WAT-E1100

2023

Instructions for Presentation and Laboratory Report

1. **Presentation (Friday 29th of September, 1pm-4pm)**

In the presentation, each group should present **the** **calculated results** of all of their analyses **on their own mystery water**. You do not have to consider other groups’ work here. Some analyses, such as turbidity, give the final value immediately, whereas others, such as chemical oxygen demand require calculations done after the laboratory session. Also in your presentation, reveal which water sample you think that your group was given, and what do you base your decision on. Use your pre-existing knowledge and literature or make an educated guess.

Follow the lab instructions (Laboratory Analysis Autumn 2023) provided in MyCourses. You will find the formulas you need and the units you should use for reporting there.

Each group has max. 10 minutes for presentation followed by feedback.

1. **Laboratory report (due Wednesday 04th of October @ 11pm)**

Follow the typical structure of a laboratory report:

Introduction – Should answer to the following questions that a reader might have: Why was this laboratory report done? When and where was the work carried out?

Theory – Study the directives given by the European Council on water quality (find them below). Why have they been given? What is the motivation for controlling the quality of certain waters?

Methods – Write which analyses you have done. If you have diverted from the standard, what have you done differently? Which equipment did you use?

Results – Write the results of each analysis. Always give the final results, not e.g. adsorption given by the spectrophotometer on iron.

Discussion and Conclusions – Link the theoretical part into your results. Is your water suitable for bathing according to the European Bathing Water Directive? Is the water suitable for human consumption? Does the water body achieve “good status” according to the Water Framework Directive? If not, why? Additionally, identify possible errors that you can think of.

Follow the lab instructions (Laboratory Analysis Autumn 2023) provided in MyCourses. You will find the formulas you need and the units you should use for reporting there.

Material:

[Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32006L0007)

[Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31998L0083)

[Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32000L0060)