

**AP/HRM4425 3.0M**  
**Human Resource Analytics**  
**Winter 2026 Course Outline**

**School of Human Resource Management**  
**Liberal Arts & Professional Studies**  
**York University**

**COURSE INFORMATION**

Time: Tuesday 11:30 to 2:30pm

Location: on campus, Accolade West (ACW) 104

Webpage: <https://eclass.yorku.ca/eclass/my/>

**COURSE DIRECTOR AND CONTACT INFORMATION**

**Dr. James Chowhan**

Associate Professor

Email: [chowhan@yorku.ca](mailto:chowhan@yorku.ca)

Office Hours: Monday 1 to 2:30pm (online zoom)

**COURSE OVERVIEW**

This course provides students with the concepts, empirical techniques, methods, and applied tools they need for developing information, planning, and effective decision-making. Students learn foundational HR analytic methods such as data collection, data management, descriptive statistical analysis, model-based regression analysis, and information communication techniques.

**COURSE DESCRIPTION AND LEARNING OBJECTIVES**

The design, implementation, and on-going functioning of Human Resource Management policies, practices and systems should be based on sound evidence. Evidence derived from an HR Analytics data-driven approach is key to aiding and improving decisions that advance individual and organizational success.

This course will provide students with the concepts, techniques, methods, and applied tools they will

need for effective decision-making. Students will be able to apply these tools and principles to support transformations, decisions, and HR programs and practices (e.g. recruiting and selecting, evaluating and rewarding performance, and training/development and career management).

Students will learn how HR related data can be used to enable the investigation of common HR questions (around topic areas such as selection-recruitment, workforce engagement, employee development, performance, and retention), and they will learn the steps required for HR data analytics including data collection, management, and analysis. The concepts and tools learned in this course will enable students to process, explore, and communicate the vital information that is critical to key decision makers.

This course is designed for students that have some basic understanding of types of HR data, descriptive statistical analysis, and regression techniques. Through exercises and assignments students will learn foundational HR analytic methods such as data collection, data management, descriptive statistical analysis, model-based regression analysis, and information communication techniques (such as data visualization and HR dashboards). Students will have exposure to different types and sources of data and data analytic tools, and these will be used in relevant practical applications during exercises and assignments.

Prerequisites: HRM2600 Human Resources Management; HRM3430 Human Resources Planning; New Human Capital Data and Analytics Course in development (course number 2420) OR ADMS 2320 Business Statistics.

## COURSE ORGANIZATION AND FORMAT

This course will integrate formal lectures with exercises and practical application. Classes will be made up of lectures, exercises, and discussion. Active participation is encouraged and expected. In-class exercises will be conducted throughout the term, as such, regular class attendance is necessary. The Final Exam will cover all of the material covered in class. It is your responsibility to keep up with the pace of this course. It is important that you attend each lecture in order to stay on top of the course material. Class time will be provided for weekly exercise assignments. Students that miss any class are responsible for catching up on the material (e.g. check with your class-mates for notes and other discussions). Class material and exercises will provide the knowledge needed to complete the culminating assignment.

Class participation is important both to your learning and your professional development. I encourage questions and interactive discussions at any point during class. I will be available by email and office hours to address any questions or concerns that you may not want to raise in class.

I will make use of eClass for class content and for posting all class announcements. You are responsible for regularly checking the site for important communications. The Course Director is not responsible for any communication that is not received.

When emailing the Course Director, please include in the subject line of the email the course number and section (e.g. HRM 4425 M), your full name, and a few words on the nature of correspondence.

Course and in-class time is time for practicing professional conduct, which includes treating all people with dignity and respect. Students should come to class with a focus on learning and with an understanding that this is why their peers are present. Let's treat each other with dignity and show each other respect by: (a) muting all your electronic devices, (b) avoid using electronic devices for anything other than taking notes, or following the lecture, (c) avoiding food that is distracting to the senses (e.g. noisy to eat or has a strong aroma), and (d) minimize disturbances (e.g. arrive and leave on time), for example.

### TECHNICAL REQUIREMENTS FOR TAKING THIS COURSE

Several platforms will be used in this course (e.g., eClass, Zoom, etc.) through which students will interact with the course materials and the Course Director.

Students shall note the following:

- Zoom is hosted on servers in the U.S. This includes recordings done through Zoom.
- If you have privacy concerns about your data, provide only your first name when you join a session.
- The system is configured in a way that all participants are automatically notified when a session is being recorded. In other words, a session cannot be recorded without you knowing about it.

Please review the technology requirements and FAQs for eClass.

With regard to the live video sessions students will not be required to join the session and appear on video. For the office hour meetings, appearing on video can aid in enhancing our engagement and connection as a group; however, appearing on video is not mandatory. At a minimum, students will need a stable internet connection and a computer or similar device with a microphone.

Here are some useful links for student computing information, resources and help:

Student Guide to eClass

Zoom@YorkU Best Practices

Zoom@YorkU User Reference Guide

Computing for Students Website

Student Guide to eLearning at York University

## REQUIRED COURSE MATERIALS AND READINGS

Presentation slides are available for access/download from eClass:

<https://eclass.yorku.ca/eclass/my/>

For more on using eClass, please access: <https://lthelp.yorku.ca/student-guide-to-moodle>

\*Other required content will be posted on eClass.

Textbook:

Collins, J., McKie, M., & Soostar, E. (2025). Human Resources Analytics in Canada. Emond: Toronto.

The most recent cost for this textbook appears to be about \$119.00 (and it is subject to change). There are no restrictions that would prevent a student from using a second-hand copy of the textbook or other learning material.

This course is participating in York University's Day1Digital Opt In program. Click below to get digital access to your textbook, billed directly to your York University Student Account.

- Opt in to take advantage of lower prices until **January 19<sup>th</sup>, 2026**. You will be billed the **non-refundable** fee to your student account on the next regular [billing date](#). D1D Ebooks are **HST-exempt**.
- After you Opt In, [create a Bookshelf account](#) on VitalSource (use the same email you use for eClass).
- **Make sure after January 19th to click on this link again to properly sync your VitalSource account.**
- If you recently enrolled, you may need to wait up to 24 hours to access your ebook through this link.
- **If you withdraw from the course** before the [D1D Withdrawal Deadline](#), you will not be billed, even if you opted in.
- If you missed the Opt In deadline and wish to Opt In, please reach out to [askyub@yorku.ca](mailto:askyub@yorku.ca).

## EVALUATION

| Task                             | Description                                                                                                                         | Weighting |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Weekly Exercises and Reflections | Five assignments (with each contributing 4% to the final grade) and five reflections (with each contributing 1% to the final grade) | 25%       |
| Research Paper                   | Draft (10%)<br>Final paper (30%)                                                                                                    | 40%       |
| Final Exam                       | Cumulative exam                                                                                                                     | 35%       |
| Total                            |                                                                                                                                     | 100%      |

### Exercises and Reflections (25%)

Exercises will be conducted throughout the term, as such, regular class attendance is necessary. Students are expected to read the designated chapters in advance of each class in preparation for the weekly assignment. Each assignment will be complementary to the chapter(s) covered that week. Each exercise will be completed in class by following the instructions provided. The completed assignments should be submitted through eClass at the end of class. There will be about five weekly assignments. Each of the submitted assignments will be marked out of 10. The due dates are identified in the course schedule below.

Individual reflections: When individual reflections are assigned, each student is expected to reflect on their learning at the end of the class.

### Research Project (40%)

Students will develop a research paper based on an area of human resource management that they find of interest. The objective of this assignment is that students will develop a research paper.

Two outputs will need to be submitted: a draft research paper is due **February 10, 2023**, while the final research paper is due on **March 24, 2023** (submit to eClass). Detailed guidelines for the draft paper and the final paper will be posted on the course website.

In summary, the research paper will identify a research question; include a literature search to support the development of hypotheses and a theoretical framework; identify the research design that will be used to address the research question(s) and hypotheses (e.g. survey); describe the methods, measures and analyses that have been used; and discuss the results; and the final section will be a discussion and conclusion that discuss the implications of the study for Human Resource practitioners.

The writing in the research paper should be professional and formal. The style should be clear and

concise--minimize the use of long sentences and excessive use of quoted material. It is a good practice to copy-edit your papers, this will minimize grammatical errors and spelling mistakes.

Your draft paper should be one page double-spaced, in 12-point font with 1-inch margins, while the final research paper should be between 1800 and 2000 words (or between 7 and 8 pages in length), double-spaced, in 12-point font with 1-inch margins. Please include a title page and list of references (not included in the word or page count). American Psychological Association (APA) professional style formatting should be used for the paper, and references should be cited in APA style. All content that is not your own idea or information should be referenced appropriately. You must cite at least eight (8) references (with a minimum of 6 of the 8 being academic references) and include them in your list of references in your final paper.

All written work will be marked on style, grammar, clarity, and organization, as well as content and analysis (i.e. the extent and quality of your research, analysis, and evaluation).

### **Final Exam (35%)**

The final exam will include the material covered in the weekly lectures, assigned readings, exercises, and any other material as indicated. This cumulative final exam may consist of a variety of questions, such as true-false, short-answer, mini-essay, and essay questions designed to test the student's ability to apply the course concepts. The final exam will take place during the final examination period.

Please review the Grading Scheme and Feedback Policy:

<http://secretariat-policies.info.yorku.ca/policies/grading-scheme-and-feedback-policy/>

<https://calendars.students.yorku.ca/2022-2023/grades-and-grading-schemes>

"Final course grades may be adjusted to conform to Program or Faculty grades distribution profiles."

## **MISSED ACADEMIC WORK**

**Lateness Penalty:** Assignments received later than the due date will be penalized. All assignments are due on the specified due date otherwise a late penalty will be applied. Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc., may be considered but will require supporting documentation (e.g., self-declaration or attestation of illness, a statement of reasons). Documentation should be provided prior to the due date, or within seven days following the due date. A late penalty of 5% daily will be applied for each of the first four calendar days an assignment is late (for a total of 20%), and a 10% penalty will be applied daily for each of the remaining calendar days an assignment is late up to seven days after which a 100% penalty will apply (in other words, seven days after the due date of the course work a 100% penalty applies and the course work will receive a mark of zero).

<https://www.yorku.ca/laps/decisions-petitions/academic-petitions/>

<http://currentstudents.yorku.ca/student-forms>

<https://secure.students.yorku.ca/pdf/attending-physicians-statement.pdf>

## COURSE INFORMATION FOR STUDENTS

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Academic Standards, Curriculum & Pedagogy webpage (see Reports, Initiatives, Documents), some useful links:

- Religious Observance: <https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs>
- Grade Scheme and Feedback (Policy): <http://secretariat-policies.info.yorku.ca/policies/grading-scheme-and-feedback-policy/>
- Student Rights and Responsibilities: <http://oscr.students.uit.yorku.ca/student-conduct>
- Academic Accommodation for Students with Disabilities: <http://secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-students-with-disabilities-policy/>
- Academic Honesty: <http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/>
- Deferred Standing Request for HRM courses: <https://www.yorku.ca/laps/shrm/academic-resources/deferred-exam-request/>
- Counselling & Disability Services: <https://students.yorku.ca/counselling>
- Alternate Exam/Testing Scheduling Centre: <http://altexams.students.yorku.ca/>

Important dates that students should be aware of are available at the following:  
<https://registrar.yorku.ca/enrol/dates>

## STUDENTS SUPPORT SERVICES

To help you succeed academically, York University offers a wide range of resources and services. Everything from writing workshops and peer mentorship to wellness support and career guidance is available to fulfill our LA&PS students' needs. Explore the links below to access these on-campus resources:

- [Academic Advising](#) is available to provide students support and guidance in making academic decisions and goals.
- [Student Accessibility Services](#) are available for support and accessibility accommodation when required.
- [Student Counselling, Health & Wellbeing](#) offers workshops, resources, and counselling to support your academic success.
- [Peer-Assisted Study Sessions \(PASS\) Program](#) provides student study sessions for students to collaborate and enhance their understanding of course content in certain courses.
- [Student Numeracy Assistance Centre at Keele \(SNACK\)](#) supports students in courses involving math, stats, and Excel.
- [The Writing Centre](#) provides multiple avenues of writing-based support including drop-in sessions, one-to-one appointments, a Multilingual Studio, and an Accessibility Specialist.



- [ESL Open Learning Centre \(OLC\)](#) supports students with building proficiency in reading, writing, and speaking English.
- [Learning Skills Services](#) provides tips for time management, effective study and learning habits, keeping up with coursework, and other learning-related supports.
- [Learning Commons](#) provides links to supports for time management, writing, study skills, preparing for exams, and other learning-related resources.
- [Roadmap to Student Success](#) provides students with timely and targeted resources to help them achieve academic, personal, and professional success.
- [Office of Student Community Relations \(OSCR\)](#) is responsible for administering the [Code of Student Rights & Responsibilities](#) and provides critical incident support.
- [goSAFE](#) is staffed by York students and can accompany York community members to and from any on-campus location, such as the Village Shuttle pick-up hub, parking lots, bus stops, or residences.

For a full list of academic, wellness, and campus resources visit [Student Support & Resources](#).

## ACADEMIC CONDUCT

It is the student's responsibility to understand what constitutes academic dishonesty. The University Senate Policy on Academic Honesty policy describes the responsibilities, procedures, and guidelines for students and faculty should a case of academic dishonesty arise. Please refer to the policy for a list of examples. The policy also provides faculty with procedures to follow in cases of academic dishonesty as well as general guidelines for penalties. For further information related to the policy, please refer to the University Senate Policy on Academic Honesty at the following URL:

<https://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/>

There is also an academic integrity website with comprehensive information about academic honesty and how to find resources at York to help improve research and writing skills, and cope with university life. Students are expected to review the materials on the Academic Integrity website at:

<https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/>

### Generative Artificial Intelligence (GenAI)

Students are not permitted to use generative artificial intelligence (AI) in this course. Submitting any work created (in whole or part) through the use of generative AI tools will be considered a violation of York University's Senate Policy on Academic Conduct. Using AI apps including, but not limited to, ChatGPT, GPT-3, DALL-E, translation software among others to complete academic work without your instructor's knowledge or permission, is considered to be a breach of academic honesty. For more information, please review AI Technology & Academic Integrity: Information for Students.

If you're not sure whether using an AI app for your academic work is



acceptable, it is recommended that you:

- Carefully review the guidelines for your assessments
- Check for any messages from your instructor on eClass
- Ask your instructor or TA if they are permitting the use of these tools

### Turnitin

To promote academic integrity in this course, students will be normally required to submit their written assignments to Turnitin (via the course eClass) for a review of textual similarity and the detection of possible plagiarism. 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.

## POTENTIAL MODIFICATIONS TO THE COURSE

The Course Director and University reserve the right to modify elements of the course during the term. The University may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their York email and course websites regularly during the term and to note any changes.

## STUDENT ACCESSIBILITY SERVICES

Students with disabilities who require accommodations shall, in a timely manner, provide the relevant medical, psychoeducational, or psychiatric documentation to the appropriate York Office for students with disabilities to qualify for accommodations.

York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs. The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses. Provided that students have given sufficient notice about their accommodation needs the Course Director shall take reasonable steps to accommodate these needs in a manner consistent with the guidelines established hereunder.

<http://accessibility.students.yorku.ca/>

## COURSE SCHEDULE

| Week             | Topic                                                                   | Readings and Schedule         | Weekly Activities and Due Dates            |
|------------------|-------------------------------------------------------------------------|-------------------------------|--------------------------------------------|
| 1<br>January 6   | Strategy and HR Analytics (01)                                          | Chapter 3<br>Chapter 1 p15-22 | Course overview and Introduction           |
| 2<br>January 13  | HR Analytics Value, Roles and Process (02)_                             | Chapter 4                     | Lecture<br>Exercise 1                      |
| 3<br>January 20  | HR Data Collection and Systems (03)                                     | Chapters 1, 2<br>Chapter 5    | Lecture                                    |
| 4<br>January 27  | HR Data Collection (Surveys) (04)                                       | Chapters 5, 6, 7              | Lecture                                    |
| 5<br>February 3  | HR Data and Variable Type (05)                                          | Chapters 5, 6, 7              | Lecture<br>Exercise 2                      |
| 6<br>February 10 | Types of Analysis and Univariate Analysis (06)                          | Chapter 7                     | Lecture<br><b>Draft Research Paper Due</b> |
| 7<br>February 17 | <b>Winter Reading Week</b>                                              | <b>Reading Week</b>           | <b>Reading Week<br/>February 14 to 20</b>  |
| 8<br>February 24 | Bivariate Analysis (07)                                                 | Chapter 8                     | Lecture<br>Exercise 3                      |
| 9<br>March 3     | Multivariate Analysis: Regression (08)<br>Moderation and Mediation (09) | Chapter 8                     | Lecture<br>Exercise 4                      |
| 10<br>March 10   | Forecasting and Prediction (10)                                         | Chapter 8                     | Lecture                                    |
| 11<br>March 17   | Presenting Information and Visualization (11)                           | Chapter 9                     | Lecture<br>Exercise 5                      |
| 12<br>March 24   | Decision-Making (12)                                                    | Chapters 10, 11, 12           | Lecture<br><b>Final Research Paper Due</b> |
| 13<br>March 31   | Last Class                                                              | <b>Last Class</b>             | Final Exam Preview                         |
| April 6          | Classes End                                                             |                               |                                            |
| Apr. 8-24        | Winter Examinations                                                     |                               |                                            |