

| Course | 22:010:690:10 Special Topics in Audit Analytics | | | | | | | | | | | | |
|------------------------------------|--|-------------|--|------------------------------------|-----|-------------------|-----|---------|-----|------------|-----|---------------|------|
| Term and Year | Summer 2020 | Instructor: | Soohyun Cho | | | | | | | | | | |
| Classroom: | Canvas | Office: | 1WP-906 | | | | | | | | | | |
| Class Time: | Online | Phone: | 973-353-1672 | | | | | | | | | | |
| Office Hours: | Friday 9 – 10 am, by appointment | Email: | scho@business.rutgers.edu | | | | | | | | | | |
| Course Description: | <p>This is the second of four courses in the Certificate in Audit Analytics program, which aims to further improve students' analytic skills and to promote changes in the profession towards realizing a modern audit suited to the current business environment. The certificate program is offered through the Rutgers Business School in conjunction with its Master of Accountancy in Financial Accounting (MAccy) program. This program can fulfill a dual purpose: MAccy students may specialize in the area and take these courses as electives, while non-matriculated students may take the four-course certificate program independently.</p> <p>This course consists of two parts: methodology and practice. The first part of the course is intended to develop students' understanding of data and data-related statistical inferences. Students will learn how to apply basic statistical models and data mining techniques to auditing problems, how to interpret the results, and how to troubleshoot some common problems. The second part of the course covers specialized topics on how various audit analytic techniques are applied in real-world audit scenarios using various software for related topics.</p> | | | | | | | | | | | | |
| Course Objectives: | <p>To provide students with an understanding of:</p> <ul style="list-style-type: none">• methodologies and applications in audit analytics• various software to perform audit analytics | | | | | | | | | | | | |
| Prerequisites: | <p>There are no prerequisites for this course. Students are assumed to have basic knowledge of accounting fundamentals (financial and managerial accounting, auditing) and statistics.</p> | | | | | | | | | | | | |
| Course Materials: | <p>There is no specific textbook assigned to this course. All the lectures will feature a set of relevant slides; some lectures will also include corresponding videos. The slides and videos will be continually updated and accessible at the beginning of each week on Canvas.</p> <p>Please check Canvas (https://canvas.rutgers.edu/) regularly.</p> | | | | | | | | | | | | |
| Grading: | <p>Your course grade will be based on the following components:</p> <table border="1"><tbody><tr><td>Participation in weekly discussion</td><td>20%</td></tr><tr><td>Weekly assignment</td><td>30%</td></tr><tr><td>Midterm</td><td>20%</td></tr><tr><td>Final exam</td><td>30%</td></tr><tr><td>Total points:</td><td>100%</td></tr></tbody></table> | | | Participation in weekly discussion | 20% | Weekly assignment | 30% | Midterm | 20% | Final exam | 30% | Total points: | 100% |
| Participation in weekly discussion | 20% | | | | | | | | | | | | |
| Weekly assignment | 30% | | | | | | | | | | | | |
| Midterm | 20% | | | | | | | | | | | | |
| Final exam | 30% | | | | | | | | | | | | |
| Total points: | 100% | | | | | | | | | | | | |

Assignments: There will be weekly individual assignments throughout the semester. Due dates are listed in the course schedule below. The assignments will require you to perform some analytic tasks using the methods and tools covered in class. Your answers must be submitted in a Word document and uploaded to Canvas on or before the due date. If you upload your answer after the due date and have no valid excuse for the delay, you will receive a score of zero for that assignment. The assignments are important practice that will allow you to gain hands-on experience with the analytic methods covered in class and to interpret the results of the accounting data.

Exams: There will be a midterm exam and a final exam (dates are given in the course schedule). The exams will be open-book and open-internet. Students should take the exams through the Canvas system. All students are expected to take the exams at the same time. If a student has a valid excuse for not taking an exam on the scheduled day, (i.e., an excuse that complies with University regulations), the student must contact me with supporting document(s) explaining the cancellation and obtain permission before the exam date to reschedule the test. Failure to obtain the necessary permission will result in a score of zero.

Students are expected to learn how to mine and organize useful resources through Internet. Please do NOT copy/paste material from websites. Use your own words and make sure to cite any material taken from the Internet or from other sources appropriately.

Letter Grade:

| Letter Grade | A | B+ | B | C+ | C | D+ | D |
|--------------|-------|--------|--------|--------|--------|--------|----------------|
| Percentage | 100 - | 89.9 - | 84.9 - | 79.9 - | 74.9 - | 69.9 - | 64.9 and below |
| Point | 90 | 85 | 80 | 75 | 70 | 65 | |

Course Policies:

Make-up Exams: 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 Assignments: No late assignments will be accepted without a valid excuse (see *Assignments* section above).

Re-grading: 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.

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.

Academic Integrity:

Academic integrity is the pursuit of scholarly activity free from fraudulent and/or deceptive activities. Academic dishonesty includes (but is not limited to) attempting to use unauthorized information while taking an exam, plagiarism, facilitating acts of academic dishonesty by others, submitting the work of another person or work previously or concurrently used in another class without obtaining the permission of the instructor, and tampering with the academic work of other students. Assigned work should be done independently, unless otherwise indicated by me. Students found cheating will be punished according to the severity of the infraction. At a minimum, a student found cheating will receive a zero on the corresponding assignment, group project, or exam. However, most cases of cheating will result in the student receiving a failing grade for the course. The Academic Integrity Policy is available at <http://academicintegrity.rutgers.edu>.

Rutgers, in conjunction with the RBS Committee, has established an Honor Code that states: "I pledge, on my honor, that I have neither received nor given any unauthorized assistance on this examination (assignment)."

All cases of suspected academic dishonesty will be handled in strict accordance with University policy.

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. <https://ods.rutgers.edu/contact-ods>

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:

<https://myrun.newark.rutgers.edu/counseling-center>

If you are in need of *physical health* services, please use our readily available services. Rutgers Health Services – Newark: <http://health.newark.rutgers.edu/>

If you are in need of *legal* services, please use our readily available services:
<http://rusls.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/rhc>; Rutgers University-Newark Writing Center: <http://www.ncas.rutgers.edu/writingcenter>

Harassment and Discrimination: Rutgers strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon race, ethnicity, sex (including sexual assault), pregnancy, color, religion, national origin, physical or mental disability, age, marital status, sexual orientation, gender identity, genetic information, or status as a U.S. veteran. Any student who has concerns about such behavior should contact me and/or the Office of Student Affairs Compliance (<http://compliance.rutgers.edu>) at 848-932-8576 or visit <http://studentaffairs.rutgers.edu/contact-us> for further information.

Religious Accommodation: If an academic or work requirement conflicts with your religious practices and/or observances, you may request reasonable accommodations. You are advised to provide timely notification to me about necessary absences for religious observances and are responsible for making up the work or exams according to an agreed-upon schedule. Your request must be submitted in writing. Absences for reasons of religious obligation shall not be counted for purposes of reporting.

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.

Communication: The preferred and fastest method of communication for the class is through Canvas. Students may contact the instructor by sending emails to scho@business.rutgers.edu. However, when using direct emails (not through Canvas) you must include "**22:010:690**" in the title (e.g., 22:010:690 - when will our grades be posted?); if you do not, I will likely never see your message.

Tentative Course Schedule (**Subject to Change**)

| Week | Opening Date | Topic | Readings | Notes |
|------|--------------|--|------------------|------------------------------------|
| 01 | 05/31 | ▪ Course Introduction ▪ Introduction to Audit Analytics | Lecture Slide 1 | Assignment 1 (Due Date: 06/06) |
| 02 | 06/07 | ▪ Audit Analytics with Statistics 1 | Lecture Slide 2 | Assignment 2 (Due Date: 06/13) |
| 03 | 06/14 | ▪ Audit Analytics with Statistics 2 | Lecture Slide 3 | Assignment 3 (Due Date: 06/20) |
| 04 | 06/21 | ▪ Audit Analytics with Empirical Models | Lecture Slide 4 | Assignment 4 (Due Date: 06/27) |
| 05 | 06/28 | ▪ Audit Analytics with Risk Factors | Lecture Slide 5 | Assignment 5 (Due Date: 07/04) |
| 06 | 07/05 | ▪ Audit Analytics with Audit Assertions | Lecture Slide 6 | Assignment 6 (Due Date: 07/11) |
| 07 | 07/12 | ▪ Midterm Exam Review ▪ Midterm Exam | Review Slide 1 | |
| 08 | 07/19 | ▪ Audit Analytics with Data Visualization 1 | Lecture Slide 7 | Assignment 7 (Due Date: 07/25) |
| 09 | 07/26 | ▪ Audit Analytics with Data Visualization 2 | Lecture Slide 8 | Assignment 8 (Due Date: 08/01) |
| 10 | 08/02 | ▪ Audit Analytics with Artificial Intelligence 1 | Lecture Slide 9 | Assignment 9 (Due Date: 08/08) |
| 11 | 08/09 | ▪ Audit Analytics with Artificial Intelligence 2 | Lecture Slide 10 | Assignment 10 (Due Date: 08/15) |
| 12 | 08/16 | ▪ Final Exam Review ▪ Final Exam | Review Slide 2 | |

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