

TUTORIAL SERIES

4 Estimation

Academic Year: 2023/2024

Series: 03

University Center: Abdelhafid Boussouf, Mila

Module: Biostatistics — **Topic:** Sampling and Estimation

Specialty: L3 BC, BV (S5) — Institute of Natural and Life Sciences

Instructor: Pr. S. Harik

1 Exercise

A sugar concentration measurement performed on eight samples from the same population produced the following results (in g/L):

19.5, 19.7, 19.8, 20.2, 20.2, 20.3, 20.4, 20.8

1. Determine the point estimates of the mean and standard deviation of this distribution.
2. What is the 95% confidence interval for the mean? What is the 99% confidence interval for the mean?
3. What is the 95% confidence interval for the variance?