

Accounting Course Number: 29:010:460 Course Title: Audit Analytics

COURSE DESCRIPTION

In recent years, audit analytics has drawn great attention in the accounting profession due to the increase in demand for enhancing audit quality by regulators, creditors, and investors; many audit firms and internal auditors have applied audit analytics to their audit processes. In response to this trend, this course aims at introducing our students the concept of audit analytics, the basic audit analytical tools, and the application of various analytical methods in both internal and external audit processes. In other words, this course is designed to familiarize our students with various analytical skills and provide them with a practical demonstration in an auditing context.

COURSE MATERIALS

There is no specific textbook assigned to this course. All the lectures will feature a set of relevant slides; The slides and videos will be continually updated and accessible at the beginning of each week on Canvas.

Please check Canvas (https://canvas.rutgers.edu/) regularly.

(Optional) Vernon Richardson, Katie Terrell, and Ryan Teeter. Data Analytics for Accounting. 2nd Ed. McGraw-Hill. 2021 (ISBN13: 9781260837834)

COURSE OBJECTIVES

This course is intended to provide students with the basic understanding of the application of analytics to the (internal and external) audit process in current ubiquitous computer-based information systems and their application in organizations. Students who complete this course are expected to:

• gain understanding of the evolving scenario of big data analytics, obtain hands-on experience of using state-of-the-art audit analytical tools.

PREREQUISITES

This course has no prerequisites. However, it would be helpful if students have basic knowledge of auditing and statistics.

COMMUNICATION

The preferred and fastest method of communication for the class is through Canvas. Students may contact the instructor by sending. However, when using direct emails (not through Canvas) you must include "**29:010:460**" in the title (e.g., 29:010:460 - when will our grades be posted?); if you do not, I will likely never see your message.

UNIVERSITY CLOSINGS

The class will meet as scheduled if the University is open. Should the University close for any reason, any assignments (or project) due in class that day will be accepted at the next class meeting. If the University is closed on a day that an examination is scheduled, then the examination will be deferred until the next class meeting. If classes are canceled for any other reason, emails will be sent to all students.

ACADEMIC INTEGRITY

I do NOT *tolerate cheating*. Students are responsible for understanding the RU Academic Integrity Policy (http://academicintegrity.rutgers.edu/)

I will strongly enforce this Policy and pursue *all* violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, "On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment." I will screen all written assignments through *SafeAssign* or *Turnitin*, plagiarism detection services that compare the work against a large database of past work. Don't let cheating destroy your hard-earned opportunity to learn. See business.rutgers.edu/ai for more details.

COURSE POLICIES

<u>Make-up Exams</u>: No make-up exams will be given unless you have a compelling reason and can provide sufficient evidence before the exam. A medical note or similar evidence will be required.

Late Project: No late projects will be accepted.

<u>Re-grading</u>: You may request a re-grade on any quiz, project or exam by submitting a written appeal that specifies the relevant question(s) and a brief explanation of why you believe the grading is incorrect. Any appeal with insufficient proof will not be accepted. Please use appropriate references when writing your appeal. All requests must be made within one week from the date the assessment score is released on Canvas.

Attendance: Students are required to attend all classes and to arrive on time.

Requirements for class attendance in this course are consistent with Rutgers Business School policies, which can be found at: http://www.business.rutgers.edu/undergradnew-brunswick/current-students/policies-procedures

Student athletes on recognized Rutgers University teams participating in inter-collegiate competitions who expect to miss a class and/or examination due to such events must inform me in writing of the dates on which those events will occur by the end of the second week of classes. Those student athletes will then be eligible for make-up exams.

GROUP ASSIGNMENTS

There will be group assignments, including group quizzes and a group project. You will be placed into groups at the beginning of the semester and remain in the same group for the entire semester. Students will work on the above assignments with their groups and will hand in one submission per group. However, each student is responsible for confirming the correctness of the solution and ensuring the successful submission of the assignments. If you have any specific preferences for your group members, please email me by () on ().

GROUP PROJECT

Detailed information about the group project will be provided in class and will be posted on the course website (Group Project Section) prior to beginning the project.

QUIZ

Quizzes (closed book/closed notes) will be administered during regular class hours for a period of 10-15 minutes. There are two types of quizzes: 1) individual quizzes and 2) group quizzes, during which group discussions are permissible. Each quiz will be graded immediately after completion. No make-up quizzes are available.

The one lowest quiz score will be not counted towards the course grade.

EXAM DATES AND POLICIES

There are two midterm exams and a comprehensive final exam (dates are given in the course schedule). Exams will be in class and closed book (students may consult one double-sided, handwritten page of notes during testing). No make-ups will be available for missed exams (please see Course Policies below for further information).

GRADING POLICY

Your course grade will be based on the following components:

| Quizzes | 25% |
|---------------|------|
| Group project | 10% |
| Midterm 1 | 15% |
| Midterm 2 | 20% |
| Final exam | 30% |
| Total points: | 100% |

Letter Grade

| Letter | Α | B+ | В | C+ | C | C- | D |
|------------|----------|-----------|-----------|-----------|-----------|-----------|----------|
| Grade | | | | | | | |
| Percentage | 100 - 90 | 89.9 - 85 | 84.9 - 80 | 79.9 - 75 | 82.9 - 80 | 74.9 - 70 | 69.9 and |
| Point | | | | | | | below |

COURSE SCHEDULE

| Week | Торіс | Readings | Notes |
|------|---|-----------|-------------------------------|
| 01 | ☑ Course Introduction☑ Introduction to Audit Analytics | Lecture 1 | Individual quiz |
| 02 | ☐ Audit Analytics with Big Data | Lecture 2 | Individual quiz Group quiz |
| 03 | ☐ Audit Analytics with Data Analytics | Lecture 3 | Individual quiz Group quiz |
| 04 | ☐ Audit Analytics with Data Processing | Lecture 4 | Individual quiz Group quiz |
| 05 | ☑ Midterm Exam 1 Review☑ Midterm Exam 1 | Review 1 | |
| 06 | ☐ Audit Analytics with Risk Identification | Lecture 5 | Individual quiz Group quiz |
| 07 | ☐ Audit Analytics with Risk Assessment | Lecture 6 | Individual quiz Group quiz |
| 08 | ☐ Audit Analytics with Data Visualization 1 | Lecture 7 | Individual quiz Group quiz |

| 09 | ☐ Audit Analytics with Data Visualization 2 | Lecture 8 | Individual quiz Group quiz |
|----|--|------------|-------------------------------|
| 10 | Midterm Exam 2 ReviewMidterm Exam 2 | Review 2 | Individual quiz Group quiz |
| 11 | ☐ Audit Analytics with Predictive Analysis | Lecture 8 | Individual quiz Group quiz |
| 12 | ☐ Audit Analytics with Artificial Intelligence 1 | Lecture 9 | Individual quiz Group quiz |
| 13 | ☐ Audit Analytics with Artificial Intelligence 2 | Lecture 10 | Individual quiz Group quiz |
| 14 | Group Project Final Exam Review | Review 3 | Individual quiz Group quiz |
| 15 | ☐ Final Exam | | |

Note: The schedule and syllabus are subject to change at any time by the instructor.

SUPPORT SERVICES

If you need accommodation for a *disability*, obtain a Letter of Accommodation from the Office of Disability Services. The Office of Disability Services at Rutgers, The State University of New Jersey, provides student-centered and student-inclusive programming in compliance with the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments of 2008, Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act of 1998, and the New Jersey Law Against Discrimination. More information can be found at <u>ods.rutgers.edu</u>.

[Rutgers University-New Brunswick ODS phone (848)445-6800 or email dsoffice@echo.rutgers.edu]

[Rutgers University-Newark ODS phone (973)353-5375 or email ods@newark.rutgers.edu]

If you are *pregnant*, the Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy.

[Rutgers University-New Brunswick Title IX Coordinator phone (848)932-8200 or email jackie.moran@rutgers.edu]

[Rutgers University-Newark Office of Title IX and ADA Compliance phone (973)353-1906 or email TitleIX@newark.rutgers.edu]

If you seek *religious accommodations*, the Office of the Dean of Students is available to verify absences for religious observance, as needed.

[Rutgers University-New Brunswick Dean of Students phone (848)932-2300 or email deanofstudents@echo.rutgers.edu]

[Rutgers University-Newark Dean of Students phone (973)353-5063 or email DeanofStudents@newark.rutgers.edu]

If you have experienced any form of *gender or sex-based discrimination or harassment*, including sexual assault, sexual harassment, relationship violence, or stalking, the Office for Violence Prevention and Victim Assistance provides help and support. More information can be found at http://vpva.rutgers.edu/.

[Rutgers University-New Brunswick incident report link: http://studentconduct.rutgers.edu/concern/. You may contact the Office for Violence Prevention and Victim Assistance at (848)932-1181]

[Rutgers University-Newark incident report link:

https://cm.maxient.com/reportingform.php?RutgersUniv&layout_id=7
. You may also contact the Office of Title IX and ADA Compliance at (973)353-1906 or email at TitleIX@newark.rutgers.edu. If you wish to speak with a staff member who is confidential and does **not** have a reporting responsibility, you may contact the Office for Violence Prevention and Victim Assistance at (973)353-1918 or email run.vpva@rutgers.edu]

If students who have experienced a temporary condition or injury that is adversely affecting their ability to fully participate, you should submit a request via https://temporaryconditions.rutgers.edu.

If you are a military *veteran* or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. http://veterans.rutgers.edu/

If you are in need of *mental health* services, please use our readily available services.

[Rutgers University-Newark Counseling Center: http://counseling.newark.rutgers.edu/]

[Rutgers Counseling and Psychological Services—New Brunswick: http://rhscaps.rutgers.edu/]

If you are in need of *physical health* services, please use our readily available services.

[Rutgers Health Services – Newark: http://health.newark.rutgers.edu/]

[Rutgers Health Services – New Brunswick: http://health.rutgers.edu/]

If you are in need of *legal* services, please use our readily available services: http://rusls.rutgers.edu/

Students experiencing difficulty in courses due to *English as a second language (ESL)* should contact the Program in American Language Studies for supports.

[Rutgers-Newark: PALS@newark.rutgers.edu]

[Rutgers-New Brunswick: eslpals@english.rutgers.edu]

If you are in need of additional *academic assistance*, please use our readily available services.

[Rutgers University-Newark Learning Center: http://www.ncas.rutgers.edu/rlc

[Rutgers University-Newark Writing Center: http://www.ncas.rutgers.edu/writingcenter]

[Rutgers University-New Brunswick Learning Center: https://rlc.rutgers.edu/]

[Optional items that many faculty include:

- Students must sign, date, and return a statement declaring that they understand the RU Academic Integrity Policy.
- Students must sign, date, and return a statement declaring that they understand this syllabus.]