

**YORK UNIVERSITY**  
**SCHOOL OF HUMAN RESOURCES MANAGEMENT**  
**HUMAN CAPITAL DATA AND ANALYTICS**  
**HRM 2420 C 3.0 (Fall 2024; ONCA)**

**Course website:** [eclass.yorku.ca](http://eclass.yorku.ca)

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Office Hours: By appointment

**LAND ACKNOWLEDGMENT:**

York University recognizes that many Indigenous Nations have longstanding relationships with the territories upon which York University campuses are located that precede the establishment of York University. York University acknowledges its presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, and the Huron-Wendat. It is now home to many First Nation, Inuit, and Métis communities. We acknowledge the current treaty holders, the Mississaugas of the Credit First Nation. This territory is subject of the Dish with One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region (LA&PS Land Acknowledgement).

**COURSE OBJECTIVES:**

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:

- Ask questions that can be answered by the collection and analysis of data.
- Frame a business problem in the context of HR principles.
- Understand how to formulate an HR question as an analytics problem.
- Understand the different types of measures and data that are used in HRM, and how those data may be stored.
- 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.
- Interpret and communicate the results of HR research.

**PREREQUISITES:** AP/HRM 2600 3.00.

Students are personally responsible for ensuring that they have the required prerequisites as stated in the course outline. Students who do not have the prerequisites are at risk of being dropped from the course at any time during the course. The department will not be responsible for refunds resulting from students being dropped from a course due to a lack of appropriate prerequisites.

**REQUIRED TEXT:**

Bauer, T., Erdogan, B., Caughlin, D., & Truxillo, D. (2023). *Human Resource Management: People, Data, and Analytics (2<sup>nd</sup> Edition)*. SAGE Publications, Inc.

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

The Power Point slides with audio lectures and required readings will be uploaded onto the course website weekly.

**COURSE CONTENT:**

<b>Week</b>	<b>Date to Post Recorded Lectures</b>	<b>Topic</b>	<b>Chapter(s)</b>
Week 1	September 9	Introduction to HRM and Social Sciences Research	Bauer et al.: Chapter 1 Urdan: Chapter 1
Week 2	September 16	Measures of Central Tendency and Variability <b>Online Exercise #1 Posting</b>	Urdan: Chapters 2-3
Week 3	September 23	Statistical Significance, Effect Size, and Confidence Intervals <b>Mid-Term Individual Assignment Instructions Posting</b>	Urdan: Chapters 7
Week 4	September 30	T-Tests and One-Way Analysis of Variance <b>Online Exercise #2 Posting</b>	Urdan: Chapters 8, 9
Week 5	October 7	Correlation and Regression	Urdan: Chapters 12,13
Week 6	October 14	<b>Reading Week, No Lecture</b>	
Week 7	October 21	<b>Mid-Term Individual Assignment Due, No Lecture</b>	
Week 8	October 28	Factor and Reliability Analyses <b>Online Exercise #3 Posting</b>	Urdan: Chapters 15
Week 9	November 4	Person-Centered Analysis	Urdan: Chapters 16
Week 10	November 11	The Roles of Analytics and Technology in HRM <b>Online Exercise #4 Posting</b>	Bauer et al.: Chapter 1
Week 11	November 18	Strategic HRM, Data-Driven Decision Making, and HR Analytics	Bauer et al.: Chapter 2
Week 12	November 25	Data Management and HR Information System <b>Online Exercise #5 Posting</b>	Bauer et al.: Chapter 3
Week 13	December 2	The Analysis and Design of Work in Organizations <b>Final Exam Instructions Posting</b>	Bauer et al.: Chapter 5
<b>TBA</b>	<b>TBA</b>	<b>Final Exam (Based on Classes 1-11)</b>	

*Note: The instructor reserves the right to change or alter the course outline/syllabus/materials with a sufficient notice to students. On occasion, the instructor may add additional readings for a specific class, if he deems it necessary for the better understanding of the topic.*

## **COURSE EVALUATION:**

Weekly Online Quizzes:	15%
Weekly Online Exercises:	15%
Mid-Term Individual Assignment:	25%
Final Exam:	45%

All final grades will be reviewed by the School of Human Resources Management. The School reserves the rights to modify them in order to maintain high standards.

### **Weekly Online Quizzes: 10 x 1.5%**

There are 10 online quizzes throughout the semester. Each quiz consists of 15 True/False questions, and will be posted on eClass each week, following the lectures on corresponding topics. The quizzes are “open book” and will be completed online individually.

Each quiz will be available for a calendar window of **FIVE DAYS** (120 hours) following posting. For example, online quiz #1 will be posted at 11:00am, Monday, September 16. The window for Quiz #1 then will be closed at 11:00am, Saturday, September 21. Once you launch the quiz, it must be completed within **15 MINUTES** – you cannot return to it later.

Please use a wired internet connection while completing quizzes to avoid any internet interruptions. After the window for an online quiz is closed, you will receive feedback on which of your answers was correct or incorrect. To get full marks for each weekly quiz, you must answer all questions correctly.

### **Weekly Online Exercises: 5 x 3.0%**

Throughout the semester, **FIVE** online exercises will be introduced to help you learn how to perform key data analysis tasks. You are expected to complete each online exercise during the week when they are scheduled. To be clear, you are required to participate in each online exercise within **SEVEN** days (168 hours) of it being posted by the instructor.

For example, online exercise #1 will be posted at 11:00am, Monday, September 16, you will have **SEVEN** days (168 hours) to submit your posts for credit. The submission window for Exercise #1 then will be closed at 11:00am, Monday, September 23. **ALL LATE SUBMISSIONS AFTER THIS TIME WILL NOT BE AWARDED ANY MARKS.**

A grade of 3% will be assigned to each online exercise based on the quality of the answer. Individuals who do not participate in online exercises should not expect to be rewarded for this dimension of performance.

### **Mid-Term Individual Assignment: 25%**

There is no mid-term exam for this course. Instead, you are asked to write an individual assignment, which is a data analysis assignment. A more detailed instruction will be posted on the course website in Week 3.

### **Final Exam: 45%**

The final exam will be held on the York University, Keele Street campus, during the formal examination period for the semester. It will be scheduled by the Registrar Office. Once the instructor receives exam details (date, time, location) from university administrators, this information will be posted on the course

website "Announcements" board, as well as on the York University website <http://www.yorku.ca>. It is imperative that students attend the final exam since **there will be no other alternative date to write the final exam.**

The final exam will be three (3) hours, closed-book, and covering all materials uploaded throughout the semester (i.e., recorded lectures for Week 1-13). Please see COURSE CONTENT for more details. The format of the final exam will be multiple-choice and short-essay questions. More details will be provided closer to the exam date.

*Note: Not all the material covered in the textbook will be discussed in class. Conversely, some of the materials presented in the recorded lectures will not be in the textbook. You will be responsible for all of the materials in both the assigned textbook chapters and in the recorded lectures.*

### **Grading**

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](#).

<b>GRADE</b>	<b>GRADE POINT</b>	<b>PERCENT RANGE</b>	<b>DESCRIPTION</b>
A+	9	90-100	Exceptional
A	8	80-89	Excellent
B+	7	75-79	Very Good
B	6	70-74	Good
C+	5	65-69	Competent
C	4	60-64	Fairly Competent
D+	3	55-59	Passing
D	2	50-54	Marginally Passing
E	1	(marginally below 50%)	Marginally Failing
F	0	(below 50%)	Failing

### **STANDARDS OF PERFORMANCE:**

Exams results will determine students' grades. It is expected that all students will write the mid-term and final exam on the scheduled day, time, and location.

Students who choose to enroll in this course are personally responsible for ensuring that they can write the examination during the date/time specified by York University, and for ensuring that discretionary activities such as vacations do not conflict with examination dates and the academic requirements of this course. If the final examination is missed, a deferred exam can be written only when supporting medical documentation (accompanied by a signed physician's note) is provided to the School of HRM. Deferred final exams are common across all sections of HRM 4440, i.e., not just for the internet version of the course, and are cumulative in nature. If a student does not write the final exam and is not able to provide acceptable medical documentation for the missed exam, she/he will need to petition for a deferral to the faculty council.

### **OTHER INFORMATION:**

#### **Communications with the Instructor**

It is always challenging to maintain efficient and effective communication between the instructor and students. Please take a note of the following important communication policies for the course.

- If you have any questions on course policies, requirements, contents, etc., you could send an **email** directly to [gordwang@yorku.ca](mailto:gordwang@yorku.ca). I will try to respond to your questions within 24 hours.
- If you have questions that may be of interest to the rest of the class, you could post them using **Open Forum** on the eClass course site so that other students can benefit from the questions and answers.
- I will summarize all students' questions and my answers in a **Q&A folder** on the eClass course site biweekly. I strongly recommend you check the Q&A folder for possible answers before submitting your questions to me.

### **Course Announcements**

I will post messages to the class using **Announcements** on the eClass course site. These messages may regard such things as the exam locations, exam formats, course changes, etc. You should check the **Announcements** board frequently for messages.

### **Open Forum**

You may use **Open Forum** on the eClass course site to communicate with the rest of the class about any course-related issues, to submit new posts and/or respond to other people's posts, and to ask questions and get answers. Anyone can post ad hoc, general discussions topics here. However, there will be no participation marks for posting here.

### **Recorded Lectures**

Recorded lectures will be uploaded to the eClass course site on Monday per week. These recorded lectures are intellectual property owned by the instructor. Any unauthorized dissemination is strictly prohibited. In other words, you should not download and share recorded lectures with any individual contacts or organizations without the instructor's written permission. Infringing a faculty member's property rights is a serious offense and the consequences are severe. Make yourself aware of them.

### **Marks and Grades Postings**

Unofficial marks for online quizzes and exercises, and midterm assignment will be posted on the eClass course site. Official final grades will be posted by the Registrar Office following the final exam.

### **eClass Course Site**

The eClass course website is accessible at <https://eclass.yorku.ca/eclass>. Students will require an active Passport York Account to access the site. Secured access to this site is usually activated on the first day of term. For technical support issues related to eClass, please refer to the Student Resources page at <https://lthelp.yorku.ca/moodle>.

### **Support for Internet Courses**

If you have any administrative issues or questions related to taking internet or distance courses, please refer to York's Centre for Distance Education at (416) 736-5831 and <http://www.yorku.ca/laps/disted/>. Please review this site for new information, procedures, and services.

## IMPORTANT YORK POLICIES:

All students are expected to familiarize themselves with the following information:

- [Student Rights & Responsibilities](#)
- [Academic Accommodation for Students with Disabilities](#)

### Academic Integrity:

As a student at York University, you have a responsibility to both understand and uphold the integrity of the academic experience. The Faculty of Liberal Arts & Professional Studies supports the International Center for Academic Integrity's [definition of academic integrity](#). That is, you will be committed to acting in all academic matters, even in the face of adversity, with honesty, trust, fairness, courage, respect and responsibility. 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. For more information about how to cite properly, use the [Student Papers and Academic Research Kit \(SPARK\)](#). You can improve your writing, research, and personal learning abilities through the [Learning Commons](#), or by visiting the [Writing Centre](#) or [ESL Open Learning Centre](#).
- **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 Senate Policy 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.

## Using Generative Artificial Intelligence in this Course

Students are not permitted to use generative artificial intelligence (AI) in this course. Submitting any work created through the use of generative AI tools will be considered a violation of York University's [Senate Policy on Academic Honesty](#). If you do not know whether an online resource or tool can be used in this course, please contact your instructor for guidance. For more information, please review [AI Technology & Academic Integrity: Information for Students](#).

## Turnitin

To promote academic integrity in this course, students will normally be required to submit their written assignments to Turnitin (via the course's eClass site) for a review of textual similarities 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. York students may opt out of using Turnitin. If you wish to opt out, you should contact your instructor as soon as possible.

## Using Zoom

Students shall note the following:

- Zoom is hosted on servers in the United States and Canada. Recordings done since May 4, 2022 are stored in Canada. For more information, please refer to the notes on [Zoom Privacy and Security](#) provided by Information Security at York.
- If you have privacy concerns about your data, provide only your first name or a nickname 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.

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](#)
- [Student Guide to eLearning at York University](#)

To determine Internet connection and speed, there are online tests, such as [Speedtest](#), that can be run. If you need technical assistance, please consult the [University Information Technology \(UIT\) Student Services](#) web page. For more specific assistance, please write to [askit@yorku.ca](mailto:askit@yorku.ca).

## Accessibility

While all individuals are expected to satisfy the requirements of their program of study and to aspire to achieve excellence, the University recognizes that persons with disabilities may require reasonable accommodation to enable them to perform at their best. The University encourages students with disabilities to register with [Student Accessibility Services](#) to discuss their accommodation needs as early as possible in the term to establish the recommended academic accommodations that will be communicated to Course Directors through their Letter of Accommodation (LOA).

Please let your instructor know as early as possible in the term if you anticipate requiring academic accommodation so that we can discuss how to consider your accommodation needs within the context of this course. Sufficient notice is needed so that reasonable steps for accommodation can be discussed. Accommodations for tests/exams normally require three (3) weeks (or 21 days) before the scheduled test/exam to arrange.

### **Religious Observance Accommodation**

York University is committed to respecting the religious beliefs and practices of all members of the community, and making reasonable and appropriate accommodations to adherents for observances of special significance. 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. If the date falls within the formal examination periods, you must complete and submit a Religious Accommodation for Examination Form at least three (3) weeks before the start of the exam period.

### **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.

### **Student Conduct in the Learning Environment**

York University is committed to fostering teaching and learning environments that are free of disruptive and/or harassing behaviour, are physically safe, and conducive to effective teaching and learning. Students and instructors are expected to maintain a professional relationship characterized by courtesy, civility, and mutual respect and to refrain from actions disruptive to such a relationship. Individuals who fail to adhere to such standards and who violate University or public law may be subject to disciplinary action by the University.

For more information, see the policies on Disruptive and/or Harassing Behaviour in Academic Situations and Student Conduct and Responsibilities, as well as the Code of Student Rights & Responsibilities.

### **Netiquette for eClass and Online Learning**

Students and instructors have a joint responsibility to create and maintain a welcoming and inclusive learning environment. All students are expected to conduct themselves in accordance with the Code of Student Rights and Responsibilities. Please review and familiarize yourself with behaviours that support "netiquette" in virtual classrooms by consulting the Student Guide to eLearning.



## **Student Notice of Recording for Online Teaching and Learning**

Activities for this course involve recording, in partial fulfillment of the course learning outcomes. Images, audio, text/chat messaging that have been recorded may be used and/or made available by the University to students enrolled in the course and those supporting the course for the purpose of materials review, for assessment, etc. Recordings will be managed according to the University's Common Record Schedule and will be securely destroyed when no longer needed by the University. Your personal information is protected in accordance with York University's [Guidelines on Access to Student Records and Protection of Privacy](#) and the [Freedom of Information and Protection of Privacy Act](#). Access to online materials, including recordings or live meetings, is subject to York University's [Senate Policy on Computing and Information Technology Facilities](#).

The University will use reasonable means to protect the security and confidentiality of the recorded information, but cannot provide a guarantee of such due to factors beyond the University's control, such as recordings being forwarded, copied, intercepted, circulated, disclosed, or stored without the University's knowledge or permission, or the introduction of malware into computer system which could potentially damage or disrupt the computer, networks, and security settings. The University is not responsible for connectivity/technical difficulties or loss of data associated with your hardware, software, or Internet connection.

By engaging in course activities that involve recording, you are consenting to the use of your appearance, image, text/chat messaging, and voice and/or likeness in the manner and under the conditions specified herein. In the case of a live stream recording, if you choose not to have your image or audio recorded, you may disable the audio and video functionality. If you choose to participate using a pseudonym instead of your real name, you must disclose the pseudonym to your instructor in advance to facilitate class participation.

You are not permitted to disclose the link to/URL of an event or an event session recording or copies of recording to anyone, for any reason. Recordings are available only to authorized individuals who have been directly provided the above instructions/link for their use. Recordings for personal use, required to facilitate your learning and preparation of personal course/lecture notes, may not be shared with others without the permission of the instructor or event coordinator, and may not be published, posted, linked to, or otherwise made available online, including on social media feeds, even if those feeds are private.

## **Student Support and Resources**

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](#).