

Business Analytics and Information Technology
Course Number: 33:136:287
Course Title: Introduction to Business
Analytics

COURSE DESCRIPTION

This course is meant to be a non-business student's initial exposure to how data is used in making decisions at the managerial level. The class will be a hands-on, example-based approach on solving business decision problems from a diversified background. The class takes a unified approach, integrating concepts from statistics and management science, and uses many practical examples from business.

COURSE MATERIALS

- Textbook:

Business Analytics: Data Analysis & Decision Making, 6th Edition. Albright, Winston

-Lectures slides and assignments will be posted on Canvas.

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.

ATTENDANCE AND PREPARATION POLICY

- Throughout the semester, attendance will be taken randomly. Being absent more than three times without any clear reason and proof will result in getting F. Two late classes will be considered as one absence.
- If you are to be absent, report your absence in advance at <https://sims.rutgers.edu/ssra/>. If your absence is due to religious observance, a Rutgers-approved activity, illness, or family emergency/death and you seek makeup work, also send me an email with full details and supporting documentation.

- Expect me to arrive on time for each class session. I expect the same of you.
 - Expect me to remain for the whole period of each class session. I expect the same of you.
 - For weather emergencies, consult the campus home page. If the campus is open, class will be held, unless any special notification in advance.
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CLASSROOM CONDUCT

- Questions are strongly encouraged during the class, office hours, and via e-mail.
 - While I will do my best to keep you engaged in class, your participation is encouraged and needed for the success of this course. It will be taken into account in your final grade.
 - The use of portable electronic devices such as telephones and tablets will not be permitted during class.
 - Please raise your hand before asking questions.
 - Refrain from side conversations, eating, sleeping, and other disruptive behaviors.
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EXAM DATES AND POLICIES

- There are two exams in this course:
 - **Midterm: Final:**
- Exam policies and content will be announced prior to the exam.
- Verifiable documented proof of a serious medical or family emergency must be supplied if you are absent from an exam.
- Exams will be closed book/notes, calculator allowed, no laptops or PDAs, all cell phones turned off. During in-class exams, the following rules apply:
 - If you have a disability that influences testing procedures, provide me an official letter from the Office of Disability Services at the start of the semester.
 - No cell phones or other electronics are allowed in the testing room.
 - You must show a valid Rutgers photo ID to enter the room and to turn in the exam.
 - Alternate seating; do not sit next to another student or in your usual seat.
 - The collaboration of any kind is strictly forbidden on all exams, and violations of this rule will be formally prosecuted.

GRADING POLICY

- Grade Distribution:

◦ Homework	20%
◦ In-class Exercise	20%
◦ Midterm	20%
◦ Final exam (Cumulative)	40%
- Final Grade: your final letter grade (A, B+, B, F) will be based on your **raw points in 100-scale as well as your Rank in class**, so please do your best for all the details.

- I reserve the right to make changes to the grade calculation scheme.

COURSE SCHEDULE

This is a temporary schedule for reference. I will make some adjustment on speed and topics according to your level of understanding and interest.

Topics
Welcome, Warm-up, Class Policy, Overview and Basic Introduction
Describing the Distribution of a Single Variable
Finding Relationships among Variables
Probability and Probability Distributions
Various Distributions for Random Variables
Exercise 1 , Sampling and Sampling Distribution (1)
Sampling and Sampling Distribution (2)
Estimation (1)
Estimation (2), Fundamentals of Hypothesis Testing: One sample Tests (1)
Exercise 2 , Fundamentals of Hypothesis Testing: One sample Tests (2)
Two-sample Statistical Inference (1)
Two-sample Statistical Inference (2)
Exercise 3
Review for Midterm, Exercise 4
Review for Midterm
Midterm Exam
No Class
No Class
Chi-square and Nonparametric Tests (1)
Chi-square and Nonparametric Tests (2)
Linear Regression Model (1)
Linear Regression Model (2)
Time Series Analysis and Forecasting (1)
Exercise 5 , Time Series Analysis and Forecasting (2), Introduction to Optimization Modeling (1)
Introduction to Optimization Modeling (2), Applications and Examples of Optimization Models (1)
Applications and Examples of Optimization Models (2)
Introduction to Simulation Models
Applications and Examples of Simulation Models
Review for Final
Review for Final
Final Exam

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 ods.rutgers.edu.

[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.]