ITIS 5431 A
Business Analytics for Managers

Tuesdays, 8:35 – 11:25, DT1006

Instructor: Dr. Alejandro Ramirez
Office: DT1722
Phone: 613-520-2600, ext. 2397
Email: Alex.Ramirez@Carleton.ca
Office Hours: Tuesdays 1:30 to 3:30 PM or by appointment

Course calendar entry from 2015/2016 graduate calendar: Decision support systems in organizations; moving from business intelligence to business analytics; big data trends in organizations; theories and trends in data analytics.

Course Description: Managers need to assess their organization’s needs for business analytics, something that has become a sought after skill for business practitioners and professionals. This course aims to empower managers to make decisions regarding the opportunities available to them by looking at how Decision Support Systems are used in organizations. By looking at the historical evolution of these systems that have moved from Business Intelligence to Business Analytics. Understand and engage in the conversation on Big Data trends in organizations. The sessions will include both theories and trends behind Data Analytics.

Learning Objectives: Assessing the role of computers in organizational decision-making and the affordances of Information Systems; Generating value from business data; Evaluating tools available for business analytics.

Course Prerequisites: ITIS 5401 or permission of the School of Business

Textbook(s): ENTERPRISE ANALYTICS:
OPTIMIZE PERFORMANCE, PROCESS, AND DECISIONS THROUGH BIG DATA
THOMAS H. DAVENPORT
FT PRESS – PEARSON EDUCATION

Exam date: Tuesday April 12, 2016 – 8:35 am
Drop Course Policy:

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

Grading Scheme:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>In Class Exercises [5 @ 3%]</td>
<td>15%</td>
</tr>
<tr>
<td>Weekly Activities [5 @ 7%]</td>
<td>35%</td>
</tr>
<tr>
<td>Special Topic Group Presentation</td>
<td>10%</td>
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<tr>
<td>Written Case Analysis</td>
<td>10%</td>
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<tr>
<td>Final Exam</td>
<td>30%</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
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**Preparation and participation:**
Preparation for the sessions is essential to fulfil the course’s goals. The readings assigned for each session are the way to set a framework for our discussion and in class exercises. Business Analytics skills are developed by acquiring a new perspective to look at business decision making, which is in essence the most important role a manager plays.

**Weekly activities** are expected to be completed before the session start. These aim to achieve a common background in order to engage fully in class exercises. Some students may need to do additional work if they need to refresh some skills, especially Excel and Statistics. Plan the completion of these activities accordingly. The deadlines for each one of them are clearly marked in the course schedule and in CU Learn.

Most of you are familiar with in class participation. Due to the nature of Business Analytics, the course will include **weekly in class exercises** that are designed to serve as learning reinforcements. All students are expected to engage in these exercises. This is experiential learning by including hands on task using a **Virtual Desktop Interface (VDI)**. Each will be introduced by the instructor and includes a rubric to assess student engagement in the exercise.

The **Special Topic Group Presentation** is a way to enhance our horizons by sharing our understanding of a special topic. You will be able to select a special topic during the first week in class exercise. The goal is to try to motivate your classmates to see the benefits and limitations in the topic you are presenting. In that session groups will be formed.

**Missed weekly activities, in class exercises or special topic group presentation:**
Completion of some activities will become meaningless after the in class exercises are conducted; therefore some of these activities have **hard deadlines** and cannot be deferred. These activities, if not completed by the hard deadline will be missed and students will receive no marks for them. Similarly, there won’t be ways to make up for missed experiential in class exercises or the special topic group presentation.
Case Analysis:
A written report on lessons learned based on the 4 cases included in the text [Chapters 15-18]. These cases are examples of best practices written from the perspective of the International Institute for Analytics. These are not standard MBA cases therefore your analysis is not expected to be the traditional SWOT analysis, or to provide an enhanced solution, on the contrary, it is about translating those lessons into possible ways to apply Analytics in another organization. We will use these cases as a starting point. The written report on lessons learned needs to be submitted through CU Learn.

Final Exam:
During our schedule session, during the final exams week there will be a written final exam covering all the material in the course

Deferred Final Examination:
Students unable to write a final examination because of illness or other circumstances beyond their control must contact the instructor 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. Deferred exams are not granted for students who have made travel arrangements that conflict with examination schedule.

Course Schedule:

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic/Agenda</th>
<th>Pre-class Prep</th>
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<tbody>
<tr>
<td>1</td>
<td>Mar 1</td>
<td>Overview of Business Analytics</td>
<td>Davenport Chapters 1 &amp; 2 Weekly Activity I</td>
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<td>A framework for BA</td>
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<td>In class Exercise I</td>
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<td>In class Exercise II</td>
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<td>3</td>
<td>Mar 15</td>
<td>Application of Analytics</td>
<td>Davenport Chapters 3 to 6 Weekly Activity III</td>
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<td>In class Exercise III</td>
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<td>4</td>
<td>Mar 22</td>
<td>Technologies for Analytics</td>
<td>Davenport Chapters 7 to 10 Weekly Activity IV</td>
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<td>In class Exercise IV</td>
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<td>5</td>
<td>Mar 29</td>
<td>The Human Side of Analytics</td>
<td>Davenport Chapters 11 to 14 Weekly Activity V</td>
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<td>In class Exercise V</td>
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<td>6</td>
<td>Apr 5</td>
<td>Big Data, future directions of Business Analytics</td>
<td>Special Topic* Case Analysis Report</td>
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<td>Special Topic Presentations</td>
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<td></td>
<td>Apr 12</td>
<td>Final Exam</td>
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*These readings will be decided during in class exercise I
**Course Sharing Websites**

Student or professor 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).

**Policy on Mobile Devices**

The use of mobile devices IS NOT PERMITTED in this class. It is disruptive to the instructor and class members. If you carry such a device to class, please make sure it is turned off. If an emergency situation requires you to keep it turned on, please discuss this with your instructor prior to class.

**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, followership and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your instructor 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.*

**Person with Disabilities**

Students with disabilities requiring academic accommodations in this course are encouraged to contact a co-ordinator at the Paul Menton Centre for Students with Disabilities to complete the necessary letters of accommodation. After registering with the PMC, make an appointment to meet and discuss your needs with me at least two weeks prior to the first in-class test or ITV midterm exam. This is necessary in order to ensure sufficient time to make the necessary arrangements. Please refer to [http://www.carleton.ca PMC](http://www.carleton.ca/pmc/) for all PMC information.

**Religious Observance**

Students requesting academic accommodation on the basis of religious observance should make a formal, written request to their instructors for alternate dates and/or means of satisfying academic requirements. Such requests should be made during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist, but no later than two weeks before the compulsory academic event. Accommodation is to be worked out directly and on an individual basis between the student and the instructor(s) involved. Instructors will make accommodations in a way that avoids academic disadvantage to the student.

Students or instructors who have questions or want to confirm accommodation eligibility of a religious event or practice may refer to the Equity Services website for a list of holy days and Carleton’s Academic Accommodation policies, or may contact an Equity Services Advisor in the Equity Services Department for
assistance.

Pregnancy

Pregnant students requiring academic accommodations are encouraged to contact an Equity Advisor in Equity Services to complete a letter of accommodation. The student must then make an appointment to discuss her needs with the instructor at least two weeks prior to the first academic event in which it is anticipated the accommodation will be required.

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 expulsion; suspension from all studies at Carleton; suspension from full-time studies; a refusal of permission to continue or to register in a specific degree program; academic probation; and a grade of Failure in the course, 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: http://www2.carleton.ca/sasc/advisingcentre/academic-integrity/.

Important Dates and Deadlines – Winter 2016

Graduate, Undergraduate and Special Students

Sessions:
- Fall term: September 2, 2015 – December 7, 2015
- Winter term: January 6, 2016 – April 8, 2016
- Fall/winter: September 2, 2015 – April 8, 2016

March 1
Last day for UHIP refund applications for International Students who will be graduating this academic year.
Last day for receipt of applications from potential spring (June) graduates.

March 6
Last day to submit Formal Examination Accommodation Forms to the Paul Menton Centre for Students with Disabilities for April examinations.

March 24
Last day to pay any remaining balance on your Student Account to avoid a hold on access to marks through Carleton Central and the release of transcripts and other official documents. An account balance may delay Summer 2016 course selection.
Last day for tests or examinations in courses below the 4000-level before the final examination period (see Examination Regulations in the Academic Regulations of the University section of this Calendar).

March 25
Statutory holiday, University closed.
April 1, 2016

Last day for receipt of applications for admission to an undergraduate program for the fall/winter session, from candidates whose documents originate outside Canada or the United States, except for applications due February 1 or March 1

April 8
Winter term ends.
Last day of fall/winter and winter-term classes.
Last day for academic withdrawal from fall/winter and winter term courses.
Last day for handing in term work and the last day that can be specified by a course instructor as a due date for term work for fall/winter and winter-term courses.

April 9-10
No classes or examinations take place

April 11-23
Final examinations in winter term and fall/winter courses may be held. Examinations are normally held all 7 days of the week.

April 15, 2016
Winter Co-op Work Term Reports are due.

April 23, 2016
All take home examinations are due on this day.