**Study programme**: PhD in Biology

**Level**: PhD degree

**Course title: The Biology of Aquatic Vascular Plants** 

Lecturer: Dr Dragana Vukov, assistant professor

Status: elective ECTS: 15 Requirements: -

# Learning objectives

Introduction to the different comparative biological aspects of freshwater and marine vascular plants.

## **Learning outcomes**

Gaining knowledge on aquatic vascular plants as a base for individual research.

### **Syllabus**

Theoretical instruction

Features of aquatic vascular plants. Features of aquatic environment. The structure and physiology of emergent foliage. The structure and physiology of floating leaves. The structure and physiology of submerged organs. The structure and physiology of underground organs. The free-floating habit. Vegetative polymorphism and the problem of heterophylly. Sexual reproduction and natural affinities. Vegetative reproduction and perennation. Some aspects of geography of aquatic vascular plants. The growth of hydrophyte communities and their interaction with the aquatic environment. The problem of aquatic weeds. The control of aquatic weeds. The aesthetic and economic value of aquatic plants.

### Practical instruction

- 1. Introduction to the contemporary approaches in aquatic vascular plant's research
- 2. The desighn of research project and planing of the experiment
- 3. Experiment realisation
- 4. Data processing
- 5. Writting of publication/ seminary paper

## Literature

Seminary paper: 50

SCULTHORPE, D.C. (1967): The Biology of Aquatic Vascular Plants. Edvard Arnold (Publishers) Ltd. London

HUTCHINSON, G. E. (1975): A treatise on limnology, v. 3. Limnological botany. John Wiley & Sons, New York, London, Sydney, and Toronto.

COOK, C.D.K. (1991): Aquatic Plant Book. SPB Academic Publishing, The Hague, The Netherlands.

Weekly teaching load				Other:	
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5		
Teaching methodology					
Lectures and consultations, experimental work					
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Grading method (maximal number of points 100)					
Oral exam: 50					