UNIVERSITY OF LOUISVILLE.

COLLEGE OF BUSINESS

MBA Analytics: Advanced Business Analytics ANLY 620-55 Summer 2021

Instructor	Dr. Sandeep Goyal
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Office hours	By appointment

II. Course Information	
Class time / Room	Fully Online class
Required texts	*None.* All the resources for the courses will be provided by the instructor. *Recommended text: Business Analytics: Data Analysis & Decision Making* by S. Christian Albright and Wayne L. Winston You may get either the 6th edition (ISBN-13: 978-1305947542) or the 5th edition (ISBN-13: 978-1133629603).
Course description	The volume of data generated every day continues to grow exponentially. Being able to mine the available data for information is now a fundamental skill sought by organizations. This course builds on the Introduction to Business Analytics course by introducing more advanced topics in analytics. This course challenges and teaches students how to use powerful statistical tools (e.g., SPSS) to handle data that come in a variety of forms and sizes in more complex, less structured business situations. Students will participate in extensive hands-on work solving realistic business problems. This course may guide students with handling advanced regression analysis that deals with real-life models and interaction variables, time series analysis, and topics such as PLS path modeling. After taking this course, students should: (1) Approach business problems data-

	analytically; (2) Think systematically whether and how data can help make better-informed decisions; (3) Be able to interact competently with business analytical tools; and (4) Have a had hands-on experience mining data. A review of necessary statistical concepts will be provided as needed.
Prerequisites	MBA 602—Decision Analysis; MBA 680: Introduction to Business Analytics
Learning objectives	• Coverage of a wide range of statistical procedures • Review of correlation and simple regression • Working with interval and categorical data • Interactions • Data transformations • Multiple regression • Logistic regression • Analysis of variance
Learning Outcomes	• Solve common analytical business problems • Think systematically if and how data can help make better-informed decisions • Use business analytical tools; and • Have had hands-on experience mining and analyzing data.
Final drop date	Please contact the MBA Office
Required software	SPSS (your instructor will provide access to SPSS)
Other utilities	You would be required to bring a Windows or a Mac laptop. Have access to high speed internet for homework assignments.
Caveat and Promise	I will attempt to adhere to the dates, policies, and instructions in this syllabus. I will also do the same for all materials and instructions on the Blackboard site for this class. I do however reserve the right to make changes due to extraordinary circumstances, or when it is obviously in your (the students) best interests to do so. In such an event I will give you adequate notice (via Blackboard or otherwise) and you can be assured that any additional demands or changes made will be reasonable and (to re-iterate) in your best interest.
Communication	Student to student and student to instructor interactions are an important component to this class. Communication between the student and the instructor will be regular. I am always available before and after the class. You may email me questions as and when they arise, and I will reply within 24 hours if at all possible. In certain cases email will not be a satisfactory medium to answer a specific question, and a telephone call may be more appropriate. In certain cases, I will be happy to fix an appointment in person, and I will accommodate your work schedules.

	Note: Please include "MBA 680" in the subject line on your emails.

III. Evaluation			
Grading scale	A	>=93	Exceptional work
	A-	91-92	Very good
	B+	87-90	Above average
	B	83-86	Average
	B-	80-82	Below Average
	C+	78-79	Barely Acceptable
	F	<78	Unacceptable
Grading scheme	*Grading component*		*Weighted grading percentage*
	Final exam		35%
	Individual assignments & quizzes		30%
	In-class group exercises		35%

IV. Schedule		

Notes:
1. This course does not require a review of the mathematical calculations. Primary focus is SPSS output and its interpretation
2. This schedule may change
3. **All assignments are due Friday at midnight of the week they are assigned**

Week	Topic	Session Activity Additional readings may be added for more information
1	Advanced Regression Analysis	Review of linear/multiple regression Regression with categorical independent variables **Assignments Due:** Exercise regression Quiz regression Due Friday at midnight of week 1
2	Working with Time	Using time to make predictions: Time-series analysis **Assignments Due:** Exercise time series Quiz time series

		Due Friday at midnight of week 2
3	Analytical decision making I	Making decisions: Logistic Regression **Assignments Due:** Exercise logistic regression Quiz logistic regression Due Friday at midnight of week 3
4	Analytical decision making II	Testing strategies: Working with 2-way interactions **Assignments Due:** Exercise interactions Quiz interactions Due Friday at midnight of week 4
5	Wrap-up	Review Practice Exam Final Exam **Assignments Due:** Practice exam (graded) Final exam

Changes in the syllabus	Syllabus is subject to change. In particular the order of topics to be presented may change.

V1. Student Responsibilities / College and University Issues	
University of Louisville student conduct and responsibilities	This course will abide by University of Louisville student conduct and responsibilities with regards to ethics and related issues: http://louisville.edu/dos/students/policies-procedures/student-handbook.html#codeofstudentconduct
College of Business student conduct and responsibilities	This course will abide by College of Business student conduct and responsibilities with regards to ethics and related issues: http://business.louisville.edu/students/college-of-business-academic-dishonesty-policy
Religious holiday conflict policy	http://louisville.edu/diversity/resources/work-restricted-holy-day-policies-calendar.html
University policy on equal access	http://louisville.edu/disability/policies-procedures

Title IX/Clery Act Notification	Sexual misconduct (including sexual harassment, sexual assault, and any other nonconsensual behavior of a sexual nature) and sex discrimination violate University policies. Students experiencing such behavior may obtain **confidential** support from the PEACC Program (852-2663), Counseling Center (852-6585), and Campus Health Services (852-6479). To report sexual misconduct or sex discrimination, contact the Dean of Students (852-5787) or University of Louisville Police (852-6111). Disclosure to University faculty or instructors of sexual misconduct, domestic violence, dating violence, or sex discrimination occurring on campus, in a University-sponsored program, or involving a campus visitor or University student or employee (whether current or former) is not confidential under Title IX. Faculty and instructors must forward such reports, including names and circumstances, to the University's Title IX officer. For more information, see the Sexual Misconduct Resource Guide (http://louisville.edu/hr/employeerelations/sexual-misconduct-brochure).