INFM 350 Business Analytics

General Course Information:
Meeting Times and Location: Tuesday and Thursday 12:15-1:30 pm
Education Center 112

Professor Information:  Dr. Olga Biedova
Department of Supply Chain and Information Management
Beatty 314 and online at https://cofc.zoom.us/j/7647146892
biedovao@cofc.edu

Office Hours:  Tue and Thu: 9:30 am - 11:00 am (in-person in Beatty 314)
Wed: 10:00 am - 12:00 pm (virtually via Zoom: https://cofc.zoom.us/j/7647146892)
Please make an appointment via email.

Textbooks and Software:

- **Supplementary Material**: will be posted on OAKS and/or distributed in the classroom.
- **Required Software**: Tableau, Weka, Rstudio, MineMyText.

Prerequisites:  DSCI 232 or DATA 101.

Course Description
To successfully compete in today’s global business environment, organizations must constantly monitor, recognize and understand every aspect and every issue of their operations, their industry and the overall business environment. Corporate data is at the heart of this competition. Insights gleaned from corporate data can be used to streamline processes, drive changes in product development and inform decisionmakers on how best to approach a market.

This course focuses on business analytics—an approach that entails the use of analysis, data and systematic reasoning to make business decisions. Studies have shown that organizations that use rigorous data analysis to drive decision-making can be more competitive than those that do not.

The course examines the theoretical and conceptual foundations of business analytics, its uses and contextual considerations. It zooms in on methods that have emerged from the field of business analytics and provides the opportunity to gain knowledge and hands-on experiences with algorithms and technological tools applied in the field.

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The School of Business Learning Goals

Communication Skills
Students will analyze quantitative as well as qualitative data and present findings in written form as well as in form of presentations. In addition, students will provide briefings of the latest trends in business analytics.

Quantitative Fluency
Students will use various analytical tools to analyze data sets. More specifically, they will gain experience with business applications in the areas of descriptive, predictive and prescriptive analytics.

Global and Civic Responsibility
Students will describe the ethical as well as corporate issues associated with data analytics. Students will communicate with employees associated with, or working in, the area of business analytics as part of a group assignment.

Creativity
Students are required to identify a business and/or societal problem, analyze the appropriate data set, and offer recommendations to solving the problem. Students will have to choose what works best among the set of tools they have learned.

Synthesis
After gaining training and exposure to a variety of analytical tool sets, and interviewing a person in the business analytics field, students will apply those experiences to a comprehensive data project. Students will become aware how companies are/could be leveraging these technologies for competitive advantage.

Method of Teaching/Learning
The majority of lectures will be delivered in in-person format: all of the students are expected to be present in class, lectures are not recorded on transmitted online. A few classes may be delivered via Zoom (at the regular time of the class).

If the circumstances change and the face-to-face lectures are no longer possible and/or safe, the class will switch to the synchronous online meetings.

Grading
Participation 5%
Quizzes (12) 12%
Exercises (8) 28%
Tests (2) 20%
Team Project 20%
Final Exam 15%

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**Participation:** Students should plan on actively engaging in class. The class contribution component will reflect the individual student’s *constructive* contribution during lectures, including answering questions, participation in the discussions, engaging with the material posted on OAKS, participating in the OAKS discussions. Students should come to class on time and be ready to participate. Non-constructive contributions include disrespectful or disruptive behavior, taking unnecessary breaks during class, and the use of cell phone, text messaging, e-mailing or computers for non-class activities.

**Quizzes:** Almost each week (typically in the beginning of the class on Tuesday) students will take a short quiz that covers the material of the previous week. There will be 12 quizzes total, one for each chapter. If for any reason, you cannot take a quiz in the scheduled time, you should notify me at least two days in advance.

**Exercises:** There will be 8 exercises that cover various business analytics topics. You will complete each exercise in a group or two students. The groups will be randomly formed for each exercise. Students in each group are expected to put equal amount of effort in the exercise and equally contribute to the group submission. The lowest exercise grade will be dropped when calculating the final grade.

**Tests:** There are two tests which will be given during the class time. These tests are not cumulative.

**Team Project:** Team project will be conducted in teams of two (you are free to form your own group). You will be asked to evaluate each other in terms of multiple criteria. The project will consist of multiple required steps: (1) identify a business problem, (2) collect relevant data, (3) choose a suitable BA technique, (4) present the solution in the class. The deliverables will include a project proposal with the clear business problem and actionable plan to solve it, collected and cleaned data, business report, and the classroom presentation. Reproducible steps and code should be available upon instructor’s request.

**Final Exam:** The final exam is cumulative and is worth 15 points. It must be taken at the time assigned by CofC for our time block

   **Final Exam: 4/28 3:00 pm-5:00 pm**

Tests and the final exam are closed book, closed notes, closed phone, with no other browser windows or tabs open on your computer. Tests and the final exam are timed. Additional software may be enforced in order to facilitate these rules.

For the graded exercises and team project deliverables, late submissions are accepted with a **penalty of 25%** for each day after the deadline.

There is no “extra credit” work in this course. No work for any additional credit will be given at the end of semester. You are responsible to keep up with the course material.
Course Policies

Attendance Policy
Students are expected to attend all live class. Your success in this class depends on your participation and participation of your fellow students.

The absence memo process will not be used this academic year. I will not need to provide me with documentation for absences. However, I ask you to tell me directly as soon as possible any time you miss class.

Late Work
Unless otherwise noted, all assignments are due on the due date and time listed in the OAKS calendar or by that graded item. All the deadlines are stated in the Eastern Time zone. If you are in a different time zone, make sure you keep track of the time difference and submit an assignment on time. Do not wait until the last minute to submit your assignments, save your work often, and keep its backup in on external source (e.g. cloud services).

If extraordinary circumstances arise (e.g., hospitalization) or family emergency, or network outage, notify me as soon as possible so arrangements can be made.

Communication
Communication will occur in multiple ways: Zoom, face-to-face meetings, OAKS announcements, OAKS content, OAKS gradebook, OAKS discussions, and CofC email.

OAKS, including Gradebook, will be used for this course throughout the semester to provide the syllabus and class materials and grades for each assignment, which will be regularly posted. It is the student’s responsibility to ensure that all grades entered are correct. If I have made a mistake, the student has two weeks from when the assignment/exam was graded to notify me of the mistake.

Email
Typically, I will respond to your email within 24 hours, although my response time will be slower on weekends. If you do not receive a reply within 24 hours, please re-send your message. Please start with [INFM 350] in the title field, message without this portion may be ignored or delayed.

Technical Difficulties
If you have questions or problems related to the course, please follow the communication procedures noted above. If you have technical problems, please contact Student Computing Support or Helpdesk using these methods:

Student Computing Support
843-953-5457
studentcomputingsupport@cofc.edu
blogs.cofc.edu/scs
It’s important to resolve technical problems swiftly, so do not delay getting support. Computer failure or unavailability does not constitute an excuse for not completing assignments.

Class Climate and Etiquette
To maintain a respectful and supportive environment, please uphold to the rules described in the Student Handbook as well as the rules of netiquette when joining the class online. Netiquette is network etiquette, the do's and don'ts of online communication.

- Be kind and ethical. Sexist, racist, and homophobic language will not be tolerated.
- Be aware of how your communication may be perceived by others. Ask yourself if your message or comment may be misinterpreted and offend someone.
- Be forgiving. Try first asking clarifying questions rather than attacking. But if you experience any questionable or outright inappropriate behavior from your colleagues, please let me know.
- Respect disagreement.
- Share your knowledge.
- Help each other.
- Cite your sources.

Continuity of Learning
This class will include a variety of online and technology enhanced components to reinforce continuity of learning for all enrolled students.

During the course of class, in response to the development of COVID-19, the course delivery mode could be switched among face-to-face, online, or hybrid. The students need to make sure that their study will not be interrupted by the change of the delivery mode.

If one or more students are absent for an extended period of time due to COVID-19 (quarantine or isolation), instructors may, at their discretion, conduct the class exclusively online via OAKS for the duration of student quarantine/isolation, record class lessons to share with students, or choose an alternate accommodation that provides the impacted student(s) with the opportunity to continue in the course. The specific accommodation will vary depending on the number of students affected, the expected duration of their absence, and the needs of the class.

Inclement Weather, Pandemic or Substantial Interruption of Instruction
If in-person classes are suspended, faculty will announce to their students a detailed plan for a change in modality to ensure the continuity of learning. All students must have access to a computer equipped with a web camera, microphone, and Internet access. Resources are available to provide students with these essential tools.
College of Charleston Honor Code and Academic Integrity

Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved.

Incidents where the instructor determines the student’s actions are related more to a misunderstanding will handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the XX to be expunged. The F is permanent. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

Students should be aware that unauthorized collaboration—working together without permission—is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others’ exams, fabricating data, and giving unauthorized assistance.

Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the Student Handbook at [http://deanofstudents.cofc.edu/honor-system/studenthandbook/index.php](http://deanofstudents.cofc.edu/honor-system/studenthandbook/index.php)

Disability Accommodation

1. Any student eligible for and needing accommodations because of a disability is requested to speak with the professor during the first two weeks of class or as soon as the student has been approved for services so that reasonable accommodations can be arranged.

2. The College will make reasonable accommodations for persons with documented disabilities. Students should apply for services at the Center for Disability Services/SNAP located on the first floor of the Lightsey Center, Suite 104. Students approved for accommodations are responsible for notifying me as soon as possible and for contacting me one week before accommodation is needed.

3. This College abides by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. If you have a documented disability that may have some impact on your work in this class and for which you may require accommodations, please see an administrator at the Center of Disability Services/SNAP, (843) 953-1431 or me so that such accommodation may be arranged.

For more information, you may visit the disability services website: [http://disabilityservices.cofc.edu/](http://disabilityservices.cofc.edu/)

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Center for Student Learning:
The Center for Student Learning’s (CSL) academic support services provide assistance in study strategies, speaking & writing skills, and course content. Services include tutoring, Supplemental Instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at http://csl.cofc.edu or call (843) 953-5635.

Mental & Physical Wellbeing:
At the college, we take every student’s mental and physical wellbeing seriously. If you find yourself experiencing physical illnesses, please reach out to student health services (843.953.5520). And if you find yourself experiencing any mental health challenges (for example, anxiety, depression, stressful life events, sleep deprivation, and/or loneliness/homesickness) please consider contacting either the Counseling Center (professional counselors at http://counseling.cofc.edu or 843.953.5640 3rd Robert Scott Small Building) or the Students 4 Support (certified volunteers through texting "4support" to 839863, visit http://counseling.cofc.edu/cct/index.php, or meet with them in person 3rd Floor Stern Center). These services are there for you to help you cope with difficulties you may be experiencing and to maintain optimal physical and mental health.

Food & Housing Resources:
Many CoF students report experiencing food and housing insecurity. If you are facing challenges in securing food (such as not being able to afford groceries or get sufficient food to eat every day) and housing (such as lacking a safe and stable place to live), please contact the Dean of Students for support (http://studentaffairs.cofc.edu/about/salt.php). Also, you can go to http://studentaffairs.cofc.edu/student-food-housing-insecurity/index.php to learn about food and housing assistance that is available to you. In addition, there are several resources on and off campus to help. You can visit the Cougar Pantry in the Stern Center (2nd floor), a student-run food pantry that provides dry-goods and hygiene products at no charge to any student in need. Please also consider reaching out to Professor ABC if you are comfortable in doing so.

Regarding Student Use Of Course Materials. Lectures and course materials, including PowerPoint presentations, recorded videos, outlines, tests, and similar materials are protected by copyright even if there is no copyright notice on the material. You may take notes and make copies of course materials for your own use. You may NOT reproduce or distribute these materials publicly, without the instructor’s express written consent.

Final grades will be assigned according to the following grading scale:

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<thead>
<tr>
<th>Points</th>
<th>Letter Grade</th>
<th>Points</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 94</td>
<td>A</td>
<td>73 - 75.99</td>
<td>C</td>
</tr>
<tr>
<td>90 - 93.99</td>
<td>A -</td>
<td>70 - 72.99</td>
<td>C -</td>
</tr>
<tr>
<td>86 - 89.99</td>
<td>B +</td>
<td>66 - 69.99</td>
<td>D +</td>
</tr>
<tr>
<td>83 - 85.99</td>
<td>B</td>
<td>63 - 65.99</td>
<td>D</td>
</tr>
<tr>
<td>80 - 82.99</td>
<td>B -</td>
<td>60 - 62.99</td>
<td>D -</td>
</tr>
<tr>
<td>76 - 79.99</td>
<td>C +</td>
<td>&lt; 60</td>
<td>F</td>
</tr>
</tbody>
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