

ITIS 5431 P [Spring 2020] Business Analytics for Managers

May 22/23, 2020

8:35 - 17:25 Hrs.

Online

Instructor:Alejandro Ramirez, PhDEmail:Alex.Ramirez@Carleton.caOffice Hours:by email

Course calendar entry from graduate calendar:

ITIS 5431 [0.25 credit]

Business Analytics for Managers

Decision support systems in organizations; moving from business intelligence to business analytics; big data trends in organizations; theories and trends in data analytics. Includes: Experiential Learning Activity

Course Description:

Managers need to assess their organization needs for business analytics, something that has become a sought-after skill for business practitioners and professionals, especially in the wave of Big Data. This course aims to assist managers to make decisions regarding the opportunities available to them by:

- looking at how Decision Support Systems (DSS) are used in organizations
- studying the historical evolution of DSS, first to Business Intelligence and then to Business Analytics
- engaging in the conversation on Big Data trends in organizations.

The sessions will include both theories and trends behind Data Analytics

Learning Objectives:

- 1. Insight into decisions, decision-making and decision-makers
- 2. Assessing the role of computers in managerial decision-making
- 3. Evaluate the affordances of Information Systems
- 4. How to generate value from business data



5. Evaluating tools available for business analytics

Course Prerequisites:

Prerequisite(s): ITIS 5401 or permission of the School of Business.

Textbook:

Leaders & Innovators: How Data-driven Organizations are Winning with Analytics Tho H. Nguyen Wiley ISBN: 978-1-119-23257-5

Final Exam due date: Sunday May 31, 2020

Drop Course Policy:

The deadline for academic withdrawal is the last day of classes (each term).

Grading Scheme:

45%
25%
10%
20%

Preparation and participation:

To have a common ground in our discussions, it is necessary that you work on the Preparation Activity available in CU Learn. It includes three aspects: Read, Write & Research. Please read the material before you start writing your Word document. The textbook is a good starting place. Be sure to submit your document in CU Learn latest by the due date.

The instructor will keep track of each student participation and will assess how such participation contributes to the discussion. Participation clearly needs to be based on the reading material. Experience-based comments are valid but carry less weight than those made based on the reading material. Each session will have a 5% as a maximum.

Missed Preparation Activity:

Completion of the Preparation Activities will become meaningless after the course sessions; therefore, it cannot be deferred. If not completed by the hard deadline it will be missed and students will receive no marks for it.

Final Exam:

A take home examination will be posted in CU Learn. It is due by midnight on May 31, 2020. Be advised that since this is a final examination, late submissions are not allowed!

Deferred Final Examination:

Students unable to write a final examination because of illness or other circumstances beyond

their control must contact the instructor and the MBA office in writing to request a deferred exam. Permission may be granted when the absence is supported by a medical certificate and or appropriate document/s to support the reason for the deferral.

Course Schedule:

Session	Date	Topic/Agenda	Due
Pre		Read Textbook, Course Outline &	Submit latest by midnight on May
		review the Excel features and	20 the Word document of your
		functions specified in the Preparation	Preparation Activity in CU Learn
		Activity	
1	May 22	Introduction	
	Morning	The Analytics Lifecycle	
		The Business Analytics Framework	
		Feasibility of BA projects	
		In class Exercise I	
		Decisions	
		Decision Making	
		Decision Makers	
		Decision Style Inventory	
2	May 22	In class Exercise II	
	Afternoon	Data \rightarrow Information \rightarrow Knowledge	
		Minkowski Distance	
		Fuzzy Sets Applications	
		The S Function	
		In class Exercise III	
3	May 23	Data Warehousing	
	Morning	Data Marts	
		Data Model	
		The Entity Relationship Model	
		Star Schema	
		In class Exercise IV	
4	May 23	Data Visualization	
	Afternoon	Metrics	
		KPIs	
		Power View	
		In class Exercise V	
Post		Final Exam	Submit latest by midnight on May
			31 in CU Learn

ADDITIONAL INFORMATION

Course Sharing Websites

Materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

Required calculator in course examinations

If you are purchasing a calculator, we recommend any one of the following options: Texas Instruments BA II Plus (including Pro Model), Hewlett Packard HP 12C (including Platinum model), Staples Financial Calculator, Sharp EL-738C & Hewlett Packard HP 10bII

Group work

The Sprott School of Business encourages group assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, follower-ship and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your professor may assign one or more group tasks/assignments/projects in this course. Before embarking on a specific problem as a group, it is your responsibility to ensure that the problem is meant to be a group assignment and not an individual one.

In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

A+ = 90-100	B+ = 77-79	C+ = 67-69	D+ = 57-59
A = 85-89	B = 73-76	C = 63-66	D = 53-56
A - = 80-84	B - = 70-72	C - = 60-62	D - = 50-52
F = Below 50			

Grades entered by Registrar: WDN = Withdrawn from the course DEF = Deferred

Academic Regulations

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here: http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/

Requests for Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Pregnancy obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: <u>https://carleton.ca/equity/wp-</u>content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Religious obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: <u>https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf</u>

Academic Accommodations for Students with Disabilities

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. carleton.ca/pmc

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and its survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: <u>https://carleton.ca/sexual-violence-support/</u>

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. <u>https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf</u>

For more information on academic accommodation, please contact the departmental administrator or visit: students.carleton.ca/course-outline

Academic Integrity

Violations of academic integrity are a serious academic offence. Violations of academic integrity – presenting another's ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized co-operation or collaboration or completing work for another student – weaken the quality of the degree and will not be tolerated. Penalties may include; a grade of Failure on the submitted work and/or course; academic probation; a refusal of permission to continue or to register in a specific degree program; suspension from full-time studies; suspension from all studies at Carleton; expulsion from Carleton, amongst others. Students are expected to familiarize themselves with and follow the Carleton University Student Academic Integrity Policy which is available, along with resources for compliance at: <u>https://carleton.ca/registrar/academic-integrity/</u>

Centre for Student Academic Support

The Centre for Student Academic Support (CSAS) is a centralized collection of learning support services designed to help students achieve their goals and improve their learning both inside and outside the classroom. CSAS offers academic assistance with course content, academic writing and skills development. Visit CSAS on the 4th floor of MacOdrum Library or online at: carleton.ca/csas

Important Information:

- Students must always retain a hard copy of all work that is submitted.

- All final grades are subject to the Dean's approval.

- For us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CARLETON address. Therefore, in order to respond to your inquiries, please send all email from your Carleton CMail account. If you do not have or have yet to activate this account, you may wish to do so by visiting <u>https://carleton.ca/its/get-started/new-students-2/</u>

Important dates and deadlines

https://sprott.carleton.ca/students/mba/dates-deadlines-policies/