

## ECON 4822: Economic research and communication

Fall 2019/Winter 2020, (August 20, 2019)

Location	TBA (check back)
Time	Friday 11:30am – 2:15pm
Instructor	Gregory Mason
Office hours	This is a WebEx enabled course. Please see <a href="#">How we will communicate</a> .
Contact phone	204 474 8670
Contact e-mail	<a href="mailto:gregory.mason@umanitoba.ca">gregory.mason@umanitoba.ca</a> (preferred)
Course website	UMLearn (Course materials will appear on UMLearn for registered students.)
About me	<a href="http://www.gregorymason.ca">www.gregorymason.ca</a>

### Overview

Effective research and communication in economics combine 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.

#### Key Information for this course

[Grading plan](#)

[Key dates](#)

[Deliverables](#)

[Learning schedule](#)

[Fine print](#) (academic honesty, student access, etc.)

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

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

As a student in this course you will:

1. Increase your ability to define and refine research by taking a general issue and framing more specific questions that either singly or together can form the focus for a technical paper. It will also train you to develop a general issue into a specific research questions that you can evaluate using economic analysis. Management often issues very general questions, and a primary function of technical support staff is to refine a vague issue into a series of specific research questions.
2. Understand how to place that question in the context of existing research to offer the reader a more complete understanding of all the complexities behind the issue and how your paper contributes to a deeper understand of the questions you have defined.

3. Learn how to locate relevant data and shape it to respond the research questions you have defined.
4. Prepare a professional academic/technical report that responds to the question(s). If you prepare a good paper in this course you may be able to use it for graduate applications or to support a job application to demonstrate your skills as an economist.
5. Most importantly, mastering the principles and techniques in this course will increase your capacity to undertake and communicate the results of economic research.

## Course philosophy.

[Kenneth Arrow](#), known for ideas such as the Arrow Impossibility Theorem and assessing risk, also offered a key insight into the impact of knowledge on technical change and economic growth. He believed that technical skills increased 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 the stages – **learn by doing**.

**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),

This is how I will approach this course:

- All course materials and additional directions are on UMLearn
- I will keep formal lectures to a minimum, with workshops offering the opportunity to complete elements of the course work where I will be available to assist you.
- The course will feature coaching both one-on-one, in groups, and electronically via email. You can expect to “meet” me in-person and electronically (email) more in this course than others you have taken.
- The class will meet periodically with lectures/workshop/structured practice as a group in a workshop and so that you can present your work ... developing oral presentation skills will be very important in any career you may pursue.
- The course is progressive. You will build the final product, a competent technical paper, through a series of stages marked by “deliverables”, each one of which I will assess so that you have good information on your progress and build toward the final product .
- For some steps (not the the final paper) you will have the opportunity to revise and resubmit the deliverable based on my comments. This is part of the coaching process I use in this course.
- I will also post outstanding student work (anonymously) as we proceed through the course to encourage everyone to do their best.

## Learning resources

There is no text for the course. Learning notes, videos, and other resource material appear **UMLearn** for this course. All registered students with valid [SignUM](#) have access to these materials.

Note: it is your responsibility to learn UMLearn and how to use this approach to course materials. General UMLearn instruction appears UM Learn resources are available [here](#)

Registered students may access UMLearn through a PC, Mac, tablet or smartphone. You will find owning their own PC/Mac most convenient.

### Computer

I strongly encourage students to acquire a laptop (PC or Mac). Since the course has no text, all the materials are on-line.

A laptop will make learning the course elements and producing the paper much easier. Any MacBook will work and refurbished units are available from Amazon for around \$600. Similarly, refurbished PCs are available on Amazon for \$400. A new MacBook is expensive, but a new PC from office suppliers such as Staples or BestBuy is around \$500 - \$600, with a warranty and extras. Make sure it has at least an I3, with 4GB Ram and 128GB hard drive, preferably solid state.

### Software:

In addition to Word, you will need access to Excel, which is available through Microsoft Office 365. For the econometrics portion, Stata is available through any of the computer labs areas on campus. Alternatively, you can lease Stata as a student for 6 months for \$45 (US) or for 12 months (\$90 US). Stata runs on a PC or Mac. Many students will find the lease a convenient option. Those planning to continue to graduate school may find the perpetual license attractive (\$198 US), which supports regular updates and reduced rates to upgrade as newer versions become available if you remain a student at an accredited university anywhere.

Another software resource for this course is the reference manager – Zotero. Those with a PC/Mac can download it free, or you may use the web-based option. Downloading to Zotero your own machine is more reliable and less “buggy”.

### Standards

I also have posted example papers from other courses at the fourth-year level to reveal my standards and what other students before you have done.

## Course structure - Summary

The course has four modules; each comprising a step toward creating the final deliverable of “the paper.” A detailed [learning schedule](#) appears at the end of this syllabus.

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 February and March, much of the activity is independent work and consultations with me to develop the bests paper you can.

I have created discussion groups for this course. Please see UMLearn for your group assignment. The goal of the discussion group is experiencing collaboration with your peers in developing insights. The marks will be based on individual work you submit.

### Module 1: Defining and refining the research question and creating the literature review (20 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
- understanding of current citation standards and the preparation of a bibliography using a standard reference manager – Zotero
- ability to deliver a concise oral presentation on your work (aka *elevator speech* where you have between the 5th and 15th floors to explain your research to your boss).

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

In most industry and government employment you would not develop research topics/issues until you had reached a management level. Therefore, I have supplied a list of research [topics/issues](#), for which I know data exist. You are completely free to select another topic, **but in that case, I strongly encourage you to discuss that topic with me no later than September 13 before proceeding.**

This module will also present 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 of these steps are fundamental to sound economic research.

Learning resources to support your acquisition of these skills appear under Module 1 of the UMLearn site for this course.

**Resource Librarian:** Asako Yoshida ([Asako.Yoshida@umanitoba.ca](mailto: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. She will also present a lecture on various economic data sets available through the library and on-line.

**Submission of work:** Submission of all deliverables (except oral presentations of course) will be through UMLearn Assignments. A folder will exist for each Module/Deliverable with a due date. Note: You will not be able to submit after the due date.

**Module 1 Deliverables:** Research Question and Literature Review (There are five deliverables for Module 1. Please see [Deliverables](#) and [Learning Schedule](#) for more information.

- a. **Refine a research issue.** In this exercise each group (see UMLearn) will review a general research issue, creating more specific research questions and thinking about what sort of information might help to offer answers to the specific quartile to critique. The discussion groups will convene in the classroom. A few days after the group discussion, each student will submit a short 300-word interpretation of what the group decided as well as individual observations **(3 marks)**.
- b. **Critique a short article.** Deconstructing a short article will offer you the skill to prepare a brief summary for management. In this workshop each group will critically analyze an assigned article responding to the following three questions: 1) is the goal/point of the article clear; 2) has the author used credible data to support the main arguments; and, 3) what suggestions do you have for improving the article? Each student will post their own 200-word summary of the conclusions reached by their group) **(3 marks)**
- c. **Refine your paper topic** After choosing a topic from the [list](#) (by September 20), you will prepare a brief 300 – 400 analysis that refines the research questions for my review. The day after you post the submissions I will re-issue the list with additional hints and ideas for data sources. **(3 marks)**
- d. **Elevator speech (Slide and presentation) (3)** This represents the type of quick synopsis common to the modern workplace. You will have 2 minutes to speak to one slide posted on UMLearn.
- e. **Literature review (1500 words max).** The Literature Review is a major component of the final paper. In this review, you will search and locate important source documents that offer theoretical background to your paper. The paper must use APA referencing and I will assess it in two main domains
  - i. Completeness of references **(5 marks)**
  - ii. Quality of writing and organization **(10 marks)**

Note: you will have an opportunity to resubmit the Literature Review to raise your mark. See [Revisions](#), [Deliverables](#) and [Learning Schedule](#) for more details.

## Module 2: Data development and initial analysis (20 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 aspect of economic research. In any organization, you will draw on internal information such as sales/production 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.

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.

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. These “summary statistics” such as measures of central tendency (mean and median) and dispersion (variance, range) are useful in deepening your understanding of the data you will be using

**Module 2 Deliverable:** *Data development, meta-data description, and exploration (About 750 words plus tables/graphs).*

Note: you will submit a single document for Parts a and c, with a separate excel file for Part b

- a. **Description of how your data sources** for the research problem. Explaining your data sources and why they will support your analysis is essential to clear communication of your methodology **(5 marks)**
- b. **Data and metadata** – in Excel. For this deliverable you will submit an excel spreadsheet of your data, with variables properly labelled and clear metadata. In most case your will need to blend several sources to create your analysis dataset and your metadata must make this clear. **(5 marks)**
- c. **Exploratory analysis - summary statistics, graphs and comments.** This deliverable will be about 750 words and include tables/graphs). The purpose of this section of your paper is to inform the reader about the information that supports your analysis. UMLearn Module 2 has a template. **(10 marks)**

**Note: The Winter 2020 outline is provisional and subject to revision.**

**Module 3: Answering the questions using statistical and other analytical techniques (20 marks) (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 or Excel 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. Note that I emphasize using appropriate analyses and not flashy techniques. The goal is to answer a question as directly as possible using appropriate analytical techniques.

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. I have prepared learning videos on Stata.

You must submit your Stata Code and data or alternatively your Excel worksheets and cell notes with this paper. I need to be able to understand what you did.

<b>Module 3 Deliverable: Empirical Analysis</b>
a. <b>Description of statistical results</b> including an appendix with commented Stata code/Excel worksheet results as an appendix. <b>(15)</b> (About 1000 words plus tables and graphs)



**Module 4: Final Paper (40 Marks)**

*Expected learning outcomes for Module 4*

Increased:

- Experience in presenting and paring an integrated research paper.

After completing modules 1 – 3, the final paper should come together very easily. 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.

The final paper will be approximately 5000 words (not more than 6000). A single page, doubled spaced in Times Roman Font 12 is about 250 – 290 words.

In the last three weeks, you will present your paper to the class, in a 10-minute oral speech **with at most 4 slides**, which you will post on UMLearn for the rest of the class to review. The specific time you will present will be randomly selected...I will demonstrate this in a video posted on UMLearn. I know that ten minutes is short, but being able to concisely present findings to management is one of the essential skills that will support your career advancement. Since everyone will have presented twice on aspects of their paper, this should not be a significant burden to prepare.

**Attendance during this presentation period is mandatory.** I do not expect you to have your paper in its final form for the presentation, but because you have participated in the prior modules, this presentation should be straightforward. Use the comments from the class (and me) to refine your paper.

It is very important to keep due dates very clear and maintain your obligations to the class during this period.

<i>Module 4 Deliverables: Presentation and Final Paper</i>
a. Presentation of your paper to the class <b>(10)</b>
b. Final Paper <b>(20)</b>

## How the course assessment works

Modules 1 – 3 are worth 20 marks each, while module 4 is worth 40 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).

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 40/100 which is a F.

*Table 1*

For Modules 1b, 2c and 3b, students may resubmit deliverables based on comments received on their draft. See learning schedule for due dates.

## My expectations for department

The University of Manitoba expects all staff and students to conduct themselves professionally and responsibly.

### *Student obligations*

What this means specifically for students is the following

1. Please arrive on time to the lecture portion of class. If you need to leave early, please let me know in advance. During the workshop phase of each class you are free to come and go, but please respect other students who are working, collaborating, or consulting with me.
2. Since some work will be in groups and you may gain personal information on your colleagues such as e-mail addresses, please use this information responsibly.
3. If you make an appointment to see me in my office, please honour that or communicate with me by email that you will not or cannot attend.
4. I make some classes compulsory when your colleagues are making a presentation. Please remain for all the presentations and not leave after you have finished yours.
5. When called upon to comment others' word, do so respectfully and please do not interrupt others.
6. Be careful with citations and observe the basic dictum to treat other authors' intellectual property as you would wish to be treated. I always check for plagiarism.
7. I expect students to work through the Learning Schedule at the pace suggested.
8. The lectures/workshops are your opportunity to gain insight into the on-line material, work on your deliverables, and obtain advice. During those lectures/workshops when your colleagues are presenting as noted in the Learning Schedule, respect them as you will want them to respect you when you present.

### *My obligations*

For my part

1. I will return feedback on submitted written material within 5 business days 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.

3. My office hours will remain stable. To ensure you do not waste time, you may schedule an appointment on UMLearn.
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 also have posted excellent papers from past courses so you understand my expectations.

### *Copyright*

All material posted on UMLearn otherwise distributed for this course are copyright to me as are any and all lectures. You may record lectures for your own purpose, but do not post or share them or any other material made available for this course.

### *Academic Integrity*

The university has regulations concerning academic dishonesty. I am very strict about plagiarism ... I always check. 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. 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](#).

You may also phone me at the number on the front page... it forwards to my cell. I turn my cell off at certain times (dinner with my wife, sleeping, attending the theatre, Friday night and all-day Saturday, etc.) which is something we all need to do for our mental health.

I will not respond to SMS text messages or messages sent through social media.

This is a **WebEx** enabled course. You may arrange a WebEx virtual appointment where we can share files (e.g. your deliverable with comments) and discuss them online. For this you will need a laptop (PC or Mac) with an operational microphone and headset. The internal mic and speaker on most laptops will work. Please see the instructions on UMLearn. I have created 15- minute time slots during the following times:

- Wednesday 17:00 – 18:30 (I will be in my office on campus)
- Friday 09:30 – 11:00 (I will be in my office on campus)
- Sunday and Monday 18:00 – 21:00 (If no calls are scheduled by 12:00 of the day, I reserve the right to cancel the evening session.)

Note: when I am in my office, WebEx calls will take priority over drop-ins.

**Due Dates:** All work is due on the dates/times [noted below](#). 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.

- I only accept original (no texts or email attachments) and signed medical notes from MDs on their professional stationary.
- Do not ask for an extension for any reason other than sickness.
- Do not request an extension for medical reasons without emailing me before the due date of the deliverable. Extensions will not usually be granted without this prior notice.
- 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 10; since this is the culmination of 7 months of work and represents the concatenation of prior work, an extension of this deadline requires approval of the Dean's office.

*Table 2*

### Important information on the submission of written work

You must submit all deliverables UMLearn's assignment folder and be in WORD (.doc or .docx), Excel (.xlsx) or PowerPoint (.ppt) as appropriate. Do not send pdf files or weird formats as I will not convert them.

Do not password protect your files if you want a grade.

**Please submit the papers on UMLearn using the assignment folders set up for the purpose. I will not covert filenames into the proper format. I will not mark papers submitted through email.**

Please use the following examples to guide you in your file naming conventions

ECON4822 Deliverable 1a\_lastname\_firstname.docx

ECON4822 Deliverable 1b\_lastname\_firstname.docx

ECON4822 Deliverable 1b Revised\_lastname\_firstname.docx

**UMLearn is a very strict enforcer of submission dates and time. You will not be able to submit a deliverable even 1 second late.**

Example: ECON4822 Deliverable 2b\_Gregory\_Mason.xlsx

### A note on the revision process.

Students can expect to increase their grades on certain deliverables (as noted in the learning schedule) by submitting revisions based on my comments. Whether you submit a revision is entirely up to you. I will insert comments and make suggestions in track changes (in Word) and insert comments in Excel sheets.

You may resubmit Deliverables 1b and 2c for a higher mark. The revision process is common in all work. Here it is also part of the coaching process and can lead to improved grades. Beyond boosting the mark for the Lit Review and exploratory analysis, you may learn to improve your writing and organization, and this will support better work in all following writing.

The change in grade will depend on the nature of the revisions. For example, just making the changes I suggest, will result in no grade increment. You must make additional structural revisions based on general comments. Students can expect *at most* a letter grade increase from the revision process. It is unlikely that a deliverable will move from a "C" (6/10) to an "A" (8/10). Students that score an "A" are very unlikely to move to an A+ based on my comments. A paper with an initial grade of B+ (7.5/10) can move to an A, but never an A+(9/10). My rule for A+ work is that it needs to move well beyond the bounds of this course and teach me something I did not know **in the first submission**.

Table 3

Deliverables and Mark Summary (Note the Winter term is provisional and subject to revision)					
<b>Note:</b> You must post all deliverables to the suitable folder under the UMLearn Assignment submission tab for this course by 2400 on the date except where noted otherwise. <b>You will not be able to submit</b>					
Due (2400 local time)	Deliverable		Marks	Cum Marks	
Sept 18	Module 1	a	<b>Refine a research question.</b> Based on the group discussion (in the September 13 class), you will further will refine and extend the work on reframing the question. The paper must not exceed 300 words (less than 1 page) and posted to the Assignments Folder using the submission <a href="#">naming conventions</a> . See UMLearn for discussion group assignment	3	3
Sept 20			Choose topic from list (or propose your own)	NA	
Oct 2		b	Critique of article	3	6
Oct 9		c	Refining your research question for your paper (Word)	3	9
Oct 25		d	Elevator speech and slide (PowerPoint)	3	12
Nov 5		e	Literature Review (Word)		
		i.	Completeness	3	15

<b>Deliverables and Mark Summary (Note the Winter term is provisional and subject to revision)</b>					
<b>Note:</b> You must post all deliverables to the suitable folder under the UMLearn Assignment submission tab for this course by 2400 on the date except where noted otherwise. <b>You will not be able to submit</b>					
<b>Due (2400 local time)</b>	<b>Deliverable</b>			<b>Marks</b>	<b>Cum Marks</b>
			ii. Quality of writing and organization	10	25
Nov 15			Revised deliverable 1b (see <a href="#">Revisions</a> )	NA	
Nov 18	Module 2	a	Data sources	5	30
Nov 26		b	Data and metadata	10	40
Dec 18		c	Exploratory analysis (summary statistics, graphs and commentary)	15	55
Jan 7			Resubmission of Deliverable 2c		
Feb 7	Module 3	a	Description and presentation of results with Stata code or Excel Worksheets	15	70
Feb 28			Resubmission of Deliverable 3a		
<b>Mar 18</b>	<b>Voluntary Withdrawal Deadline</b>				
Mar 27- Apr 3	Module 4	a	Oral presentation. Your presentation will occur on either March 27 – April 3. I will randomly assign your date on the day of the presentation. I would appreciate it if you would stay for the entire class so that you colleagues have an audience.	10	80
Apr 10		b	Integrated Final Paper (Overall mark) (No extensions) The Final Paper brings all deliverables together in an integrated document.	20	100

## Learning Schedule (Fall 2019)

### Module 1: Defining and refining the research question and creating the literature review (20 Marks)

Week	Date	
1.	Sept 6	<b>Lecture – Course orientation</b> This lecture will be a general overview of the course and discussion of the potential research themes. I will review all aspects of the course. UMLearn presents the discussion groups for the group sessions in the lectures (2 and 4)
2.	Sept 13	<b>Lecture/Workshop – Refining a research question</b> Consult the presentation on UMLearn for refining research questions. I will briefly review the principles by examining a current issue. The class will then break into groups and each group will receive a topic to refine and shape into a research question, reporting back in the last hour of the class on the results of their deliberations. These topics will not be available for your own work in this course.
	Sept 18	<b>Deliverable 1a: Your own 300-word summary of the deliberations in your discussion group (Remember to post on Assignments folder of UMLearn by 2400 on the due date.)</b>
3.	Sept 20	<b>Lecture/Workshop Effective use of the library resources and Zotero review – Asako Yoshida (Guest Lecturer)</b> The class will comprise a lecture for the first hour, followed by in class literature searching to support the topic of your choice. Students will set up a Zotero account on their laptops and use it as the basis for the literature and other material identified for the topic. A presentation on Zotero appears on UMLearn for this course which students should view prior to the class
		<b>You must inform me which topic you will personally develop for this course by email no later than 24:00 on Sept 20. If I do not hear from you, I will assign a topic from the list of papers</b>
4.	Sept 27	<b>Lecture/Workshop – Effective writing</b> A brief guide to effective written style appears on UMLearn. In this lecture, we will deconstruct several short articles (Posted on UMLearn) to understand what makes them effective in communicating an economic concept. In the workshop portion, each of the groups will examine an assigned article and will respond to three questions: 1) is the goal/point of the article clear? 2) has the author used credible data to support the main arguments; and 3) suggestions for improving the article. The articles will be posted on UMLearn along with the group assignment.
	Oct 2	<b>Deliverable 1b: You will prepare you own 200-word critique (max 200 words) of the assigned article.</b> (Remember to post on Assignments folder of UMLearn by 2400)
5.	Oct 4	<b>Lecture/Workshop – What is a literature review?</b> There will be an initial lecture literature reviews/surveys including integrated reviews, meta-analyses, and annotated bibliographies. Students will then use the remainder of the class to work on their reviews consulting with the instructor. Students may then use the remainder of the class to develop the core research questions and start the literature review with advice from the instructor.
	Oct 9	<b>Deliverable 1c: Refine your paper topic into discrete and concrete research questions (500 words max).</b> (Remember to post on Assignments folder of UMLearn by 2400)
6.	Oct 11	<b>Literature review refinement</b> No formal class. Students will continue to develop their literature review. I will be available from 10 am to 2:15 pm for advice and consultation. Make an appointment through UMLearn and you should e-mail me specific questions.
7.	Oct 18	<b>Literature review refinement</b> No formal class. Students will continue to develop their literature review. I will be available from 10 am to 2:15 om for advice and consultation. Make an appointment through UMLearn and ideally, you should e-mail me with specific questions.
8.	Oct 25	<b>Elevator Speech Presentations</b> on your topic with key lit review points. Students will prepare 2-minute speech using their slides posted on UMLearn as a reference. Students should attend this entire lecture since I make offer comments that will benefit the final paper. Note if you do not present, you will lose all marks regardless whether you post a slide.
	Oct 25	<b>Deliverable 1d: Delivery of elevator presentation</b> (Post on UMLearn by 0800 Oct 25) (see Template on UMLearn)
9.	Nov 5	<b>No lecture</b>

## Learning Schedule (Fall 2019)

		<b>Deliverable 1e: Literature Review</b> (Post on UMLearn by 2400 Nov 5)
<b>Module 2 Data development and initial analysis</b>		
10.	Nov 8	<b>Lecture/Workshop – Review of data acquisition techniques</b>
		This lecture looks at a range of on-line sources and techniques for downloading data. In the workshop portion students will identify the data sources for their paper and begin the download process.
11.	Nov 15	<b>No lecture Fall Break</b> (I will be available between 10:00 am and 2:15pm in my office to discuss your data problems.
	<b>Nov 15</b>	<b>Revised Deliverable 1e:</b> Students who are revising their lit review must post it by 2400. See <a href="#">Revisions</a> .
	<b>Nov 18</b>	<b>Deliverable 2a: Selection of the data</b> (This will be a 500-word document describing that data along with links and other identifiers for the data you will use for the paper).
12.	Nov 22	<b>Lecture – Data development in Excel</b>
		Excel is a powerful way to clean data before more substantive analysis. Learning materials exist to help students acquire the basic excel expertise and to show how to set up metadata in a worksheet.
	<b>Nov 26</b>	<b>Deliverable 2b: Data and metadata – in Excel.</b> This is the dataset you have prepared for the paper. Make sure you include the metadata. The data set should be ready for analysis,
13.	Nov 29	<b>Lecture and Workshop – Data development for your project – exploratory analysis . I will review other data development “tricks” and during the workshop you may consult with me on methods for the exploratory analysis of their dataset.</b>
14.	Dec 6	<b>No Lecture</b> (I will be available between 10:00 am and 2:15pm in my office)
	Dec 18	<b>Deliverable 2c: Exploratory Analysis</b> (This should be a Word document that presents tables and graphs that summarize the variables you plan to use in your analysis. Make this a form of essay so that you can integrate it easily in the final paper. I will return comments by Dec 31, and you can revise resubmit for a better mark by Jan 7
		<b>Note: Students will have completed 45% of the course with after submission all deliverables to this point in the course.</b>

## Learning Schedule (Winter 2020) (Provisional, subject to revision)

### Module 3: Defining and refining the research question and creating the literature review (20 Marks)

Week	Date	Note: The lectures in January show how Stata performs certain econometric analysis. It does not replace econometrics you learned in other courses.
14.	Jan 3	<b>Lecture/Workshop –Stata 1 (Inputting data and basic data transformation)</b>
		This will lecture review and extend the on-line learning materials. We will review how to import the data you developed in Module 2. The workshop will allow you to work with your data set. You may decide to rent Stata and install it on your machine – this is the most convenient way to go –. or use the computers in the lab, but then I will not be able to assist you in class.
	Jan 7	<b>Deliverable 2c: Resubmission</b> (see <a href="#">Revisions</a> )
15.	Jan 10	<b>Lecture/Workshop –Stata 2 (Creating a DO file, creating new variables, and documenting your work)</b>
		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.
16.	Jan 17	The linear model is the workhorse of econometrics. The lecture will review the main points in the on-line materials, showing models in real time. The workshop is your opportunity to apply these techniques to your paper. Note: If you are confident with your econometrics, feel free to apply more complex methods and modelling, provided your data can support them

## Learning Schedule (Winter 2020) (Provisional, subject to revision)

17.	Jan 24	<b>Lecture/Workshop – Stata 4 (Time Series)</b> The lecture will review the main points in the on-line materials, showing models in real time. The workshop is your opportunity to apply these techniques to your paper. Note: If you are confident with your econometrics, feel free to apply more complex methods and modelling, provided your data can support them.
18.	Jan 31	<b>Lecture/Workshop – Stata 5 (Regression diagnostics and graphs)</b> The lecture will review the main points in the on-line materials, showing models in real time. The workshop is your opportunity to apply these techniques to your paper.
19.	Feb 7	<b>Presentation of your empirical results</b> Students will take 5 minutes to presents their analysis to the class. This presentation, which can be in Word or PowerPoint must be concise and cover the following topics: 1) statement of the main questions 2) the model you tested; 3) summary statistics (a single table or graph); and 4) empirical results.
	Feb 7	<b>Deliverable 3a: Presentation</b> (This is a 3-minute presentation on three slides you post this on UM Learn by 0800 Feb 7)
20.	Feb 21	<b>No class.</b> I will be in my office and you can make an appointment to consult about deliverable 3b
21.	Feb 28	<b>No class.</b> I will be in my office and you can make an appointment to consult about deliverable 3b
	Feb 28	<b>Deliverable 3b: Draft Statistical Analysis (2400)</b>
22.	Mar 6	<b>Consultations on draft statistical analysis</b> I will be available between 1000 and 1415 to review my comments on your statistical analysis
<b>Module 4 Final Paper</b>		
23.	Mar 13-20	<b>No classes: Consultations on Final Paper</b> I will be available 10:00 – 14:15 to assist with the preparation of the final paper. Please make an appointment on UMLearn
	Mar 27 – Apr 3	<b>Deliverable 4a: Oral Presentation of paper.</b> You must post your slides by 0800 March 27. I will select presenters randomly, so if you do not present on March 27, you will need to attend the April 3 class. I will draw names from an urn to assure randomness
24.	April 10	<b>Deliverable 4: Final Paper Due</b> (Note because you have a month to prepare the final paper with classes, I will grant no extensions.) <b>You must post your paper by 2400 on April 10.</b>

## Paper Topics

These topics will support a range of papers depending on the countries or country sets you choose.

1. Select one of the OECD countries (Canada, US, UK, France, etc.) and examine the relationship between real interest rates, inflation, and GDP. Use <https://stats.oecd.org/#> as a data source. Extracting data from this source will require a little trial and error and you can download a user guide.

Choose your country by September 20.

2. The Great Recession (2008 – 2009) had a world-wide impact. Select one of the following country pairs and examine the impact of the recession on the loss of GDP and employment for each country.
  - a. Canada – US
  - b. France – Germany
  - c. Italy – Spain
  - d. China – US
  - e. Mexico – US
3. Inequality in income and wealth has captured the attention of economists. In this paper, you will explore whether economic growth is associated with changes in income (in)equality for set of countries. Choose 20 countries from one of the following sets
  - a. Europe
  - b. North and South America
  - c. Africa
  - d. Asia.
4. Imagine Finance Canada hires you once they see you have completed ECON4822. Using Canadian data, select one of the following goods to create an economic model to explain, and then forecast sales over the next two years.
  - a. Cars
  - b. Trucks
  - c. Home Furnishings
  - d. Home Health Products

**On October 10, I will release a series of hints and data source suggestions for each paper.**

## 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, general library assistance is provided in person 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](http://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](mailto: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 are required to 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) <http://umanitoba.ca/student/records/academiccalendar.html> is one important source of information. View the sections *University Policies and Procedures* and *General Academic Regulations*.

While all of the information contained in these two sections is important, the following information is highlighted.

- 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/>

- You are expected to 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 to 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](http://umanitoba.ca/admin/governance/governing_documents/community/23_0.html)

**Student Discipline** [http://umanitoba.ca/admin/governance/governing\\_documents/students/student\\_discipline.html](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](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](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](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](mailto:student_advocacy@umanitoba.ca)