DISCIPLINE DESCRIPTION

1. Information on the study programme

1.1 Academic institution	**UNIVERSITY OF ORADEA**
1.2 Faculty	**FACULTY OF ENVIRONMENTAL PROTECTION**
1.3 Department	**FORESTRY AND FOREST ENGINEERING**
1.4 Field of study	**FORESTRY**
1.5 Cycle of study	**BACHELOR**
1.6 Study programme/Qualification	**FOREST EXPLOITATION/ENGINEER**

2. Information on the discipline

2.1 Name of discipline	INFORMATICS					
2.2 Course holder	Prof. PhD. Eng. CURILĂ MIRCEA					
2.3 Seminar/Laboratory/Project holder	Assist.PhD. ŞENDRUŢIU GABRIELA ROXANA					
2.4 Year of study	I	2.5 Semester	I	2.6 Type of evaluation	Exam	2.7 Regime of discipline	C

(C) Compulsory; (O) Optional; (E) Elective

3. Total estimate time (hours per semester of didactic activities)

3.1 Number of hours per week	4	out of which: 3.2 course	2	out of which 3.3 seminar/laboratory/project	2
3.4 Total hours in the curriculum	56	out of which: 3.5 course	28	out of which 3.6 seminar/laboratory/project	28

Time allotment	h
Study assisted by manual, course support, bibliography and notes	15
Additional documentation in the library/ on specialised electronic platforms and in the field	10
Preparation of seminars/laboratories/ topics/reports, portfolios and essays	10
Tutorship	5
Examinations	4
Other activities..................................	-

3.7 Total hours of individual study	**44**
3.9 Total hours per semester	**100**
3.10 Number of credits	**4**

4. Pre-requisites (where appropriate)

4.1 curriculum	-
4.2 competences	-

5. Conditions (where appropriate)

5.1. related to course	projector
5.2. related to seminar/laboratory/ project	

6. Specific competences acquired	
Professional competences	C5.1 Definition and use of specific engineering terminology in connection with multidisciplinary terminology specific to the field of environmental engineering C4.3 Hierarchy of information for compiling and completing databases in the field of biotechnical and ecological systems
Transversal competences	CT1. Identifying and compliancing the norms of professional ethics and deontology, assuming the responsibilities for the decisions taken and the related risks CT3. Efficient use of information sources and of assisted communication and professional training resources (portals, Internet, specialized software applications, databases, online courses, etc.) both in Romanian and in an international language

7.Objectives of discipline (coming from the specific competencesacquired)

7.1 General objective	The courses cover the creation and management of relational databases using the Microsoft Access application. For this purpose, the construction of tables containing database information, the creation of forms that facilitate data entry and examination, queries for selecting and sorting data from tables, preparing reports for examining and printing information from the database and defining the relationships between tables for build complex forms, reports and queries. Theoretical notions presented in the course will be practically exemplified in the laboratory classes.
7.2 Specific objectives	**1. Theoretical knowledge - Knowledge and understanding** - Assimilation of basic concepts for approaching databases in the context of the relational model, - Acquiring knowledge about techniques and methods for designing applications with relational databases **2. Acquired skills - Explanation and interpretation** - Explanation and interpretation of the database, projects, processes, as well as the theoretical and practical contents of the database - Development of the capacity to evaluate the results of a requirements analysis - Development of the capacity to evaluate the performance of a database **3. Acquired abilities - Instrumental-applied** - Training skills to build conceptual and logical models - Designing tables - Establishing relationships between tables - Design of forms - Designing interrogation reports - Acquiring the use of relational database management systems in the context of current trends in the field. **4. Attitudinal** - Formation of a positive and responsible behavior both for the economic importance and for the environment. - Creative capitalization of one's own potential in student scientific activities (participation in scientific symposia, articles in academic publications). - Awareness of the importance of training during the semester to achieve good and lasting results. - Awareness of the importance of one's own search, documentation and research related to learning. - Team spirit. - Cultivating a discipline of work done correctly and on time

8. Contents*/

8.1 Course	Methods of teaching	No. of hours/Remarks

Basic notions about databases
    The component parts of an Access database
        Tables. Forms. Queries. Reports.
		2

Creating a new database in Access
    Creating a database from a template
    Creating an empty database
		2

Creating tables in a database
    Create a table in Datasheet view mode
        Adding fields in Datasheet view mode
		2

Create a table in Design view
    The data type of a field and its properties
    Setting the primary key
Creating a table using a template
Creating a new table by importing or linking to external data
Create a table based on a SharePoint list
		2

Relationships between tables
    Creating a table relationship
    Modifying a table relationship
    Imposing referential integrity
	The course is presented to students in the form of a lecture. The video projector and the laptop are used to present the slides that outline the mentioned course elements. Thus, the lecture allows student intervention for a better understanding of the notions presented by the professor	2

Creating a simple form
    Field List panel
    Adding fields to a form or report using the Field List Panel
    Insert in a form or report a title, a logo, the page number
		2

Adding fields to a form or report in Design view Moving and resizing controls Add a text box control to a form or report		2
Create a checklist using a list box or a combo box Display Yes / No values using check boxes, option buttons, and toggle buttons		2

Searching for information in a database
    Browsing records
    Search for specific records
        Finding and replacing data in a table
        Finding and replacing data in a form
		2

Sort records
    Sort a report
    Sort a table, query, or form
		2

Filtering records
    Ordinary filters
    Selection-based filters
    Filter by form
    Complex filtration
		2

Finding records using a query
    Create a simple query
    Query criteria
		2

Create a simple report
    Create a report using the Report tool
    Create a report using the Report wizard
		2

Creating labels using the Label wizard		

Create a report using the Blank Report tool
    Establish report details in Appearance view
    Establish report details in Design view
        Adding fields from the Field List panel
    Adding controls to the report
Viewing the report
Print the report
		2

Bibliography
1. Mircea Curilă - Applied Informatics, University of Oradea, 2015.
2. Mircea Curilă, Adrian Hava - Database management with Access, University of Oradea Publishing House, 2008.
3. Roger Jennings - All About Microsoft Access 2000, Theory 2000 Ed.
4. Joe Habracken - Access 2002 for beginners, Teora Publishing House 2002.

8.3 Laboratory	Methods of teaching	No. of hours/ Remarks
1. Basic notions about databases. The component parts of an Access database.	In the first part there is a short professor-student debate followed by practical demonstrations of the notions corresponding to the theme of the work practice. Then the students perform practical exercises similar to those presented, being assisted during this time.	2
2. Create a database from a template. Creating an empty database.		2
3. Creating tables. Create a table in Datasheet view mode.		2
4. Create a table in Design view. Create a table by using a template, importing, or linking to external data, based on a SharePoint list.		2
5. Relationships between tables. Imposing referential integrity.		2
6. Create a simple form. Adding fields to a form or report using the Field List Panel.		2
7. Add fields to a form or report in Design view. Add a text box control to a form or report.		2
8. Create a checklist using a list box or a combo box. Display Yes / No values using check boxes, option buttons, and toggle buttons.		2
9. Searching for information in a database. Browsing records. Find and replace data in a table and form.		2
10. Sort records. Sort a report, table, query and form.		2
11. Filtering records. Ordinary filters, based on selection, by form, complex.		2
12. Finding records using a query. Create a simple query.		2
13. Create a report using the Report tool and the Report wizard. Creating labels using the Label wizard.		2
14. Create a report using the Incomplete Report tool. View and Print the report.		2

Bibliography
1. Mircea Curilă - Applied Informatics, University of Oradea, 2015.
2. Mircea Curilă, Adrian Hava - Database management with Access, University of Oradea Publishing House, 2008.

| 3. Roger Jennings - All About Microsoft Access 2000, Theory 2000 Ed. |
| 4. Joe Habracken - Access 2002 for beginners, Teora Publishing House 2002. |

* The content, respectively the number of hours allocated to each course / seminar / laboratory / project will be detailed during the 14 weeks of each semester of the academic year.

9. Corroboration of discipline content with the expectationsof the epistemic community, professional associations and representative employers from the field corresponding to the study programme

The content of the discipline is found in the curriculum of the specialization of Forest Exploitation and from other university centers that have accredited this specialization.

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of the final grade
10.4 Course	In order to obtain grade 5, the following conditions must be met: - obtaining at least a grade of 5 in the laboratory test; - knowledge of the basic notions presented in the course. In order to obtain grades 6, 7, 8 or 9, the students will present two subjects extracted from the package prepared with subjects that contain notions of course. Depending on the ability to understand and describe the respective notions, they receive the corresponding grade. In order to obtain a grade of 10, the following conditions must be met: - obtaining a grade of 10 in the laboratory test; - knowledge of all the topics presented in the course.	Oral	70%
10.5 Seminar			
10.6 Laboratory		Practically	30%
10.7 Project			
10.8 Minimum standard of performance			
Knowledge and understanding of courses at the level of essential principles and results			

Date of completion	Signature of course holder**	Signature of seminar laboratory/project holder **
10.09.2020	**Prof.PhD.Eng. CURILĂ MIRCEA** e-mail: mcurila@uoradea.ro	**Assist.PhD. ŞENDRUŢIU ROXANA** e-mail: rsendrutiu@uoradea.ro

Date of approval in the department

Signature of the Head of Department

Prof.PhD.Eng. TIMOFTE ADRIAN
e-mail: atimofte@uoradea.ro

17.09.2020

Dean signature

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