ECON 4822 (A&B): Economic research and communication
Fall 2020/Winter 2021, (September 1, 2021) Subject to revision

Location	Remote (Via Webex)
Time	**Lecture/Class Discussion/Quizzes** Friday 11:30 – 2:30 (approx..) with breakouts and individual study (Via Webex). **Virtual Office Hours** Monday and Tuesday 19:30 – 21:30 Central (via Webex)
Instructor	Gregory Mason
Office hours	This is a WebEx enabled course. Please see How we will communicate.
Contact e-mail	gregory.mason@umanitoba.ca
Course website	UMLearn (Course materials appear on UMLearn for registered students.)
About me	www.gregorymason.ca

Overview

Effective research and communication in economics comprises three elements:

- Framing an interesting and relevant question
- Using technical analysis to answer that question
- Communicating both the question and your answer to a range of audiences.

This capstone course offers training to acquire the skills needed to prepare and present a technically competent empirical paper. This will support your career both as a professional and as an academic economist.

This course outline applies to ECON 4822 (A) – Fall and ECON 4822 (B) Winter.

Quick Links
   Course Structure
   Course Assessment
   Learning schedule
   Deliverables, Dates and Marks
   Paper Topics
   Packback
   Fine print (academic honesty, student access, etc.)

Course objectives (What you will get out of this course)

As a student in this course, you will:

1. Increase your ability to interpret the facets of a general issue and frame specific questions you evaluate using economic analysis, that will culminate in a professional technical paper.

2. Understand how to place that question in the context of existing research to offer the reader a more complete understanding of the complexities behind the general issue and create a rationale for your particular formulation.

3. Locate, shape, and analyze relevant data to respond to the research questions you have defined.

4. Prepare/present a professional academic/technical report that responds to the question(s). A good paper will support graduate school applications and demonstrate your skills as an economist to potential employers.

Most importantly, mastering the principles and techniques in this course will increase your capacity to define, undertake, and communicate the results of your economic research.

Course philosophy.

Kenneth Arrow, known for ideas such as the Arrow Impossibility Theorem and creating new ways to assess risk, also offered insights into the impact of skills on technical change and economic growth. He believed that technical skills increase through a process of "learning by doing."

In this course, you will learn how to prepare a technical paper in applied/empirical economics by going through discrete stages – **learn by doing**.

This is how I will approach this course:

> **Learning by doing:** "Learning is the product of experience. Learning can only take place through the attempt to solve a problem and therefore only takes place during activity."
> Kenneth Arrow, The Economic Implications of Learning by Doing, *The Review of Economic Studies*, Vol. 29, No. 3 (Jun., 1962),

- Course materials and additional directions are on UMLearn.

- Friday sessions (11:30am – 2:30pm) comprise a lecture (with directed questions and lasting about 45 minutes) followed by breakouts, individual study, or pop-up quizzes.

- Monday/Tuesday evenings I will have virtual office hours when you may book an appointment. I will extend these as needed. A strong correlation exists between those who book time to talk to me individually and final grades.

- The course is progressive. You will build the final product, a competent technical paper, through a series of assignments, termed by "deliverables," (to mimic consulting terminology) each one of which I will assess so that you can revise it, building toward as high-quality final product.

- I will also post excellent student work (anonymously) as we proceed through the course to encourage everyone to do their best. UMLearn also has examples of outstanding work from the last two years to communicate the nature of the assignment and to illustrate the standard I expect. If these expectations seem high, blame my past students who spoiled me.

- I have structured the course so that students from both streams – *Economics and Econometrics* and *Economics and Society* – can do well. The sample papers show excellent work by students in both streams.

- In this course, your opinions have no value. Instead, I welcome your considered conclusions, based on rigorous research, established facts, and logic, communicated in clear English. One good way to get a "0" in this course is to use the phrase "in my opinion."

Learning resources

Learning notes, videos, and other resource material appear on UMLearn for this course. All registered students with valid SignUM have access to these materials.

Please purchase the following

- *The Elements of Style*, Strunk, William and E.B. White, 4th Ed. (Kindle Edition ($3-4) You can download the Kindle Reader free for Windows, MacOS, IOS and Android.
- Enrol in Packback for this class. ($29)

Software
Students will also need to acquire/install

> ### UMLearn and Webex
>
> This course uses UMLearn, Cisco Webex, and Packback
>
> It is your responsibility to learn UMLearn and how to use this approach to course materials.
>
> General UMLearn and Webex instructions appears on the first page once your log in to your UMLearn account.

- *Stata/IC* through a student license, which costs $60(Cdn) for six-month non-renewable lease. Those going to graduate school should consider the longer perpetual lease for students. Download this in November since you will not need this until the Winter term. https://www.stata.com/order/new/edu/gradplans/student-pricing/

- *Office 2016/2019*. Even though the free version of Office 365 includes of Word, Excel and PowerPoint, these are "underpowered". I prefer downloading Microsoft Office which students can do for free. You will need access to Word, PowerPoint and Excel.

- *Zotero* reference manager (Free) https://www.zotero.org/download/ Download both the program (I use this on Windows and Mac OS versions and both work well) as well as the Chrome connector. The course site on UMLearn has further instruction on setting up Zotero which can be finicky … the help pages are pretty good. Verify that Zotero appears as an "add-in" in your version of Word.

Note: Some students do not install English Versions of Windows or MacOS. Some software will override this and install the English version, some programs will choke, and other will install in the Windows language. Neither IST nor I can help you if your software emulates a language other than English.

Install the software needed before classes start (except for Stata which will be needed for January)), so that if you have problems the University Help Desk can assist you before they become overwhelmed. Because this is a remote learning course, I will probably not be able to help you with software installations – you need to consult with the help services of the software publisher.

Computer

It goes without saying you will need a decent PC/Mac, with a functioning camera and microphone, and a good internet. Students have reported difficulty in using Chromebooks and while some tablets such as the iPad Pro are coming close to the capabilities of the PC/Mac, but they will not run Zotero or Stata and not do have full functionality with Word and Excel and therefore are not suitable. Note, we can work around some computer limits, but the software demands of the course exists to ensure you are ready for more advanced academic work and "job" ready.

Resource Librarian

Asako Yoshida (Asako.Yoshida@umanitoba.ca) is your "go to" University of Manitoba Library resource for accessing public data sets and help with Zotero. Please email her to make an appointment to discuss your research topics. She will also present a lecture on various economic data sets available through the library and on-line.

My expectations for deportment

The University of Manitoba expects all staff and students to conduct themselves professionally and responsibly. Remote learning will require some adjustment and the acquisition of new "Covid era virtual skills."

Your obligations

What this means specifically for students is

1. Please log-on to the lecture portion of class on time. I do not take attendance… this is not elementary school.

2. Use the virtual office hours on Monday to meet with me to clarify deliverables and obtain advice. Since each of you will prepare a different paper, consulting with me will ensure success. These virtual office hour slots are your opportunity to gain insight into the on-line material, work on your deliverables, and obtain advice.

3. If you make an appointment to see me during my virtual office hours, please honour that or communicate with me by email that you will not or cannot attend. I check appointments at 6:00 pm, and if none exist, will do not sign-in.

4. This course features breakouts and oral presentations. As a courtesy, please remain for all the presentations. It is easy to disappear on-line but out of respect for your colleagues please attend their presentations. Your work world will feature virtual presentations so learn from colleagues and support them in their learning. If you fail to appear for an oral presentation that has a mark, you will get 0 for that component, unless you have a medical excuse.

5. During the on-line session, mute your microphone and use the chat function/hand signal to communicate with me. Unmute to ask questions, offer an answer, or make presentations.

My obligations

For my part

1. I will return feedback on submitted written material within 5 business days (usually faster) after a deliverable is due (Final Papers excepted).

2. I will respond to email within 8 hours between 8am and 10pm, except between Friday evening and Sunday morning, when responses might be slower. Emails to the entire class use blind copy (bcc) and so it may appear I am responding to you when I am actually responding to the entire class. I do this for general communication and when a student poses a question, the answer to which I judge of general benefit.

3. My virtual office hours will remain stable except during unusual circumstances. I may extend these as demand warrants.

4. You can expect me to be fair in all assessments and offer clear reasons for my marking. You always have the right to appeal. I will also post exemplary papers (anonymously) for each deliverable so you may assess your work in relation to your colleagues and gain confidence in my marking.

Mutual obligations

- *Be kind*

- *Be Polite*

- *Treat others as you would wish to be treated.*

Copyright

All material posted on UMLearn or otherwise distributed for this course are copyright to me (or the original author in the case of posted student work). My lectures are also copyright. You may record lectures for your own use, but do not post or share any material made available for this course.

Academic Integrity

The university has regulations on academic dishonesty. I am very strict about plagiarism … I always check. It is easy for students to grab on-line material; it is just as easy for me to locate these sources and identify plagiarism. It can be tricky to paraphrase and the course offers practice in this. Be careful with citations and observe the basic dictum to treat other authors' intellectual property as you would them to treat yours. This is a fourth-year course and I expect all students to understand regulations on academic dishonesty and the penalties for violating these regulations. Please see the fine print section below.

How we will communicate

You may contact me through university e-mail … please do not use any other email service as I ignore these messages. The university policy on email appears [here.](#) Always place the course number (ECON4822) in the subject line of the email. I will not respond to SMS text messages or messages sent through social media.

Course structure

The course has four modules; each comprising a step toward creating the final deliverable of "the paper." Each contributes 25% to the final mark. A detailed [learning schedule](#) appears below.

The Fall term and into January of the Winter Term has much activity and many deliverables as you acquire the tools of effective research and communication. Then in March and into April, the activity turns to independent work and consultations with me to help you develop the very best paper possible.

> Prior to classes starting (Sept 10) I will assign you to a group. In this group you will undertake joint projects such as developing datasets, develop a position for a debate, and other activities. Please see UMLearn for your group assignment. The goal of the discussion group is to encourage collaboration with your peers in developing responses to some of the deliverables. Note that the final marks will be based solely on individual work you

> Packback: I am trying a new interactive system to support question development. This system purports to refine your ability to pose interesting and constructive questions, and to offer useful answers to the questions posed by your colleagues. Each week (Sunday evening), I will pose a theme or research puzzle. Then you will have an opportunity to pose a question, and respond. Your responses receive a "curiosity" score that you can increase by reining your question and answers. You will have until Friday midnight of the same week to improve your score. I will discuss the best questions in class.

Part A – Fall 2020

Module 1: Defining and refining the research question and creating the literature review (25 Marks)

Expected learning outcomes for Module 1

Increased:

- ability to frame a general issue into testable research questions using empirical data and logical arguments.
- facility in organizing written material and writing clearly

- capacity to align data to the research question

- capacity to paraphrase without risking plagiarism

- understanding of current citation standards and the preparation of a bibliography using a standard reference manager – Zotero

- ability to deliver a concise *3-minute* oral presentation on your work (aka *elevator speech* where you have between the 5th and 15th floors to explain your research to your boss).

This module will review techniques for effective source searching using the University of Manitoba Library Access system, building a reference data base using a reference manager (we will use Zotero), and preparing a concise literature review. All these steps all fundamental to sound economic research.

In this module you will identify a research question (from the supplied list of topics), verify that empirical data exist, and then prepare a literature review to refine the research question(s) you will attempt to answer in your major paper. This is often the most difficult task since it requires practice to formulate a good question and ensure that information exists that can support an answer.

I have supplied a list of research topics/issues, for which I know data exist. Choose a topic from one of the four themes, or if you wish let me choose for you. In most industry and government employment you would not develop research topics/issues until you had reached a management level.

Module 2: Data development and initial analysis (25 Marks)

Expected learning outcomes for Module 2

Increased:

- facility in downloading and cleaning data
- understanding the importance and role of "metadata"
- capacity to perform basic exploratory analysis of a data set using graphs and summary statistics
- experience in preparing a technical description of a dataset.

Acquiring usable data and then shaping it to support the research question is often the most tedious, yet important aspect of economic research. In many organizations, you will draw on internal information such as sales/production/financial/human resources data as well as external information from surveys and government sources. Often, you will need to obtain information from multiple sources, and usually you will need to adjust, splice, correct, and transform data before you can analyze it. This module will show Excel based techniques to create the analysis dataset and to perform a basic description of the information you intend to use for your paper. It will also show how to use graphs to explore data relationships, which begins the process of answering the questions you identified in Module 1.

Technical papers also usually include a preliminary and high-level or exploratory view of the data to acquaint the reader with the nature of the information you will be using in your paper. "Summary statistics" such as measures of central tendency (mean and median) and dispersion (variance, range) are

also useful in deepening you understanding of the data you will be using. The exploratory analysis often reveals data patterns worth pursuing and change the direction of the research.

Analysis data sets must always include *metadata* – "data about data." You must source all data and document its origin. There are learning materials in UMLearn under this Module that describe the data development and documentation process.

Part B – Winter 2021

Module 3: Statistical and numerical analytical techniques (20 marks)

Expected learning outcomes for Module 3

Increased:

- capacity to investigate research questions using statistical analysis of data
- experience in writing up research results
- experience in presenting your research.

In this section you will use Stata to undertake a deeper analysis of the data you have developed in Module 2. Many students will use some form of regression model on cross-sectional or time series data. Students should use skills acquired in other statistics and econometric courses to analyze their data. However, it is possible to use tables and graphs skillfully to explore an economics problem, which can supplement the more technical aspects of the paper and increase its accessibility.

Stata is a very common statistical program used in economics. Students will learn how to use a DO file in Stata and to document their Stata code to support team work and to document their work. You must submit your Stata code (Do file) and data (DTA). I need to be able to understand and replicate what you did.

Module 4: Final Paper (30 Marks)

Module 4 shifts from lecture/breakout format to a tutorial approach with one-on-one consultation to support the preparation of the final paper.

Expected learning outcomes for Module 4

Increased:
- Experience in preparing and presenting research at a professional level.

After completing modules 1 – 3, creating the final paper should be atraightforward. You simply integrate the previous deliverables, add a brief introduction and outline, and then write a conclusion responding to the three additional points:

- Conclusions on the research questions
- Limitations of the analysis

- Directions for future research.

Caution – I expect the final paper to comprise much more than slapping together the literature review, exploratory analysis and statistical analysis. You execute three important steps in preparing the final paper

1. Revise and correct errors in the earlier three deliverables (do not just include an unrevised lit review, exploratory or statistical analysis). The final paper needs reflect improvement.
2. Write the introduction to reflect all changes you mad to research direction and data not the plans you created in Module 1
3. Create an integrated paper, with transitions between section and a solid conclusion that

   - Summarizes the question and your findings
   - Note the limitations (in data, method, etc.)
   - Identifies interesting further questions

In the last three weeks, you will post and deliver a 5 slide PowerPoint summary of your paper. The final paper will be approximately 5000 words (not more than 6000).

Course assessment

Modules 1 – 3 are worth a total of 70 marks each, while module 4 is worth 30 marks for a total of 100 for the course. The nominal numerical grade conversion: A+ (>90), A (>80), B+ (>75), B (>70), C+ (>65), C (>60), D (>50), F (<50). The Deliverables and Marks summary shows the marks for each deliverable.

While the course is progressive in the sense that modules build on each other, the first three will receive an individual assessment worth 60% of the final mark. In other words, you need to be engaged in this course from the start to get a decent mark,

For example: If you write a perfect final paper (Module 4) and have submitted nothing for the first three modules, you will score 30/100 which is an F.

Due Dates

All work is due on the dates/times noted in the Learning Schedule and Deliverables. If you are ill, and cannot make the deliverable/presentation date for the Final Paper or the final delivery date for the paper, I need a note by an MD (preferably from the University of Manitoba Health Service) dated within 24 hours of the due date and this must be preceded by an email from you before the due date/time indicating your inability to submit on time. (Note: Covid may upset these processes.)

- I only accept original scanned medical notes from MDs on their professional stationary

- Do not ask for an any extension for any reason other than documented sickness.

- If you request an extension for medical reasons, I need to see an email prior to the deadline followed by the documentation within 24 hours.

- I reserve the right to refer any request for extensions due to medical or other reasons go the Dean's office.

Note that the Final Paper is due April 23; since this is the culmination of 7 months of work and represents the concatenation of prior work, I will not extend this deadline and you must apply to the Dean's office for any variance to this rule.

Submission of Work

Submission of work: Submission of all deliverables (except oral presentations of course) will only be through the UMLearn Assignments Folder. (**No email attachments!**) Sub-folders exist for each Module/Deliverable with a due date. **Note: You will not be able to submit after the due date and time. Make your you know how to do this. A video and practice folder are available under Module 1 to allow you to become proficient at this.**

Marked assignments become available through the UMLearn folder as well

Missed Deliverables due to illness

Students who are unable to meet a course requirement due to medical circumstances do not need to submit medical notes.

Please follow these guidelines if you are unable to meet an academic requirement for your courses.
- Contact me using your university email within 24 hours of the missed assignment indicating clearly that the reason for non-submission was a medical condition. In that email, please include your full name, student number, course number, and the academic work you missed.
- Propose a date for delivery of the missed assignment.

Note that the accommodation regarding not needing medical notes for a missed assignment reflects the unusual times. Please respect the spirit in which such accommodation has been extended.

Guide to remote learning

UMLearn is the place for all interaction in this course, aside from emails to me that deal with issues specific to you. Make sure you are familiar with navigating the course, and make sure you turn your notifications on to receive notices of changes and marking completion.

The term "deliverable" refers to assignments posted to UMLearn. (I am using language common to the consulting world).

Note: You will submit all assignments through the Assignments folder for this course. The course outline and UMLearn set clear deadlines for submitting material. The lead time for these assignments is long, therefore if you miss the deadline, you miss the marks for that deliverable.

Why am I strict on this? Because I set the deadlines as midnight (23:39 CT to be precise), if a student misses and sends me an email, I may not see it for several hours. Since I generally do not check emails on Saturday before 6pm, if I change the submission time in UMLearn for than one student, they can gain 12 – 18 hours extra time, which is unfair to other students.

Also, do not submit at 11:58:30, as internet and servers can get slow and you can get locked out. Don't be that person who emails me to explain you missed a deadline that has been clear for weeks.

Each Friday, I will deliver a lecture (except when no lecture occurs as noted), usually anchored by a PowerPoint and questions I pose. These slides appear on UM with space to take notes. I encourage physically taking notes as this improves learning. After the lecture we will have three types of activity:

- **Breakout** refers to group activity where you learn from your peers. I will create breakout groups in UMLearn (and which Webex will mirror). I will post breakout activity tasks and supporting materials Monday before the formal Friday session; groups should work on the tasks during the week, using the discussion group functions in UMLearn. Usually, this means collaborating on a short Word, PowerPoint, or Excel document.
- **General discussion** where I review the best of Packback for the week.
- **Pop-up quizzes:** These are short 60-minute quizzes designed to improve writing and will draw from articles in the Economist. These quizzes will be posted under the Assignments, and must be submitted to the same folder, usually within minutes after they become visible.

Learning Schedule (Fall 2021)

Module 1: Defining and refining the research question and creating the literature review (25 Marks) Deliverables are in ***italics*** and designated by **D. The deadlines are 23:59 CT on the date noted unless stated otherwise. Pop-up quizzes are completed in class and submitted before the end of the class.**		
Week	Date	
1.	Sep 10	Orientation This lecture will review the course, its structure in UMLearn, validate the remote learning technologies, especially breakout groups and screen sharing, and Packback. *Note: I will start each lecture with a brief review of the book of the week – books that every economist should read.*
		Breakout Practice with UMLearn breakouts and Webex breakouts. Please download Office 365 for students for the breakouts. Students will meet within their assigned group, learn about each other, and come back to the main session after 20 minutes, introducing their colleagues to the entire class.
	D	*Pop-up Quiz 1: Create a 300-word summary (about 1-page double-spaced in Times Roman 12) of the noted article from the Economist. I will not download the article, but expect you to retrieve it from the library system. This occurs in the last hour of the class time and you will post the quiz the same day before the deadline which varies, but usually before 2:15pm.*
2.	Sep 17	Refining and clarifying a research question Usually, management with pose very general issues; your job is to refine the general issue into specific questions that defines a research agenda. See UMLearn for the issue we will discuss in class.
		Packback – Open discussion of theme and review of good questions and answers. I will post a theme, table, graph, or some economic "Fact") on Sep 12 evening (Sunday). Packback will be available for posting at 00:00 CT. It closes at 23:59 PM on Sept 16. You have 4 days to post. You may repost to increase scores. This patten will repeat throughout the course.
		Breakout I will post a problem/data challenge/research question on Sunday evening for discussion in UM Learning Groups (See Teams and Breakouts on UM Learn). Note this exercise is ***not*** the same as the Packback exercise which is an individual effort.
3.	Sep 24	Effective writing and paper organization This lecture will cover the basic principles of paper organization and good writing. You should have acquired *The Elements of Style* and read the PRA Style Manual in UMLearn.
		Packback – Open discussion of theme and review of good questions and answers
		Breakout TBA
	D	*Research topic Students will select from a paper topic for their final paper and notify me by email by 23:39 CT. If you do not select a topic, I will choose one for you … this is what will happen in your work life anyway.*
4.	Oct 1	Searching for sources and creating a reference data base in Zotero Make sure you have Zotero installed as well as the Chrome connector (other connectors are available) and that the Zotero add-in appears in your Word. This lecture demonstrates techniques of searching for source, using the connector to "grab" sources. Asako Yoshida will briefly review on-line resources at the University of Manitoba.

		Packback – Open discussion of theme and review of good questions and answers
		Breakout TBA
		Individual study As time permits, the last part of the class will be open discussion to pose questions about Zotero and sourcing.
	D	*Research question Each student will submit a 300-word summary refining the research question discussed on September 18. This is an individual perspective and not a summary of what the group discussed. You may add additional points and include/ignore points raised in the breakout. See the discussion on refining the research question in UMLearn. Due 23:39 CT*
5.	Oct 8	**Literature review** The literature review is the first major deliverable for the course. UMLearn has details and examples of exemplary work from the past to guide you. This lecture will discuss the form and content of a literature review, drawing contrasts with annotated bibliographies, systematic reviews, and integrated reviews.
		Packback – Open discussion of theme and review of good questions and answers
	D	***Pop-up Quiz 2:*** *Create a 300-word summary (about 1-page double-spaced in Times Roman 12) of the noted article from the Economist.*
6.	Oct 15	**Refining the Literature Review** (No formal class) I will be available for virtual appointments from 9:30 – 2:30 on Friday and during the normal office hours on Monday and Tuesday evenings if you wish to discuss your literature review. Look at the examples from last year for models of good work.
7.	Oct 22	**Elevator Speeches** The elevator speech is a 3-minute presentation using a 3-side PowerPoint (not including any title page of the "Thank you! Page") of your research topic and plan of research. See examples of past slides on UMLearn. These will occur after the Packback discussion
		Packback - Open discussion of theme and review of good questions and answers.
	D	*Elevator speech I will enforce the 3-minute rule and call upon students randomly to make their presentation. Be ready to share your screen and your slides. You must post the PowerPoint in the assignments folder by 23:39 CT on* **October 21 (the night before).**
Module 2: Data development and initial analysis		
8.	Oct 29	**Formulating the research hypotheses/questions** Statements about the relationships among the dependent and independent variables will frame the research you propose to complete. This lecture will illustrate the construction of such research hypotheses and the formulation of methods that form the backbone of the research you will conduct
		Packback – Open discussion of theme and review of good questions and answers
		Breakout TBA
	D	*Literature Review The literature review will be no more than 1000 words plus a bibliography of 15 – 20 citations in APA format (with bibliography). This is the first major deliverable and an important part of the final paper.* **Due 23:39 CT**
9.	Nov 5	**Data sourcing** Locating numerical data to support research represents a major element in the life of an applied economist. This lecture will review major on-line sources, and review downloading techniques.

		Packback – Open discussion of theme and review of good questions and answers
		Breakout TBA
		Individual study During the latter half of the class, students will identify and locate key information for their research paper. The goal is to create an excel spreadsheet of data and meta data. I will be available for advice during the lecture.
November 12 Fall Break No Class		
10.	Nov 19	**Data development, cleaning, and documentation** Creating an analysis data set means creating a flat file, defining variables, cleaning the data, and creating the Metadata. We use Excel and for those with little knowledge of Excel, UMLearn has discussion and videos to assist with basic Excel operations.
		Packback
	D	*Pop-up Quiz 3 Create a* **100-word** *summary of the noted article from the Economist. I will not download the article, but expect you to retrieve it on your phone/computer using your subscription. Note: Shorter summaries are harder.*
	D	**Data sources** This is a Word document listing the data sources, the variables you intend to create and complete location data (URL)
November 22 is the last day to withdraw without academic penalty		
11.	Nov 26	**Exploratory analysis – Summary statistics** This lecture covers the basis of creating summary statistics, including multiple regression, to explore the properties of the data to propose for your research.
		Packback – Open discussion of theme and review of good questions and answers
		Breakout TBA
12.	Dec 3	**Exploratory analysis – Graphs** Graphs can reveal important dimensions of your data. Preparing clear graphs supports clear analysis and clear communication of information.
		Packback – Open discussion of theme and review of good questions and answers
		Breakout TBA

Module 2 (Continued)		
13.	D	*Data and metadata* This is an excel workbook of the data you propose for your project. See UMLearn for examples of good work (It is very common that as you gain understanding of the subject, explore the data, and even as you conduct statistical analysis (Module 3) that you alter the course of your research and change your data (but not the theme area). You need not use the exact dataset prepared in this step for your paper. The changes have limits of course, as I will not permit you to change your paper topic.) *Due 23:59*
14.	Dec 10	**Creating professional Word documents with tables and graphs** Word has many features to support tabular and graphical analysis. From this point the course, no submitted work must ever contain cut and paste images from the internet or sources other than your dataset.
		Packback Open discussion of theme and review of good questions and answers
		Breakout TBA
	D	**Methodology** This will be a 250 – 500-word statement of the theory and model(s) you propose for your research project. This could be the specification of a regression model, verbal description the causal structure you will be evaluating (identification of the dependent and independent variables), or just a description of the variables you will use and how you propose to test your ideas. *Due 23:59*
	Dec 24	*Exploratory Analysis* This deliverable comprises a brief (750-word max) analysis of the quantitative properties of your dataset. It will be rich with tables and graphs, properly embedded in Word, with Table and Figure numbering and cross referencing. *Due 23:59*
Note: Students will have completed 50% of the course after submission all deliverables to this point in the course.		

Learning Schedule (Winter 2022)

Module 3: Statistical Analysis		
Week	Date	We will review the essentials of econometric, but these lectures cannot replace the detail in coursers such as ECON4040.
14.	Jan 21	**Lecture/Workshop – Data development in Stata – Creating the DTA file and creating summary stats.** It is usually quite easy to import Excel data to Stata… the exception is time series data, which most students will have. This lecture will also cover basic transformations, and the creation of a DTA file (Data file). I will post links to some good Stata intro videos.
		Packback Open discussion of theme and review of good questions and answers (I will post the theme/graph/table on Jan 14)
	D	*Pop-up Quiz 4 Create a* **100-word** *summary of the noted article from the Economist. I will not download the article, but expect you to retrieve it on your phone/computer using your subscription. Shorter summaries are often harder than longer summaries*

15.	Jan 28	**Lecture/Workshop Stata Graphs** This will lecture review and extend the on-line learning materials. You will work with Stata to create professional graphs and important them to Word. We will review how to import the data you developed in Module 2. The workshop will allow you to work with your data set.
		Packback Open discussion of theme and review of good questions and answers
		Breakout TBA
16.	Feb 4	**Lecture/Workshop Stata Do File** Stata works bests when you use DO files and document your work. This will review and extend the on-line learning materials and allow you to start developing your model.
		Packback Open discussion of theme and review of good questions and answers
		Breakout TBA
17.	Feb 11	**Lecture/Workshop Stata Regression**
		Packback Open discussion of theme and review of good questions and answers
		Breakout TBA
18.	Feb 18	**Lecture/Workshop Stata 4 Regression diagnostics and graphs**
		Packback Open discussion of theme and review of good questions and answers
	D	*Pop-up Quiz 5 Create a **100-word** summary of the noted article from the Economist. I will not download the article, but expect you to retrieve it on your phone/computer using your subscription. Shorter summaries are often harder than longer summaries.*
Mid Term Break – No Class Feb 25		
19.	Mar 4	**Lecture/Workshop Stata 5 Time Series diagnostics and graphs**
		Packback Open discussion of theme and review of good questions and answers
		Breakout TBA
20.	Mar11	**TBA** (Based on class needs I may convene a Q&A on issues/problems in Stata.
	D	*Statistical Results This is a 750-word paper describing the statistical results and must include Stata (Do File and DTA Files). This paper must cover: 1) statement of the main questions 2) the model(s) you tested; 3) summary statistics (tables and graphs; and 4) empirical results. (4 slides max). You must submit the Stata code – DO File and DTA file*
Module 4 Final Paper Module four has no formal lectures with the focus on revising previous elements (literature review, exploratory analysis, and statistical analysis) into an integrated final paper. Students should make individual virtual appointments to discuss their paper.		
21.	Mar 11 - Apr 2	**No classes- Consultations on final paper** I will be available I during the virtual Office hours (Mon 19:00 – 21:00) and Fridays (10:00 – 13:00)
March 30, 2020 VW date		
22.	April 15 D	*Presentations of paper. This will be a virtual presentation using the recording option in PowerPoint. Please submit your slides (6 max) by **23:29 CT** and make sure they play.*
23.	April 23 D	*Final Paper Due April 23 at 23:59 CT (Note because you have an extended period to prepare the final paper, I grant no extensions.)*

Deliverables and Marks Summary ECON 4822 (A)				
Data	Deliverable		Marks	Cumulative Marks
Sept 10	**Pop-up 1**	Create a 300-word summary (about 1-page double-spaced in Times Roman 12) of the noted article from the Economist. I will not download the article, but expect you to retrieve it from the library system. This occurs in the last hour of the class time and you will post the quiz the same day before the deadline which varies, but usually before 2:15pm. *Due at the end of class.*	3	3
Sept 24	**Research Topic**	Students will select from a paper topic for their final paper and notify me by email by 11:59 pm. If you do not select a topic, I will choose one for you … this is what will happen in your work life anyway. *Due 23:59 CT*	NA	
Oct 1	**Research Question**	Each student will submit a 300-word summary refining the research question discussed on September 18. This is an individual perspective and not a summary of what the group discussed. You may add additional points and include/ignore points raised in the breakout. See the discussion on refining the research question in UMLearn. *Due 23:39 CT*	3	6
Oct 8	**Pop-up 2**	Create a 300-word summary (about 1-page double-spaced in Times Roman 12) of the noted article from the Economist. *Due at the end of class*	3	9
Oct 22	**Elevator speech and slides**	You will present a 3-minute speech class supported by 3 slides. I will enforce the 3-minute rule and call upon students randomly to make their presentation. Be ready to share your screen and your slides. You must post the PowerPoint in the assignments folder by *23:59 CT on October 22.*	3	12
Oct 29	**Literature Review**	The literature review will be no more than 1000 words plus a bibliography of 15 – 20 citations in APA format (with bibliography). See UMLearn for additional guidance and the marking rubric I use to assess these reviews. *Due 23:59 CT*		
		i. Referencing	3	15
		ii. Quality of writing and organization	10	25
Nov 19	**Pop-up 3**	Create a 300-word summary (about 1-page double-spaced in Times Roman 12) of the noted article from the Economist. I will not download the article, but expect you to retrieve it on your phone/computer using your subscription. *Due at the end of class.*	3	28
		Pop-up adjustment (28 – 9 +6)		25
	Data sources	This is a Word document listing the data sources, the variables you intend to create and complete location data. *Due at 23:59 CT*	3	28

Deliverables and Marks Summary ECON 4822 (A)				
Data	Deliverable		Marks	Cumulative Marks
Dec 3	Data and metadata	This is an excel workbook of the data you propose for your project. See samples under this lecture. Due at 23:59 CT.	3	31
Dec 10	Methodology	This will be a 500-word statement of the theory and model(s) you propose for your research project Due at 23:59 CT	4	35
Dec 24	Exploratory analysis	This deliverable comprises a brief (500-word max) analysis of the quantitative properties of your dataset, with embedded tables and graphs. **No cut and paste!** Due at 23:59 CT	10	45
	Participation	This is assessment of each student's participation and support during the breakout. I will be looking at the contributions in the UMLearn Groups, the breakouts, and Packback	5	50

Deliverables and Marks Summary ECON 4822 (B)				
Date		Deliverable	Marks	Cumulative Marks
Jan 21	**Pop-up 4**	Create a 100-word summary of the noted article from the Economist *Due at the end of class*.	3	
Feb 18	**Pop-up 5**	Create a 300-word summary of the noted article from the Economist. *Due at the end of class.*	3	6
Mar 4	**Statistical Results**	Presentation of statistical results with Stata code (DO file and DTA file), I need to be able to replicate the analysis. *Due at 23:59 CT*	12	18
Apr 16	**Oral presentation**	Your paper presentation will occur virtually. Please post your slides by 23:59. Make sure you post a .pptx file with recoding. **Do not make a video of your screen as you present your slides. This will create a very large file that I cannot annotate.**	5	23
		Pop-up adjustment (Best 1 of 2) (23 - 6 +3)		20
	Participation	This is assessment of each student's participation and support during the breakout. I will be looking at the contributions in the UMLearn Groups, the breakouts, and Packback	5	25
Apr 23	**Final paper**	Integrated Final Paper The Final Paper brings all deliverables together in an integrated document. Due at 23:59 CT	25	50

Paper Topics

Choose one theme by September 24. No more than 5 students per theme area, and I will allocate topics on a first come basis, after September 1. If you do not choose, I will assign a topic based on the available slots. Because all the deliverables focus on preparing elements of a complete research paper, once you have a topic (either by choice or assignment) you will not be able to change.

I recommend using OECD data, Statistics Canada, or US data, since these are reliable and accessible official statistics.

These papers must be more that descriptions. The three modules of the course create the following key elements: a)theory and model definition based on literature review; b) data development and exploratory analysis; and, c) statistical analysis. Each of these elements is a deliverable. The final paper is an integration of these elements (corrected and adjusted based on comments and your additional reflection). It is not a simple "slapping together" of the three unedited parts.

COVID Themes

Theme 1: Impact of COVID on the economic wellbeing of the specific segments of the population

1. Select one of the following country sets and compute the impact of Covid on the economic well-being of men and women

Country Sets (Choose 1) or propose a set of your own countries (Caution – make sure data exist and talk to me first. For example, the data are poor for many developing countries, China and South Asian countries)	
1	Canada, US, and Mexico
2	France, Germany, England
4	Norway, Sweden, Denmark
5	Mexico, Brazil, Chile
6	Italy, Spain, Greece
7	Israel, Hungary, Czech Republic

2. Select two of the following Canadian province pairs, and compare impact of COVID on the economic well-being of young and old workers.

Province pairs)	
8	Nova Scotia, Alberta
9	New Brunswick, Manitoba
10	British Columbia, Saskatchewan
11	Ontario, Newfoundland
12	Quebec, Manitoba

Comment on Covid themes.

- You will need to define "economic well-being" and probably select a couple of measures.
- Covid has not had a uniform presence overt time; it has come in waves
- The trickiest part of the research will be to measure government responses.
- In all cases, the term "measure" means locating one or more variables.

Inequality/Poverty Themes

Increasing inequality appears to be a feature of the recent era (since the Great Recession) but poverty rates seem to have declined. Compare the relationship between inequality, poverty, and health care spending (as proportion of GDP). It is you role to come up with interesting questions, and understand the causality may run in several directions (health care spending →inequality →poverty; poverty → inequality → health spending….

Country pairs	
13	Austria and Czech Republic
14	France and Greec
15	Israel and Ireland
16	Japan and Chille
17	Australia and Italy

Economic Freedom

The previous theme if often tackled by those on the left of the political spectrum. Neoliberals argue for free markets, reduced government, and property rights. A common assertion is that "economic freedom" is positively related to (causes) economic prosperity. The Heritage Foundation publishes a freedom index for over 150 countries and associated data. Select 5 countries that are dispersed in their measures of measures of freedom to test this assertion.

Note this site has a lot of data, but you need to review the sources used, and go beyond correlations. You will also need to know something about the political and social context for each country.

Country quintets (You choose from the list at https://www.heritage.org/index/visualize)	
18	
19	
20	
21	
22	
24	
25	
26	

Forecasting and Demand

Select one the commodity groups below and create a forecasting/demand study (make sure you understand the difference). I suggest using Canadian data and selecting an option for a national study or comparing a set of provinces. Depending on your data, you need to take care of special "events" such as Covid and the great recession as well as slow changes such as demography

Commodities			
	National (long time series)		Provincial (Pooled data – choose the number of provinces and sufficient time to ensure n=60+)
27	Multifamily housing	33	
28	Cannabis	34	
29	Used and new cars (study the relationship between the two)	35	
30	Liquor	36	
31	Gasoline		

Rubric for the final paper

This is the way I will assess the final paper. Note the marks for degree of difficulty, which reflects the nature of the questions posed, the methodology, and data development. A paper that has basic regressions using annual data with few explanatory variables, will receive lower marks on this component than papers that explore more complex relationships, using more independent variables (including transformations) and requiring data cleaning and several sources.

Rubric for Final Paper				
Component		Mark	Mark	Explanation
Style and format	Is the paper well written and organized; do references follow APA; are figures tables and figures professional	20		
Context	Does the paper set out the main questions; is the lit review clear; are research questions clearly stated?	20		
Analysis	Is the analysis appropriate and clearly explained; are the conclusions sound	30		
Degree of difficulty	Simple = 1 Moderate = 5 Complex = 10	20		
		100		
		30		
Course Mark				

Packback

Discovery rests on two ideas:

1. The answer lies in the question, as the quote from Einstein reveals.

"If I had an hour to solve a problem and my life depended on the solution, I would spend the first 55 minutes determining the proper question to ask for once I know the proper question, I could solve the problem in less than five minutes.

- Albert Einstein

2. We must be able to make a distinction. Up and down, in and out, stop and go… are all distinctions that order our experience. Certainly, shades of grey exist as does nuance, but at the core lie simple distinctions.

When we communicate with Siri or Alexa, we used natural language. Compiler languages translate our words into assembler language comprising strings of "0's" and "1's". This is what we mean by "digitizing". At the base of all AI computation are zeroes and ones.

Packback is an AI (artificial intelligence) enabled process to support asking better questions, leading

Packback Questions

Full Disclosure: I have never used Packback. It may suck, in which case I apologise for any financial expense you may have incurred. But I think it may also be brilliant, and even eventually replace me in the class (🙁). Combining our natural intelligence and capacity to learn, along with the AI capabilities of the software, let's see where this goes.

Participation is a requirement for this course, and the Packback Questions platform will be used for online discussion about class topics. Packback Questions is an online community where you can be fearlessly curious and ask open-ended questions to build on top of what we are covering in class and relate topics to real-world applications.

Packback Requirements:

Your participation on Packback and along with as assessment of your participation in UM Learn Discussions will count toward 10% of your overall course grade.

I will post a theme each Monday evening and you must post questions and answers by the following Friday by 23:39 CT CT deadline. To receive full credit, you should submit the following per each deadline period:

- 1 open-ended Question every week with a minimum Curiosity Score of 70, worth 33.33% of each

assignment grade

❑ 2 Responses every week with a minimum Curiosity Score of 70, worth 66.67% of each assignment grade

❑ Half credit will be provided for questions and responses that do not meet the minimum curiosity score.

You may revise questions/answers as many times as you wish between midnight Sunday and midnight Friday to improve your score.

How to Register on Packback:

An email invitation will be sent to you from help@packback.co prompting you to finish registration. If you don't receive an email (be sure to check your spam), you may register by following the instructions below:

1. Create an account by navigating to https://questions.packback.ca and clicking "Sign up for an Account"
   Note: If you already have an account on Packback you can log in with your credentials.

2. Then enter our class community's lookup key into the "Looking to join a community you don't see here?" section in Packback at the bottom of the homepage.
   Community Lookup Key: **9334b576-51f1-4700-bfe4-a636887fda9e**

3. Follow the instructions on your screen to finish your registration.

   Packback may require a paid subscription. Refer to www.packback.co/product/pricing for more information.

How to Get Help from the Packback Team:

If you have any questions or concerns about Packback throughout the semester, please read their FAQ at help.packback.co. If you need more help, contact their customer support team directly at help@packback.co.

For a brief introduction to Packback Questions and why we are using it in class, watch this video: vimeo.com/packback/Welcome-to-Packback-Questions

The Fine Print

Writing and Learning Support

The Academic Learning Centre (ALC) offers services that may be helpful to you throughout your academic program. Through the ALC, you can meet with a learning specialist to discuss concerns such as time management, learning strategies, and test-taking strategies. The ALC also offers peer supported study groups called Supplemental Instruction (SI) for certain courses that students have typically found difficult. In these study groups, students have opportunities to ask questions, compare notes, discuss content, solve practice problems, and develop new study strategies in a group-learning format.

You can also meet one-to-one with a writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. If you are interested in meeting with a writing tutor, reserve your appointment two to three days in advance of the time you would like to meet. Also, plan to meet with a writing tutor a few days before your paper is due so that you have time to work with the tutor's feedback.

These Academic Learning Centre services are free for U of M students. For more information, please visit the Academic Learning Centre website at: http://umanitoba.ca/student/academiclearning/

You can also contact the Academic Learning Centre by calling 204-480-1481 or by visiting 201 Tier Building.

University of Manitoba Libraries (UML)

As the primary contact for all research needs, your liaison librarian can play a vital role when completing academic papers and assignments. Liaisons can answer questions about managing citations, or locating appropriate resources, and will address any other concerns you may have, regarding the research process. Liaisons can be contacted by email or phone, and are also available to meet with you in-person. A complete list of liaison librarians can be found by subject: http://bit.ly/WcEbA1 or name: http://bit.ly/1tJ0bB4. In addition, in-person general library assistance is available at 19 University Libraries, located on both the Fort Garry and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the following: http://bit.ly/1sXe6RA. When working remotely, students can also receive help online, via the Ask-a- Librarian chat found on the Libraries' homepage:www.umanitoba.ca/libraries.

For 24/7 mental health support, contact the Mobile Crisis Service at 204- 940-1781.

Student Counselling Centre
Contact SCC if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with relationships or other life concerns. SCC offers crisis services as well as individual, couple, and group counselling. *Student Counselling Centre:*
http://umanitoba.ca/student/counselling/index.html
474 University Centre or S207 Medical Services (204) 474-8592

Student Support Case Management
Contact the Student Support Case Management team if you are concerned about yourself or another student and don't know where to turn. SSCM helps connect students with on and off campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team.

Student Support Intake Assistant http://umanitoba.ca/student/case-manager/index.html
520 University Centre
(204) 474-7423

University Health Service

Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation.
University Health Service http://umanitoba.ca/student/health/ 104 University
Centre, Fort Garry Campus
(204) 474-8411 (Business hours or after hours/urgent calls)

Health and Wellness

Contact our Health and Wellness Educator if you are interested in information on a broad range of health topics, including physical and mental health concerns, alcohol and substance use harms, and sexual assault.

Health and Wellness Educator http://umanitoba.ca/student/health-wellness/welcome.html
Katie.Kutryk@umanitoba.ca 469
University Centre
(204) 295-9032

For comprehensive information about the full range of health and wellness resources available on campus, visit the Live Well @ UofM site: http://umanitoba.ca/student/livewell/index.html

A notice with respect to copyright:

All students must respect copyright as per Canada's *Copyright Act*. Staff and students play a key role in the University's copyright compliance as we balance user rights for educational purposes with the rights of content creators from around the world. The Copyright Office provides copyright resources and support for all members of the University of Manitoba community.
Visit http://umanitoba.ca/copyright for more information.

Your rights and responsibilities

As a student of the University of Manitoba you have rights and responsibilities. It is important for you to know what you can expect from the University as a student and to understand what the University expects from you. Become familiar with the policies and procedures of the University and the regulations that are specific to your faculty, college or school.

The Academic Calendar http://umanitoba.ca/student/records/academiccalendar.html is one important source of information. View the sections *University Policies and Procedures* and *General Academic Regulations*.

These two sections contain all the important information contained, pay attention to the following:

- If you have questions about your grades, talk to your instructor. There is a process for term work and final **grade appeals**. Note that you have the right to access your final examination scripts. See the Registrar's Office website for more information including appeal deadline dates and the appeal form

http://umanitoba.ca/registrar/

- Please view the General Academic Regulation section within the Academic Calendar and specifically read the **Academic Integrity** regulation. Consult the course syllabus or ask your instructor for additional information about demonstrating academic integrity in your academic work. Visit the Academic Integrity Site for tools and support http://umanitoba.ca/academicintegrity/ View the **Student Academic Misconduct** procedure for more information.

- The University is committed to a respectful work and learning environment. You have the right to be treated with respect and you are expected conduct yourself in an appropriate respectful manner. Policies governing behavior include the:

Respectful Work and Learning Environment

http://umanitoba.ca/admin/governance/governing_documents/community/23 0.html

Student Discipline http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html and,

Violent or Threatening Behaviour
http://umanitoba.ca/admin/governance/governing_documents/community/66 9.html

- If you experience **Sexual Assault** or know a member of the University community who has, it is important to know there is a policy that provides information about the supports available to those who disclose and outlines a process for reporting. The **Sexual Assault** policy may be found at: http://umanitoba.ca/admin/governance/governing_documents/community/23 0.html More information and resources can be found by reviewing the Sexual Assault site http://umanitoba.ca/student/sexual-assault/

- For information about rights and responsibilities regarding **Intellectual Property** view the policy http://umanitoba.ca/admin/governance/media/Intellectual_Property_Policy_-_2013_10_01.pdf

For information on regulations that are specific to your academic program, read the section in the Academic Calendar and on the respective faculty/college/school web site http://umanitoba.ca/faculties/

Contact an **Academic Advisor** within our faculty/college or school for questions about your academic program and regulations http://umanitoba.ca/academic- advisors/

Student Advocacy

Contact Student Advocacy if you want to know more about your rights and responsibilities as a student, have questions about policies and procedures, and/or want support in dealing with academic or discipline concerns. http://umanitoba.ca/student/advocacy/
520 University Centre
204 474 7423
student_advocacy@umanitoba.ca