

# ACCT 5392: Selected Topics in Accounting

Accounting Data Analytics

Spring 2021

## Instructor Information

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**Instructor:** Dr. Cherie Henderson

**Office Number:** COB 409

**Office Telephone Number:** 817-272-3179 or 817-272-7029 (department phone number)

**Email Address:** [chenderson@uta.edu](mailto:chenderson@uta.edu) (email is preferred and the quickest way to reach me)

**Faculty Profile:** <https://www.uta.edu/profiles/sandra-henderson>

**Office Hours:** : Mondays and Wednesdays 3:30 - 5:00 pm in Microsoft Teams. For general office hours questions, go to the Office Hours Team. Please email me to set up private meetings.

\* My preferred methods of communication are through email or Teams chat. I will reply to emails and chats within 48 regular business hours. If you wish to speak by phone or video, please email me to set up an appointment. ***Please do not use the Canvas Inbox to contact me as I do not monitor it as frequently.***

## Course Information

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### Section Information:

ACCT 5392-001

### Time and Place of Class Meetings:

This is a synchronous (live) online course conducted through Canvas and Microsoft Teams. Live sessions will be held in Microsoft Teams during the scheduled days and times as listed in MyMav. Some of these sessions will be recorded and will be made available in Teams and Canvas (<https://uta.instructure.com>) for those not able to attend an occasional live session. More information for accessing class meetings can be found on Canvas.

### Description of Course Content:

The analysis of data as it pertains to accounting professionals. Focuses on analytical techniques and the skills necessary to translate accounting information into actionable proposals that can be presented to decision makers in areas such as auditing, risk management, forensics, predictive modeling and strategic planning. Prerequisites: business statistics and ACCT 5316 with a grade of C or higher.

### Course Objectives:

One of the major challenges in businesses today is the proliferation of data. Organizations struggle to understand how to capture, organize, manage, and use the data. Because this information can come from a variety of sources (e.g., operational, mechanical, or social) and in a variety of forms (e.g., structured or unstructured), companies often find themselves with vast amounts of data but with little ability to use it to gain better insights.

As custodians of the company's assets, accountants are expected to understand and properly manage this data. As business professionals, accountants are expected to know how to apply this data for improved decision making and better risk management. Accountants need to develop the skillset necessary to both be effective custodians of the data as well as to extract value from the data held by the organization. Therefore, it is

incumbent on the accounting profession to understand big data. This course will help ensure that students start becoming aware of the big data and how organizations can leverage it.

### **Student Learning Outcomes:**

The student learning outcomes for this course are to:

- Identify the different types of data and how data is structured.
- Explain how data analytics are used in business and society.
- Explain how analytics can be used to solve auditing, tax, and advisory related problems.
- Develop critical thinking skills around the design and implementation of data analytics solutions.
- Apply different types of analytics (descriptive, predictive, and prescriptive) to different accounting needs and challenges.
- Apply different tools to analyze and visualize the data.
- Interpret results from analytic procedures.
- Present recommendations to decision makers.

### **Required Textbooks and Other Course Materials:**

**Textbook:** *Data Analytics for Accounting*, 2<sup>nd</sup> Edition, Richardson, Teeter, and Terrell, McGraw-Hill, 2021. ISBN: 978-1-260-83783-4.

Rental options, a digital version through Connect, a loose-leaf version (ISBN: 978-1-260-83783-4), and a print and connect versions are available on the publisher's website at

<https://www.mheducation.com/highered/product/9781260837834.html?exactIsbn=true#textbookCollapse>.

**Connect (optional):** Connect is the assignment and assessment platform for the textbook. You can use Connect if you wish, however, there are no required assignments using this platform. There are recommended reading assignments.

**Software:** The focus of this class is on concepts, not tools, however we will use several applications during the semester including Microsoft Excel, Power Query for Excel, Microsoft Power BI, Microsoft Access, Tableau, and IDEA. All are available at no cost to students. Keep in mind that some of the software will not work on a Mac. You will need to have a PC available. Please note that Intel-based Macs have the Boot Camp Assistant utility built into the Mac operating system (10.6 or higher). This utility will allow you to install Microsoft Windows on your Mac. Be aware that there are some limitations as explained in the following article:

<https://www.dummies.com/computers/macs/how-to-switch-between-windows-and-os-x-with-macs-boot-camp/>. If this is not a possibility, you can access them through the University of Arkansas Virtual Lab. If you do not have login credentials already, your login information will be provided once the course gets started.

We will also use a variety of free and/or open-source tools such as Weka, Microsoft OneDrive, Google Documents, and Google Sheets.

There is a possibility that we will use others. If we do, you will be notified well in advance of its use so that you have time to acquire and install the software on your computer.

**Canvas:** We will use Canvas for online management of this course. All class information, materials, announcements, grades, and assignments will be on Canvas. All assignments will be submitted via Canvas.

**Technology Requirements:** Due to the online nature of the class, you will be required to use LockDown Browser and a webcam for online exams. The webcam can be the type that is built into your computer or one that plugs in with a USB cable. You must also have Internet with adequate bandwidth to be able to complete exams. If you do not have a computer with a webcam or if you do not have access to a stable Internet connection, you may want to plan to take exams on campus in the library or a lab. If you have issues with any technology as described, you need to let me know immediately so we can work on a solution.

## Download Instructions and Video for LockDown Browser

Download and install LockDown Browser from this link:

<https://download.respondus.com/lockdown/download.php?id=163943837>

### Descriptions of major assignments and examinations:

**Quizzes:** Nine reading quizzes will be given during the semester to ensure that you adequately read and understand the textbook chapters and any other readings. Quiz questions may include multiple choice, short discussion and short problems/exercises. You will have three attempts for each quiz. Each attempt will be a different quiz and the highest score will be recorded. Quizzes are before the start of class. Quizzes will be available in Canvas at least 24 hours before they are due. There will be **no makeups** for quizzes.

**In-Class/Homework Assignments:** In-class/homework assignments will be assigned for nearly every class period. The work is to be during class time and turned in by the end of the class. There will be **no makeups** for in-class assignments.

**Labs:** There will be two types of labs—individual and UARK—assigned during the semester. While I understand that you might work with someone, you must understand the concepts, do the work yourself and turn in only your work.

- **Individual Labs:** These assignments are to be completed on an individual basis during class time.
- **UARK Labs:** The assignments are a little more intense and all analyses will be conducted using the University of Arkansas Remote Desktop. The

***Late Lab Assignments will be accepted on a very limited basis. Any assignment turned in after the due date and time in Canvas will receive an immediate 20% penalty. Under no circumstances will any assignment be accepted more than 30 minutes past the time due.***

**Exams:** There will be a midterm and a final exam for the course. Both exams will be based on **all materials** presented, including any readings, discussions, and textbook material. Short answer, objective questions, and computer-based problems may be used. The final exam will be comprehensive in that you will be responsible for being able to use all the concepts presented during the course. You will also be required to record a presentation.

**Makeup exams:** There will be **no makeup exams allowed** due to the nature of the class. In the case of a documented emergency, the Final Exam score percentage may be substituted for the Midterm Exam. However, verifiable written documents must be submitted by the class after the exam in order for the absence to be excused and the substitution to be allowed. Legitimate emergencies must be the result of unavoidable or serious circumstances (e.g., illness or injuries that requires you to go to the emergency room, death in the family, or accidents on the way to the exam (with a police report)). A flat tire, car trouble (including accidents where the police are not involved), no babysitter, tired, allergies, colds, personal or family problems, vacations or similar out of town trips, etc., are not eligible for “excused absence” status. If you miss an exam without being excused, you will receive a zero for that exam.

**Professionalism:** The professionalism component of the course is derived from your interaction and participation in class (e.g., showing up on time and staying for the class, participating in discussions, etc.).

## Grading Information

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### Grading:

Course grades will be assigned based on the total number of points earned during the semester. Points are allocated according to the following:

## Point Distribution for Grading

Quizzes (9 @ 10 points)	90 pts
In-Class/HW Assignments (9 @ 10 points)	90 pts
Individual Labs	90 pts
UARK Labs	130 pts
Professionalism	50 pts
Midterm Exam	100 pts
Comprehensive Final Exam	<u>200 pts</u>
<b>Total</b>	<b><u>750 pts</u></b>

## Grading Scale

<u>Grade</u>	<u>Points Range</u>
A	675 – 750 pts
B	600 – 675 pts
C	525 – 600 pts
D	450 – 525 pts
F	0 – 450 pts

Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels.

All grades will be maintained in the Canvas gradebook. No grade will be discussed or released by phone or email. Final grades will be posted in Canvas once the semester is complete.

### Grade Grievances:

Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog. [See [Grades and Grading Policies](#). For student complaints, see [Student Complaints](#).]

### Expectations for Out-of-Class Study:

Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 -12 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

## Institution Information

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UTA students are encouraged to review the below institutional policies and informational sections and reach out to the specific office with any questions. To view this institutional information, please visit the [Institutional Information](#) page (<http://www.uta.edu/provost/administrative-forms/course-syllabus/index.php>) which includes the following policies among others:

- Drop Policy
- Disability Accommodations
- Title IX Policy
- Academic Integrity
- Student Feedback Survey
- Final Exam Schedule

## Additional Information

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### Attendance:

At The University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator of student success. Each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance.

While UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients "begin attendance in a course." UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report must the last date a student attended their class based on evidence such as a test, participation in a class project or

presentation, or an engagement online via Canvas. This date is reported to the Department of Education for federal financial aid recipients.

### Student Success Programs:

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include [tutoring by appointment](#), [drop-in tutoring](#), [etutoring](#), [supplemental instruction](#), [mentoring](#) (time management, study skills, etc.), [success coaching](#), [TRIO Student Support Services](#), and [student success workshops](#). For additional information, please email [resources@uta.edu](mailto:resources@uta.edu), or view the [Maverick Resources](#) website.

The **IDEAS Center** (<https://www.uta.edu/ideas/>) (2<sup>nd</sup> Floor of Central Library) offers **FREE** [tutoring](#) and [mentoring](#) to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. Students can drop in or check the schedule of available peer tutors at [www.uta.edu/IDEAS](http://www.uta.edu/IDEAS), or call (817) 272-6593.

## Emergency Phone Numbers

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In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381

## Course Schedule

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Please note that this is a summary of the Course Schedule. The complete schedule is on Canvas and includes a detailed listing of topics and the associated assignments.

*As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. Schedule adjustments will be communicated either by verbal or written statement – Dr. Cherie Henderson*

Session	Date	Chapter	Topics
1	January 20	1	Introduction, Data Analytics in Accounting and Identifying the Questions
2	January 27	2	Mastering the Data
3	February 3	2	Mastering the Data
4	February 10	3	Performing the Test Plan and Analyzing the Results
5	February 17	3	Performing the Test Plan and Analyzing the Results
6	February 24	4	Communicating Results and Visualizations
7	March 3	4	Communicating Results and Visualizations
8	<b>March 10</b>		<b>Midterm Exam (Chapters 1-4)</b>
	<b>March 17</b>		<b>Spring Break</b>
9	March 24	5	The Modern Accounting Environment
10	March 31	5	The Modern Accounting Environment
	<b>April 2</b>		<b>Last Day to Drop (before 4:00 pm)</b>
11	April 7	6	Audit Data Analytics
12	April 14	6	Audit Data Analytics
13	April 21	8	Financial Statement Analysis
14	April 28	7, 9	Managerial and Tax Analytics
15	<b>May 10</b>		<b>Comprehensive Final Exam</b>