

MIS2502: Data Analytics *Course Introduction*

Alvin Zuyin Zheng

zheng@temple.edu

<http://community.mis.temple.edu/zuyinzheng/>

About Me

- Instructor: **Alvin Zuyin Zheng**
- Office: 201F Speakman Hall
- zheng@temple.edu
- Phone: 347-819-0936

Office Hours

- 10:00am – 11:00am
- Monday and Wednesday, or by appointment

Course Websites

Website	Usage
Community Site:	syllabus, schedule, class announcements, slide decks, in-class exercises, assignment instructions, as well as other course documents.
Blackboard: learn.temple.edu	Assignment submission, Sharing videos/recordings if necessary, Posting grades.

Q

What is Data Analytics?

What are Data?

Definition from Oxford

“Facts and statistics collected together for reference or analysis”

Definition from Wikipedia

“Analytics is the discovery and communication of meaningful patterns in data.”

How do you evaluate an unfamiliar Facebook friend request?

- Check the profile pictures
- Check the his/her posts and hobbies
- You talk
- Pictures, hobbies and the content of the conversation are DATA
- The process to form an impression based on those data is DATA ANALYTICS

Getting from Data to Decisions

- It is about asking the right questions and being curious – be a “data detective”



Course Overview

- A foundation for
 - designing database systems and,
 - analyzing business data
- Hands-on experience with MySQL, R and Excel
- No textbook is required for this course.

Topics

- Weeks 1 – 6: Transactional Database (SQL)
- Weeks 7 – 8: Data Visualization, From Transactional Database To Analytical Database (Excel)
- Weeks 9-15: Advanced Data Analytics (R)

Evaluation and Grading

Item	Percentage
Exams (3)	60%
Assignments (9)	30%
In-class activities	5%
Presence & Participation	5%

Exams

- There will be three exams.
- Exam schedules:
 - Exam 1: **Feb 22**, during class time
 - Exam 2: **Mar 29**, during class time
 - Exam 3 (final exam): **May 8**, 8:00am-10:00am, in the same room for classes (Alter 231)

Assignments

#	Assignment	Tentative Due Date
1	ER Modeling	Feb. 3
2	SQL #1 – Getting Data out of the Database	Feb. 17
3	SQL #2 – Putting Data into the Database	Feb. 27
4	ETL in Excel	Mar. 10
5	Pivot Tables in Excel	Mar. 24
6	Introduction to working with R	Apr. 3
7	Decision Trees	Apr. 12
8	Clustering	Apr. 17
9	Association Rules	Apr. 26

Late Assignment Policy

- All assignments will be assessed a 50% penalty (subtracted from that assignment's score) for the first day (i.e. 24 hours) they are late.
- No credit will be given for assignments turned in more than 24 hours past the deadline.
- *Equipment failure is not an acceptable reason for turning in an assignment late*

A Note on Regrade Requests

- Must be submitted within 1 week of the date when the grade was returned.
- I reserve the right to regrade the entire assignment/exam and thus your grade may go up or down.

In-Class Activities

- Very hands on in nature
 - examples and datasets
- Deliverables:
 - Submit within **two days**
 - Allowed to miss two submissions for in-class activities
 - Graded by **success** or **fail**

Presence & Participation

Perfect score = frequent presence + active participation

- Two unexcused absence without penalty.