

Course ID:	Course Title:	Fall 2019
BUS 472	Business Analytics	Prerequisite: BUS 372
		Credits: 3

Class Information		Instructor Information		Important Dates	
Lectures:	Tuesdays and Thursdays	Instructor:	Dr. Randy Poon, PhD	First day of classes:	Wed., Sept. 4
Time:	4:00 – 5:15 pm	Email:	rpoon@ambrose.edu	Last day to add/drop, or change to audit:	Sun., Sept. 15
Room:	L2084	Cell:	(587) 893-4730	Last day to request revised exam:	Fri., Nov. 1
Tutorial:	Mondays	Office:	L2055	Last day to withdraw from course:	Mon., Nov. 18
Time:	4:00 – 5:15 pm	Office Hours:	T/TH 12:00 – 1:00 W/F 12:30 – 1:00 or by appointment	Last day to apply for coursework extension:	Mon., Nov. 25
Room:	L2084			Last day of classes:	Wed., Dec. 11
Final Exam:	Friday, Dec. 20 9:00 am – noon A2212				

Course Description

This course provides a more in-depth exploration of business analytics and data analysis techniques. The use of these techniques and tools, in turn, help managers make data-driven business decisions. Students will think critically about how to frame and solve business problems and then learn how to build predictive models using business intelligence software to address these problems. In addition, they will examine the emerging ethical guidelines that might govern the use of big data. The focus will largely be on the practical use of business intelligence tools. Instruction will consist of lecture and tutorials.

Note: The course requires the use of the Microsoft Windows operating system.

Expected Learning Outcomes

- Understand the role of business analytics
- Navigate the emerging ethical uses of data amidst growing privacy concerns
- Gain knowledge of business intelligence tools (Power BI) and techniques
- Understand the process to frame, translate, and address business problems through these tools
- Prepare students to write the Microsoft Certification Exam 70-778 *Analyzing and Visualizing Data with Microsoft Power BI*

Textbooks

Allington, M. (2018). Supercharge Power BI: Power BI is better when you learn to write DAX.

Ferrari, A., & Russo, M. (2016). Introducing Microsoft Power BI (free resource)

https://blogs.msdn.microsoft.com/microsoft_press/2016/06/16/free-ebook-introducing-microsoft-power-bi/

Winston, W. L. (2016). *Microsoft Excel data analysis and business modelling*, (5th ed.). Redmond, WA: Microsoft Press.

- Note: while we used this text significantly for BUS 372, we won't be actively using the Winston text for this course. However, it will be a very useful resource in remembering how to use the Data Model, Power Pivot, and Power Query tools.

Web Resources

Throughout the course, we will be heavily drawing upon a variety of web resources. Many of these resources will be posted in Moodle; however, if you want to get a head start and review these Power BI or DAX resources, feel free to do so. These include:

- **Power BI Documentation** (<https://docs.microsoft.com/en-us/power-bi/#pivot=home&panel=home-all>). This site serves as a hub to additional Power BI resources that we will utilize during this course:
 - **Power BI for Developers** (<https://docs.microsoft.com/en-us/power-bi/developer/what-can-you-do>)
 - **Power BI for Report Designers** (<https://docs.microsoft.com/en-us/power-bi/power-bi-creator-landing>)
 - **Microsoft Power BI Guided Learning** (<https://docs.microsoft.com/en-us/power-bi/guided-learning/index>)
- **DAX Resource Center** (<https://social.technet.microsoft.com/wiki/contents/articles/1088.dax-resource-center.aspx>)

Course Outline and Schedule

September 5 – 7:	Introduction to Course
September 9 – 13:	The Role of Analytics
September 16 – 20:	Ethics and Big Data
September 23 – 27:	Introduction to Power BI
September 30 – October 4:	Connecting to Data; Transforming and Shaping Data I
October 7 – 11:	Transforming and Shaping Data II
October 14 – 18:	DAX I
October 21 – 25:	DAX II
October 28 – November 1:	Framing and Solving Problems
November 4 – 8:	Modeling Data and Relationships I
November 11 – 15:	Fall Reading Break
November 18 – 22:	Modeling Data and Relationships II; Creating Reports, Visuals, and Dashboards I
November 25 – 29:	Creating Reports, Visuals, and Dashboards II
December 2 – 6:	Power BI Service, Publishing and Sharing; Interfacing with Excel, Mobile App
December 9 – 11:	Final Exam Preparation

Approach to Tutorial and Lecture Sessions

- Tutorials will be actively used as part of the weekly coverage of a topic
- Introduction of new concepts will take place during any portion of our available time together, including the tutorial and the two weekly lectures
- Exams may take place during any of the three sessions (although many of the exams will occur on Mondays)
- Student practice time will also take place throughout the week using exercises given by the instructor
- If you are having difficulty with the lecture or practice material, it is your responsibility to notify the instructor
- As such, it is essential that you attend and actively participate in both the lectures and the tutorial

Schedule and Weighting of Assignments and Exams

- **Ethics and Big Data Essay (10%) – Friday, September 27 (due 11:59 p.m in Moodle)**
- **Exam 1: Connecting to Data & Transforming and Shaping Data (10%) – Thursday, October 10**
- **Exam 2: DAX (10%) – Monday, October 28**
- **Exam 3: Modeling Data and Relationships (10%) – Tuesday, November 19**
- **Exam 4: Creating Reports, Visuals, and Dashboards (10%) – Monday, December 2**
- **Power BI Project (20%) – Saturday, December 7 (due 11:59 p.m. in Moodle)**
 - The project will consist of multiple deliverables and will largely follow the topics covered in the course
 - Although the final deliverable is due on December 7, there will be deliverables with due dates throughout the semester
 - Details will be posted in Moodle
- **Exam 5: Power BI Service, Interfacing with Excel, and Mobile App (10%) – Monday, December 9**
- **Final Exam (20%) – Friday, December 20 (9 am – noon, A2212)**
 - Simulates the Microsoft Certification Exam 70-778 Analyzing and Visualizing Data with Microsoft Power BI
 - While the actual 70-778 Certification Exam will not be written in this course, students are invited and encouraged to write Microsoft's certification exam in the weeks following this course (<https://www.microsoft.com/en-us/learning/exam-70-778.aspx>)

Late assignments (i.e., the essay and the project) will lose 10% per day late. The instructor has the discretion to not accept assignments that are more than 5 days late. In the case of legitimate or approved absence, and at the instructor's discretion, the assigned date may be rescheduled to a later date, or if this is not practically possible, the marks may be reallocated to other components of the course grade.

Attendance:

Attendance at all classes (tutorial and lectures) is expected. This course covers a lot of material and missing class could result in falling behind.

Grade Summary:

The available letters for course grades are as follows:

% Grade	Letter Grade	
95% to 100%	A+	
90% to 94%	A	Excellent
85% to 89%	A-	
80% to 84%	B+	
76% to 79%	B	Good
72% to 75%	B-	
68% to 71%	C+	
64% to 67%	C	Satisfactory
60% to 63%	C-	
55% to 59%	D+	
50% to 54%	D	Minimal Pass
0% to 49%	F	Failure

Because of the nature of the Alpha 4.00 system, there can be no uniform University-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on student registration system. Printed grade sheets are not mailed out.

Ambrose University Academic Policies:

Communication

All students have received an Ambrose e-mail account upon registration. It is the student's responsibility to check this account regularly as the Ambrose email system will be the professor's instrument for notifying students of important matters (cancelled class sessions, extensions, requested appointments, etc.) between class sessions. If students do not wish to use their Ambrose accounts, they will need to forward all messages from the Ambrose account to another personal account.

Registration

During the **Registration Revision Period** students may enter a course without permission, change the designation of any class from credit to audit and /or voluntary withdraw from a course without financial or academic penalty or record. Courses should be added or dropped on the student portal by the deadline date; please consult the List of Important Dates. After that date, the original status remains and the student is responsible for related fees.

Students intending to withdraw from a course after the Registration Revision Period must apply to the Office of the Registrar by submitting a "Request to Withdraw from a Course" form or by sending an email to the Registrar's Office by the **Withdrawal Deadline**; please consult the List of Important Dates on the my.ambrose.edu website. Students will not receive a tuition refund for courses from which they withdraw after the Registration Revision period. A grade of "W" will appear on their transcript.

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

Exam Scheduling

Students, who find a conflict in their exam schedule must submit a Revised Examination Request form to the Registrar's Office by the deadline date; please consult the List of Important Dates. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; 2) the student has three final exams within three consecutive exam time blocks; 3) the scheduled final exam slot conflicts with an exam at another institution; 4) extenuating circumstances. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

Electronic Etiquette

Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to use electronics for purposes unrelated to the course during a class session. Turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Do not use iPods, MP3 players, or headphones. Do not text, read, or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. Some professors will not allow the use of any electronic devices in class. The professor has the right to disallow the student to use a

laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

Academic Policies

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Extensions

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a course Extension from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the deadline date; please consult the List of Important Dates. Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

Appeal of Grade

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Registrar's Office in writing and providing the basis for appeal within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of \$50.00 must accompany the appeal. If the appeal is sustained, the fee will be refunded.

Academic Integrity

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

Note: Students are strongly advised to retain this syllabus for their records.