

Subject	Practical ecology exercises
Time Range	0,5 lesson a week, 17 lessons a year
Grade	third
Code and name of the field of study	7237 M information system and services
Language	Slovak

Characteristics and objectives of the teaching subject

The aim of the subject of practical ecological exercises in ecology in the third year of the study field 7237 M information system and services is to contribute to the development of the student's personality so that in the field of knowledge, skills and abilities he acquires the ability to understand, analyze and evaluate the relationships between man and his environment based on knowledge laws governing life on Earth. To know and understand the connections between the development of the human population, to understand the impact of man on the climate and the environment in general, to know global problems and to bear personal responsibility in relation to the environment.

This subject should have a practical character, its goal is to deepen and develop practical knowledge of ecological laws and their importance for the protection of the environment and human health. Students should understand that we all live on one Earth and therefore we should respect and protect it. Knowing the laws governing living nature is the basis for understanding its functioning as a whole and a prerequisite for forming a relationship with it and a responsible approach to the surrounding world and to oneself. In the third year, part of the curriculum will be taught in the form of practical exercises, excursions, discussions and lectures (activities of the Sewage treatment plant in Holíč, waste management, protected areas in the region, ...)

Overview of education and training strategies:

In the teaching subject of practical ecology exercises, we use educational and training strategies to create and develop the following key competences, which enable students to:

Problem solving skills

- to recognize problems in the course of their education by using all the methods and means available to them at the given moment (observation, testing, etc.),
- to express or formulate (unequivocally) a problem that will arise during their education,
- to search for, propose or use additional methods, information or tools that could contribute to the solution of the given problem, unless the methods, information and means used so far did not lead to the goal,
- to assess the solution of the given problem from the point of view of its correctness, clarity or efficiency and, on the basis of these aspects, possibly compare different solutions to the given problem,
- to correct incorrect solutions to the problem,
- to use the acquired methods of solving problems in other areas of student education, as long as the given methods are applicable in these areas.

Ability to use information technology

- to obtain information in the course of their professional education by using all the methods and means available to them at that moment,
- to collect, sort, assess and use information that could contribute to the solution of the given problem or acquire new knowledge.

General assessment guidelines:

Student evaluation will be based on evaluation criteria in each educational output. The teacher continuously checks the knowledge and skills of the students mainly through practical work. Oral answers and prepared worksheets will be used as means of evaluation. The classification and assessment of pupils will be governed by the current Methodological Instruction for the assessment and classification of secondary school pupils issued by the Ministry of Education of the Slovak Republic.

Project: ACC03P30 „Awareness raising on climate change mitigation and adaptation among school pupils and the public“. The project has been co-financed from the Norway Grants and from the State Budget of the Slovak Republic

Applicant: Spojená škola, Námestie sv. Martina 5, 908 51 Holíč

Programme: „Climate Change Mitigation and Adaptation“

ACC

Teaching strategy

The following methods and forms of teaching will be used during teaching:

Methods:

Information receptive - interpretation

Reproductive - guided interview

Heuristic - interview

Forms of work:

Frontal teaching

Frontal and individual work of pupils

Group work of pupils

Work with worksheets

Excursion to the region

Literature

The following learning resources will be used to support and activate the teaching and learning of students:

Literature:

Vladimír Krejčí: Rastlinná výroba pre pre 2.a 3. ročník SOU, Bratislava, PRÍRODA 1991

Jozef Riman ,Lubomír Brtek: Základy ekológie pre SOŠ a SOU, IMPRO, spol .s r.o., Litera 1994

Danuše Kvasničková: Základy ekológie, SOŠ a SOU,1990 SPN Bratislava

Kvasničková D.: Základy ekológie, SPN. Bratislava 1991

Riman J., Brtek Ľ.: Základy ekológie IMPRO, s.r.o. Bratislava 1995

Kvasničková D., Mikulová V., Plachejdová E., Kalina V., Jedlička L., Alföldiová A., Gubová D.: Životné prostredie, SPN, Bratislava 2002

Didactic technique:

Data projector

PC

Blackboard

Practical aids

Material teaching aids:

Models, pictures, diagrams, thermometer, plant atlas

Other resources:

Internet, Brochures, Posters, Maps, CDs, Specialized literature

Professional magazines, Current articles in newspapers related to the environment

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SUBJECT						
Practical ecology exercises		0,5 lesson a week, 17 lessons a year				
Study field: 3rd grade						
Topic	Number of lessons	Intersubject relations	Expected learning outcomes	Criteria for evaluating educational outcomes	Evaluation methods	Means of assessment
Climate changes	17 h		Student should:	Student:		
Water The importance of greenery in human settlements The temperature of the planet Transformations of trees Treasure in the soil			<ul style="list-style-type: none"> Explain the importance of water Characterize how water affects the climate Familiarize himself with water retention in the country Compare temperatures in different vegetation Compare the ratio of greenery/built-up area - then and now Find out the temperature in different places and surfaces Find and present the factors that affect the temperature of the planet Observe the growing seasons of trees Identify deciduous trees around the school Know the origin and importance of soil Observe and compare soil erosion 	<ul style="list-style-type: none"> Explained the importance of water Characterized how water affects the climate Familiarized himself with water retention in the country Compared temperatures in different vegetation Compared the ratio of greenery/built-up area - then and now Found out the temperature in different places and surfaces Found and present the factors that affect the temperature of the planet Observed the growing seasons of trees Identified deciduous trees around the school Knew the origin and importance of soil Observed and compared soil erosion 	Practical examination Oral examination An interview Group work	Worksheets Oral answers

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