



GEN BUS 760: Business Data Technologies — Fall 2022

Instructor: Emaad Manzoor Instructor Email: emanzoor@wisc.edu	Office Hours: By appointment, at Grainger 4284B or over Zoom
Meeting Times, Locations, & Canvas Sites: <ul style="list-style-type: none"> • <i>Sec 010:</i> Tuesday, 2.30PM - 5.00PM <i>Location:</i> Grainger Hall 2520 <i>Canvas:</i> canvas.wisc.edu/courses/321825 • <i>Sec 011:</i> Tuesday, 5.40PM - 8.10PM <i>Location:</i> Grainger Hall 2520 <i>Canvas:</i> canvas.wisc.edu/courses/321828 	Credits: 3 Instruction Modality: In-Person Requisites: Graduate/Professional Standing Course Designations: General Business Course website and schedule (your most important resource): emaadmanzoor.com/genbus760/f22/

Course Description: This course focuses on various technologies needed to perform data analytics: techniques for extracting structured and unstructured data from databases, applications, or social networks; transforming and combine data with other relevant information and loading into targeted systems; how to use programming languages to collect data from the web and leverage libraries for other, more, advanced data analysis.

How Credit Hours are Met by the Course: This class meets for two, 75-minute class periods (back-to-back) each week over the semester and carries the expectation that students will work on course learning activities (reading, problem sets, studying, etc.) for about 3 hours out of the classroom for every class period.

Regular and Substantive Student-Instructor Interaction: Regular and substantive student-instructor interaction will be facilitated via direct instruction through weekly lectures and hands-on lab sessions, feedback provided for assigned homework exercises, and discussions/ presentations organized for the course project.

Grading: Your grade is based on your score out of 200 points for the following components:

- **Homework 1 (group work):** 30 points
- **Homework 1 Peer Grade:** 4 points
- **Homework 2 (group work):** 30 points
- **Homework 2 Peer Grade:** 4 points
- **Midterm Exam (Nov 15, 2022):** 100 points
- **Course Project (group work):** 32 points

The average GPA for the class will be no higher than 3.5. Letter grades will be determined by your performance relative to other students as indicated in the table:

A	Top 25%	BC	Next 0-5%
AB	Next 35-50%	C	Next 0-5%
B	Next 10-25%	D/F	Next 0-5%

Course Learning Outcomes: Upon completion of this course, students will be able to:

- Extract data from both structured or unstructured databases.
- Transform and combine data with other relevant information and load data into targeted systems such as data warehouses, data marts or analytical applications.
- Use Python to execute simple web scraping, mine data from social networks, and use libraries for advanced data analysis beyond simple descriptive analytics.
- Implement Online Analytical Processing (OLAP) and create multi-dimension data cubes.
- Execute social mining techniques and create valuable information from text-mining for decision-making.
- Discuss the current landscape in data warehousing, big data, and other emerging topics.

Required Textbook, Software & Other Course Materials: There is no required textbook. Optional readings from external material will be shared on Canvas.

Privacy of Student Records & the Use of Audio Recorded Lectures Statement

Lecture materials and recordings for this course are protected intellectual property at UW-Madison. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or have lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

Course Evaluations: UW-Madison uses a digital course evaluation survey tool called [AEFIS](#). For this course, you will receive an official email two weeks prior to the end of the semester, notifying you that your course evaluation is available. In the email you will receive a link to log in to the course evaluation with your NetID. Evaluations are anonymous. Your participation is an integral component of this course, and your feedback is important to me. I strongly encourage you to participate in the course evaluation.

Diversity & Inclusion Statement

[Diversity](#) is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals. The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background — people who as students, faculty, and staff serve Wisconsin and the world.

Academic Integrity Statement

By virtue of enrollment, each student agrees to uphold the high academic standards of the University of Wisconsin-Madison; academic misconduct is behavior that negatively impacts the integrity of the institution. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these previously listed acts are examples of misconduct which may result in disciplinary action. Examples of disciplinary action include, but is not limited to failure on the assignment/course, written reprimand, disciplinary probation, suspension, or expulsion.

Accommodations for Students with Disabilities Statement

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy ([UW-855](#)) require the university to provide reasonable accommodations to students with disabilities to access and participate in its academic programs and educational services. Faculty and students share responsibility in the accommodation process. Students are expected to inform me of their need for instructional accommodations during the beginning of the semester, or as soon as possible after being approved for accommodations. I will work either directly with you or in coordination with the McBurney Center to provide reasonable instructional and course-related accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA. (See: [McBurney Disability Resource Center](#)).