Fall 9-1-2021

BGEN 341.01: People, Process and Technology I

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BGEN 341: People, Process, and Technology I

Instructor Information:
Professor: Peter Anzollitto
E-mail: peter.anzollitto@umt.edu
Office: GBB 305
Office Hours: Monday/Wednesday 1pm-5pm
                    Office hours are also available by appointment, email to set-up a time

Course Information:
Meeting Place: GBB L11
Meeting Time: TR 8:00-9:20; 9:30-10:50
Prereq: COB lower core completed

Course Description:
The course is designed to prepare COB students for the future of work which is characterized by automation, artificial intelligence, technology and innovation, and creative disruptions, and the necessary human mindset and behaviors required to be successful in that environment. Specifically, this course focuses on 1) the process of data-driven decision-making 2) the practice of individual human behaviors influencing the data-driven decision-making 3) to understand how business leaders can leverage people, processes, and technology to facilitate organizational change, and 4) to analyze data and communicate results to business leaders 5) the importance of a growth mindset.

Learning Objectives*:*

Upon completing this course, student should be able to:
- *articulate* the need for organizations to innovate
- *describe* how people, process, and technology are interwoven within businesses
- *explain* a growth mindset and *understand* the need for life-long learning
- *articulate* the strengths and limitations of computer- and human-based decision-making
- *identify* decision making frameworks, tools and techniques that business leaders can use to make decisions.
- *develop* effective business questions that can be answered by data
- *understand* how to present and defend ideas persuasively in oral and written form
- *analyze* and *report* descriptive statistics for a dataset, as well as *interpret* results and *recommend* improvements to business leaders.
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Required Readings:
"How to Lie with Statistics" by Darrell Huff*
"HBR Guide to Data Analytics Basics for Managers" by Harvard Business Review Press*

Any edition is acceptable for both books

Grading:
Critical Thinking Project
        Part 1   20 points
        Part 2   20 points
        Part 3   20 Points
Data Project
        Part 1   15 points
        Part 2   15 points
        Part 3   15 Points
        Part 4   15 points
Quizzes   25 Points
Participation   15 points
Final   40 points

Total Points Available   *200 points*

NO LATE WORK ACCEPTED. Accepting work late gives a student an unfair advantage over their classmates as they have had more time to prepare/work.

A= 180 points+
B= 160-179 points
C= 140-159 points
D= 120-139 points
F= below 120 points

Critical Thinking Project: This project is in three parts. The first part is to take a stance on a topic (anything that matters to you except Covid, I'd like a variety of topics so Covid is off limits). Write a 2-3 page paper describing your position and incorporate at least 5 citations (news articles) defending your stance. You will then verbally present your stance to the class (you cannot just read your paper). The second and third parts of the critical thinking project will be given after the completion of part one.

Data Project: Chapter 2 in the HBR book will give you an example of what I'm looking for with this project.
       Part 1: Find a problem you want to investigate/solve through collecting and analyzing data. For Part 1 you will turn in a written description of the problem you are investigating/solving, how you plan to collect the data, and how you will analyze the data. I must be able to understand what you want to do through reading your description.
       Part 2: Collect and turn in your data to me. I will accept excel files through email.
       Part 3: Analyze your data and provide a write-up of your findings and results. This write-up should include the conclusions you are drawing from the data.
       Part 4: Present your project (problem you were investigating, how you collected the data, how you analyzed it, your findings and your conclusions) to the class. This presentation should include a PowerPoint and at least one graph of your data/findings.

Participation: This includes attendance at both speakers and asking questions during presentations.

Quizzes: Occasional unannounced quizzes will be given in class over the reading due that day.

Final Exam: The final exam will be comprehensive, any information covered in class may appear. I will provide a study guide for the final exam.

Course Schedule:

8/31/2021	Tuesday	Introduction	
	Thursday	Innovation Imperative	
9/7/2021	Tuesday		
	Thursday	Cognitive biases	HBR Chapter 2, 15
9/14/2021	Tuesday	*Critical Thinking Exercise Part 1: Presentations of Stance*	
	Thursday	Scientific method & Inferential statistics	HBR Chapter 4
9/21/2021	Tuesday	*Innovation Practitioner Interview: Corey Fleeman, founder of MusicProfessor*	
	Thursday	Decision-making tools, techniques, and frameworks	HBR Chapter 12
9/28/2021	Tuesday	*Critical Thinking Exercise Part 2: Presentations*	
	Thursday	Cross-Industry Process for Data Mining (CRISP-DM) - Overview and Business Understanding	Lies Chapter 1
10/5/2021	Tuesday	*Critical Thinking Exercise Part 3: Presentations*	
	Thursday	CRISP-DM - Data Understanding	HBR Chapter 13
10/12/2021	Tuesday		
	Thursday	CRISP-DM - Data Preparation	HBR Chapter 8
10/19/2021	Tuesday	*Data Project Part 1: Present Problem, Data Plan, Analysis Plan*	

	Thursday	Data Analysis - Descriptive Statistics	HBR Chapter 14
10/26/2021	Tuesday	*Data Project Workshop Day- Attendance Mandatory*	
	Thursday	Data Analysis – Visualizing data (e.g., graphing)	HBR Chapters 17, 18, 19
11/2/2021	Tuesday		
	Thursday	*Data Mining Practitioner Interview: Bo Daniel, founder of Astra Oilfield Technologies*	Lies Chapters 5, 6
11/9/2021	Tuesday	Data Analysis - Causation and correlation	
	Thursday	*No Class- Veterans' Day*	Lies Chapter 8
11/16/2021	Tuesday		
	Thursday	Individual Differences/Personality	Lies Chapter 9
11/23/2021	Tuesday		
	Thursday	*No Class- Thanksgiving Break*	
11/30/2021	Tuesday	*Data Project Workshop Day- Attendance Mandatory*	Lies Chapter 10
	Thursday	*Data Project Final Presentations*	HBR Chapter 21
12/7/2021	Tuesday	*Data Project Final Presentations*	
	Thursday	*Final Exam in-class prep*	

Changes will be made to the class schedule as we make our way through the semester. Do not worry: ample time and accommodation will be given when a change is made.

Accessibility:
The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students. If you are registered with Disability Services, please contact me during the first week of class so that we can make appropriate accommodations to ensure you receive the full benefit of the course.

If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services at (406) 243-2243 (Voice/Text) or dss@umontana.edu. Their website can be accessed via this link: http://www.umt.edu/dss.

Academic Honesty:
All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

Stealing someone else's ideas is the same as stealing someone's property. Cite others' ideas in standard footnote or endnote format (in written work and all projects). Paraphrase whenever possible. In general, a paraphrase uses no more than three of the same words in a sentence as the original source.

The University of Montana Student Conduct Code specifies definitions and adjudication processes for academic misconduct and states, "Students at the University of Montana are expected to practice academic honesty at all times."
See: http://ordway.umt.edu/SA/VPSA/index.cfm/name/StudentConductCode for a full review of the University of Montana's student conduct code.

Mission Statements and Assurance of Learning
The College of Business at the University of Montana creates transformative, integrated, and student-centric learning experiences, propelling our students to make immediate and sustained impact on business and society. We nurture our students' innate work ethic to develop confident problem solvers and ethical decision makers. We pursue thought leadership and collectively create opportunities for a better life for our students, faculty, and staff.

COB Core Values:
- Students first: We educate the whole person
- Experiential learning: We create experiences that matter
- Thought leadership: WE create rigorous and relevant knowledge
- Stewardship: We value people, planet and profit

Learning Goals:
As part of our assessment process and assurance-of-learning standards, the COB has adopted the following learning goals for our undergraduate students:

Learning Goal 1: COB graduates will possess fundamental business knowledge in the core disciplines of Accounting, Finance, Management Information Systems, Management and Marketing.
Learning Goal 2: COB graduates will be able to integrate business knowledge.
Learning Goal 3: COB graduates will be effective communicators.
Learning Goal 4: COB graduates will possess problem-solving skills.