

**Subject Area: Advanced Methods in Biotechnology and Biodiversity**  
**Subject: Plant invasions: species biology, ecological threat and ecosystem management**

**Level: PhD**

**Year: I - IV**

**Semester: S**

**Speciality: N/A**

**Status: Facultative**

**ECTS: 2**

**Department(s): Botany and Nature Protection**

**Cooperating Department:**

*Form of teaching (Number of hours; Form of assessment: Exam or Credit)*

*Lectures*

*Seminars/Conversatoria -*

*Practicals*

*Total*

**0**

**5**

**10**

**15**

**Staff:**

SUBJECT COORDINATOR: prof. Barbara Tokarska-Guzik, PhD

LECTURE/CONVERSATORIA: prof. Barbara Tokarska-Guzik, PhD

PRACTICALS: prof. Barbara Tokarska-Guzik, PhD; Katarzyna Bzdęga, PhD

**Contents:**

CONVERSATORIA: Plant invasions as a fraction of the whole process of biological invasions concerning marine, freshwater and terrestrial environments. Human perceptions of plant invasions and the role of humans in the invasion process from different perspectives and geographical areas.

PRACTICALS: Case studies of the biology and ecology of invasive species, mechanisms of invasion and ecological impacts. Best practices for prevention, control, monitoring, risk assessment, and – in limited cases – eradication of IAS. Prioritization process scheme for invasive alien plants.

**Methods and forms of teaching:** Interactive seminar, practical training during field visits, case-study analysis, use of databases, individual work according to the protocols

**Requirements:** knowledge in plant diversity, biology and ecology

**Literature** (*maximum 5, preferably recent sources, all in English*):

1. Lockwood J.L., Hoopes M.F., Marchetti M.P. (2013) *Invasion Ecology*. Blackwell Publishing Ltd.
2. DAISIE Handbook of Alien Species in Europe. (2009) Springer, Dordrecht
3. Perrings C., Dehnen-Schutz K., Touza J., Williamson M. (2005) How to manage invasive species under globalization. *Trends Ecol Evol* 20: 212-215.
4. Brunel S., Branquart E., Fried G., van Valkenburg J., Brundu G., Starfinger U., Buholzer S., Uludag A., Joseffson M., Baker R. (2010) The EPPO prioritization process for invasive alien plants. *Bulletin OEPP/EPPO* 40: 407-422.
5. Online manuals and guides available at different web pages

**Remarks** (*if necessary*):