
Course title: AQUATIC ECOSYSTEM PROTECTION - COST BENEFIT ANALYSIS

ECTS credit allocation (and other scores): 1.5

Semester: autumn

Level of study: ISCED-7 - second-cycle programmes (EQF-7)

Branch of science: Agricultural sciences

Language: English

Number of hours per semester: 25

Course coordinator/ Department and e-mail: dr inż. Adam Pawlewicz, Department of Agrotechnology, Agricultural Production Management and Agribusiness, adampawl@uwm.edu.pl

Type of classes: classes and lectures

Substantive content

CLASSES: Stages of Analysis of costs and benefits of investment projects: defining and defining objectives, project identification, feasibility and alternative solutions analysis, financial analysis, economic analysis, multi-criteria analysis, sensitivity and risk analysis. Example of a project.

LECTURES: Theoretical and practical sources of the cost-benefit analysis. Economy of well-being. Rationality and economic efficiency and effectiveness. Main problems in the methodology of cost-benefit analysis in the context of the natural environment. Stages of the cost-benefit analysis in the valuation of the natural environment. Methods valorisation of the natural environment and their application.

Learning purpose: The basic aim of education is to provide theoretical knowledge and presentation of practical tools used to carry out a cost-benefit analysis of investment and protective projects. In principle, a cost-benefit analysis should show whether a given venture will lead to an increase in the welfare of the affected community. A broadly understood socio-economic cost-benefit analysis should take into account not only the financial costs and benefits expressed in cash flows, but also provide information on those aspects of the project's impact that are not subject to market transactions. Such aspects are characteristic primarily for public goods, including the natural environment.

On completion of the study programme the graduate will gain:

Knowledge: Defines elementary concepts related to the cost-benefit analysis. Student knows about the possibilities and limitations of the method of costs and benefits in the field of valuation of the natural environment. Defines the factors determining the specificity of pro-ecological investments.

Skills: He knows the procedure for assessing the effectiveness and rationality of projects in the protection of aquatic ecosystems. He can make an assessment of the economic effectiveness of investments on the example of a project in the field of water and sewage management.

Social Competencies: Is aware of the need to protect aquatic ecosystems. He can communicate and discuss expressing his opinions.

Basic literature: Foltyn-Zarychta M. 2008. Analiza kosztów-korzyści w ocenie efektywności inwestycji proekologicznych. Wyd. Akademii Ekonomicznej w Katowicach; Czaja S., Becla A., Zielińska A. 2012. Analiza kosztów-korzyści w wycenie środowiska przyrodniczego. Analiza kosztów i korzyści projektów inwestycyjnych. 2003. Komisja Europejska; Przewodnik do analizy kosztów i korzyści projektów inwestycyjnych. 2008. Komisja Europejska

Supplementary literature: –



The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 0.96 ECTS points

Student's independent work: 0.54 ECTS points