BUAN 4353/ITSS 4353/OPRE 4353 Business Analytics

Class Information

Term	Fall 25 [25 Aug – 16 Dec]
Course Number	BUAN_ITSS_ OPRE 4353.001
Class Meetings	Thursday 1:00 PM – 3:45 PM
Classroom	JSOM 2.112

Instructor Information

Instructor	Dr. Prakash Shrivastava
Office Phone	972-883-5901
Email	Prakash.shrivastava@utdallas.edu *Please include the course number and section number in all email correspondence. Please use your UTD e-mail system for any communication with the instructor/TA.*
Location and Office Hours (Virtual)	Office Location: JSOM 3.225 Office Hours (Online): Tue 1:00 PM – 2:00 PM; Appointments are encouraged. Send me an e-mail 24 hours in advance to set up a remote session (in Teams). *Note: Office hours are meant to answer specific questions. It is not meant for additional material or to provide a tutorial.* For questions related to Homework/Grading, please contact TA (below)
TA Information	TA: TBD TA Office Hours: TBD Note: The TA is your first contact for questions re Assignment / Grades.

Course Modality

Instructional Mode	Traditional Classroom /Laboratory; (In-person, Face-to-Face). Not recorded
eLearning and Course Platforms	This course can be accessed using your UT Dallas NetID account on the eLearning website. Please see the course access and navigation section of the Getting Started with eLearning webpage for more information. To become familiar with the eLearning tool, please see the Student eLearning Tutorials webpage. The course will utilize the following platforms: • Announcements, written lecture materials, assignments and grades will be posted on the course's eLearning site. It is the students' responsibility to regularly check their UTD email accounts and the eLearning page for this course. • Microsoft TEAMS may be utilized for lectures and other live communications. • If any, recorded (and annotated) lectures and other communications will be available on Microsoft TEAMS, as well Active links to TEAMS will be available on the eLearning web site. In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements on the Getting Started with eLearning webpage. UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The eLearning Support Center includes a toll-free telephone number for immediate assistance: (1-

	866-588-3192), email request service, and an online chat service. The course will be delivered "in-class" using Blackboard Collaborate. Please access and use eLearning / Blackboard.
Asynchronous Learning	There is no provision for Asynchronous Learning. Lectures will not be recorded. All students are expected to attend all classes "in person."
Technical Requirements	Please review the important technical requirements on the Getting Started with eLearning webpage.

Course Information

Course Description	ITSS 4353 – Business Analytics (3 semester credit hours) This course will introduce various data mining analytical techniques to extract business intelligence from firms' business data for various applications, including supervised and unsupervised learning analytic techniques, association, customer segmentation, classification, customer relationship management (CRM), personalization, online recommendation systems, and web mining. Students will also be exposed to various business intelligence software such as JMP PRO 16, Python, or SQL Server (depending on availability)
Course Objectives / Outcomes	1. Gain ability to formulate business problems and determine data requirements. 2. Learn data preparation and exploration methods. 3. Understand Visual Analytical methods for business intelligence. 4. Become knowledgeable in basic analytical techniques (segmentation, affinity analysis, prediction, classification) and application in CRM and SCM 5. Become familiar with Open-source tool R, and commercial tools for Analytics (e.g., **JMP, Tableau, Alteryx**) and AI Tool: **Microsoft Copilot**
Prerequisites	ITSS 3312 and (MATH 1326 or MATH 2414 or MATH 2419 or OPRE 3340) and (CS 2305 or MATH 2418 or MATH 2333 or OPRE 3333). (Same as OPRE 4353) (3-0) T

Course Materials

Required Textbook(s) & Materials	***Books:*** 1. **Required: MindTap for Business Analytics by Jeffrey Camm, 5th edition, Cengage, ISBN: 978-0-357-70000-6 ($139.99 – Cengage Unlimited access for 4 months)** 2. Building Better Models with JMP Pro, by Jim Grayson, SAS Press, ISBN: 978-1-629-59056-8 ***Tools: Excel, JMP Pro 18,* Tableau, Alteryx** *(Instructions and links for download/installation are available on eLearning Portal)*
Laptop Computer	This course is hands-on with many in-class examples and exercises. Students are required to install tools on their laptops and bring them to each class.

Grading Policy

Grading Policy	This course will feature a mix of activities and written and verbal assignments. The instructor will provide detailed instructions and the grading criteria for each assignment. Please consult the course schedule for deadlines. Your final grade will be based on the total score of the following: **Weekly Assignments from the Textbook** (50%) **Quizzes (20%)** **Exam – 1:** 15%; (2-part exams: 1. Quiz part 2. Hands-on part) **Exam – 2:** 15%. (2-part exams: 1. Quiz part 2. Hands-on part) To ensure fairness for everyone, please plan to arrive on time for exams and quizzes, as additional time will not be available for late arrivals. Also, there are no make-up opportunities. **P**lease review the submission instructions carefully. Use Google Chrome for uploading assignments. Upload your file and click on 'Confirm'. Make sure you receive email confirmation.

Final Grading Scale

Grades are NOT Negotiable. No correspondence re grades will be entertained.

Letter Grade	Final Point Total
A	>=93.00-100.00
A-	>= 90.00-92.99
B+	>= 87.00-89.99
B	>= 83.00-86.99
B-	>= 80.00-82.99
C+	>= 77.00-79.99
C	>= 73.00-76.99
C-	>= 70.00-72.99
D+	>= 67.00-69.99
D	>= 63.00-66.99
D-	>= 60.00-62.99
F	59 & below

Course and Instructor Policies

Attendance	Attending class regularly is one of the best ways to stay engaged, ask questions, and connect with the instructor and classmates. It creates opportunities for meaningful interaction and helps you build confidence in the material. Students who participate consistently tend to perform better and enjoy a more rewarding learning experience.

Class Recordings	No in-class recordings please. The instructor may record class meetings. Any recordings made will be available to all students registered for this class as they are intended to supplement the classroom experience. Unless the Office of Student Accessibility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student Accessibility accommodation. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law. Failure to comply with these University requirements is a violation of the Student Code of Conduct.
Quizzes, Exams and Proctoring	All exams are closed books and scheduled well in advance. If there are any changes to exam dates, they will be announced during class. To help ensure a smooth and fair testing experience: • Please plan to arrive on time. Students are expected to begin the exam within 10 minutes of the scheduled start time. After that, access to the exam may no longer be available. • Unfortunately, make-up exams are not offered. Missing or arriving too late for an exam will result in a score of zero. • If you have a legitimate, non-academic reason for missing an exam, please provide verifiable documentation at least 24 hours before the exam day. Requests made after the exam has taken place cannot be considered. For exams using a quiz format (e.g., true/false, multiple choice), you can expect approximately 20 questions to be completed in about 15 minutes. To maintain academic integrity, exams may be proctored using a secure online proctoring service, the UTD Testing Center, or in-class proctoring, depending on the format.
Lockdown Browser / Honor Lock	I may require use of Lockdown browser / HONORLOCK. I will provide more information before the Exam.
eLearning	Blackboard eLearning will be used as the central platform for accessing class materials such as lecture slides, assignment descriptions, and grade records. Slides will typically be posted before each class session to help you prepare. Important class announcements—including any updates to assignment or exam dates—will be sent to your UTD email address on file in eLearning. To stay informed, please make it a habit to check both eLearning and your UTD email regularly. For the best experience, we recommend ensuring that you have a reliable internet connection when accessing course materials online.
Communications and Instructor Response Policy	For questions related to course content, assignments, quizzes, exams, scores, or grades, you're encouraged to bring them up during class sessions, office hours, or through the course discussion forums. For other matters, please use your UTD email account to send messages, as personal email addresses may be blocked due to security and spam filters. The instructor aims to respond to student emails within 48 business hours (excluding weekends and holidays). **To help ensure a timely and accurate response, kindly include your course number and section in the subject line**. All communication should be respectful, clear, and written in a professional tone. Thoughtful and courteous messages help foster a positive and productive learning environment for everyone.

Assignments	Unless specified otherwise, all written assignments should follow APA formatting guidelines, including proper citation and referencing. Assignment descriptions will be posted on eLearning as they are assigned, and all submissions must be made through the eLearning platform.
	To ensure consistency and security, assignments submitted via email cannot be accepted.
	If you accidentally submit the wrong file or need to make changes, you may resubmit your assignment—provided it is before the due date. To do so, please email the TA at least 12 hours before the deadline to request clearance for resubmission.
	Please note: • Assignments are due one week from the date and time they are assigned. • To help everyone stay on track and ensure fairness, late submissions cannot be accepted.
Clarifications / Inquiries regarding Assignments	You must review each assignment (and download required files) as soon as it is posted. Each assignment will be explained in detail in class. It is your responsibility to make sure that you understand all the instructions. If you still have questions or need clarifications about the assignment, you MUST post queries on the discussion board by the date specified in the assignment. You can also seek clarifications from the instructor / TA during their office hours. Please do not wait for the last moment to seek clarification.
Assignment Grading	MindTap Assignments are auto graded. Please be advised that if you have a question or issue with your assignment grade, contact the TA within "one week" of grade posting. Your entire assignment is subject to re-review (re-grading) which may or may not result in additional points. No inquiries regarding grades will be entertained after one week from the date of grade posting.
	General grading criteria can be found in eLearning. Assignment-specific grading criteria will be included with the assignment instructions. You will lose points for not following instructions.
Late Work / Submissions	All assignments are due on the specified date. Please give yourself sufficient time to upload assignments on the eLearning Portal/Turnitin. You would not be able to submit/upload if the due date is passed. You will be graded only on what is submitted on the portal. I do not accept late assignments unless prior arrangements have been made with the instructor in which case a penalty of 25% per day (including weekends) will be assessed. Only one such exemption is allowed in the entire semester. Why? Deadlines in the professional world are not a moving target. Missed deadlines affect product delivery, professional reputation, and revenue. Please plan accordingly. For these reasons, late work or incomplete work is not acceptable in this course EXCEPT in the most extreme and unlikely circumstances (see below) – in which case, e-mail the evidence of extreme circumstances to me/TA at least 24 hours prior to the due date (Penalty will apply). Rule: You will be graded only on what is submitted on time. Ensure that you have enough time to deal with potential technical glitches that may arise at the last moment. Inquiries related to late submissions will not be answered / entertained.
Exceptions for Late Work due to Server Unavailability or other Technical Difficulties	**Exceptions:** The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and contact the online eLearning Help Desk. The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.
Extra Credit	There is no extra credit.
Final Course Letter Grades	Final course letter grades are based solely on your performance on the graded assignments, exams, projects, and/or attendance. No bonus points, curves, extra credit, or additional assignments are offered. Do not assume that final grades will be rounded to the nearest whole number. No inquiries regarding "rounding up" is entertained.

Classroom Conduct	Please arrive on time. I strongly encourage class discussion, questions, and enthusiasm about the course material. Please engage in class discussions. I do ask that you are respectful during class, be respective to your peers who are part of the learning environment. This means no talking to others during class presentations, switching off cell phones, and not leaving the class until the end of the lecture.
Discussion Board	Students are encouraged to use discussion boards to post questions / comments related to topics in this course.
Student Code of Conduct	For information related to "Student Code of Conduct," please go the website: https://conduct.utdallas.edu/
Academic Integrity (Follow the Student Code of Conduct: https://conduct.utdallas.edu/**)**	DO NOT CHEAT and DO NOT PLAGIARIZE. All homework and exams are to be individual efforts. You are not to collaborate with other students or discuss homework or assignments with them before submission. Copying homework, assignments, or exams, in whole or in part, from other students or from assignments from previous semesters will be an act of academic dishonesty. Cases of cheating / plagiarism will be referred to the University Authorities for action. All work should demonstrate the same professional and ethical standards expected of you in the workplace, including proofreading and editing carefully all work you submit in class. Professionalism and personal responsibility mean that you use appropriate source citations so that you avoid violations of copyright and academic honesty, even if those violations are inadvertent. The University is committed to academic excellence and expects academic honesty from all members of the University community. Academic honesty includes adherence to guidelines established by the instructor for both individual and group work. It prohibits representing the work of others to be one's own (plagiarism); receiving unauthorized aid on an assignment (cheating); and using similar papers or other work products to fulfill the obligations of different classes without the instructor's permission. Any student engaged in academic dishonesty will be subject to disciplinary action. All cases of academic dishonesty will be reported directly to Judicial Affairs. My recommendation for acts of academic dishonesty will be an **F in the course**. The importance of academic honesty and my recommended sanctions are emphasized during class, in emails, and on exams and assignments.
Comet Creed	*This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:* "As a Comet, I pledge honesty, integrity, and service in all that I do."
University Policies & Procedures	For information regarding general University policies and procedures, please go to http://go.utdallas.edu/syllabus-policies. These policies include the following: ▪ Technical Support ▪ Field Trip Policies, Off-Campus Instruction and Course Activities ▪ Student Conduct and Discipline ▪ Academic Integrity ▪ Copyright Notice ▪ Email Use ▪ Withdrawal from Class ▪ Student Grievance Procedures ▪ Incomplete Grade Policy ▪ Disability Services ▪ Religious Holy Days

	- Avoiding Plagiarism - Title IX - Campus Carry

Course Schedule, Assignments, and Due Dates

*This is a **tentative** class schedule. Instructor reserves the right to make changes to the content and schedule. Changes, if any, will be announced in the class and posted on eLearning portal. It is the student's responsibility to keep track of them.*

Week	CONTENT (You must be present in the class for quizzes/exams)	Book Chapter	ASSIGNMENTS	Due Dates
1 8/28/25	Introductions, Syllabus, Textbook, Tools	Chap 1		
2 9/4/25	Introduction to Business Analytics	Chap 1.1 – 1.5	Assignment – 1: Intro to Business Analytics	9/4/25
3 9/11/25	Descriptive Statistics, Hands-On Practice Examples, Quiz – 1 (5%)	Chap 2.1 – 2.9	Assignment – 2: Descriptive Statistics	9/11/25
4 9/18/25	Data Visualization	Chap 3.1 – 3.6 (Skip 3.4)	Assignment – 3: Data Visualization	9/18/25
5 9/25/25	Data Wrangling: Data Management and Data Cleaning Strategies Quiz – 2 (5%)	Chap 4.1 – 4.5	Assignment – 4: Data Wrangling	9/25/25
6 10/2/25	Practice Activities Review for Exam – 1			
7 10/9/25	Exam – 1 (15%)			
8 10/16/25	Descriptive Data Mining: k-Means Clustering	Chap 6.2	Assignment – 5: k-Means Clustering	10/23/25
9 10/23/25	Descriptive Data Mining: Association Rules	Chap 6.3	Assignment – 6: Association Rules	10/30/25
10 10/30/25	Linear Regression Analysis	Chap 8.1 - 8.3		
11 11/6/25	Linear Regression Analysis (Continued) Quiz – 3 (5%)	Chap 8.4; part of 8.5 and 8.6	Assignment –7: Regression Analysis	11/6/25
12 11/13/25	Predictive Data Mining – Classification Tasks – Perf Measures, k-Nearest Neighbors	Chap 11.2, 11.4	Assignment – 8: Classification	11/22/25
13 11/20/25	Practice Activities - Classification; Artificial Intelligence in Business Analytics Quiz – 4 (5%)	Chap 11.2, 11.4		
14 11/27/25	Thanksgiving / Fall Break (No classes)			
15 12/4/25	Practice Activities - Classification; Review for Exam – 2			
16 12/11/25	Exam – 2 (15%)			