

TEACHING DISCIPLINE: Applied Informatics I
(Specialization ENVIRONMENTAL ENGINEERING, 1st Year of study, 1st Semester)

Credit value (ECTS): 4

Course category: mandatory

Course holder: Lecturer Marius CALIN PhD.

Discipline objectives (course and practical works)

General. Acquiring basic knowledge on the structure and functioning of a PC computer. Utilisation of Windows in professional activity.

Specific. Acquiring basic skills on using Microsoft Office applications in professional activity. Focus on the Microsoft Excel spreadsheet.

Contents (syllabus)

Course (chapters/subchapters)
1. Building an Excel spreadsheet. Basic structure
2. Editing the worksheet
3. Formatting
4. Building charts
5. Using functions
6. List (data table) processing.

Practical works
1. Microsoft Word in writing scientific text
2. Microsoft Excel. Basic structure. Data types
3. Microsoft Excel. Formulas. Using references
4. Microsoft Excel. Formatting
5. Microsoft Excel. Charts.
6. Microsoft Excel. Using functions.
7. Microsoft Excel. List sorting.
8. Microsoft Excel. List filtering.

Bibliography

1. Calin M. – Informatics I, Handbook in electronic format PDF, USAMV Iasi 2019
2. Calin M. – Informatics I, E-learning course on the Moodle platform of USAMV Iasi 2019
3. Walkenbach J. – Excel 2007 Bible, Wiley 2007

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Colloquium	Solving an Excel problem on computer	80%
Overall evaluation of the activity	Assessment of presence and activity. Periodical tests	20%

TEACHING DISCIPLINE: Applied Informatics II
(Specialization ENVIRONMENTAL ENGINEERING, 1st Year of study, 2nd Semester)

Credit value (ECTS): 3

Course category: mandatory

Course holder: Lecturer Marius CALIN PhD.

Discipline objectives (course and practical works)

General. Acquiring basic knowledge on the structure of a relational database.

Specific. Acquiring basic skills on utilisation of Microsoft Access in building a database.

Contents (syllabus)

Course (chapters/subchapters)
1. Data management and databases. An introduction.
2. The relational database. Basic structure. DBMS and its role.
3. Tables, records, fields. The Entity-Relationship diagram.
4. Relashion classification. The SSADM notation.
5. Implementing relations in a database. Integrity rules.
6. Querying. Declarative techniques in manipulating data.
7. Query by example. Forms. Reports. Indexing.

Practical works
1. Introducing Access.
2. Table design. Types of fields and their properties.
3. Creating tables within the database STUDENT-USAMV
4. Lookup tables
5. The Entity-Relationship diagram
6. Creating one-to-many relations.
7. Transforming many-to-many relations in one-to-many ones.
8. Designing queries
9. Designing forms
10. Designing reports

Bibliography

1. Calin M. – Informatics II, Handbook in electronic format PDF, USAMV Iasi 2019
2. Calin M. – Informatics II, E-learning course - the Moodle platform of USAMV Iasi 2019
3. Groth R.M et al – Access 2007 Bible, Wiley 2007

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Colloquium	Quiz	40%
	Solving an Access problem on computer	40%
Overall evaluation of the activity	Assessment of presence and activity. Periodical tests	20%

Contact

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