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**Instructor:** Dr. Wei Sha, Associate Professor  
**Office:** Kelce 223e  
**Hours:** 12:30 to 1:30, TTH; 9:00 to 1:00, MWF, Zoom or by appointment  
**Phone:** 620-235-4542  
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### **Textbook**

Business Analytics, 4<sup>th</sup> Edition, by Cam, Cochran and Fry, published by Cengage Learning, ISBN 9780357131787

### **Catalog Course Description**

This class focuses on collection of, storing, accessing, and manipulating standard-size and large datasets; data visualization; predictive analytics and clustering. Various data mining techniques will be discussed, and analytical tools and programming packages (R and R Studio) will be introduced and utilized to analyze data and to present results.

### **Prerequisites**

CIS 420 Management Information Systems.

### **Course Objectives / Learning Outcomes**

1. Be able to identify data analytic concepts and illustrate the application and importance of these concepts.
2. Be able to demonstrate proper data analytic techniques.
3. Be able to demonstrate using analytical and programming tools for data analytics
4. Be able to conduct a data analytic project with completed deliverables.
5. Be able to demonstrate the importance of ethics in data analytics.

### **Teaching Methods**

Lectures, discussions, in class demonstrations, video demonstrations, etc.

### **Canvas**

The Canvas system will be used as a primary means to distribute class materials and information. It is your responsibility to check the Canvas frequently about class announcements, quizzes, assignments, and exam information

### **Classroom Conduct**

Please be a professional at all times and adhere to the student code of conduct policy by Kelce College of Business.



## Course Outline

Tentative Outline. Please check Canvas for more details.

Week 1	Introduction
Week 2	Data Science Basics
Week 3	Centrality, Correlation and Excel
Week 4	Data Visualization
Week 5	Data Visualization
Week 6	Probabilities
Week 7	Probabilities
Week 8	Forecasting
Week 9	Forecasting
Week 10	Regression
Week 11	Regression
Week 12	Classification
Week 13	Classification
Week 14	Association
Week 15	Data Warehouse and SQL
Week 16	Final

## Attendance Policy

Students are expected to attend every class. Students who have school-sponsored activities that will conflict with any scheduled class activities or quizzes should let the instructor know ASAP with written notifications.

## Students with Disabilities

Please inform the instructor if you have a learning or physical disability that interferes with course requirements. Assistance and/or appropriate accommodations may be available through the contacts listed on the current Syllabus Supplement.

## Course Evaluation Methods

1. Homework (about 490 points total): Homework is due at the specified time on the due date. Please check Canvas for more details.
2. Mid Term Exam (100 points):  
We'll have a midterm exam in October. Please check Canvas for more details.
3. Final Project (100 points):  
You would need to analyze a set of data and present your findings in a research report. It will serve as your final exam. Please check Canvas for more details.



4. Late assignment policy:  
**Late homework will NOT be accepted and will receive a zero. Absences from exams without instructor's prior approval will result in a grade of zero for that exam.**
5. Extra credit opportunities are not guaranteed and can't be made up.
6. Grades: The grading scale is as follows: 90% to 100%, A; 80%-89%, B; 70% - 79%, C; 60% - 69%, D; Below 60%, F.
7. Although I sympathize with personal conflict (need a B to graduate, need a C to stay in school, etc.), I believe that they cannot validly be considered in grade calculations. Giving personal considerations to one student is unfair to the rest of the class. Therefore, personal conflicts will not be considered in grade calculation. So, please do not ask.

### **Academic Integrity**

All Pitt State students are bound by the academic integrity policies of the university as described and outlined in the current Syllabus Supplement. Please familiarize yourself with these rules and guidelines. In addition, as a course offered through the Kelce College of Business, students in this class are obligated to adhere to the college's Student Code of Ethics as outlined below.

Students pledge to:

- Arrive on time, remain until dismissed at all class sessions, and notify instructors in advance of anticipated absences, late arrivals, or early departures whenever possible.
- Turn off cell phones or other electronic devices while in class, unless permission to use them has been granted.
- Refrain from class disturbances.
- Refrain from use of profane or vulgar language in a threatening or disruptive manner.
- Treat fellow students, staff, faculty, administrators, and property with respect.
- Refrain from giving or receiving inappropriate assistance.
- Prepare assignment and exams honestly, refraining from such unacceptable conduct as plagiarism or unacknowledged appropriation of another's work in any academic work.
- Obey the policies, regulations, and laws of the United States of America, the State of Kansas, The Kansas Board of Regents, Pittsburg State University, and the Gladys A. Kelce College of



**KELCE**  
**COLLEGE OF BUSINESS**  
Pittsburg State University

**Course Syllabus:**

Data Analytics: Business Intelligence

CIS 430, Section 01

Kelce 221

TTH, 11:00 to 12:15

Business.

- If a student observes someone committing dishonesty in connection with academic work, the student is encouraged to report that dishonesty to the appropriate individual (ex, faculty member, or administrator).

**Note**

The instructor reserves the right to amend and to reorganize this syllabus at any time.