





Water Quality Analysis (code)

Lab Assignments

Assignment #4

Handling and Analysis of Newly Received Water Samples

I- Objectives:

The objectives of this lab session are to

- 1- practice reception, inspection, subsampling and coding of new water sampling.
- 2- determine sensitive parameters in newly received water samples.
- 3- practice standard methods of storing water samples.
- 4- tabulate, describe, and evaluate results of analysis.

II- Requirements:

Students are asked to apply standard methods of sample inspection, subsampling and coding of water samples collected from different water sources or facilities. Measurement of some sensitives water quality variables and presentation of the data obtained are required. Students should submit a report covering the following items

- 1- Description of location, source, and type of water samples received (at least 3 types)
- 2- Full inspection of the water samples (volume, color, ordor, organic particulates, etc.).
- 3- Subsampling and coding scheme.
- 4- Complete standard methods of the measured water quality parameters.
- 5- Description of equipment, tools, chemicals, and instrument used in the measurements.
- 6- Presentation (tables and graphs) and evaluation of the measured parameters.
- 7- Comparison of results among different water samples.

III- Report Format:







- The report should be written using MS Word with Times New Roman, font size 14 for titles & 12 for text body, titles & subtitles are in **bold**. Page margins 1.25" for top & bottom and 1.0" for left & right margins, page numbers are at bottom center.
- The report should include a front page showing the university and department names and logos, program name, course name and code, Instructor name and affiliation, title of the report, name(s) of the student(s), and the semester (fall, spring or summer) and academic year.
- The report should have the following main parts: Abstract (max. 200 words), Introduction, Objective(s) of the work, Materials and Methods, Results, Discussion, Interpretation, Conclusion, References, Appendix (optional).
- Reports should be submitted next week in both a hard and soft format.

IV- Rubrics for assessment of lab assignments:

Items	Excellent (4)	Good (3)	Fair (2)	Poor (1)
A. Overall grammatical content & formatting (20%)				
1. The report has a well-organized front page.				
2. Document is free of spelling & grammatical errors.				
3. General formatting guidelines were followed: topics sequence, margins, line spacing & font size.				
4. Graphics and tables are incorporated and serve the topic objectives.				
5. Abstract does not exceed 200 words.				
6. The introduction is well organized & covers main topics				
7. The objectives are stated clearly.				
8. Formatting of references is appropriate.				
B. Materials and methods (40%)				
1. Standard procedures are accurately described and referenced.				
2. Materials used in the experiments are clearly described.				
3. Chemicals and their preparation used are clearly described.				
4. Flowchart or work plan of the experiment is logic & clear.				
5. Formatting of references is appropriate.				
C. Results, Discussion, Interpretation, and Conclusion (40%)				
1. The results satisfy all requirements of the assignment.				
2. Each part of the analysis is represented by at least one table or graph				
3. The results are appropriately presented in tables and figures.				







4. Titles of tables and graphs describe the data represented.		
5. The data are well described and correlated.		
6. Discussion of the data obtained is logic and referenced.		
7. The interpretation of the data is logic and applicable.		
8. The conclusion is clear and concise.		