

SYLLABUS INTRODUCTION TO BUSINESS INTELLIGENCE (BIA 3713) UNIVERSITY OF OKLAHOMA FALL 2021

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Class Location Live Video Conference (Fridays 9:30 am – 10:20 am)

Office Hours Fridays 11:30 am – 12:30 pm (Zoom)

Course Website http://canvas.ou.edu

Course Overview

The field of business intelligence and analytics is exploding in all segments of the business landscape such as marketing, finance, accounting, management, operations, supply chain, and information technology. Tools and techniques of business analytics are driving virtually all aspects of a business to new heights and key applications include analyzing customer feedback and finding out what customers really like (or object to) about a firm, identifying similar firms from their 10-K reports, analyzing employee emotions in blog comments, recognizing anomalies and compiling a list of outliers for auditors, predicting server failure incidents, and generating diversity profiles of the organization.

This course provides an overview of the exciting and high-impact field of business intelligence and analytics, explores its many challenges, and emphasizes real-world applications. Specifically, this course provides applied knowledge and skills for data-assisted and business analytics-driven decision making. Students will gain hands-on experience with relevant tools and technologies adopted from various areas of business analytics including data processing, visualization, web analytics, dashboards, and machine-learning applications.

Prerequisite

Computer-Based Information Systems (MIS 2113)

Course Materials

All course materials are located at http://canvas.ou.edu. If you are a registered student for this course, you should be able to access the course materials when you log in to Canvas. It is recommended that you check the Canvas course website at least once between class meetings. You may set up notifications in Canvas so that you are automatically alerted to new Canvas emails and announcements. If you have problems accessing the course materials, please call the OU IT help desk.

A laptop computer or tablet with Wi-Fi connectivity will be required for accessing class materials, live sessions, recordings, assignments, quizzes, and exams. Please have a backup plan in case you experience problems with your primary device(s) or Internet connectivity. To participate in the online live lecture, you must have a video camera and microphone. If your laptop does not havea camera/microphone, you can find reliable and affordable products on Amazon (for example: www.amazon.com/Best-Sellers-Computers-Accessories-Webcams/zgbs/pc/172511).

There is no required textbook for this course. The recommended (optional) book is *Business Intelligence, Analytics, and Data Science: A Managerial Perspective (*Pearson; *4th Edition, January 23, 2017*) by Ramesh Sharda, Dursun Delen, and Efraim Turban. ISBN: 978-0134633282

Learning Outcomes

By successfully completing this course, you will be able to:

- Understand the value of data as business intelligence (BI) and business value.
- Integrate data, BI methods, and strategies for business value.
- Understand business analytics techniques and apply them to evaluate various business scenarios to transform problems into actionable items.
- Identify data needed for business process improvement analytics projects, recognize visual representation methods that increase understanding of complex data.
- Understand and appreciate ethical, social, privacy, and other implications in BI activities
- Work effectively in multidisciplinary teams and demonstrate collaboration and communication skills.

Course Methodology

- Instructor presentation of material that teaches fundamentals of business analytics concepts. Lecture materials will be posted to Canvas.
- Quizzes and other activities will be assigned during the course. To receive credit for quizzes and class activities, these activities must be completed by the designated day and time. No exceptions will be made unless the student has received prior approval from the instructor.
- Assigned problems to practice the lecture material.
- Exams to test the knowledge of the students on the key concepts covered in the class.

Key Course Topics

- Business Decision-Making
- Business Analytics and Applications
- Descriptive Analytics and Business Applications
- Introduction to Web Analytics
- Introduction to Dashboards
- Introduction to Machine Learning and Business Applications

Professor's Expectations of Students

Please assist the instructor and your classmates in creating a positive, supportive environment for learning, and staying engaged in the course. You will learn as much from the contributions of your classmates as you will from the instructor. As a group, we will create a positive, fun, and collaborative environment and share each other's views, insights, and analysis of assigned scenarios, and readings covered in the course.

Students' Expectations of the Professor

In my role as your instructor, there are certain things you can expect from me, including a well-organized and engaging learning experience, a response to emails within two business days, and feedback on all work submitted within 7-10 business days. The instructor will be as responsive as possible to requests for phone or online meetings as well.

Acquiring business analytics skills is not an easy task. You are expected to spend considerable time and effort. However, it is fun and fulfilling to learn different aspects of business analytics. Please plan to get started on the reading materials, and hands-on assignments as early as possible. Any student experiencing difficulty with the course material or assignments is strongly encouraged to approach the instructor for additional help. Your instructor is dedicated to helping you enhance your learning experience as much as possible.

Grading and Evaluation Criteria

You will have a variety of opportunities to earn points towards your final (overall) letter grade in this course. This section of the syllabus describes the assessed work you will be doing and how overall (final) letter grades will be computed. Final course grades are earned according to the following table:

Point Range	Assigned Grade
90.00 - 100.00 Points	A
80.00 - 89.99 Points	В
70.00 - 79.99 Points	С
60.00 – 69.99 Points	D
Under 60.00 Points	F

Your overall grade is based on how well you perform on a mixture of formal activities including exams, discussions, and quizzes. Points earned on the assessed activities will be distributed as follows:

Deliverable	Total Points
Assignments	20
Instructor and Peer Evaluations	10
Exams	35
Quizzes	15
Videos/Lecture-based Exercises	20
Total	100 pts

Videos/Lecture-based Exercises

Various exercises based on the videos/lecture materials will be assigned during the semester. Students' active engagement in these activities is crucial to achieving the learning objectives of the course. Class/videos exercises, taken individually, must be completed by the designated time and day.

Exams

The midterm and the cumulative final exam count for 15 points and 20 points, respectively. The objective of exams is to test your grasp of the key concepts covered in the class and your understanding of the business analytics concepts, assignments, readings, and handouts. The detailed instructions about the exams logistic will be posted on Canvas and will be discussed in class or live sessions. You are not allowed to either give or receive aid on these examinations, and you must comply with all rules of these examinations. It is your responsibility to read the instructions for each examination carefully before beginning the exam. Students are expected to

uphold academic integrity standards. Absence from any scheduled exam will result in an exam grade of zero unless arrangements have been made with the instructor before the exam date.

Peer and Instructor Evaluations

As part of the peer evaluation, each student must rate (using a peer evaluation form provided by the instructor) the degree to which members of the team, including himself or herself, fulfilled his/her responsibilities in completing the project and other group work. The objective of the peer evaluation is to encourage 100% commitment and performance from each team member throughout the module. These ratings should reflect each individual's level of participation, effort, and sense of responsibility, not his or her academic ability. Note that the peer evaluations are confidential and will not be shared with anybody.

Instructor evaluations of students' engagement will be conducted throughout the course. The students are expected to actively participate in discussions and ask questions, carry their share of the group's responsibilities, adhere to the computer/phone usage policy, and actively participate in synthesizing and presenting the concepts covered in the live class (on every Friday) and reading materials through summary presentations.

Instructor evaluations will be conducted according to the following criteria:

Criterion	Excellent	Needs Improvement (-3)	Unacceptable (-8)
Preparation	All assignments were submitted at or before the deadline through the proper channel and with all necessary information (i.e., team, names, course number).	All but one assignment were submitted by the deadline and with prior notification to the instructor regarding the delay. Some assignments lacked complete information.	More than two late deliverables with or without prior explanation.
Contribution	Actively contributed to class learning through informed comments and relevant questioning. Supported and respected peers, their questions, and their opinions.	Mix of active and passive engagement. Off-topic comments or questions introduced that detracted from overall conversation.	Complete lack of engagement with lecture or Q/A sessions. Any disrespect for instructor or peers.
Environment	Made appropriate use of electronic devices to further study and mastery of programming and analytical techniques. Food and drink consumed quietly.	Infrequent or minimal interruption of instructor or neighbors by device usage, side conversations, etc.	Non-academic computer and device usage that impacts other students. Noisy side conversations.

Ouizzes

Three individual quizzes will be conducted during the live session on the dates listed in the schedule. These quizzes must be taken individually. Quizzes will consist of multiple-choice questions. Each quiz is worth 5 points. There are no make-up quizzes. Absence from any scheduled quiz will result in a grade of zero unless prior arrangement, in case of an emergency, has been made with the instructor.

Assignments

Students are free to consult each other to do the assignments. However, each person is responsible for submitting his/her copy of the assignment through Canvas. You will receive full credit for submitting your original solutions to all the problems in the assignments before the due date. The key pointers (not the exact solution) for the selected problems will be provided and they will show the methodology/approach to solve the assigned problems. The detailed instructions for each assignment, available through Canvas at least 9 days before the due date, will be provided separately. Practice problems in the assignments are extremely useful in preparing for exams. These practice problems will be collected but not graded. If you are puzzled, please make an appointment with the instructor and resolve any issues you may be experiencing. The homework assigned should help you master the techniques covered in the course. To do well on the exams, you need to do the homework and master the broader concepts covered in the classes.

Communication

When you send an e-mail to me, please be sure to include the <u>course number or some course identifier</u> in the Subject line. Additionally, please identify yourself in the text of your e-mail, otherwise, I may not figure out who you are just by your email address alone. Please note that if your question is relevant to the class, I will forward your email with my response to the class – so be sure to proofread your email and use good email etiquette because it may be seen by your classmates. Also, any inability to receive/check incoming mail in a timely fashion (e.g., not regularly checking your email, having a "full mailbox" condition, etc.) is the student's responsibility, so please monitor your email regularly.

Attendance

If you miss participating in any presentation assigned to your team, you will receive a zero for that part of the presentation. An absence from an assignment, exam, and participation shall be considered "excused" if it occurs because of any of the following situations and the instructor was contacted before the due date:

- Illness or hospitalization of the student or an immediate family member.
- Death in the student's immediate family (for example, spouse, parents, guardians, siblings, children).
- Summons of the student to appear for Jury Duty or before a court.
- Any other explanation that has been approved by the course coordinator or instructor.

Participation

To be successful in this course, you must stay active and involved throughout the entire semester. Students are expected to participate in all interactive aspects of the course. You should also regularly communicate with the instructor as part of your overall learning experience, check into the course frequently for announcements (usually on the course home page), and actively participate in discussion events (both formal and informal).

Classroom or Online Behavior

All students in the course should be considerate of the other course students and treat them (and their opinions) with respect. The class will operate under the assumption that any and all feedback offered is positive and that the intentions of the person(s) providing feedback are strictly honorable. Insensitivity in this area will not be tolerated.

Late Policy

Assignments or other deliverables may be submitted anytime up to and including the date due. If your work is not submitted on time, the instructor reserves the option to deduct up to 50% of the grade value for tardiness depending upon the circumstances and appropriate communication between the student and the instructor. Late work will be accepted only up to three days after the deadline unless a prior arrangement has been made with the instructor.

Syllabus Changes

The instructor reserves the right to make changes as necessary to this syllabus. If changes are necessitated during the term of the course, the instructor will immediately notify students of such changes during the in-class session and by individual email communication.

University Policies

Masking Protocols

The university encourages masking indoors. The university strongly encourages masking for all individuals in high-density settings, such as classrooms and at special events.

Vaccinations

The university strongly encourages the entire OU community to get vaccinated, particularly those residing in congregate housing. COVID-19 vaccines are available to all students, faculty, and staff on all three OU campuses at no cost to the individual.

Norman Campus: ou.edu/together/vaccine

Copyright Statement

Sessions of this course may be recorded or live-streamed. These recordings are the intellectual property of the individual faculty member and may not be shared or reproduced without the explicit, written consent of the faculty member. In addition, the privacy rights of others such as students, guest lecturers, and providers of copyrighted material displayed in the recording may be of concern. Students may not share any course recordings with individuals not enrolled in the class, or upload them to any other online environment.

Academic Integrity

Cheating is strictly prohibited at the University of Oklahoma because it devalues the degree you are working hard to obtain. As a member of the OU community, it is your responsibility to protect your educational investment by knowing and following the rules. For specific definitions on what constitutes cheating, review the Student's Guide to Academic Integrity at:

http://integrity.ou.edu/students guide.html

To be successful in this class, all work on exams and quizzes must be yours and yours alone. You may not receive outside help. On examinations and quizzes, you are not permitted to use your notes, textbooks, calculators, or any other study aids. Should you see someone else engaging in these behaviors, I encourage you to report it to myself or directly to the Office of Academic Integrity Programs. That student is devaluing not only their degree, but yours, too. Be aware that it is my professional obligation to report academic misconduct, which I will not hesitate to do. Sanctions for academic misconduct can include expulsion from the University and an F in this course, so don't cheat. It's simply not worth it.

The steps and procedures as outlined in the Academic Misconduct Code will be followed in all cases of academic misconduct in this class.

MIS Division's Guidelines provides the following guidelines for dealing with Academic Misconduct:

- 1. **All academic misconduct will be reported** using the following form: http://www.ou.edu/content/dam/integrity/docs/academic-misconduct-report.pdf. Please read this form carefully so that you understand the potential penalties.
- 2. The instructor will decide whether the misconduct is an <u>Admonition</u> or <u>Violation of the</u> Academic Integrity Code.
- 3. When an instance of academic misconduct occurs on a homework or similar assignment and the instructor categorizes this as Admonition, a grade of zero will be recorded and deduction equal to the value of the assignment will be applied.
- 4. When an instance of academic misconduct occurs on an **exam** and the instructor categorizes this as **Admonition**, a grade of zero will be recorded.
- 5. When an instance of academic misconduct occurs on an **exam** and the instructor categorizes this as **Violation of the Academic Integrity Code**, no grade penalty shall be imposed until the student is officially found responsible for violating the Academic Integrity Code. Until this situation occurs, and "N" shall be filed as the student's final course grade. If established, a violation results in a grade penalty and a University penalty.
- 6. Faculty may choose to impose greater grade penalties than those recommended above by the MIS Division.

Incomplete Grades Policy

A grade of Incomplete may be awarded to students who have a legitimate reason for needing additional time to complete a course. Legitimate reasons include emergencies or extenuating circumstances that prevent a student from completing the course requirements within the normal time frame. Students must initiate the request for an incomplete prior to the end of the semester, and must be in good standing in the course. In no case will a grade of incomplete be awarded to someone seeking more time to master the course material in order to improve their grade.

Reasonable Accommodation Policy

The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students requiring academic accommodation should contact the Accessibility and Disability Resource Center for assistance at (405) 325-3852 or TDD: (405) 325-4173. For more information, please visit http://www.ou.edu/drc/home.html. Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.

Religious Holidays

University policy permits absences that result from religious observances or a scheduled University approved activity and provides for make-up exams and/or rescheduling assignment due dates as a result of a religious holiday or University approved activity. You must contact the instructor two weeks in advance for any arrangements due to an absence falling under this University policy.

Adjustments for Pregnancy/Childbirth Related Issues

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss.

Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see:

https://www.ou.edu/eoo/faqs/pregnancy-faqs for commonly asked questions.

Grade Appeals

If you believe that the grading of an exam or any other material contains mistakes, talk with your instructor as soon as possible. Turn in the work in question to your instructor with a note explaining why you should get credit for the material you turned in. Any grade appeal must be turned in to your instructor not more than one week after the exam or graded material is returned to you. Otherwise, the appeal will not be considered. Note that grade or score changes are at the discretion of the instructor. It is important to understand that your grade or score may go up or **down** based upon a complete review of the work in question.

Title IX Resources

For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24/7, counseling services, mutual no contact orders, scheduling adjustments and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office 405-325-2215 (8-5, M-F) or OU Advocates 405-615-0013 (24/7) to learn more or to report an incident. Additional information can be found at: http://www.ou.edu/content/eoo.html

Emergency Protocol

During an emergency, there are official university <u>procedures</u> that will maximize your safety.

Severe Weather: If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather, 1. LOOK for severe weather refuge location maps located inside most OU buildings near the entrances, 2. SEEK refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building. 3. GO to the building's severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows. 4. GET IN, GET DOWN, COVER UP. 5. WAIT for official notice to resume normal activities.

Link to Severe Weather Refuge Areas, Severe Weather Preparedness - Video

Armed Subject/Campus Intruder

If you receive an OU Alert to shelter-in-place due to an active shooter or armed intruder situation or you hear what you perceive to be gunshots: 1. GET OUT: If you believe you can get out of the area WITHOUT encountering the armed individual, move quickly towards the nearest building exit, move away from the building, and call 911. 2. HIDE OUT: If you cannot flee, move to an area that can be locked or barricaded, turn off lights, silence devices, spread out, and formulate a plan of attack if the shooter enters the room. 3. TAKE OUT: As a last resort fight to defend yourself. For more information, visit http://www.ou.edu/emergencypreparedness.html Shots Fired on Campus Procedure - Video

Fire Alarm/General Emergency

If you receive an OU Alert that there is danger inside or near the building, or the fire alarm inside the building activates: 1. LEAVE the building. Do not use the elevators. 2. KNOW at least two building exits. 3. ASSIST those that may need help. 4. PROCEED to the emergency assembly area. 5 ONCE safely outside, NOTIFY first responders of anyone that may still be inside building due to mobility issues. 6. WAIT for official notice before attempting to re-enter the building. OU Fire Safety on Campus

Mental Health Support Services

If you are experiencing any mental health issues that are impacting your academic performance, counseling is available at the University Counseling Center (UCC). The Center is located on the second floor of the Goddard Health Center, at 620 Elm Rm. 201, Norman, OK 73019. To schedule an appointment, call (405) 325-2911. For more information, please visit http://www.ou.edu/ucc.

Registration and Withdrawal

If you choose to withdraw from this course, you must complete the appropriate University form and turn the form in before the deadline. If you stop attending the course and doing the coursework without doing the required paperwork, your grade will be calculated with missed homework and examination grades entered as zero. This could result in receiving a grade of F in the course. Deadlines are shown in the <u>Academic Calendar</u>, which is available from the Office of the Registrar.

Student Grievances

In addition to any policies outlined related to submitting an informal or formal grievance by your professor in the Course Syllabus in the online classroom, please review the Graduate Student Handbook for more information about the process of submitting a formal grievance.