



**DEPARTMENT OF SCIENCE**

**COURSE OUTLINE – WINTER 2020**

**ST2520 (A3): Introduction to Applied Statistics II – 3 (3-0-2) 75 Hours for 15 weeks**

**INSTRUCTOR:** Dr. Mustafa Avci      **PHONE:** 780-539-2008  
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**OFFICE HOURS:** Mon. 14:30-15:30 & Wed. 10:15-11:15

**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 Business.

**PREREQUISITE(S)/COREQUISITE:** ST1510 or equivalent

**REQUIRED TEXT/RESOURCE MATERIALS:** The Statistical Sleuth: A Course in Methods of Data Analysis, 3<sup>rd</sup> Edition, Fred L. Ramsey, Daniel W. Schafer.

**DELIVERY MODE(S):**

Mode	Time	Day	Classroom
Lecture	08:30-09:50	Monday & Wednesday	J226
Lab	08:00-09:50	Friday	J101

**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 Business.

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

**TRANSFERABILITY:** UA\*, UC\*, AU\*, AF, CU, CUC, KUC, GMU (From the GPRC catalog)

Please consult the Alberta Transfer Guide for more information. <http://www.transferalberta.ca> or <http://alis.alberta.ca/ps/tsp/ta/tbi/onlineSearch.html?SearchMode=S&step=2>

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

## EVALUATIONS:

The final grade for this course is composed of the marks received for each of the following components:

Component	Percent /Weight	Notes
Assignments	10%	Collaborative Group work
Lab Reports	10%	Works delivered in the Labs
Midterm	25%	Wednesday, February 12,
Lab Exam	15%	Friday, April 3
Final Exam	40%	April 15-April 25 (including Saturdays and evenings)
<b>Total</b>	<b>100%</b>	

**GRADING CRITERIA:** Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**. This means **DO NOT GET LESS THAN “C-” IF YOU ARE PLANNING TO TRANSFER TO A UNIVERSITY.** And less than a C- may not be accepted as a prerequisite at the college and elsewhere.

## GRADE CONVERSION GUIDELINES

Alpha Grade	4-point Equivalent	Percentage Guidelines		Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	90-100		C+	2.3	67-69
A	4.0	85-89		C	2.0	63-66
A-	3.7	80-84		C-	1.7	60-62
B+	3.3	77-79		D+	1.3	55-59
B	3.0	73-76		D	1.0	50-54
B-	2.7	70-72		F	0.0	00-49

## COURSE SCHEDULE/TENTATIVE TIMELINE:

### COURSE SCHEDULE:

		Weeks (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
7 Non-Parametric tests ( <b>Optional</b> )	Ch 4	

**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 (**i.e. the final will be worth 65%**).

**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.

Cellphone use is not permitted in the classroom. This includes texting. Please turn off and put away your cellphone during class. You may be asked to leave the classroom if using a cellphone.

No recording of any kind is allowed in the class, lab or during consultation with the instructor.

**Final Exam:** The final exam will be written during the exam period, **between April 15 and April 25 inclusive** (including Saturdays and evenings). It is the student's responsibility to be available to write the exam at the scheduled time. Writing early is not permitted.

#### **STATEMENT ON PLAGIARISM AND CHEATING:**

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the College Admission Guide at <http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at [www.gprc.ab.ca/about/administration/policies/](http://www.gprc.ab.ca/about/administration/policies/)

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