ECON 4822: Economic research and communication

Fall 2019/Winter 2020, (July 4, 2019)

Location	202 Isbister
Time	Friday 10:30am – 1:30pm
Instructor	Gregory Mason
Office hours	Friday 9:00-10:30am 1:30pm – 2:30pm, Wednesday 5:00 pm – 6:30pm)
Contact phone	204 474 8670
Contact e-mail	gregory.mason@umanitoba.ca (preferred)
Course website	UMLearn (Course materials will appear on UMLearn for registered students.)
About me	www.gregorymason.ca

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.

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). Hopefully you can use the paper you prepare in this course for graduate applications or even as a job paper.

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."

> **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),

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

This is how I will approach this course:

- 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 and electronically. 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 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 will I will assess so that you always have good information on your progress.
- For all but the last stage (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 used in this course.
- I will also post outstanding student work as we proceed through the course to encourage everyone to do their best.

Learning resources

Learning notes, videos, and other resource material appear UMLearn for this course. All registered students have access to these materials. There is no formal text. 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.

The course structure appears in more detail on the UMLearn site for this course.

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 Centre For the Advancement of Teaching & Learning
and at http://intranet.umanitoba.ca/academic_support/catl/resources/umlearn.html

Provided you are registered in this course you can access UMLearn through a PC, Mac, tablet or smartphone. Most students will find a PC/Mac most convenient. You should really own your own computer at this stage.

In addition to Word, you will need access to Excel, which is available through Microsoft Office 365. Stata is available through any of the computer labs areas on campus. Alternatively, you can purchase 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 time-limited rental a convenient option. Those planning to continue to graduate school may find the perpetual license attractive ($198 US), which supports regular updates and a reduced rates to upgrade as newer versions become available.

Course structure - Summary

The course has four modules; each comprising a step toward the final deliverable of "the paper." A detailed learning schedule appears at the end of this syllabus.

Module 1: Defining and refining the research question…The Literature Review (20 Marks)

In this module you will identify a research question, verify that empirical data exist, and then undertake 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 I strongly encourage you to discuss that topic with me before proceeding no later than September 21**.

A first step is to develop specific questions your paper will answer.

This module will 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. A of these steps all fundamental to sound economic research.

You will present an in-class ***three-minute*** summary of your research topic and question(s) using 1 slide maximum. Attendance for this class is mandatory.

Deliverables: *(Combined in one document of about 1200 words))*

a. Research questions (5)
b. Literature review
    i. Completeness (5)
    ii. Quality of writing and organization (7)
c. Slide and presentation (3) (Include as an appendix)

Resource Librarian: Asako Yoshida (Asako.Yoshida@umanitoba.ca) is your "go to" resource for accessing public data sets and help with Zotero. Please email her to make an appointment. She will also present on various economic data sets available through the library and on-line

Module 2: Data development and initial analysis (20 Marks)

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 explore the relationships using graphs. This begins the process of answering the questions you identified in Module 1.

Analysis data sets must also have metadata – "data about data." You must source all data and document its origin. There are learning materials in UMLearn 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 you understanding of the data you will be using

Deliverable: *Data development, meta-data description, and exploration (About 750 words plus tables/graphs). (See UMLearn for a template)*

1. Selection of data for the research problem (5)
2. Documentation of the data (5)
3. Exploration (summary statistics, graphs and comments) (10)

Module 3: Answering the questions using statistical and other analytical techniques (20 marks) (20 marks)

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. Students may also undertake analysis in Excel. I have prepared learning videos using both approaches.

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

Deliverable: *Statistical analysis (About 1500 words plus tables and graphs)*

1. Stata code or Excel worksheet with comments (7)
2. Description and presentation of statistical results (13)

Module 4: Final Paper (40 Marks)

The final paper will create an integrated presentation of the three previous modules, with three added elements:

- Conclusions on the questions posed
- 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. More details on the paper appear here.

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. You will also act as a discussant for another student's paper during this period. The entire class will also be able to ask questions of your paper during this presentation period.

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. Also, being able to query the research of colleagues with respect is an essential element of operating as an effective and valued team member.

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.

Deliverable: Final Paper (40 marks) (Include Stata Code or Excel Spreadsheet as an appendix)

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 20% 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. I do this to minimize the chance of ghost writing. Since there are no exams, I need to ensure that the work submitted reflects solely the efforts of the individual student.

Table 1

Mark Summary			
			Marks
Module 1	a	Research Question	5
	b	i. Completeness	5
		ii. Quality of writing and organization	7
	c	Slide and presentation	3
Module 2	a	Selection of data	9
	b	Documentation of the data	5
	c	Exploration (summary statistics, graphs and comments)	10
Module 3	a	Stata Code and documentation or Excel worksheet with notes	7
	b	Description and presentation of results	13
Module 4		Presentation	6
		Commentary/Limitations/Future research	4
		Final Paper (Overall mark)	30

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

My expectations

I expect students to work through the Learning Schedule at the pace suggested. I will note attendance for the classes where presentations occur (see Learning Schedule) to ensure an audience.

For my part I will return feedback within 5 business days after a deliverable is due (Final Papers excepted).

All material posted for this course on UMLearn are copyright as are any lectures. You may record lectures for your own purpose, but do not post or share them.

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.

The lectures/workshops are your opportunity to gain insight into the on-line material, work on your deliverables, and obtain advice. I could care less if you watch YouTube cat videos in class. Just do not giggle and pester other students to show what is on your device. Better yet, go have a coffee and bother people in Starbucks.

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.

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. This is especially important for submitting papers. 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 return e-mails within six hours (often sooner) except between Friday and Saturday evening when my response will be slower. Do not email me at 3:15am expecting a response by 3:30.

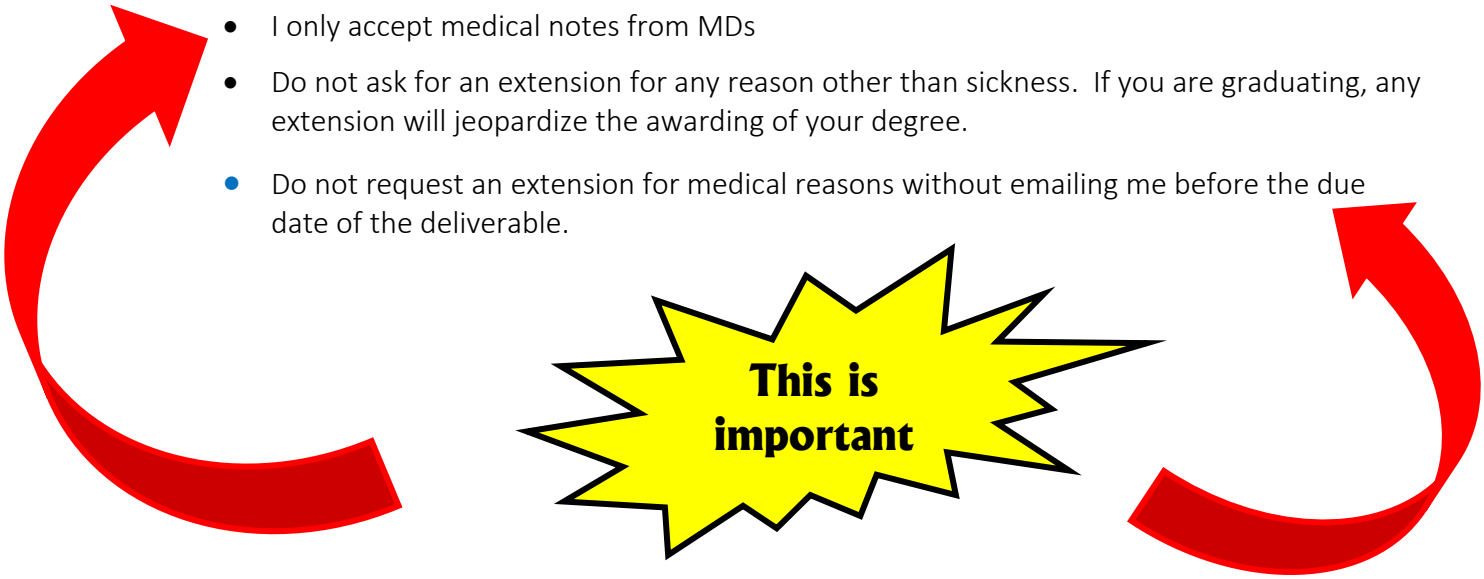
I do not respond to text messages or emails from non-university accounts.

My office hours appear at the start of this document. Please feel free to come at those times or email to arrange an appointment.

Deliverables

Due Dates: All work is due on the dates/times noted in the Learning Schedule. 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. Please note:

- I only accept medical notes from MDs
- Do not ask for an extension for any reason other than sickness. If you are graduating, any extension will jeopardize the awarding of your degree.
- Do not request an extension for medical reasons without emailing me before the due date of the deliverable.



Important information on the submission of written work

All deliverables papers must be submitted electronically via e-mail (gregory.mason@umanitioba.ca) and in WORD (.doc or .docx) and formatted according to APA style. 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 following subject lines. **I will not covert filenames into the proper format. I will not mark papers submitted through any non-University of Manitoba email.**

ECON4822 Deliverable 1 Draft_lastname_firstname.docx
ECON4822 Deliverable 1 Revised _lastname_firstname.docx
ECON4822 Deliverable 2 Draft_lastname_firstname.docx
ECON4822 Deliverable 2 Revised _lastname_firstname.docx
ECON4822 Deliverable 3 Draft_lastname_firstname.docx
ECON4822 Deliverable 3 Revised _lastname_firstname.docx
ECON4822 Deliverable 4 Final Paper_lastname_firstname.docx
ECON4822 Deliverable 1 Revised _lastname_firstname.docx

A note on the revision process.

The revision process is common in all work. Here it is also part of the coaching process and can lead to improved grades.

Students can expect to increase their grades on Deliverables 1 – 3 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. Do not just accept the suggested changes and resubmit expecting a higher grade.

The change in grade will depend on the nature of the revisions. For example, just making the changes I suggest, will result in lower grade increment, than if you make additional structural revisions based on general comments. Students can expect a letter grade increase from the revision process. It is unlikely that a deliverable can move from a "C" to an "A". Students that score an "A" are unlikely to move to an A+ based on my comments. 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.

Final Paper

If you have completed modules 1 – 3, the final paper will come together very easily. You simply concatenate the previous deliverables, add a brief introduction and outline, and then a conclusion responding to the three additional points:

- Conclusions on the questions poses
- Limitations of the analysis
- Directions for future research.

I am strict about length…being able to communicate clearly and succinctly is a valuable (and valued skill). I have placed learning videos on writing, developing clearly tables and graphs to make your work professional.

Learning Schedule (Fall 2019)

Module 1 – Defining/refining the question and setting the context (Literature Review)		
Week	Date	
1.	Sept 6, 2019	**Lecture – Course orientation**
		This is a general overview of the course and discussion of the potential research themes (see here)
2.	Sept 13, 2019	**Lecture – Refining your research question**
		We will examine several topics to generate specific questions. These topics will not be available for your own work in this course
3.	Sept 20, 2019	**Lecture/Workshop – What is a literature review?**
		Additional discussion on the variety of literature reviews/surveys including integrated reviews, meta-analyses, and annotated bibliographies
4.	Sept 27, 2019	**Workshop: Literature review refinement**
		Students may book 15 minutes between 9:00am and 1:30pm for one-on-one advice. Ideally, you should e-mail a point-form draft and come with specific questions. Try not to arrive with a general question about what topic to choose. I will send a Doodle
5.	Oct 4	**Presentation – 3 minutes/1 slide** (This class is mandatory and I will note attendance)
	Oct 4	**Deliverable 1 Draft Literature Review** (Due at midnight Oct 4)
	Oct 11	**Deliverable 1 Revised Literature Review** (No class on Oct 11)
Module 2 Data development and initial analysis		
6.	Oct 18	**Lecture – Review of data acquisition techniques**
		This lecture looks at a range of on-line sources and techniques for downloading
7.	Oct 25	**Lecture – Data cleaning in Excel**
		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
8.	Nov 1	**Workshop – Data development for your project**
		This session will allow to consult with me on methods to improve your data
9.	Nov 8	**Lecture – Conducting the preliminary analysis**
		Excel is an excellent tool to prepare effective preliminary data analysis.
10.	Nov 22	**Workshop – Finalize the data development**
		This is your opportunity to put the finishing touches on Deliverable2
11.	Nov 29	**Deliverable 2 – Draft Data Development, meta data and exploratory analysis** (Note you must submit your Excel worksheet (No class)
12.	Dec 6	Students may meet with me 9:00am – 1:30pm to review how to improve this deliverable
	Dec 13	**Deliverable 2 Revised Data Development, Meta-data and exploratory analysis**
Note: Students will have completed 40% of the course with Deliverable 2		

Learning Schedule (Winter 2020)		
Module 3 Answering the questions using statistical and other research techniques		
13	Jan 3	**Lecture –Stata 1 (Inputting data and basic data transformation)**
		This will review and extend the on-line learning materials
14	Jan 10	**Lecture –Stata 2 (Creating a DO file, documenting your work, and graphs)**
		This will review and extend the on-line learning materials
15	Jan 17	**Lecture – Stata 3 (Regression modelling)**
		This will review and extend the on-line learning materials
16	Jan 24	**Lecture – Using Excel for multivariate analysis**
		This will review and extend the on-line learning materials
17	Jan 31	**Workshop – Analysis of your data**
		Students will have the opportunity to work on their projects with assistance from the instructor
18	Feb 7	**Workshop – Analysis of your data**
		Students will have the opportunity to work on their projects with assistance from the instructor
19	Feb 14	**No Class**
	Feb 28	**Workshop – Analysis of your data**
		Students will have the opportunity to work on their projects with assistance from the instructor
20	March 6	**Deliverable 3 Draft Statistical Analysis** (You must also submit your Stata program, data or Excel worksheet) (No Class)
	Mar 13	**Deliverable 3 Revised Statistical Analysis (No Class)**
Module 4 Final paper		
21	Mar 23	**Workshop** Students may meet with me 9:00am – 1:30pm to review their final paper
22	Mar 30	**Workshop** Students may meet with me 9:00am – 1:30pm to review their final paper
23	April 10	**Deliverable 4 Final paper**

The Fine Print

Student Accessibility Services (SAS) *http://umanitoba.ca/student/accessibility/index.html*

If you are a student with a disability, please contact SAS for academic accommodation supports and services such as note-taking, interpreting, assistive technology and presentation accommodations. Students who have, or think they may have, a disability (e.g. mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

520 University Centre
204 474 7423

Communication

All communication between myself and you as a student and among students must comply with the electronic communication with student policy

(http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html). You are required to obtain and use your U of M email account for all communication between yourself and the university and with me.

Monitor your e-mail daily as this, and UMLearn, are the only mechanism for announcements about the course.

Academic Integrity

Academic integrity

Each student must read and understand university regulations regarding academic integrity as described in the General Calendar.

- Plagiarism and Cheating

Claims that these regulations were not understood will not be accepted.

By enrolling in this course, students warrant that ***all*** work they submit represents their own personal efforts.

Potential Topics