UPDATED Nov 3rd, 2025

Special Topics in Business Analytics - Generative AI for Business - Course Syllabus
BUAN 6v99.SW2 - Spring 2026

Course Information

Course Number/Section BUAN 6v99.SW2
Course Title: Special Topics in Business Analytics - Generative AI for Business
Term: Spring 2026 from Jan 20, 2026 to May 8, 2026
Class Hours & Location Wednesday 4:00pm - 6:45pm, online

Professor Contact Information

Professor	Antonio Paes
Email Address	antonio.paes@utdallas.edu *(preferred contact method)*
Office Hours	Please schedule appointment by email

Course Description

The course covers many aspects of Generative AI, including history, algorithms and modern tools.
This is a hands-on, project based course. There will be a project deliverable in every class.

Student Learning Objectives/Outcomes

- Understanding history of Generative AI
- Understanding and applying Machine Learning
- Understanding and applying GenAI
- Understanding and applying modern tools

Text Books

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Main Books

- Learning Python, Lutz, O'reilly
- Fluent Python, Ramalho, O'reilly
- Hands-On Machine Learning with Scikit-Learn, Keras and TensorFlow, Géron, O'reilly
- Machine Learning with PyTorch and Scikit-Learn, Sebastian Raschka + Yuxi Liu + Vahid Mirjalili, Packt
- Ai and Machine Learning for Coders, Moroney, O'reilly
- Python for Data Analysis, McKinney, O'reilly
- Python Data Science Handbook, VanderPlas, O'reilly
- Generative Deep Learning, David Foster O'reilly
- Most references will be online as this is an actively developing field

IMPORTANT

- There is no requirement to know how to code but you will have to learn some python during this course

Course Materials

All notes will be posted on eLearning (https://elearning.utdallas.edu/)

Tentative Course Schedule

**The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor*

Class#	Title
1	Course Introduction - Generative AI
2	Python Programming
3	Python with ML and GenAI toolkits
4	Deep learning and the Gen AI general algorithm
5	Drawing, Image generation, Music and Sounds
6	Coding with AI
7	Text Generation, Chatbots
8	Presentations

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	Spring Break
9	LLMs
10	LLMs
11	New AI tools and trends
12	Amazon GenAI Tools
13	Microsoft GenAI Tools
14	Google GenAI Tools
15	Final Presentations
16	Final Presentations

About Classes

- Classes content will be posted weekly and schedule is fluid meaning, the class content and order can change

About Assignments

Individual Homework or in-class Assignments:

- There will be multiple individual homework or in class assignments during the semester.
- Assignments must be submitted through eLearning on time (please do not wait till last minute, put at least one hour buffer between the deadline and your planned submissions time)
- Submissions **emailed** to the Instructor and/or TA will **not count**.
- Delayed assignments **will not be graded**

Group Project:

- Groups will be formed

Course Policies

- Makeup Exam: There are no makeup exams. In case of a medical emergency, a medical report is required including physician information.
- Missing exam: Any missing exam without a medical report will be graded as Zero.
- Assignments must be submitted through eLearning. Emailed submissions are

not accepted and will be graded as zero.

- UTD Syllabus Policies and Procedures: Please visit https://go.utdallas.edu/syllabus-policies
- Cheating will not be tolerated. When I find evidence of cheating, the documentation is turned over to the Office of Community Standards

Academic Integrity

In general, academic dishonesty involves the abuse and misuse of information or people to gain an undeserved academic advantage or evaluation. The common forms of academic dishonesty include:

- Cheating – using deception in the taking of tests or the preparation of written work, using unauthorized materials, copying another person's work with or without consent, or assisting another in such activities.
- Lying – falsifying, fabricating, or forging information in either written, spoken, or video presentations.
- Plagiarism—using the published writings, data, interpretations, or ideas of another without proper documentation

Plagiarism includes copying and pasting material from the internet into assignments without properly citing the source of the material. Episodes of academic dishonesty are reported to the Vice President for Academic Affairs.
The potential penalty for academic dishonesty includes a failing grade on a particular assignment, a failing grade for the entire course, or charges against the student with the appropriate disciplinary body.

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Grading Scale

Grade	Min	Max
A+	96	100
A	93	96
A-	89	92
B+	85	88
B	81	84
B-	77	80
C+	73	76
C	69	72

Calculated Grade Weights**

- Individual Assignments and Projects (60%)
- Group Project (40%)

**The calculated grade weights are subject to change at the discretion of the Professor.

Classroom citizenship

- eLearning will be used for class content.
- Slides and other class materials will be posted after class is held.
- Class announcements (e.g., change in assignment dates) will be posted in the eLearning announcements. It is the students' responsibility to regularly check the announcements (typically by having the announcement automatically forwarded to their email accounts).

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UT Dallas Syllabus Policies and Procedures

- The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.
- Please go to https://go.utdallas.edu/syllabus-policies for these policies.

Academic Support Resources

- The information contained in the following link lists the University's academic support resources for all students.
- Please see http://go.utdallas.edu/academic-support-resources.

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