UNIVERSITY "UKSHIN HOTI" PRIZREN

Educational faculty

PROGRAM: **Basic program**

SYLLABUS							
Level of studies	Bachelor	***Program***	EDU-Bos	***Academic year***	2018/2019		
SUBJECT	**Fundamentals of Natural Sciences with Methodology II**						
Year	1rd	***Status Of the subject***	electoral	***Code***		***ECTS credits***	5
Semester	IV						
Teaching weeks	15	***Hours teaching***	45	***Lectures***	***Exercises***		
				2	1		
Teaching Methodology	**Lectures, exercices, seminar papers, consultations, etc.**						
Consultations	**1 hr / week**						
Professor	**Prof. ass. Ajka Aljilji**	***E-mail:***	ajka.aljilji@uni-prizren.com				
		Tel.:	**045 438 378**				
Assistant		***E-mail:***					
		Tel.:					

Study goal and table of content	**Benefits of student**
The basics of natural sciences with methodics are extremely important for the development of thinking. Learning of natural sciences is a key impetus for the development of forms of formal thinking called the experimental thinking that is encountered when studying the experiment The influence of the environment is necessary for the study of natural sciences because it studies matter, and the matter is all around us.	▪ In the context of teaching natural science, students will also learn about the ways of planning the teaching process, where it deals with lenses, new daily plans, a new structure that implies ERR. ▪ Students also get acquainted with the ways of assessing and formulating questions. ▪ Content of the program: methodology of teaching, role of teachers in the process of teaching, motivation of students for work, analysis of activities and role of pupils in teaching. ▪ Assessment of student knowledge, analysis of realized teaching, teaching planning, teacher questions and assignments, student assessment, knowledge testing using tests, teaching techniques and acquiring knowledge.

Methodology for the implementation of educational topics:		
▪ Presentation of a teaching topic in Power Point (the student can download the presentation . ▪ A student case or task (during exercise) is associated with a lecture topic. ▪ Practical work with students in the laboratory. Analysis of the experiment.		
Conditions for realization of educational topics:		
Adequate literature, tables, computers, projectors, labs.		
Ways of assessing of the student (in %) :	**Evaluation in%**	**Final grade**
• Regularity in lectures 0-5% • Activity 0-5% • Seminar paper 0-10%	91-100	10 (ten)
	81-90	9 (nine)

• Test I 0-10% • Laboratory exercises 0-10% • Final exam 0-50% • Participation in exercises 0 - 5% • Work on groups on tasks and case studies 0-5%	71-80	8 (eight)
	61-70	7 (seven)
	51-60	6 (six)
	0-50	5 (five)
Total 100.00 %		

Obligations of student:

Lectures	Exercises
The student should be regular in lectures and especially in exercises, make use of all learning opportunities, use compulsory and broader literature, be active and respect the rules on high school ethics in courtesy and cooperation.	The student should be active in exercises and reflect the readiness and knowledge of initiatives, ideas and demonstrations of knowledge acquired through lectures and experimental exercises.

Activities	Hour/ weeks	Days/Weeks	Total
Lectures	2	15	30
Laboratory exercises	2	15	30
Contacts with teachers / consultations	1	15	15
Practical work	1	15	15
Projects, presentations, etc.	1	15	15
Own study time	1	15	15
Preparation for final exam	2	10	5
Time spent in the assessment (tests, final exam, etc.)	4	0	0
Notice: 1 ECTS credits= 25 hour commitment, e.g. if the subject has 5ECTS credits student must have 150 hours during the semester commitment.		**Total load:**	**125**

Week	Lectures Topic	Hour	Exercises Topic	
1	**Constructive model of learning** ▪ Introduction. ▪ Plan and program. ▪ Principles of constructive learning.	2	**Constructive model of learning** ▪ Principles of constructive learning.	1
2	**Specific characteristic for learning natural sciences** ▪ Why do we have specificities in the study of natural sciences? ▪ What are the specifics characteristic of natural sciences.	2	**Specific characteristic for learning natural sciences** ▪ What are the specifics characteristic of natural sciences.	1
3	**Chemical cabinet** ▪ Characteristics of the chemical cabinet. ▪ Composition of the chemical cabinet. ▪ The use of a chemical cabinet.	2	**Chemical cabinet** ▪ Visit to the chemical cabinet	1

4	**Educational strategies and methods** ▪ What are the strategies and methods. ▪ What methods of work do we have in natural sciences.	**2**	**Educational strategies and methods** ▪ Practicing strategies and methods in teaching natural sciences**.**	1
5	**Learning strategies by discovery** ▪ What is a strategy. ▪ Which strategies are best for work. ▪ Developing strategies in teaching.	2	**Learning strategies by discovery** ▪ Exercises ▪ Developing strategies in teaching.	1
6	**First intermedial evaluation**	2	**Exercises** ▪ Developing strategies in teaching	1
7	**Prerequisites for improving the teaching of natural sciences** ▪ What are the prerequisites for learning native sciences. ▪ What are its characteristics. ▪ Improving teaching.	2	**Prerequisites for improving the teaching of natural sciences** ▪ Exercises ▪ Exercise lesson of natural science	1
8	**Models** ▪ What are the models. ▪ Where models are used.	2	**Models** ▪ Laboratory analysis models**..**	1
9	**Schemes** ▪ What are the schemes. ▪ What is their role in everyday life.	2	**Schemes** ▪ Drawing schemes.	1
10	**Training for the application of scientific information in different situations** ▪ What is the information and their role in teaching. ▪ Correct application of information. ▪ Forwarding information.	2	**Training for the application of scientific information in different situations** ▪ Exercise. ▪ Forwarding information.	1
11	**Other intermedial evaluation**	2	**Exercise** ▪ Measuring time.	1
12	**Evaluation** ▪ What is the rating. ▪ Methods of evaluation. ▪ Rules in the evaluation.	2	**Evaluation** ▪ Exercise,rules in the evaluation.	1

13	**Homework** ▪ What are homework? ▪ How Homework Assesses. ▪ What are the criteria for evaluation.	2	**Homework** ▪ Exercise, how Homework. ▪ Assesses.	1
14	**Tests and assessment** ▪ What the test which is their role. ▪ Types of tests.	2	**Tests and assessment** ▪ Exercise, types of tests.	1
15	**Preparation of teaching teachers** ▪ The role teacherof education in education.	2	**Preparation of teaching teachers** ▪ Exercise, the student is holding the clock.	1

LITERATURE:

M. Sikirica: *Metodika nastave hemije* (priručnik za nastavu hemije). Školska knjiga, Zagreb, 2003.

V. Matijević, M. Randelovic, M. Trivic D. Bojović, S. Zindovic-Vukadinovic G.: Efikasnost različitih metoda nastave i učenja hemije u osnovnoj školi, Pedagoško društvo Srbije, "Nastava i vaspitanje" br. 4, 2013.

I. Ivić, A Pešikan, S. Antić: Aktivno učenje 2, Priručnik za primjenu metoda aktivnog učenja nastave; Institut za psihologiju, Beograd, 2003.

N.Čabrilo,R. Sušić: Prirodne nauke metodika 2010, Podgorica.

I. Vinković Vrček, Dada Lerotić ., Hemija - Zagreb2010.

Notice for the student:

Students are required to be regular in the lectures and exercises section.
The contribution of students in the form of conversation and cooperation with students will be evaluated.
Timely arrival in lectures and exercises is mandatory.