



EAST TEXAS A&M

College of Business
Fall 2026 Syllabus
ACCT 570-01W
Accounting Analytics
(8/20--10/16)

Instructor Information

Instructor: Daniel Hsiao, PhD., CPA, CISA
Office: Rm-2066 @Dallas Campus
Office Hours: 2:00pm-4:00pm Thursday @Dallas office Rm-2066
2:00pm-6:00pm Tuesday @online (other times by appointment)
E-mail: Daniel.Hsiao@etamu.edu

The best way to reach me is by email. All emails must contain ACCT 570 Accounting Analytics in the subject line to be treated as a high priority. **The syllabus is tentative and subject to change as the semester progresses.**

Course Information

Course Description

This graduate level course provides students with an understanding of data analytic thinking and terminology as well as hands-on experience with analytics tools and techniques. That includes how its theories and procedures can benefit accounting professionals. The central theme will be the use and application of analytic techniques and artificial intelligence for decision making and the examination of big data involving useful accounting information. It will also cover the application of data analytics and artificial intelligence concepts and techniques to financial accounting, auditing, forensic, managerial, and tax scenarios. While there will be some use of tools in this course, the key focus is on concepts, not algorithms, nor statistical methods.

Prerequisites: None.

Required Textbook: Data Analytics for Accounting, by V. Richardson, R. Teeter, and K. Terrell, McGraw Hill Education, 2025. ISBN: 978-1266-079214, and **Connect** online access is required and must be included for this course; or ISBN: 978-1266-533969 (Loose-leaf with **Connect**). This course also requires **Connect** Online Access.

****This course is provided in D2L Inclusive Access. No action is required to purchase.****

COB Student Learning Outcomes (SLOs)	Course Outcomes - After successfully completing this course, students will be able to:	Measurement Methods (Outcome Assessments)
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--will demonstrate proficiency in written communications by creating clear and well-structured business documents. -- will identify and evaluate ethical business issues. -- will be analytical problem solvers in business environments.	--Demonstrate the ability to frame accounting and audit questions that can be answered with accounting data. -Demonstrate the ability to prepare, clean and document accounting data for analysis. --Be capable of perform descriptive, diagnostic, predictive, and prescriptive analysis using accounting analytic tool. --Be capable of communicate accounting results through application of accounting analytic tool and prepare the visualization.	• Homework Lab Assignment • Exam Assessment • Data Analytic Project
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Course Objectives:

- (1) Students will be able to demonstrate the basic concepts of data analytics, and how it is utilized in financial reporting, auditing engagement, and related accounting areas.
- (2) Students will become familiar with best practices surrounding data accumulation, extraction, cleaning, as well as data governance, structure, provisioning, and privacy.
- (3) Students will become familiar with the application of data visualization and analytics software and how they assist the business for better accounting decision making.
- (4) Students will be able to understand the theory and methodology behind interpreting and analyzing financial statements.
- (5) Students will be able to understand the purpose and role of internal and external auditors in relation to business data.

Learning Goal:

Students are expected to achieve the above learning outcomes and demonstrate core competence in the accounting profession.

Student Responsibilities:

- (1) Complete all lab assignments in a timely manner.
- (2) Devote the necessary time outside of class.
- (3) Read assigned material prior to the class.
- (4) Prepare and actively participate in class and discussion.

Grading:

The final course grade will be based on these following components.

Grading and Assessment	Learning Outcomes Assessed	Available Weights
Exam I	(1), (2), (3)	20 %
Exam II	(1), (2), (3), (4), (5)	20 %
Weekly Lab Assignment	(1), (2), (3), (4), (5)	25 %
Analytic Course Project	(1), (2), (3), (4), (5)	25 %
Participation/Professionalism	(1), (2), (3), (4), (5)	10 %
Total Available		100 %

Grades for the course will be determined by converting each student's points out of a possible 400 points into a percentage and then applying the following ranges:
90%-100%: A, 80%-89%: B, 70%-79%: C, 60%-69%: D and below 60%: F.

Exams: Since the essential knowledge of theory and application of accounting analytics are often cumulative, this class will comprise of two scheduled exams to evaluate a student's progress and performance. Exams will be assigned **via Connect**. Schedule of exams should be found in the schedule table and via D2L announcement. The format of the exams will be described in more details on D2L course folder. Make-up exams/quizzes are given **ONLY** under extenuating conditions. The following are considered extenuating conditions: hospitalization, medical emergency, physical injury, or death of an immediate family member. You **MUST** bring proof of the extenuating circumstance in order to facilitate an exam/quiz make-up. Proof of the extenuating circumstance must be received in a timely manner. For extenuating conditions make-up exams/quizzes must be taken within three days of release or recovery. A 30% late penalty may apply even if an extenuating circumstance exists. Students attending university sponsored events must provide necessary documentation in order to accommodate any make-up exam/quiz.

Quiz: Quizzes may be assigned **via Connect**. Coverage and schedule of quizzes will be announced in advance via D2L and make the delivery with sufficient time.

Discussion: Discussion topics will be assigned on the discussion forum of course D2L to engage students for active participation. It is expected that students will post the discussions and engage with other students for conversations on the accounting analytics and AI in accounting topics.

Homework Lab Assignment: We plan to assign lab assignment with data and activities for weekly assignment on D2L. Students will be given a set of tasks to complete, documenting their process, and interpreting their results. It is imperative that students start this assignment early and complete them for submission by the deadline.

Course Data Analysis Project: To show proficiency and understanding of data analytics concepts and techniques, one final analytic project will be assigned for utilizing the concepts discussed throughout the course. It is designed to evaluate accounting data by using accounting analytic framework, develop a meaningful dashboard, create a presentation, and document the findings, to demonstrate the detailed process and results with analytics knowledge and application. The complete requirement for this project and its detail will be posted on D2L course folder.

Late work: Assignments, exams, quizzes, etc. must be submitted no later than the date outlined in our course on D2L. Unless extenuating circumstances exist, late work is not accepted. Extenuating circumstances do **NOT** include forgetting, technical difficulties or running out of time. The evaluation of an extenuating circumstance is judged on a case-by-case basis. Documentation **MUST** be provided in a timely manner. A 30% late penalty may apply even if an extenuating circumstance exists.

Class Withdrawal: Be aware that this course is a **Time Consuming and Intensive class**. Any student who is not progressing satisfactorily in the course is advised to withdraw by the academic deadline.

Note 1: Final examination for the Master's/Specialist degree

All candidates must satisfactorily pass a comprehensive examination covering all the work within their master's/specialist degree programs. The Final Examination Report for the Master's/Specialist Degree is to be submitted to The Graduate School at least three weeks prior to graduation.

Note 2: CPA Exam Candidates – For State of Texas

Candidates who plan to take the CPA or become certified in Texas should review the Texas State Board of Public Accountancy's current requirements. Effective August 2026, Texas recognizes Pathway A and Pathway B, which have different education and experience requirements. For the latest CPA Exam eligibility and certification information, please visit

<https://www.tsbpa.texas.gov/news/new-pathway-for-cpa-exam-and-certification/>

University Policies and Procedures:***Students with Disabilities:***

The Americans with Disabilities act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring accommodation, please contact:

**Office of Student Disability Resources
and Services- East Texas A&M University
Gee Library - Room 162
Phone (903) 886-5150
or (903) 886-5835 Fax (903)
468-8148
StudentDisabilityServices@etamu.edu**

Ethics: Integrity is the hallmark of the accounting profession and will be stressed throughout the course. Any type of student breach of ethics, including but not limited to: illegal activity, dishonest conduct, cheating, plagiarism, or collusion, will result in failure of assignment or exam (F) and/or further academic sanction (i.e. failure of course (F), dismissal from class and/or referral to Dean of the College of Business and Technology. All students are required to read, sign and submit the Academic Honesty Policy form via the drop box the first week of class.

"All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (See Student's Guide Handbook, Policies and Procedures, Conduct).

Per 13.99.99.R0.10 Graduate Student Academic Dishonesty:

East Texas A&M University acknowledges that there are legitimate uses of Artificial Intelligence-AI, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism). Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of

such requirements and follow their instructors' guidelines. If no instructions are provided, the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

Non-discrimination: East A&M will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Other: University policy will be followed in regards to withdrawals during the semester. It is the student's responsibility to conform with the university rules relating to dropping or withdrawing from the course.

Concealed Carry Policy

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in East Texas A&M University buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and East A&M University -Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to

(<http://www.etamu.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all East A&M University campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

East Texas A&M Supports Students' Mental Health

The Counseling Center at East A&M University, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.etamu.edu/counsel

NOTE: THIS SYLLABUS IS SUBJECT TO CHANGE AS NEEDED TO MEET THE OBJECTIVES OF THE COURSE OR TO AID IN COURSE ADMINISTRATION AT THE DISCRETION OF THE INSTRUCTOR.

ACCT 570 -01W Accounting Analytics
Fall 2026 (8/20—10/16)

Weeks	Chapter & Reading	Activity	Note
Week-1 Week-2 (8/20—8/29)	Introduction to data analytics Master the data • Big data impact to accounting • Accounting analytics process • AI to Accounting analytics • Schemes, hierarchies, and relational databases • Data governance, privacy and ethics	Assignment for Chap 1 + 2	
Week-3 (8/31—9/5)	Perform data analytics • Statistical concepts for accounting analytics • Data analytics approaches and techniques • Analytic software applications	Assignment for Chap 3	
Week-4 (9/7—9/12)	Data visualization Storytelling with data • Visualization for communication • Charts and dashboards • Visualization tools	Assignment for Chap 4 Discussion #1	9/7 Labor Day
Week-5 (9/14—9/19)	Modern accounting and audit environment • Automation and continuous monitoring • Enhancing governance and risk management • Working papers and audit workflow	Assignment for Chap 5	Prepare for Exam #1 (9/18—9/20)
Week-6 (9/21—9/26)	Analytics considerations for auditors • Data analytics in the audit functions and business • Advanced audit analytic approaches • Fraud considerations	Assignment for Chap 6	
Week-7 (9/28—10/3)	Financial statement and accounting analytics • Analytics for external and internal reporting • Financial modeling and ration analysis • Text mining and sentiment analysis • Introduction to XBRL	Assignment for Chap 8	
Week-8 (10/5—10/10)	Project week (tentative)	Discussion #2	Fall Break 10/8-10/9 Project due 10/12 (or TBA)
Week-9 (10/12—10/16)	Managerial analytics Tax analytics • KPI matrix • Balanced scorecard • Tax data for tax planning	Assignment for Chap 7+9	Prepare for Exam #2 (10/16—10/17)

Readings & Assignments Tentative Schedule: subject to change with an advanced notice.

*****Please check the course announcements & updates frequently on D2L.*****