

## DEPARTMENT OF SCIENCE COURSE OUTLINE – WINTER 2021 ST2520 A3 INTRODUCTION TO APPLIED STATISTICS II– 3.0 (3-0-2) 75 HOURS OVER 15 WEEKS

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**OFFICE HOURS:** TBA

## **WINTER 2021 DELIVERY:**

Remote Delivery. This course is delivered remotely. There are no face-to-face or onsite requirements. Students must have a computer with a webcam and reliable internet connection. Technological support is available through <a href="helpdesk@gprc.ab.ca">helpdesk@gprc.ab.ca</a>
Note: GPRC reserves the right to change the course delivery

**CALENDAR DESCRIPTION:** Methods in applied statistics including regression techniques, analysis of variance and covariance, and methods of data analysis. Applications are taken from Biological, Physical and Social Sciences, and Bussiness.

PREREQUISITE(S): ST 1510 or Equivalent

**TEXTS/RESOURCE MATERIALS:** The Staistical Sleuth: A Course in Methods of Data Analysis (3<sup>rd</sup> ed) Ramsey/Schafer

**DELIVERY MODE(S):** Lecture: A3 MW 10:00-11:20

Lab: AL1 M 14:30-16:30

**COURSE OBJECTIVES:** To learn methods in applied statistics including regression techniques, analysis of variance and covariance, and methods of data analysis. SPSS will be used as a tool to aid in this learning process. Applications are taken from Biological, Physical and Social Sciences, and Bussiness.

**LEARNING OUTCOMES:** The student should be able to demonstrate knowledge of the course objectives describe above.

**TRANSFERABILITY:** Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page http://www.transferalberta.ca.

\*\* Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions and may not meet the prerequisite requirements for other math courses. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability

## **GRADING CRITERIA:**

**EVALUATIONS:** Assignments and Labs 30%

Midterm 30% TBA

Final Exam 40% Scheduled by Student Services

GRANDE PRAIRIE REGIONAL COLLEGE					
GRADING CONVERSION CHART					
Alpha Grade	4-point Equivalent	Percentage Guidelines	Designation		
A <sup>+</sup>	4.0	90 – 100	EXCELLENT		
А	4.0	85 – 89			
A <sup>-</sup>	3.7	80 – 84	FIRST CLASS STANDING		
B <sup>+</sup>	3.3	77 – 79			
В	3.0	73 – 76	GOOD		
B <sup>-</sup>	2.7	70 – 72			
C <sup>+</sup>	2.3	67 – 69	SATISFACTORY		
С	2.0	63 – 66			
c-	1.7	60 – 62			
D <sup>+</sup>	1.3	55 – 59	MINIMAL PASS		
D	1.0	50 – 54			
F	0.0	0 – 49	FAIL		
WF	0.0	0	FAIL, withdrawal after the deadline		

**STUDENT RESPONSIBILITIES:** Students are responsible for all lecture material, labs and readings. Students are expected to practice the material by doing problems from the textbook. Assignments are not accepted if handed in late. If the midterm is missed due to illness the weight will be put on the final (ie. the final will be worth 70%). If the final is missed due to illness it will be deferred (see calendar for information). A doctor's note and a phone message or email will be required in both cases.

**STATEMENT ON PLAGIARISM AND CHEATING:** Refer to the Student Conduct section of the College Admission Guide at <a href="http://www.gprc.ab.ca/programs/calendar/">http://www.gprc.ab.ca/programs/calendar/</a> or the College Policy on Student Misconduct: Plagiarism and Cheating at <a href="http://www.gprc.ab.ca/about/administration/policies/\*\*">www.gprc.ab.ca/about/administration/policies/\*\*</a>

\*\*Note: all Academic and Administrative policies are available on the same page.

COURSE SCHEDULE:		<u>Weeks</u> (approximate)
1 Review, Intro + Design Concepts	Ch 1	1
2 One or Two Population Means	Ch 2, 3	2.5
3 Several Population Means	Ch 5, 6	2
4 Simple Linear Regression	Ch 7, 8	2
5 Multiple Linear Regression	Ch 9 – 12	2.5
6 Two-Factor ANOVA	Ch 13	2
Optional Non-Parametric tests	Ch 4	