

# Fall 2023 Course Outline SHRM 2420 Human Capital Data and Analytics

Instructor: Marlee Mercer Email: <a href="mmercer@yorku.ca">mmercer@yorku.ca</a> Phone: 647-966-3834

Class Time: Mondays, 11:30 am - 2:30 pm

**Location:** CLH, Room E – *This course will be taught live, in-person* 

Whatsapp Group: https://chat.whatsapp.com/JHUeEaN6vtsCSbDNoR2HB2 (or see below for

QR code)



#### **Course Description**

This course introduces students to methods and measures used to examine the impact of human capital and HR initiatives. Students learn how to frame a business problem in the context of HR principles, and to use data to analyze HR-related business problems and communicate results. Students will also be made familiar with the purpose of more advanced analytical methods.

The surge in available organizational data has led to the requirement for HR practitioners to store, track, and analyze large amounts of data. This course is intended to help the practitioner to understand what kinds of data are useful to help solve HR-related problems and issues, the differences between using spreadsheets and databases to manipulate and store data, to perform basic data analyses, and to effectively communicate the results of scientific enquiry.

Upon completion of this course, students will be able to understand and perform basic HR analytics by using data to answer key HR questions around the development and implementation of human capital. The material covered in this course will include issues such as data storage, cleaning and visualization, common measures of workplace attitudes, and basic statistical tests that are commonly used by researchers interested in studying organizational behaviour such as descriptive statistics, the basics of psychometric theory, differences in means, and basic

regression. Students will also develop the skills necessary to understand the foundations of HR information systems used by many large organizations today, and the skill to implement a strategic HR dashboard.

### **Course Learning Outcomes**

Upon completion of this course, students will be able to ask questions that can be answered by the collection and analysis of data. Students will be able to:

- 1) Frame a business problem in the context of HR principles
- 2) Understand how to formulate an HR question as an analytics problem
- 3) Understand the different types of measures and data that are used in HRM, and how those data may be stored.
- 4) Understand the types of analyses that are commonly used to answer business questions involving Human Capital data, and perform basic statistical analyses that are suited to the research question, and
- 5) Interpret and communicate the results of HR research.

Prerequisites: AP/HRM 2600 3.0

### **Course Communication Plan**

The instructor will provide a WhatsApp group for students to communicate with one another and the instructor. Additionally, there will be a discussion forum on eClass for those who prefer to communicate there. Students who wish to schedule time for in-person or Zoom meetings and have questions can reach out via text or email to the instructor. The aim is to create an open and collaborative learning environment where students can engage with the course material and seek assistance when needed.

### **Student Rights and Responsibilities**

Your responsibilities:

- ♦ Stay on schedule. Complete your readings in the assigned week as it is easy to fall behind. Creates notes and a folder to organize your notes. Note all dates and plan your work ahead of time. Observe deadlines and schedules.
- ♦ Read the assignment instructions carefully well before the due date. This way if you have questions for the professor, you will have sufficient time to have them answered.
- ♦ Maintain academic integrity. Submit original work and ensure all information is cited as needed. Adhere to the university's policies regarding cheating and plagiarism.
- ♦ Confidentiality and respect. Create an atmosphere for open and honest exchange. Do not demean others' ideas and responses. If students discuss confidential and sensitive information, keep it private. Finally, harassment and discrimination of any kind will not be tolerated.

♦ **Speak your discomfort.** If something bothers you, please share it so that we can work to solve it.

For York University's policies on student rights and responsibilities, please click here.

## **Required Text:**

Bauer, T., Erdogan, B., Caughlin, D., & Truxillo, D. (2019). *Human Resource Management: People, Data, and Analytics Interactive Edition*. SAGE Publications, Inc. (US).

Urdan, Timothy C. Statistics in Plain English. (5th Edition). Taylor & Francis, 2022.

Textbooks can be purchased at the York University bookstore.

We will be using Microsoft Excel for the statistical analyses portion of the course.

## **Evaluation:**

Assignment	Weight	Due Date
Participation: In class mini assignments	15%	In class on multiple dates
Measuring Attitudes Assignment	30%	October 16, 2023
Test	25%	October 30, 2023
Statistics Assignment	5%	Data collection: November 13
	25%	Final project: December 4, 2023

## **Course Schedule:**

Week	Topic	Reading Assignment	Note
1	Introduction to HRM	Bauer et al.: Chapter 1	
Sept 11		(pages 1-15)	
<u>2</u> Sept 18	The role of analytics and technology	Bauer et al.: Chapter 1 (the remainder of chapter 1)	Measuring Attitudes assignment will be explained during this class.
3 Sept 25	HR Strategy	Bauer et al.: Chapter 2	
4 Oct 2	Data for HR analytics	Bauer et al.: Chapter 3 (pages 66-86)	The requirements of the test will be reviewed during this class.
5 Oct 16	Developing HR Information Systems case	Bauer et al.: Chapter 3 (the remainder of chapter 3)	DUE: Measuring Attitudes  The survey finding, and data collection

			portion of the Statistics Assignment will be explained during this class.
6 Oct 23	Job Analysis and the Design of Work	Bauer et al.: Chapter 5	
7 Oct 30	Т	TEST	
<u>8</u> Nov 6	Intro to Social Sciences research; Measures of central tendency and variability	Urdan: Chapters 1-3	
9 Nov 13	Statistical Significance; t-tests	Urdan: Chapters 7, 8	DUE: Data Collection for Statistics Assignment  The remainder of the Statistics Assignment will be explained during this class
10 Nov 20	Correlation; regression	Urdan: Chapters 12, 13	
11 Nov 27	Review of Statistics and addressing assignment questions		
12 Dec 4	No class	Your final assignment is due the week after class ends.	DUE: Statistics Assignment

### **Submitting Assignments**

All assignments in this course must be submitted electronically via the eClass platform by 11:59 PM (EST) on the specified due date. We will be using Turnitin to ensure academic integrity and uphold the principles of originality and honesty in all academic work. In so doing, students will allow their material to be included as source documents in the Turnitin.com reference database, where they will be used only for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin service are described on the Turnitin.com website.

It is crucial to submit your assignments on time, as any late submissions, even if delayed by just one minute, will be considered late. Late submissions will be subject to a penalty, and the number of points deducted will be determined by the extent of the delay. Therefore, it is highly recommended to plan ahead and allocate sufficient time for completing and uploading your assignments.

To avoid any potential issues, it is essential to familiarize yourself with the eClass platform early on in the course and practice submitting assignments in advance of the due dates. Additionally,

you are responsible for checking your internet connection and ensuring that any technical difficulties are resolved well before the assignment deadline.

### **Details of Assignments**

### **IN-CLASS MINI ASSIGNMENTS**

Throughout the course, in-class mini assignments will be distributed during class sessions, and they will be due for submission within the same class period. These assignments are designed to reinforce your understanding of the topics covered and encourage active participation during our in-person meetings. Details regarding each mini assignment will be explained on the day they are assigned, ensuring you have clear instructions and expectations for completion.

Please be aware that missed mini assignments cannot be made up unless there are exceptional circumstances, such as providing a valid doctor's note or having sufficient documentation for unforeseen events that caused your absence.

#### MEASURING ATTITUDES ASSIGNMENT

In this case assignment, students will act as HR strategists at a fictitious company, "TechGiant." The HR department at TechGiant aims to design a future-oriented strategy to assess employee attitudes using data-driven decision-making, HR analytics, HR information systems, and job analysis. Students will devise a plan based on course materials on how TechGiant can effectively determine employee attitudes in the future. Use research to support all steps of this assignment.

This assignment should be 5-7 pages double spaced, 12-point font, including the cover page and reference page.

- 1. Provide an introduction to data-driven decision-making in HR and explain its significance in assessing and improving employee attitudes. Emphasize the role of data analytics in gaining valuable insights.
- 2. Identify and define specific employee attitudes that TechGiant aims to assess and explain why it is important to assess these attitudes.
- 3. Propose a strategy for developing and implementing HR information systems at TechGiant to collect and store employee attitude data. Discuss the features of the system and how it will ensure data accuracy and privacy.
- 4. In a step-by-step format, explain how HR analytics will be leveraged to analyze employee attitude data. Discuss the types of analytics and statistical techniques that will be employed to gain insights from the data.
- 5. Add a discussion of reliability and validity and the importance of using pre-existing measures of attitude (also why companies using their own measures of attitude without considering reliability and validity can lead to inaccurate implications).
- 6. Outline how TechGiant will integrate data-driven attitude assessment into its HR strategy. Discuss how data insights will guide HR decisions and influence organizational initiatives.

- Submit the case assignment in a formal report format: introduction, analysis, recommendations, and references.
- Use APA citation style for in-text citations and references.

#### **TEST**

The test will cover material from Bauer's textbook chapters 1, 2, 3, 5, along with content discussed in class and course slides up until the test date. The test format will consist of multiple-choice questions and will be conducted in class. Please note that it will not be an open-book test. Further details regarding the test structure will be provided during class sessions leading up to the examination date.

#### STATISTICS ASSIGNMENT

In this assignment, you will engage in hands-on social science research, providing you with the opportunity to design and execute your own study within the realm of Human Resources. This assignment aims to bridge theoretical knowledge with practical application, enabling you to apply learned research methodologies and statistical concepts to real-world scenarios. Your final deliverable will be a well-structured research report spanning 7-10 pages, adhering to double-spacing and a 12-point font. The page count encompasses the cover page, references, and details of statistical analyses.

### **Assignment:**

- 1. **Choose a Relevant Research Question:** Identify a research question in the field of Human Resources that captivates your interest and includes variables listed in the provided surveys. Formulate a clear research hypothesis to guide your investigation.
- 2. **Explain Research Significance:** Convey the importance of your chosen research question in a concise 2-3 paragraph section. Employ citations to substantiate the significance of your topic by referencing prior research.
- 3. **Craft Your Survey:** Leverage the SurveyMonkey platform to construct a survey suitable for distribution to participants, including fellow students and individuals beyond the student community.
- 4. **Collect and Protect Data:** Invite willing participants to complete your SurveyMonkey survey. Respect demographic details, such as age, gender, and educational background, while ensuring the privacy and anonymity of respondents. Furnish participants with a consent form that underscores the confidential nature of collected data. Your aim is to achieve a sample size of 30-40 participants for robust statistical analysis.
- 5. **Data Analysis and Organization:** Apply pertinent statistical techniques to scrutinize your survey data. Incorporate measures of central tendency (mean, median, mode) and variability (range, variance, standard deviation) to glean insights.
- 6. **Employ Statistical Tests:** Utilize a statistical test taught in the course, such as t-tests for significance, correlation analysis, or potentially regression analysis. Select the most fitting analysis based on the nature of your research question.

- 7. **Visual Representation:** Enhance your analysis outcomes through meaningful visual aids such as tables, charts, and graphs. These visuals should elucidate your findings.
- 8. **Interpretation and Conclusions:** Delve into your analysis findings vis-à-vis your research question and initial hypotheses. Probe the ramifications of your results and assess whether they align with your initial hypothesis.
- 9. **Probe Broader Implications:** Explore the potential ramifications of your findings for the broader Human Resources domain. Reinforce your insights by referencing pertinent past research.

**Note:** Ensure your research topic, hypotheses, and survey design harmonize with the statistical concepts covered in the course. Prior to commencing your research, reach out to me for feedback on your proposed topic and methodology. This collaborative step will assure your research's cohesion with the course's scope and will contribute to a fruitful research assignment.

Students must complete and submit the data gathering three weeks prior to the final submission.

The evaluation of your final research report will hinge on the robustness of your research design, the appropriateness of your selected statistical methods, the coherence of your interpretations, and the overall quality of your report's presentation. This assignment underscores the integration of theory and practice, equipping you with valuable research skills applicable in various professional scenarios.

### **Citation Expectations**

Throughout this course, it is essential that all written assignments and academic works comply with the APA citation style. All students must diligently follow the APA guidelines for in-text citations and construct a comprehensive reference page to acknowledge the sources used in their work. Failure to adhere to APA citation rules may result in penalties on assignments and may negatively impact overall grades.

Familiarizing yourself with APA guidelines early on will not only enhance the academic rigor of your work but also demonstrate your commitment to producing scholarly and well-researched content. Should you have any questions or need assistance with APA formatting, do not hesitate utilize the university's writing center resources found <a href="here">here</a>.

The following also provides comprehensive guidelines for following APA-style citations: <u>APA Purdue Owl.</u>

### **Artificial Intelligence (AI)**

Students may only use generative AI tools so long as the following two conditions are met:

- Specific generative AI tools are used in accordance with the written guidelines provided for each assessment or activity, and
- The use of generative AI is documented and cited following citation instructions.

Use of generative AI outside these two conditions will constitute academic dishonesty under York University's *Senate Policy on Academic Honesty*. As a student in this course, it is your responsibility to understand when and how generative AI tools can be used to complete your assessments and activities. If you do not know whether an online resource or tool can be used in this course, please contact your instructor for guidance.

#### You can use the AI tool to think with you, but not for you.

• Citing AI-generated material: According to the Senate Policy on Academic Honesty, all work that you submit for evaluation must be completed by you and you alone, unless otherwise specified. While this course allows you to work with an AI, you must document your process, by including all of your prompts and the AI's responses as appendices to your assignment.

### **Grade Breakdown**

The grading scheme for this course conforms to the 9-point system used in undergraduate programs at York University. For a full description of the York grading system, visit the York University Academic Calendar.

Grade	Grade	Percent Range	Description
	Point		
A+	9	90-100	Exceptional
A	8	80-89	Excellent
B+	7	75-79	Very Good
В	6	70-74	Good
C+	5	65-69	Competent
C	4	60-64	Fairly Competent
<b>D</b> +	3	55-59	Passing Slightly
D	2	50-54	Marginally Passing
E	1	(Marginally below 50%)	Marginally Failing
F	0	(Below 50%)	Failing

#### **Late Assignments**

**For all assignments**: The late penalty is 5% a day, including weekends. If you submit the assignment late, you may send it to the instructor. Under specific circumstances, the instructor might offer short extensions, however, but this extension should be established in advance and will only be granted with supporting documentation.

- 1. All assignments are to be submitted electronically through the designated platform as instructed by the instructor.
- 2. It is the student's responsibility to submit assignments well ahead of the deadline to account for any potential technical issues. Excuses related to internet connectivity problems at the time of submission will not be accepted.

**For the final test:** If you are not present on the assignment completion date, you must request a deferred standing. You will need to fill out the form <a href="here">here</a>. If you were absent due to a health concern, you must submit and <a href="here">attending physician's statement</a>. The deadline to submit these forms are no later than a week after the test date. Once your deferred standing form is accepted, the professor will work with you to ensure a time is set up to complete the deferred assignment.

#### Late Excuses:

- 1. Proper excuses for late submission without penalty/test absence must be genuine, unavoidable, and supported by appropriate documentation.
- 2. Acceptable excuses include illness and bereavement. In case of illness, a valid doctor's note must be provided, specifying the dates of incapacity and the inability to complete the assignment on time.
- 3. Vacation, personal trips, or non-emergency events will not be considered valid excuses for late submission. Students are expected to plan their schedules accordingly and submit assignments before leaving for any planned absence.

### **Religious Observances**

Any assignment that conflicts with religious accommodations should be communicated by the student via email or text. Should any of the dates specified in this syllabus for course examinations, tests, or deadlines conflict with a date of religious significance, please contact the instructor within the first three (3) weeks of class. The student should specify the full details regarding the conflict. If an extension is granted, the professor will notify the student. For religious accommodation guidelines please click here.

### **Academic Honesty**

Plagiarism is a grave breach of trust and is taken very seriously. In academia, our ideas are the value of our work, so we consider plagiarism a theft of sorts. Here is how you can demonstrate academic integrity in the completion of this course:

- Respect the ideas of others: Your course work should represent your own knowledge and ideas. You should not falsely claim credit for ideas that are not your own, by presenting another's work as yours. If you are quoting, paraphrasing, or summarizing another person's work in order to support your own ideas, identify the work and the author through proper citation practices.
- Respect your peers: Know when you are allowed to collaborate. Ask your instructor about what group work entails when it comes to the sharing of work. In test situations and assignments, don't steal or give answers to your peers, whether in-person or online (e.g., in group chats and/or on third-party content-sharing websites, such as Chegg, Course Hero, etc.). Both cheating and aiding in a breach of academic honesty are violations of York University's academic honesty policy.
- Respect your course instructor(s): Understand what your instructors are asking of you in class, as well as on assignments, tests and/or exams. If you are unsure, ask your professor

- or teaching assistant. They are committed to making you feel supported and want to assess you fairly and with integrity. Please do not submit the same piece of work for more than one course without your instructor's permission. That can be considered an act of cheating.
- Respect yourself: When you act with integrity, you know that your work is yours and yours alone. You do not allow others to take tests for you. You do not buy or otherwise obtain term papers or assignments. You do the work. As a result, you know that you earned the grades that you receive, so you can be proud of your York degree. By acting with integrity in your course work, you are also practising a valuable professional skill that is important in all workplaces.
- Take responsibility: If you have acted in an academically dishonest way, you can demonstrate courage and take responsibility for your mistake. You can admit your mistake to your course instructor as soon as possible.

Students who engage in academic dishonesty can be subject to disciplinary action under the Senate Policy on Academic Honesty. Your lack of familiarity with the <u>Senate Policy</u> does not constitute a defense against its application. Some academic offences can also constitute offences under the Criminal Code of Canada, which means that you may also be subject to criminal charges.

You will receive an automatic 0 for the assignment if caught plagiarising the first time and will have to speak to an academic board and submit additional assignments. Any assignments found to be plagiarised beyond the first one may result in expulsion.

To ensure that you follow academic integrity principles and properly source material, it is recommended you complete the online tutorials for students <u>here</u> and <u>here</u>.

### **Intellectual Property**

Course materials are designed for use as part of this particular course at York University and are the intellectual property of the instructor unless otherwise stated. Third-party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian copyright law. Students may not publish, post on an Internet site, sell, or otherwise distribute any course materials or work without the instructor's express permission. Course materials should only be used by students enrolled in this course.

Copying this material for distribution (e.g., uploading material to a commercial third-party website) may lead to a charge of misconduct according to York's Code of Student Rights and Responsibilities, the Senate Policy on Academic Honesty, and/or legal consequences for copyright violations.

### **Diversity and Inclusion**

It is acknowledged and celebrated that students will be diverse in various ways, including race, ethnic origin, creed, languages spoken, sex, sexual orientation, gender identity, disability,

socioeconomic status, age, religion, and beliefs, among other factors. These various factors will undoubtedly influence the students' perspectives. I aim to introduce material and activities that are respectful to diverse individuals. As a professor, I promote diversity, equity, and inclusion for many reasons, including excellence, innovation, and justice. I also expect students behave in a manner that is inclusive to everyone and respects individual differences. Nonetheless, intentional or unintentional discrimination or a feeling of non-inclusion may occur. In this case, I encourage anyone who witnesses such instances to speak out. You may contact me via email or in person if the culture in this class is not up to par. Alternatively, you may follow the guidelines to report discrimination <a href="here">here</a>. This link also provides the university's various human rights policies and procedures.

For York University's Equity, Diversity, and Inclusion Strategy 2022-2027, please click here.

If you require accommodations for class or assignments, please contact me as early as possible in the course so that we can work collaboratively to create a plan for you to make completing this course as smooth and enjoyable as possible. The university's instructions for academic support and accommodations can also be found here.

### **Additional Student Resources**

\*\* **Student Help Directory**: <a href="https://www.yorku.ca/laps/wp-content/uploads/sites/44/2020/10/Student-Help-Tree.pdf">https://www.yorku.ca/laps/wp-content/uploads/sites/44/2020/10/Student-Help-Tree.pdf</a> \*\*

### **Degree and Career Advice**

Academic Advising: https://www.yorku.ca/laps/support/academic-advising/

Degree Planning: https://www.yorku.ca/laps/degree-planning/

Career Centre: https://careers.yorku.ca/

#### **Writing and Research Support**

Writing Centre: <a href="https://www.yorku.ca/laps/writing-centre/">https://www.yorku.ca/laps/writing-centre/</a>

Library and Research Consultations: https://www.library.yorku.ca/web/ask-services/book-a-

consultation-with-a-librarian/

### **Monetary Support**

Scholarships, Awards, and Bursaries: <a href="https://www.yorku.ca/laps/student-awards/">https://www.yorku.ca/laps/student-awards/</a>

Emergency Funding for Students: https://www.yorku.ca/laps/fund-your-studies/emergency-

funding/

OSAP: https://osap.vorku.ca/

Dean's Award for Research Excellence (DARE): https://www.yorku.ca/laps/dare/

Internships: https://www.yorku.ca/laps/internships/

#### **Mental Health Support**

Counselling Services: <a href="https://counselling.students.yorku.ca/">https://counselling.students.yorku.ca/</a>

### **International Student Support**

International Student Support: <a href="https://www.yorku.ca/laps/students/international/">https://www.yorku.ca/laps/students/international/</a>

# **Accessibility Services**

Student Accessibility Services: <a href="https://accessibility.students.yorku.ca/">https://accessibility.students.yorku.ca/</a>