MIS2502: Data Analytics

Course Introduction
About Me

• PhD in Information Systems from Carnegie Mellon University

• Impact of emerging technologies on business, individuals and society
  – E-commerce, Online marketing/advertising
  – Online labor market
Contact info

• Office: 201C Speakman Hall
• [gong@temple.edu](mailto:gong@temple.edu)
• Phone: 215-204-7454

• Office hours: 11:30 – 12:30 Tuesday and Thursday or by appointment

• **ITA:** Lauren Sirianni ([laurensirianni@temple.edu](mailto:laurensirianni@temple.edu))
# Course Websites

<table>
<thead>
<tr>
<th>Website</th>
<th>Usage</th>
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<tbody>
<tr>
<td>Community Site: <a href="http://community.mis.temple.edu/mis2502sec002004s16/">http://community.mis.temple.edu/mis2502sec002004s16/</a></td>
<td>syllabus, schedule, class announcements, slide decks, in-class exercises, assignment instructions, as well as other course documents.</td>
</tr>
<tr>
<td>Blackboard: <a href="https://blackboard.temple.edu/">https://blackboard.temple.edu/</a></td>
<td>assignment submission, sharing videos/recordings, posting grades.</td>
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Q

What comes to your mind when you think of Data Analytics?
Definition from Wikipedia

“Analytics is the discovery and communication of meaningful patterns in data.”
Definition from WhatIs.com

“Data analytics (DA) is the science of examining raw data with the purpose of drawing conclusions about that information.”
Definition from Techopedia

“Data analytics refers to qualitative and quantitative techniques and processes used to enhance productivity and business gain.”
Getting from Data to Decisions

• It is about asking the right questions and being curious – be a “data detective”
Steps to be a Data Detective

1. **Set objectives:** What do you want to achieve?

2. **Gather data, analyze data:** What do you need to know?

3. **Generate insights:** What did you learn? What questions still need to be answered?

4. **Make decisions:** How can you turn data-based insights into action?
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 – 5: Transactional Database (SQL)

• Weeks 6 – 9: From Transactional Database To Analytical Database (Excel)

• Weeks 10-13: Advanced Data Analytics (R)

• Week 14: Data Visualization
# Evaluation and Grading

<table>
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<tr>
<th>Item</th>
<th>Percentage</th>
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<tr>
<td>Exams (3)</td>
<td>60%</td>
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<tr>
<td>Assignments (9)</td>
<td>30%</td>
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<tr>
<td>In-class exercises</td>
<td>5%</td>
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<tr>
<td>Presence &amp; Participation</td>
<td>5%</td>
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Late Assignment Policy

- All assignments should be submitted via Blackboard before 11:59 pm on due date.
  - Late for 1 day: 20% penalty
  - Late for 2 days: 40% penalty
  - Late for >2 days: 100% penalty

- 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 Exercises

• Very hands on in nature
  – examples and datasets

• Deliverables:
  – Submit within **two days**
  – Allowed to miss two in-class exercises
  – Graded by success or fail
Presence & Participation

*Perfect score = frequent presence + active participation*

- Two unexcused absence without penalty.
Survey: Get to know your background
(complete the survey by January 20 and get a bonus credit)