# UNIVERSITY OF WATERLOO ECONOMICS 483: ECONOMETRICS IN THE CONSULTING INDUSTRY SPRING 2023

#### Instructor

Chris Riddell Hagey Hall 104 Email: <u>c2riddell@uwaterloo.ca</u>

### **Course Description**

This course covers a selection of areas in the management consulting industry that use econometric techniques. The specific areas covered include: 1) job evaluation design, 2) compensation structures, 3) pay equity systems and compliance, 4) executive compensation design, and 5) equity auditing. The focus of the course is on both the econometric techniques themselves as well as dealing with a client on complex statistical issues. For some material— in particular equity auditing, pay equity and executive compensation—the course also allocates time to discuss the larger public policy debate.

### Readings

This course uses a selection of customized readings; there is no textbook. All readings are available @ LEARN. It is important to note that the readings are largely background context. There are no readings available that cover the analytical methods in this course. Thus, it is a course where <u>active</u> class participation is very important.

### **Office Hours**

Monday and Wednesday, 1 to 2 pm

### **Evaluation**

This is largely a project-based course. Students complete two major projects: 1) a base pay project where students design a job evaluation system and compensation structure as well as conduct pay equity compliance for an organization, and 2) an equity audit project where students evaluation the personnel practices of an organization for compliance with equity regulations. Students will also present their base pay project. To ensure the material is clear, and maximize engagement, short assignments are due on a regular basis through term. The final grade is based on the following:

Assignments/Participation	15%
Base Pay Project and Presentation	45%
Equity Audit Project	20%
Exam	20%

## Assignments/Participation:

There are a total of 7 assignments. All assignments relate to Project 1. Some of these assignments are stages of Project 1 (see below). This is to ensure that students progress on the project at a reasonable pace. Other assignments are with different data from other organizations but cover material relating to the major project. Items in **bold** below are substantive (i.e., time consuming) components of Project 1.

\*\*Please note: All due dates are tentative, official due dates are always what is posted at the Dropbox @ Learn.

		Tentative Due Date
Assignment 1	Introduction to Job Ratings	In-Class Exercise
Assignment 2	Job Weighting Regression	May 21 <sup>st</sup>
Assignment 3	Project 1 Job Ratings	May 28 <sup>th</sup>
Assignment 4	Introduction to Job Hierarchies	In-Class Exercise
Assignment 5	Project 1 Benchmarking	June 18 <sup>th</sup>
Assignment 6	Project 1 Pay Policy Lines	June 25 <sup>th</sup>
Assignment 7	Pay Equity Analysis	In-Class Exercise

### Projects:

Project 1: This first project has four major components. It is important to note that Project 1 cannot be completed in a short time period. The assignments help in the regard. Project 1 has a separate grading rubric which is available at Learn. It is advisable that students consult the rubric early in the course. The tentative due date for Project 1 is July 1<sup>st</sup>. The final project 1 deliverable is a single Excel file, and is worth 35% of the grade. A statistical package (Stata or R) can be used for the weighting regressions. Presentations of the project (worth 10% of the final grade) will take place during the week of June 26<sup>th</sup>.

Project 2: The second project is much smaller in scope and can be completed either in Excel or using a statistical package. Stata is the preferred software; if students wish to use R there are additional instructions. The tentative due date for Project 2 is Friday July 28<sup>th</sup>.

### Exam:

The exam is comprehensive and will take place <u>in-class</u> at the regular scheduled time on the last day of term (July 31, which is a make-up day for the Canada Day holiday).

# Schedule

# \*\*Please note that this schedule is *tentative* For all due dates, the Dropbox @ Learn is the official source of information!

	Торіс	Notes
May 8-10	Course Outline /Pay Structures—Introduction /Job Evaluation Introduction	Assignment 1 In-Class Exercise
May 15-17	ONLINE CLASS May 17 Job Ratings and Weighting Regressions	
May 22-23-24	ONLINE CLASS May 23 Standard Class May 24: Job Evaluation Conclusion	Assignment 2 Due (Note: May 22 is Victoria Day. Tuesday May 23 is the make-up day but our class is online)
May 29-31	Review Assignment 2; Hierarchy Analysis	Assignment 3 Due Assignment 4 (In-Class Exercise)
June 5-7	Benchmarking/ Pay Policy Lines Intro	
June 12-14	Pay Policy Lines	Assignment 5 Due
June 19-21	Pay Equity	Assignment 6 Due Assignment 7 (In-class Exercise)
June 26-28	Project 1 Presentations (no in-person class this week)	(Note: Presentations are by Teams and will be scheduled throughout the week)
July 3-5	Pay Structures—The economics literature	Project 1 Due
July 10-12	Equity Audit Introduction	
July 17-19	Equity Audit Regression	
July 24-26	Exec Comp Analysis	Project 2 Due
July 31	Exam	(Note: this is a make-up class from Canada Day)

Policies

## Late Assignment/Project Policies

All assignments and projects are submitted at LEARN. For assignments, late submissions are not accepted under any circumstances. For both projects, late submissions incurs a penalty of 2 points per day (the projects are graded out of 100).

# Institutional-required statements for undergraduate course outlines approved by Senate Undergraduate Council, April 14, 2009

Economics Department Deferred Final Exam Policy Deferred Final Exam Policy found at <u>https://uwaterloo.ca/economics/undergraduate/resources-and-policies/deferred-final-exam-policy</u>

### Academic Integrity

**Academic Integrity:** In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility.

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline (https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-71)

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read <u>Policy 70 - Student Petitions and</u> Grievances (https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-

guidelines/policy-70), Section 4.

Appeals: A student may appeal the finding and/or penalty in a decision made under

Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 -Student Discipline if a ground for an appeal can be established. Read <u>Policy 72 -</u> <u>Student</u> <u>Appeals</u> (https://uwaterloo.ca/secretariat-general-counsel/policies-proceduresguidelines/policy-72).

# Other sources of information for students:

Academic Integrity website (Arts)

https://uwaterloo.ca/arts/current-undergraduates/student-support/ethical-behaviour

Academic Integrity Office (UWaterloo) https://uwaterloo.ca/academic-integrity/

## Accommodation for Students with Disabilities

# Note for students with disabilities: The <u>AccessAbility Services</u> office

(https://uwaterloo.ca/disability-services), located on the first floor of the Needles Hall extension (NH 1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.