

Syllabus

MGMT 462 Managerial Analytics

MWF 11:30 PM - 12:20 PM
Computer Classroom Parmer 003

Fall 2019 August 26, 2019 - December 14, 2019

Instructor: James Miller
E-mail: jmiller@dom.edu
Cell phone : 847-530-0550

Class Location : Parmer 003

Texts (required):

1. Business Analytics 3rd Edition by James R. Evans and Publisher Pearson. Save up to 80% by choosing the eTextbook option for ISBN: 9780135231715, 013523171X. The print version of this textbook is ISBN: 9780135231678, 0135231671.

2. Computational and Inferential Thinking

The Foundations of Data Science

By [Ani Adhikari](#) and [John DeNero](#)

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The book is available at <https://www.inferentialthinking.com/chapters/intro.html>

The book is also available in PDF form in Canvas

We will use Microsoft Office software, especially Excel, and Access and the Anaconda distribution of Python. We will also use Microsoft SQL Server which you should not attempt to install on your own machine. All software is available in the Dominican Tech Center. The easiest way to use all the software needed in this course is to connect to the Dominican Server **acats2k12.dom.edu**. Instructions to do this will be given in the course. You can connect from home or from Dominican.

This is especially important for MAC users since Access does not run on the MAC and we will use features in Excel that may not be available on the MAC.

Course Description:

Firms can gain a competitive advantage by using data to make better decisions. Many different organizations, including businesses, governments, and non-profits, are now making significant investments in analytics. The objective of this course is to help you understand the field of analytics and be able to put analytics into a business / managerial environment. A secondary objective is to expose the student to basic concepts in Management Information Systems such as Database Management, Cloud Computing, and Big Data. The course will explore

1. How managers use analytics to formulate and solve business problems and to support managerial decision making.
2. The Role of Data to help you understand the basis of all analytics
3. Descriptive Analytics to help you understand what has happened
4. Predictive Analytics to help you understand trends and predict outcomes
5. Prescriptive Analytics to help you decide what action you should take

Cases and hands on exercises will be used. Students will apply tools such as Microsoft Excel, Microsoft Access and SQL, and Python.

Prerequisites: MGMT301, CIS120 or exemption from CIS120, and QUAN201 (starting May 2020)

Grading: (Percentages will be updated as soon as all assignments have been entered into Canvas)

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| Homework, Quizzes, and in class work | 65% |
| Online Discussions | 10% |

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| Exam in Week 11 | 25% |
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At the end of the course the final letter grade will be computed as follows:

| Letter Grade | Corresponding Percentage |
|--------------|--------------------------|
| A: | 93-100% |
| A-: | 90-92.9% |
| B+: | 88-89.9% |
| B: | 80-87.9% |
| C+: | 78-79.9% |
| C: | 70-77.9% |
| C-: | 68-69.9% |
| F: | 0-67.9% |

Logistics:

You will need to use your Dominican e-mail address in this class. Please see the Computer Lab aides if you do not already have the required accounts. Use of Canvas is required.

All assignments are due at midnight the night before the class. If you have a reason why your assignment will be late, contact me **before** the due date. This is easy to do and it will save you the late penalty. The late penalty is 10% if you don't ask for an extension ahead of time and 100% one week after the assignment was originally due.

Exam in Week 11: The exam will cover all materials presented in class up to the exam date. An emphasis will be placed on the class lectures, notes, handouts and the required reading. If you must miss the exam, you must obtain approval before the exam date. The exam may be made up on a mutually agreeable schedule but make up dates

generally are **before** the scheduled exam date.

Online work (Canvas): All work in this course will be submitted in Canvas (No paper!).

Schedule details: The schedule is subject to change. A detailed schedule by class week can be found in Canvas.

Objectives:

- Upon completion of this course, students should be able to:
 - Use advanced features in Excel such as
 - Pivot Tables
 - Solver (linear programming)
 - Date and Text manipulation
 - Use Python or other tools to analyze data and then draw conclusions from analysis.
 - Analyze and explain the applicability of big data and data analytics within a particular business/managerial environment and explain the associated requirements and challenges.
 - Assess the ethical, legal, and privacy issues associated with collection and use of data.
 - Demonstrate and effective use and an understanding of the applicability of various systems and tools for managing data including relational databases, spreadsheets, and analytical engines.

Fall 2019

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|----------------|--|
| August 19 | Last day to apply to graduate Fall 2019 |
| August 26 | First Day of Classes |
| September 2 | Labor Day - No Classes |
| September 3 | 7:00PM deadline for adding/dropping undergraduate classes |
| September 10 | 6:30PM deadline for adding/dropping graduate classes |
| September 10 | Last day to declare satisfactory/fail grade option for undergraduate classes |
| September 24 | Caritas and Veritas Day (class schedule suspended) |
| September 24 | Last day to declare course intensification option for undergraduate classes |
| October 18-20 | Long Weekend (no undergraduate classes) |
| November 6 | Last day to withdraw from fall semester courses |
| November 27-01 | Thanksgiving Vacation |
| December 7 | Last day of undergraduate classes |
| December 9-14 | Undergraduate Final Examinations |
| December 14 | Last day of graduate classes |

December 17

Final Grades due at noon for all classes