BIOL 330 / ES 344 University of Victoria – Spring 2021
STUDY DESIGN AND DATA ANALYSIS

Instructor Dr. Terri Lacourse – tlacours@uvic.ca
Office hours: on Zoom by appointment
Lab Instructor Dr. Neville Winchester – winchest@uvic.ca
Course website BIOL 330 / ES 344 on bright.uvic.ca
Lectures Tuesdays, Wednesdays, Fridays at 11:30 AM–12:20 PM
Labs Tuesdays, Thursdays at 2:30–5:20 PM
Textbook Whitlock, M. & Schluter, D. 2020. The Analysis of Biological Data. **3rd Ed.** Macmillan.
Software R and RStudio (available for download at no cost)

Learning Objectives At the end of the course:
1. You are able to frame appropriate and testable hypotheses for a set of data.
2. You are able to analyze and interpret a set of data in a statistically sound way, so that your interpretation will withstand scrutiny as being a logical and appropriate hypothesis test and interpretation of the data.

Assessment of Final Grades

Lab Assignments	40%	Five assignments, each worth 5 or 10%; see pages 2 & 3
Midterm Exam	20%	**Cumulative** and **closed-book**; February 23, 11:30 AM-12:20 PM
Final Exam	40%	**Cumulative** and **closed-book**; During Exam Period: April 15-27

Important Notes & Course Policies ( )

1) This is an online course. Students are responsible for having a reliable computer and internet connection for lectures, labs, assignments and exams. Refer to the **University's minimum technology requirements for online courses**: www.uvic.ca/systems/status/features/min-tech-requirements.php

2) Live sessions may be recorded by the Instructors and posted on the course website. Students are not permitted to record lecture or lab sessions in audio or video formats.

3) A lockdown browser and Zoom may be required for exams. If so, advance notice will be given.

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5) As per University regulations, students who do not complete all tests and assignments will be given a final grade of **N** and will not be permitted to write the final exam.

6) As per University regulations, students must achieve satisfactory standing in both the lecture and the lab. To receive credit for the course, students must pass both the lecture and the lab.

7) Final grades will be assigned on the basis of the University's official grading scale with F and N as per university regulations.

LECTURE SCHEDULE

Week of…	Lecture Topics	Textbook Chapters
Jan 11	Types of data; Random sampling; Displaying Data	1, 2, Interleaf 2
Jan 18	Describing Data; Estimating Uncertainty; Probability	3, 4, 5
Jan 25	Hypothesis testing; Binomial test; ^{2} goodness-of-fit	6, 7, 8, Interleaf 3
Feb 1	Contingency; Normal distribution; Confidence intervals	9, 10
Feb 8	Testing means and variances	11, 12
Feb 15		
Feb 22	Experimental design	14, Interleaf 5 & 6
March 1	Violating test assumptions; Non-parametric tests	13
March 8	ANOVA	15
March 15	Correlation; Regression	

				individual	***assignments***
A	L	3	5	5%	
A	L	7, 9	10		