



UNC CHARLOTTE

BELK COLLEGE of BUSINESS

INFO 3236 – 001 Business Analytics  
Course Syllabus – Spring 2017

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**Office Hours:** Tuesday & Thursday 3:30 – 5:00 pm and by appointment  
Friday 254A

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**Course Materials:** **Reading Materials:** There is no required text book for this class. All reading materials will be posted or linked on Canvas course site. These materials include handouts, notes, power-point slides, practice problem sets, and web links to articles for class discussions. You can print the posted material and bring them to class. Please note that I will not provide printed copies of any of the posted materials.

**Software:** This class will primarily use SAS Enterprise Guide and SAS Enterprise Miner Workstation (both available when you install SAS 9.4). We may also use Microsoft Excel 2013/2016, depending on time available during the semester. **The SAS and Excel software are installed in the Friday building student labs. Please check the availability of these software in other student labs on campus if you plan to work outside the Friday building and plan for class activities, including the homework assignments, project, and exams.** The SAS software can be installed on your personal laptop or home desktop by contacting the library for installation instructions.

Course materials including copies of presentations will be provided on the Course Canvas website at: <https://canvas.uncc.edu>

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**Course Description:** **Catalog Description:** This course covers various data mining and business intelligence methods, such as rule-based systems, decision trees, and logistic regression. In addition, this course covers query and reporting, online analytical processing (OLAP) and statistical analysis as well as issues relating to modeling, storing, securing, and sharing the organizational data resources.

**Prerequisite:** Junior or Senior standing; and MIS, OSCM, Economics, or Marketing major or minor in good standing; or permission of department.

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**Course Objectives:** As we transition from an industrial to knowledge economy, an organization's ability to create and successfully leverage data and knowledge assets will be an important competitive factor. Increasingly organizations are faced with the challenges of "Big Data" and how to effectively use the data for competitive advantage. "Business analytics" refers to the extensive use of data, statistical and quantitative analysis, explanatory and predictive models, and fact-based management to drive decisions and actions (Davenport and Harris, 2007, *Competing on Analytics: The New Science of Winning*). This class will provide the conceptual foundations of business analytics and an overview of select analytics techniques and software tools.

The specific learning objective are as follows:

1. To develop an understanding of the business intelligence, analytics and decision support.
2. To understand the principles of data management in a “big data” environment, including the issues relating to storing and organizing organizational data resources using data warehousing.
3. To understand different data mining and analytics tools and techniques (e.g., decision trees, logistic regression, cluster analysis, etc.) for solving business problems.
4. To understand how to effectively use reporting and visual analytics tools to present analytics results to a business audience.
5. To understand the ethical and privacy issues when practicing business analytics.

## Grading Policies:

Following letter grades will be used:

A	90.0 – 100%
B	80.0 – 89.99%
C	70.0 – 79.99%
D	60.0 – 69.99%
F	59.99% AND BELOW

Student performance in the course will be weighted as follows:

Grade Components	Points	Group/Individual
Exam #1	225	Individual
Exam #2	225	Individual
Final Exam	200	Individual
Homework	100	Group or Individual
Quizzes and In-class Assignments	100	
Project	100	Group
Attendance and Class Participation	50	Individual
<b>Total</b>	<b>1000</b>	

**Exams,  
Assignments,  
etc.**

**Examinations**

**There will be three exams for the course – 2 midterm exams and one final. All the exams will be non-cumulative.** All exams will be in-class, closed book, and closed notes. The exams include multiple-choice questions, essay-type questions, and problem solving with analytics software and will be administered in the computer lab.

The instructor will keep all exams after grading. However, exam reviews are available during office hours or by appointment. Students requesting a review of their exams should do so within 7 calendar days of the posting of the exam grades. **No grade reviews or adjustments will be done beyond this 7-calendar day period.**

Exams are a form of intellectual property belonging to those who create them. Consequently, exams must remain in instructor’s possession or under instructor’s control at all times. This means that exams may not be taken out of the room or copied. Students are encouraged to review their exams during office hours or by appointment. However, failure to return an exam after taking or reviewing it or removing an exam from instructor’s presence at any time or copying an exam will be considered theft of intellectual property. Such action will result in an exam grade of zero and may warrant further disciplinary action.

**Make-up Exam Policy**

If a student anticipates missing an exam, she/he must provide appropriate supporting documents in advance to the instructor to request a make-up exam. The instructor will review all requests and authorize, at his discretion, eligible students to take makeup exams for a missed exam. A student **who misses an exam without prior approval, possibly due to unexpected situation on the exam day, should contact the instructor within 6 hours of the exam start date/time and provide appropriate supporting documentation to be eligible for the makeup exam.** It is the student’s responsibility to be aware of and follow the make-up exam policies and no special accommodations will be made for any exceptions. **THERE WILL BE NO MAKE-UP FOR THE FINAL EXAM.**

**Quizzes and In-class Assignments**

During the semester, the instructor will give quizzes or assignments to be completed in class. The points and weights for each assignment will be announced by the instructor. Your performances in these assignments together will count towards a maximum of 100 points towards final grade. There are **NO MAKE UP** for quizzes and in-class problem solving if you miss any, irrespective of the reason for a student missing the assignment. Instead, you will be allowed to drop **ONE** quiz or in-class problem solving assignment (missed or lowest grade).

**Class  
Policies:**

**Class Attendance**

**Regular attendance is necessary for doing well in this course. It has been my observation that students who miss more than 3 or 4 classes are most likely to end up with a failing grade in this class. However, when you attend class, it is important to not arrive late or leave early as it is very, very disruptive.** You are responsible for completing the work from all the class meetings. You are responsible for any material covered, announcements made, assignments distributed, and any other type of work you may miss during any absence from class. The exams may contain material discussed in the class but may not be in the posted PowerPoint notes or handouts.

Attendance will be taken at random in class during the semester and will be counted towards your grade (as specified later in this document). Attendance will be an important factor in making borderline grade decisions. Besides, there are several good reasons to attend all classes:

- some topics discussed in the class are not covered adequately in the textbook and the instructor may present alternative and better approaches
- class attendance is highly correlated with learning the material and performing well on the course examinations
- historically, those who skip the class tend to make less than their target grades

- **instructor may refuse to answer questions already covered in class but missed due to absenteeism.** A student that misses a class is responsible for obtaining any needed information (e.g., notes, announcements) from fellow students

### **Class Preparation and Participation**

Meaningful participation in class includes answering questions posed to the class by the instructor, adding insightful comments or information to the topics being discussed, sharing information relevant to the discussion topic, and asking thoughtful questions that raise the level of discussion for the benefit of the entire class. However, students should refrain from discussions or behavior that disrupts the general learning environment in the class. Such disruptive behavior will be treated seriously and will result in loss of grade points.

Students are expected to study the posted materials (notes, videos, presentations, etc.) **prior to each respective class session.** Additionally, students must be prepared to intelligently contribute to active class discussions and answer questions related to the current topics.

### **Due Dates Policy**

A deadline is like a ticket for a cruise. If you arrive after the scheduled departure time, the ship will have sailed without you and your ticket (homework) will be worthless. Late homework and projects will not be accepted, and will receive a grade of zero. If you know you will miss class, make arrangements to turn in your work ahead of time.

### **Quality of Work**

The expectation is that all your submitted work will be of **professional quality** both in terms of **content and presentation.**

- Spelling, grammar, punctuation, clarity of expression, and presentation will count in every piece of work you do for this course. If you have trouble with spelling, grammar or punctuation, have someone proofread your package.
- Your grade will be based on what you say or write and how you present it. It becomes difficult to read for content if the mechanics are sloppy, and a superior job may not be recognized as such if presented in an error-laden package.
- Good ideas sloppily expressed will receive mediocre grades, as will flashy presentations that lack content.
- Students whose native language is not English must meet the same quality requirements as others

All work submitted for evaluation (including group and individual work) must be neat and clearly marked indicating the question/case to which it relates. Work submitted online must have all files named appropriately so that the instructor can easily understand what the file represents. The instructor will not spend time going through all your files to find your submitted work. Even though this is not a language class, the instructor will deduct points for typos or grammatical errors in submitted work. Whether it is individual work or group work, it is a good idea to thoroughly review it before submitting it. Do not ask/expect the instructor to review your work before submission for opinions or feedback.

### **Instructor's help for homework and project**

As you practice various sample problems in this class, you will invariably encounter programs that do not work. It is your responsibility to pay attention to discussions in class related to debugging. If you are not able to identify the errors, I will be happy to go through your work with you and help you identify the problems. I can provide any amount of help with the examples and practice problems. But, I cannot provide any help with your homework assignments or your project, if you face any problems. Specifically, I cannot look at your homework or project before the submission to identify/correct bugs/errors or to judge how well the work meets the requirements. It is your responsibility to learn the correct use of the tools required for this class. I strongly advise you to try

to solve the examples and practice problems by yourself, so that it is easy for you to complete your homework assignments and exams.

### **Group Project and Team Work**

Students will form groups (5-6 members each) to complete and present the project. A list of group members must be submitted to the instructor via email copied to all group members by **midnight on the due date**.

For group activities, each team is responsible for organizing itself, dividing up the work, and deciding how relative contributions should be measured. It is your responsibility to **promptly** inform the instructor of any dysfunctional team dynamics and to solicit his help. All members in a group are expected to contribute to the project. If a group member does not contribute, the rest of the members may, after a consensus agreement and the instructor's consent, ask him/her to leave the group. Peer reviews/feedback will be factored into the grade.

All team members must

- participate in all team activities,
- participate in class discussions,
- strive to maintain positive working relationships with their team members,
- complete all assignments,
- assist classmates,
- freely express their ideas, thoughts, comments, and constructive criticisms to their team members, me, and the class.

It is the responsibility of the team to ensure that all team members understand all concepts related to the completed projects and presentations. The instructor may ask questions about any completed project to any team member and any incomplete or unsatisfactory answers will affect the team grade. *The instructor may announce additional measures to obtain feedback on group member contributions and institute appropriate grade penalty for lack of participation. However, this grade penalty will be limited to the course-work that is group-based.*

### **Class Conduct Policy**

**Disruptive behavior in the class distracts other students' ability to benefit from their in-class experience.** Such behavior includes but is not limited to **side-bar conversations between two or more students during lecture, unnecessary comments that add no value to class, arriving late, leaving early, surfing the net, and any activities that negatively impact the ability of other students to learn and/or listen in the class.**

**Rude and disruptive behavior will not be tolerated.** If necessary, the instructor will deduct points from grades for any student who chooses to disrupt the class and distract others repeatedly. In particularly egregious or recurring cases, the instructor will have the student permanently removed from the class.

Please avoid spending class time working on assignments for other classes, checking e-mail, surfing the Web, texting, or engaging in activities not related to the class. Repeated engagement in such behavior will be reflected in lower grades and may lead to removal from the course.

### **Electronic Devices in Class**

Students are permitted to use laptops or tablets during class for **note-taking and other class-related work only**, but this should be done without distracting other students and without distracting you from the topic of discussion. Those using these devices during the class for work not related to this class must leave the classroom for the remainder of the class period.

Cellular phones **MUST BE TURNED OFF/SILENCED AND STORED AWAY DURING THE CLASS** and students are strongly discouraged from checking their cell-phone messages when the class is in progress. Use of instant messaging, email or other communication technologies during class time is

not allowed. Calculators and computers are not allowed during examinations and quizzes, unless specifically announced by the instructor.

*I will take very seriously any disruptive behavior in my class. Students in my class should feel free to let me know if any electronic device usage behavior of fellow student/s is distracting her/his learning experience. Such complaints will be treated as confidential, but will help me to take appropriate actions to make sure that such distractions are eliminated and there is a positive learning environment in the class.*

Students violating the electronic devices policies will be marked for disruptive behavior and may be asked to leave the class. Their grade will also be affected according to the rules of class participation points.

### **Extra Credit Work**

There will be **NO EXTRA CREDIT** work offered for any student during the semester. **Please do not depend on any extra credit opportunities to improve your grade later in the semester.**

### **Grade Appeals**

If you believe that the grade you received on an assignment, exam or other graded course component was in error or unfair, **you can appeal to the professor in writing within 7 calendar days of the receipt of your grade.** The appeal should clearly state the reasons why you believe the grade to be unfair or the nature of the error. Overdue appeals will not be considered late in the semester.

### **Class Cancellation**

If the instructor is unable to attend class or the University is closed unexpectedly, assume the course material will be moved forward to the next meeting.

## **General Policies:**

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### **Student Academic Integrity**

As a program that that helps to create business and government leaders, the Belk College of Business has an obligation to ensure that academic integrity is of the highest standards. Standards of academic integrity will be enforced in this course. Students are responsible for knowing and observing the UNC Charlotte Code of Student Academic Integrity (<http://legal.unc.edu/policies/up-407>). All work on exams and quizzes is to be done on an *individual basis*. This may also be extended to certain assignments and will be specified as such in class. There is always the possibility and temptation to consult with someone who has had the course (or class) previously or to consult case/class notes or project reports from another section or from a previous year or semester or that might be available on the Internet. This practice is *strictly prohibited* under all circumstances and unequivocally constitutes a *violation* of the *Code of Student Integrity*. Obviously, group projects involve cooperative effort. Everyone however, is *required* to contribute to the effort for this class, and individual contributions will be evaluated through group peer review and participation score.

### **Diversity and Inclusion**

The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

### **Disability Accommodations**

Students in this course seeking accommodations to disabilities must first consult with the Office of Disability Services and follow the instructions of that office for obtaining accommodations. If you have a disability that qualifies you for academic accommodations, please provide a letter of accommodation from the Office of Disability Services during the first week of class. For more information regarding accommodations, please contact the Office of Disability Services at (704) 687-4355 or stop by their office in 230 Fretwell.

### Withdrawal from Class

The administration of this institution has set deadlines for withdrawal from any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, the instructor cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

### Incomplete Grade

As per [university policy](#), incomplete grades will be granted when a student who is otherwise passing has not, due to circumstances beyond his/her control, completed all the work in the course. The missing work must be completed by the deadline specified by the instructor or during the next semester (fall or spring) in residence, but no later than 12 months after the term in which the "I" grade was assigned, whichever comes first. If the "I" grade is not removed during the specified time, a grade of "F", "U" or "N" as appropriate is automatically assigned. ***The grade of "I" cannot be removed by enrolling again in the same course.***

### Course Changes Disclaimer

The instructor reserves the right to make any necessary changes to the course content, schedule, and policies. Changes will be announced in class and will also be posted online.