, makes a description and recognizes the species after the traits and voices, applies methods of estimation of the birds' abundance and distribution.

SOCIAL COMPETENCIES: observes ethical principles during observation and shows diligence in conducting research.

Basic literature: 1.) Svensson L., Birds of Europe, Princeton University Press, 2009 (library of Dep. Botany and Evolutionary Ecology). 2.) Pettingill O.S., Ornithology in Laboratory and Field, Academic Press, 1985. 3.) Gregory R.D., Gibbons D.W., Donald P.F., Bird census and survey techniques [in:] Bird Ecology and Conservation: A Handbook of Techniques, Oxford University Press, R. 2004.

https://www.researchgate.net/publication/241473794_2_Bird_census_and_survey_techniques

Supplementary literature: 1.) Goldsmith, F. B. (ed.), Monitoring for conservation and ecology, Chapman and Hall, New York, 1991. 2.) Bibby C.J., Hill D.A., Burges N.D., Bird Census Techniques, Academic Press, 1992.

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 32 h.

Student's independent work: 18 h.