MICROSOFT EXCEL BY EXAMPLE I

Learning Objectives:

- Working with Workbook and Sheets (Exercise 1)
- Using formulas in Excel – operators, order of operations (Exercise 2)
- Relative and absolute references, writing equations (Exercise 2)

Exercise 1

1. Create a new Workbook named **ExcelExample**.
2. Rename the sheets of the **ExcelExample** file as follows: <u>Example</u> (Sheet 1), <u>Data</u> (Sheet 2), <u>File</u> (Sheet 3).
3. Insert a background (whatever you want) to the sheet named <u>Example</u>.
4. Hide the sheet named <u>Example</u>.
5. Insert a red tab to the sheet named <u>Data</u>.
6. Create on the <u>Data</u> sheet a table with three columns (A1 = No; B1 = Category; C1 = Example) as in the example bellow:

No	Category	Example
1	Number	
2	Date	
3	Time	
4	Text	
5	Scientific	

7. Formatting the cells from the column *Example* according with column *Category* and fill in these cells some examples (e.g. for Date category insert in the example column after proper formatting you birth date).
8. Delete the sheet named <u>File</u>.

Exercise 2

1. Create a new Excel file named **Formulas**.
2. Rename the first sheet as <u>Data</u>, and delete all other sheets.
3. Introduce in the Data sheet the following structure of a table:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Cost of hospitalization						300	lei					
2													
3	N0.	Name	Specie	Age (years)	Gender (F/M)	Seizures (Yes/No)	Disorientation (Yes/No)	Dilated pupils (Yes/No)	Blood in the urine (Yes/No)	Protein in the urine (Yes/No)	SAP (mmHg)	DAP (mmHg)	Duration of hospitalization (days)
4	1												
5	2												
6	3												
7	4												
8	5												
9	6												
10	7												
11	8												
12	9												
13	10												

(SAP = Systolic Arterial Pressure; DAP = Diastolic Arterial Pressure)

4. Formatting the columns according with the type of variables as **Text** OR **Number without decimal**s.
5. Include information of all variables for 10 patients.
6. Insert to the right of DBP column a new column named MAP (Mean Arterial Pressure).

MICROSOFT EXCEL BY EXAMPLE I

7. Compute for each patient the MAP using the following formula (**Building formula by using Relative References**):

$$\text{MAP} = \text{DAP} + \frac{1}{3}\left(\text{SAP} - \text{DAP}\right)$$

MAP is considered to be the perfusion pressure seen by organs in the body and takes normal values between 70 to 110 mmHg.

8. Insert to the right of MAP column a new column named PP (Pulse Pressure).

9. Compute for each patient the PP using the following formula (**Building formula by using Relative References**):

PP = SAP(mmHg) – DAP(mmHg)

10. Insert a new column named CH (lei) to the right of the Duration of Hospitalization. (CH = Cost of Hospitalization).

11. Compute for each patient the CH using the following formula (**Building formula using Absolute References**):

CH = (Duration of Hospital Stay) * (Cost of one hospitalization day)

12. Save the file and close all applications!