BUS 377 – Business Analytics

COURSE OUTLINE

Semester:	May - June 2023
Class Time:	**Monday & Wednesday 10:00am - 12:45pm**
Class Room #:	**ED 531 – Computer Lab**
Instructor:	**Dr. Adrian H. Pitariu**
Office Location:	ED 565.6
Phone:	(306) 999-0304 (cell)
Email:	adrian.pitariu@uregina.ca

UR Courses:	https://urcourses.uregina.ca/
Office Hours:	I am always available to meet with students! Please email/text me to make an appointment. I also am happy to respond to emails and text messages with questions regarding the content or the evaluations for this course.
Special Needs:	If there is any student in this course who, because of a disability, may have a need for accommodations, please come and discuss this with me, as well as contacting the Coordinator of Special Needs Services at 585-463l.
Pre-requisites:	STAT 100 - while I will give a brief review**, I expect students to have working knowledge of basic statistics (i.e.,** normal distribution; statistical inference; confidence intervals, hypothesis tests for group means, ANOVA, simple linear regression etc.) – PLEASE review the Statistics 1 (SAS Publishing) tutorial – see URCourses.
Textbook / Course Notes:	1. **Statistics 1**: Introduction to ANOVA, Regression, and Logistic Regression (SAS Publishing) 2. Applied Analytics using SAS Enterprise Miner (SAS Publishing) – link will be made available on URCourses by the instructor. 3. CORTEX – Analytics game developed by SAS (information for acquiring licence will be provided in class) 4. EXCEL - tbd *Further information about these texts and readings will be posted on URCourses.*
Course Description:	This course is an introduction to the field of business analytics. We will learn how analytics can help improve [business] decision-making by studying fundamental principles and techniques of data science and data mining. We will look at real-world examples for context to develop analytic thinking and to show how data science is in fact as much art as it is science.
Learning Objectives:	• To be able to approach business problems data-analytically. • To be able to interact competently on the topic of data mining for business analytics. • To have had hands-on experience mining data.

	The course will explain through lectures, discussions, and real-world examples the fundamental principles, uses, and some technical details of data mining and data science. The emphasis is, primarily, on understanding fundamental concepts of data science and business applications of data mining.
Academic Integrity:	Students enrolled in Business courses at the University of Regina are expected to adhere rigorously to principles of intellectual integrity. Plagiarism is a form of intellectual dishonesty in which another person's work is presented as one's own. Plagiarism or cheating on examinations/assignments is a serious offence that may result in a zero grade on an assignment, a failing grade in a course, or expulsion from the University. For more information on this matter, please consult the Student Code of Conduct and Right to Appeal section of this Calendar
Student Accessibility:	The Centre for Student Accessibility upholds the University's commitment to a diverse and inclusive learning environment by providing services and supports for students based on disability, religion, family status, and gender identity. Students who require these services are encouraged to contact the Centre for Student Accessibility to discuss the possibility of academic accommodations and other supports as early as possible. For further information, please email accessibility@uregina.ca.

Requirements & Grading:

Assignment / Test:	Due Date:	% of Course Grade
3 Homework assignments	TBA	30%
Quizzes (best 4 out of 5)	TBA	20%
Midterm Exam	TBA	20%
Final project (write-up & presentation)	23 June, 12pm	30%
TOTAL:		**100%**

Rules & Expectations:

1. This course has a heavy out of class work component – meaning that you will have to spend 2-3 hours working at home for every hour of class. Furthermore, you have to pay close attention to instructions in class or online and follow them carefully. Missing a class will set you back and you will have to work hard to catch up.
2. The **Statistics 1** tutorial will be posted on URCourses and I recommend everyone to review it **as soon as possible** (please do not wait for the start of the semester!)**.** The estimated time to complete this tutorial (without doing the problems/exercises) is about 20 hours.
3. Quizzes are based on essential concepts and information/knowledge from the previous class and they are unannounced. Therefore, please be prepared!
4. Late assignments will be penalized by 25% for up to 24hrs and by50% for up to a week lateness. For assignments that are more than a week late there will be no credit.

5. If you have to miss a quiz, an exam, or an assignment deadline due to a medical problem, then you MUST contact the professor ASAP (if possible, prior to the due date!) in order to reschedule. A doctor's certificate will be required.

6. **If you miss more than 4 classes** (unexcused), you may not be eligible to write the final exam and **may be dropped from the course**.

7. Please refer to the University Calendar for information on appeals, withdrawal dates, plagiarism, cheating, and academic misconduct. All students are expected to abide by these regulations of the University of Regina.

CLASS SCHEDULE*

Date	Topics	Assignments
5/3	Introduction to the Course Course setup	
5/8	Stats Primer The SAS Environment	
5/10	Introduction to Data Analytics	
5/15	Excel Analytics	
5/17	Excel Analytics (cont'd)	Homework 1
5/22	Victoria Day - No classes (Most university offices closed	
5/24	Predictive Modeling Decision Trees Introduction to the Final Project	
5/29	Predictive Modeling Regression	Homework 2
5/31	Predictive Modeling Artificial Neural Networks	
6/5	**Midterm**	
6/7	Artificial Neural Networks (cont'd)	Homework 3
6/12	Model Performance Analytics	Begin work on Final Project
6/14	**Ethics in Data Analytics**	
6/19	Final Project	

*This schedule is tentative and may change based on class needs.