

198:660:30 Business Analytics Programing**544:660:30 Business Analytics Programing**

Spring 2019

1 Washington Place, Rm 206

Sunday 11:00 am – 2:00 pm

Dr. Wajahat Gilani

Office # Rm 206

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Office Hours: Sunday 2:00 pm - 3:00 pm

COURSE DESCRIPTION

This course is meant to teach you how to use data, statistical analysis and quantitative methods to help businesses make better decisions and gain insights into business operations using the python programming language. You will be learning the pandas package, which is used for data storage and manipulation, and the numpy package which is the math/statistical libraries in python. In addition, we will be using unstructured data from social media to apply data transformation techniques and the statistical procedures

COURSE MATERIALS

- Slides will be on Blackboard
 - Codes and Practice Questions will be on BlackBoard
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LEARNING GOALS AND OBJECTIVES

The goal of this class should be to gain an understanding to how to do data and statistical analysis in python and how to use API's to do source and structure unstructured data.

ACADEMIC INTEGRITY

I do NOT tolerate cheating. Students are responsible for understanding the RU Academic Integrity Policy (http://academicintegrity.rutgers.edu/files/documents/AI_Policy_2013.pdf). 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." Don't let cheating destroy your hard-earned opportunity to learn. See business.rutgers.edu/ai for more details.

ATTENDANCE AND PREPARATION POLICY

- Attendance is not required but is strongly recommended.

CLASSROOM CONDUCT

Please respect your fellow classmates by not disrupting the lectures or talking while they are trying to ask questions.

EXAM DATES AND POLICIES

There are 3 exams in this course:

Midterm 1 Exam: 10/13/2019, bring a calculator, 1 cheat sheet both sides

Midterm 2 Exam: 11/17/2019, bring a calculator, 1 cheat sheet both sides

Final Exam: 12/15/2019, it is **cumulative**, bring a calculator, 1 cheat sheet both sides

During 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.
 - Cell phones must be turned off and placed screen-side in the front of your table. Once you receive the exam you cannot touch your cell phone UNTIL after you submit your exam.
 - You must show a valid Rutgers photo ID to enter the room and to turn in the exam.
 - Assigned seating; I will randomly seat you for the exam.
 - Use the bathroom prior to the exam start; bathroom breaks can only happen if there is an additional proctor to escort you to the exam.
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GRADING POLICY

*Labs are meant for you to practice the lessons from the class, and allow me to give individual attention to students with their programming

Midterm 1 – 130 pts

Midterm 2 – 130 pts

Final – 240 pts

Grade scale (pts):

A >=400

399 >= A- > 375

374 >= B+ >350
 349 >= B > 325
 324 >= B- > 300
 299 >= C+ > 275
 274 >= C > 250
 249 >= C- > 225
 224 >= D >= 200
 F < 224

- Grade posting: My graders do their best to return grades the following class.
- Grade grubbing: Consider a note along these lines: “Your final grade is not subject to negotiation. If you feel I have made an error, submit your written argument to me within one week of receiving your final grade. Clarify the precise error I made and provide all due supporting documentation. If I have made an error, I will gladly correct it. But I will adjust grades only if I have made an error. I cannot and will not adjust grades based on consequences, such as hurt pride, lost scholarships, lost tuition reimbursement, lost job opportunities, or dismissals. Do not ask me to do so. It is dishonest to attempt to influence faculty in an effort to obtain a grade that you did not earn, and it will not work.

COURSE SCHEDULE

This Syllabus WILL change throughout the semester!!

Date	Topic
9/8/2019	Class Intro, Numpy, Pandas, Assessment
9/15/2019	Lab 1: NY State 2016 fundraising data – Pandas Aggregation
9/22/2019	Lab 2: Twitter, JSON Objects, sentiment analysis (textblob)
9/29/2019	Lab 2: Twitter, JSON Objects, sentiment analysis (textblob)
10/6/2019	Lab 2: Twitter, JSON Objects, sentiment analysis (textblob)
10/13/2019	Midterm # 1
10/20/2019	Lab 3: Modeling Runners Times in Cherry Blossom
10/27/2019	Lab 4: Processing Robotic Data
11/3/2019	Lab 5: Airline Flight Delays
11/10/2019	Lab 6: Pairs Trading
11/17/2019	Midterm # 2
11/24/2019	Lab 7: Simulating Black Jack
12/1/2019	THANKSGIVING BREAK!!!
12/8/2019	Lab 8: Baseball database
12/15/2019	Final

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>

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/>

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/>]