College of Charleston
School of Business
INFM 530: Business Analytics Fundamentals for Competitive Advantage

**Semester:** Fall 2022  
**Meeting time:** 8 AM – 10:40 AM  
**Meeting location:** Tate Center 132, or virtual via Zoom

**Professor:** Dr. Iris Junglas  
**Office:** Beatty Center 306, or virtual office via Zoom  
**Office Hours:** Tuesdays and Thursdays 12:05-2pm; and by appointment  
**Contact Information:** junglasia@cofc.edu, or via https://cofc.zoom.us/my/irisjunglas

**Course Description:**
This course focuses on business analytics—an approach that entails the use of analysis, data and systematic reasoning to make business decisions. 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. The course examines the strategic and managerial foundations of business analytics, its use cases and conceptual and ethical considerations.

**Course Prerequisite:**  
Graduate standing

**Course Learning Objectives:**
The overall goal of this course is to develop a working knowledge of the challenges and practices associated with business analytics practices as used in corporations. Upon completion of the course, students should be able to:

- Explain how organizations excel at business analytics
- Determine appropriate analysis and design strategies of business analytics for organizations
- Discuss the link between business performance management and business analytics
- Develop fluency with the issues relating to business analytics, including data and ethical considerations
- Use a commercial tool to create high-impact visualizations of common data analyses to help see and understand business data

**Required Textbooks:**
A set of teaching cases available at Harvard Business Publishing: the link is available on OAKS, seven cases, total price: USD 25.50 (Make sure you register as a student otherwise you will not get the discounted price!)
Printed version: ISBN 9780134633282, 0134633288, USD 30
E-version: ISBN 9780134635248

Additional Textbook (not required):
Printed version: ISBN 1119560209, USD 40
E-version: USD 27

Necessary Tech Tools:
1. Access to a computer (Windows or Mac)
2. Access to the Internet in order to use
   - OAKS, our Web-based course management system
   - Tableau: https://www.tableau.com (instructions will be provided)
   - Weka: https://waikato.github.io/weka/wiki/downloading_weka/ (instructions will be provided)

Course Delivery Method:
All materials are available in OAKS, including presentation slides, reading materials, assignments, and exams. Live sessions will be recorded and made available in OAKS.

Final Grade Computation:
Quizzes (4-7): 10%
Exercises (4): 24%
Exams (2): 35%
Team case presentation (1): 15%
Team case write-up (2): 16%

Grading Scale:
A: 90-100; B+: 87-89.99; B: 80-86.99; C+: 77-79.99; C: 70-76.99; F: <70.

Course Assessment:
Quizzes (4-7): In order to ensure you have read the case of the day, there will be 4-7 random quizzes administered throughout the semester without prior announcement. Each quiz will be administered at the beginning of class and will consist of 5 to 8 questions. You have the option of tossing one quiz at the end of the semester. If you miss more than one quiz, you will receive a zero for each beyond the first missed quiz.

Exercises (4): There will be three comprehensive exercises related to tools. You will receive a dataset, along with a set of questions. Make sure you answer each question not only with a visual, but also with text. Overall, each exercise should equal an executive report.

Exams (2): There will be two exams that will consist of multiple choice and essay questions, designed to test your mastery of the course material and ability to explain the role of business analytics in the management of organizations. The material tested will stem from the readings, presentations, and
lectures.

Case Presentation (1): In teams of two students, you will need to prepare one case presentation of your choice. Sign-up possibilities will be provided via OAKS. A case presentation includes a formal presentation where your group presents and discusses the case material and recommendations with the class. The presentation should be approximately 30 minutes in length total. This time frame includes your presentation as well as questions as well as discussions as well as my comments. The latter can be extensive depending on where the discussion is going. I recommend that you shoot for 20 min to be covered by a presentation, and the rest to be discussions, either triggered by you or the audience or me.

Team case write-up (2): In teams of two, you will work on two cases of your choice. Sign-up possibilities will be provided via OAKS. You will receive a set of questions (typically three) that you are required to discuss, research, and report upon. A case write-up should be no more than three pages, single-spaced, 12pt font, one-inch margin. (Of course, it can be less, but definitely not more.) As top management has a very short attention span in most organizations, it is critical for you to be able to make brief, coherent arguments when discussing a question. Note that a case write-up is not a summary, but a deeper reflection of the case. I strongly discourage you to recount the happenings and focus on the question posed instead. Case write-ups must be turned in electronically via OAKS, which will automatically submit your entry to Turnitin.com. This ensures that written assignments are original. Papers that have significant portions copied from other sources (and not quoted properly) will not be accepted, and students will receive a zero (0) on the assignment.

Participation: While not graded, interaction is a significant part of this class. After all, discourse creates knowledge!

Course Policies:

Use of Oaks: Grades will be posted on OAKS. 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 handed back to notify me of the mistake. Failure to notify me within this time frame will result in the recorded grade becoming permanent.

Attendance: Because class attendance is crucial for any course, students are expected to attend all classes of each course in which they enroll, including this course. All students, whether absent or not, are responsible for all information disseminated in the course.

Questions and Problems: You are encouraged to ask questions during class and office hours. We all want to hear your ideas and opinions.

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 XF 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 X to be expunged. 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://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php

**Center for Student Learning:** You are encouraged to utilize the Center for Student Learning’s (CSL) academic support services for assistance in study strategies and course content. They offer 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 written papers or presentations, for example, you can seek assistance offered in the College Skills Writing Lab and Speaking/Presentation Lab located in the in the Center for Student Learning (Addlestone Library, first floor). Trained writing consultants can help with writing for all courses; they offer one-to-one consultations that address everything from brainstorming and developing ideas to crafting strong sentences and documenting sources. For more information regarding these services, please visit the CSL website at http://csl.cofc.edu or http://csl.cofc.edu/labs/writing-lab/ or call (843) 953-5635.

**Disability Accommodation:** The College will make reasonable accommodations for persons with documented disabilities. Students should apply 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 by presenting a copy of their SNAP-issued Professor Notification Letter (PNL) and for contacting me one week before accommodation is needed.
<table>
<thead>
<tr>
<th>Session</th>
<th>Date</th>
<th>Topic</th>
<th>Related Tasks (check OAKS for exact due dates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Oct 11</td>
<td>Concept: An Overview of Business Analytics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oct 13</td>
<td>Concept: The Nature of Organizational data Case: Walsham Hotel</td>
<td>Case presentation Group 1</td>
</tr>
<tr>
<td>2</td>
<td>Oct 18</td>
<td>Concept: Databases, Data Structures, and Data Warehouses Skill: Tableau</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oct 20</td>
<td>Concept: A Journey of Business Analytics Case: AllDrinksSoft</td>
<td>Exercise 1 - Tableau Case presentation Group 2</td>
</tr>
<tr>
<td>3</td>
<td>Oct 25</td>
<td>Concept: Organizational Decision-Making with Dashboards Skill: Tableau</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oct 27</td>
<td>Guest Speaker (Cole Gulledge) Concept: Consumer Analytics, MBS and Association Rules Case: BigBasket</td>
<td>Exercise 2 - Tableau Case presentation Group 3</td>
</tr>
<tr>
<td>4</td>
<td>Nov 1</td>
<td>Concept: Data Visualization Skill: Tableau</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nov 3</td>
<td>Guest Speaker (Blake Ives) Concept: A Business Analytics Application Case: The Dean’s Dilemma</td>
<td>Case presentation Group 4</td>
</tr>
<tr>
<td>5</td>
<td>Nov 8</td>
<td><strong>Exam 1</strong> Concept: Text Analytics Case: Evisort</td>
<td>Exercise 3 Case presentation Group 5</td>
</tr>
<tr>
<td></td>
<td>Nov 10</td>
<td><strong>Exam 1</strong> Concept: Text Analytics Case: Evisort</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Nov 15</td>
<td>Guest Speaker (Noah Gresham) Concept: Data Mining Overview Skill: MineMyText, sentiment analysis, IBM Watson</td>
<td>Case presentation Group 6</td>
</tr>
<tr>
<td></td>
<td>Nov 17</td>
<td>Concept: AI and Machine Learning Case: Carolina Healthcare</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Nov 22</td>
<td>Concept: Artificial Neural Networks Skill: Weka</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Nov 29</td>
<td>Concept: Decision trees, Clustering Case: Facebook, Cambridge Analytica</td>
<td>Exercise 4 Case presentation Group 7</td>
</tr>
<tr>
<td></td>
<td>Dec 1 (last day)</td>
<td>Concept: The Future of Business Analytics Skill: Weka</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dec 8, 8-10am</td>
<td><strong>Final Exam</strong></td>
<td><strong>Final Exam</strong></td>
</tr>
</tbody>
</table>