Preamble
This course outline is a contract between the student (you) and the instructor (me), and can only be overridden by explicit policies of either MRU or the Department of Economics, Justice, and Policy Studies. By remaining registered in this course, you signify that you have read, understand, and agree with each and every one of the policies, requirements, and expectations below. Under no circumstances will I accept “I didn’t know” or “I was too busy” as an excuse for breaking this contract. In return, I agree to fully honour all expectations that this outline explicitly sets for me.

Course Objectives
This course focuses on empirical methods that can be used to examine economic and political decision making. The primary objectives of this course are first, to provide students with an understanding of the basic statistical techniques in these fields, followed by guidance on how to apply these techniques to actual Canadian public policies. Students will also be given the opportunity to develop their research and writing skills, as well as critical thinking and group interaction skills with a major group project.

Prerequisites: ECON 1101, ECON 1103, PLSC 1101, and POST 2201

University Learning Outcomes
MRU endeavours to improve students’ competencies in the following four areas: intellectual and practical skills; integrative and applied learning; knowledge of human cultures and the physical, natural and technological world; and personal and social responsibility. It is expected that each course a student takes at MRU will develop at least one of these competencies. It is not intended that all competencies should be included in each course. Building upon this principle, each program – by combining a carefully integrated sequence of appropriate courses – will ensure that upon completion, the student will have had access to the desired level of competency in all the specified areas. For this course, I will focus on all four of these areas.
Required Readings (Available for Free and Legal Download on Blackboard)

Please note that my lectures include important material that is not covered in any single textbook, as I have created my lecture notes using multiple sources. This is one reason why an interactive in-class environment is very valuable for both you and me. Nonetheless, I recognize that it is beneficial to read some background material prior to lectures in order to be more prepared for these lectures. Therefore, I have written my own Background Notes for this class that will be provided free-of-charge on this course’s Blackboard site.

Other Readings (Available on Reserve in the MRU Library)
If you read the Background Notes provided on Blackboard and study the material provided in the lectures for this course, you will have all that you need to earn an A+ in this class. Nonetheless, one might wish to study material in the following textbooks that I have found to be very useful when creating my lecture notes. They are therefore available on reserve in the MRU library:


Course Evaluation and Exam Schedule

<table>
<thead>
<tr>
<th>Component</th>
<th>Due Date (Time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz #1</td>
<td>January 23 (12:30PM)</td>
</tr>
<tr>
<td>Quiz #2</td>
<td>February 8 (12:30PM)</td>
</tr>
<tr>
<td>Quiz #3</td>
<td>March 6 (12:30PM)</td>
</tr>
<tr>
<td>Quiz #4</td>
<td>March 22 (12:30PM)</td>
</tr>
<tr>
<td>Quiz #5</td>
<td>April 5 (12:30PM)</td>
</tr>
<tr>
<td>Take-Home Assignment</td>
<td>April 7 (6:00PM)</td>
</tr>
<tr>
<td>Group Project: Proposal</td>
<td>January 30 (12:30PM)</td>
</tr>
<tr>
<td>Group Project: Literature Review</td>
<td>March 1 (12:30PM)</td>
</tr>
<tr>
<td>Group Project: Paper</td>
<td>April 12 (6:00PM)</td>
</tr>
<tr>
<td>Final Exam</td>
<td>TBA</td>
</tr>
</tbody>
</table>
The following table contains three grading schemes. Each student’s final grade will be calculated for each scheme, and the actual grade awarded will be the highest of those three grades (subject to the conditions explained in the notes below).

<table>
<thead>
<tr>
<th>Component</th>
<th>Grading Scheme #1</th>
<th>Grading Scheme #2</th>
<th>Grading Scheme #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>Best 4/5 @ 10% each</td>
<td>Best 2/5 @ 10% each</td>
<td>Best 4/5 @ 15% each</td>
</tr>
<tr>
<td>Assignment</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Project: Proposal</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Project: Lit Review</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Project: Final Paper</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
<td>40%</td>
<td>0%</td>
</tr>
</tbody>
</table>

NOTES:

- Grading Scheme #3 only applies to students who write all five quizzes either on or before the scheduled days/times, and also earn a minimum average grade of 60% on those quizzes.

- To pass this course under the first two grading schemes, you must receive an unweighted average grade of 50% across all five quizzes and the final exam. The intent of this policy is to ensure that no one passes the course only due to good grades on the group work.

- If a student arrives to a quiz or exam late, they will not be given extra time and they will not be given any leniency when marking it.

- “Should a student write an examination, hand in the paper for marking, and later report extenuating circumstances to support the request for cancellation of the paper or examination, such requests will not be considered” (Mount Royal University 2016-2017 Academic Calendar, page 33). I will enforce this policy for all course requirements.

- The final exam will cover all material taught during the entire course.

- I will be happy to review a maximum of two drafts of each group’s term paper, as long as it is e-mailed to me no later than 6:00PM on April 10, 2016.

Note that according to MRU academic regulations, these weightings “may not be changed during the semester or at the time of final grade reporting.” (MRU 2016-2017 Academic Calendar, p. 32, http://www.mtroyal.ca/cs/groups/public/documents/pdf/16-17academiccalendar.pdf). Thus, a grade of zero will be applied to any missed quiz, regardless of the reason for missing it.
On a related subject, if you do not do as well as you hoped on a course requirement I will not give you a supplemental assignment to increase your grade. To do so would defeat the purpose of testing students: to examine their abilities to retain and apply information without second chances. Even if I did believe in supplemental assignments, it would be unfair to give them to only some students, and I do not have time to create and grade extra-credit assignments for every student in the class.

For the quizzes and final exam, you are required to have your Mount Royal ID card. You may also bring pens and pencils, an eraser, a ruler, and a non-programmable (non-graphical) calculator. You are prohibited from using any electronic communications device during quizzes and exams.

The quizzes and final exam will contain only short-answer/problem-solving questions (3 questions for each quiz and 5 questions for the final exam). Each question will be worth 10 marks, and you might be required to draw graphs and make mathematical calculations. Regardless of potential requirements, all questions on every quiz and exam will require you to explain your answers step-by-step, as if I have no knowledge of the course material. Doing so will demonstrate that you know what you are doing, rather than memorizing jargon, graphs, and math.

Finally, electronic submissions of course requirements will never be graded. Furthermore, group-project requirements that are not submitted by their exact deadlines will receive grades of zero, unless a legitimate reason for non-submission is provided to me; whether a reason is considered “legitimate” will be solely determined by me, so any reason that is foreseeable and/or avoidable (e.g., being stuck in traffic, requirements for other courses, extra-curricular activities, employment, personal commitments) will not be accepted.

**Grading Policy**
Each course requirement will be marked and averaged on a 100-point scale. The percentage mark obtained will then be converted to letter grades based on the following conversion system.

<table>
<thead>
<tr>
<th>Percent</th>
<th>Alpha Grade</th>
<th>4-point Scale</th>
<th>Percent</th>
<th>Alpha Grade</th>
<th>4-point Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>95-100</td>
<td>A+</td>
<td>4.0</td>
<td>67-69</td>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>85-94</td>
<td>A</td>
<td>4.0</td>
<td>63-66</td>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>80-84</td>
<td>A-</td>
<td>3.7</td>
<td>60-62</td>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>77-79</td>
<td>B+</td>
<td>3.3</td>
<td>55-59</td>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>73-76</td>
<td>B</td>
<td>3.0</td>
<td>50-54</td>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>70-72</td>
<td>B-</td>
<td>2.7</td>
<td>0-49</td>
<td>F</td>
<td>0.0</td>
</tr>
</tbody>
</table>

When you get your final grade, do not ask me to “bump it up” to the next level, no matter how close you are to that next level. To adjust grades based on “closeness” would make my grading policy subjective and biased, and therefore compromise my integrity as an educator.
Teaching Method
In my experience, students have given me conflicting advice relating to my teaching methods: some want to write notes regularly during the lecture because it helps them to learn the material, while others feel that they learn better if they just listen. From my own experience as a student, I agree to some degree with both sides of the debate, so I want to create a balance between them.

Therefore, I will post PowerPoint lecture notes on Blackboard prior to each class (in addition to the Background Notes cited on page 2 of this syllabus). However, these notes will be incomplete, so you will need to come to class to get the information that is most relevant for the quizzes, exam, and assignment. Specifically, my PowerPoint notes will not include the graphs, summary tables, and very specific methodologies that I expect you to use when answering questions on the quizzes, exam, and assignment. This missing material is often not in the Background Notes provided on Blackboard, so if you ONLY understand the Background Notes then you can still fail the course.

Moreover, I will not give you time to write down notes that are already available online, so bring them to class with you. I will instead use a problem-solving approach to teach you what you need to know: I will provide a brief overview of the online material that will be complemented with “real world” examples. Of course, I will also answer any questions regarding this material. However, the majority of the class sessions will be spent interactively working through problems that are relevant for the quizzes, exam, and assignment, and the answers to these problems will not be provided online. In the Background Notes, I will also recommend online articles and blogs posts to read before class so that we can have more informed discussions during class.

Attendance and Expected Class Conduct
The purpose of a post-secondary education is to prepare students for careers in the “real world”. Thus, I will treat you like trainees in the workforce: I will give you extra attention to teach you what you need to know to do your job in this course. However, I will expect you to take some responsibility, too (and I also hold myself to strict minimum standards).

Thus, I strongly recommend that you attend all lectures. You might feel that you learn better on your own, but I respectfully disagree. I believe that no one can learn everything necessary from a single user manual (e.g., textbook), which is also true in the workplace. In your future professional careers and your current academic careers, you will be expected to “learn on the job” by interacting with both your superiors (e.g., professor, your boss) and your peers (e.g., fellow students and co-workers). Thus, an advantage of not “regurgitating” a textbook in class is that I provide a different perspective on the course material, which can help you to more fully understand this material.

While I do understand that missing a lecture (in whole or in part) is occasionally unavoidable and excusable, employers will not look kindly on frequent absences and late arrivals, and neither will I. You are also expected to arrive to class on time, to stay awake during class, to turn off your phone, and to not leave early. In short, treat this class like your workplace, and the lectures as workplace meetings. This is not a correspondence course.
I also expect that you will take notes in class, just as you will be expected to take notes during professional meetings. Not everything that is testable is in a textbook or in the material provided on Blackboard. I realize that some people feel that they learn better if they just listen, which is why I reduce the amount of notes that need to be taken in class. However, similar to employers I will not look kindly on you if you sit back with your arms folded during the entire lecture, and then ask me later to repeat everything that you chose not to write down.

Please ask questions in class whenever you do not understand something that I am teaching; this will not only help you, but it will also help me to improve my teaching abilities (another reason why I care about regular class attendance). Remember that aside from the material that will be posted on Blackboard, I will not provide lecture notes, either in whole or in part, to students who miss lectures for any reason whatsoever. I will also not allow anyone to copy my lecture notes from my office computer. Thus, it is your responsibility to obtain missed notes from a classmate. I will strictly enforce this policy, even if someone has a legitimate reason for missing a class, because I cannot prevent them from forwarding these notes to “free-riders” (students who skip class without a legitimate reason, and then unfairly benefit from the efforts of others).

However, please note that due to time constraints, if the answer to your question in class is not critical to anyone’s level of performance in the course, I might ask you to wait until another time to answer it (i.e., after class or during office hours). In general, I will be more than happy to answer any questions related to the course, whether it is inside or outside of class.

Since I encourage questions both inside and outside class, please do not talk with one another while I am lecturing. This is not only rude to me, but it is also distracting to other students. For the same reasons, please strive to arrive to class on time (and remain in class until the end of the lecture) so that you do not distract anyone with your movements. If arriving to class late (or leaving early) is unavoidable, try to sit near a door to minimize disruptions, and warn me in advance when possible.

Finally, turn off all electronic devices (except laptops) before class begins. If you do have a legitimate reason for leaving your phone turned on during the lecture (e.g., a family emergency), please warn me about this need in advance, put your cell phone on vibrate mode, and sit near the door to minimize disruptions if you do leave the room. Note that I do allow laptops to be used in class for POST 2209 course-related purposes only.
Accommodations in this Course for Students with Accessibility Issues

Students requiring accommodations due to issues affecting mobility, vision, hearing, learning, or mental or physical health are advised to discuss their needs with Accessibility Services (http://www.mtroyal.ca/AcademicSupport/ResourcesServices/AccessibilityServices/index.htm), either in person at Y201, by phone at 403-440-6868, or by e-mail at accessibility@mtroyal.ca.

As explained in the previous section, NO ONE will be provided my full lecture notes, even if I am given a letter from Accessibility Services requesting them. Thus, if you have problems taking notes due to an accessibility issue then please negotiate an agreement with a classmate to obtain their notes, or hire a note-taker (and still attend class either way). Reasons for this policy include:

1. I do not record all of my notes either before or during class. Much of the material that is covered in class comes either from my memory or from in-class discussions; I type some of these notes into my slides during lectures, but they are incomplete as I want students to practice taking notes while listening to someone speak (as one does in the workplace).

2. The notes that are pre-recorded, but which are not posted online, are cryptic since I only record keywords to “jog my memory” during lectures. No one else will understand them.

3. Most of my pre-recorded notes that are not provided online consist of answers to practice problems that we will solve together in class; to distribute these answers prior to class would defeat the purpose of working through these problems together during lectures.

Other Important Mount Royal University Policies Not Addressed in This Outline

You are expected to become familiar with the policies of Mount Royal University, which include, but are not limited to, standards regarding academic honesty, and to uphold the policies of MRU in this respect. You are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (see www.mtroyal.ca/CampusServices/CampusResources/StudentConduct) and avoid any behaviour that could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from Mount Royal University.
Topics to Be Covered in the Course
The following lecture schedule is tentative; it may change as the course progresses, and as expectations are revised. Updates to this schedule will be provided in class only. Also, please remember that my lectures include material that is not found in any textbook, nor is it provided on Blackboard. Thus, the Background Notes and optional textbooks listed on page 2 of this outline are complements (not substitutes) for coming to class.

Also, please note that the chapters identified below for each section refer to the Archer and Berdahl (2015) textbook recommended on page 2 of this syllabus, in case you wish to read it.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Chapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting Research in the Social Sciences</td>
<td></td>
</tr>
<tr>
<td>1. The Scientific Method and the Issue of Causality</td>
<td>1-3</td>
</tr>
<tr>
<td>2. Defining the Economic and Political Worlds: Concepts and Measures</td>
<td>4-5</td>
</tr>
<tr>
<td>3. Research Ethics: People Behind the Numbers</td>
<td>6</td>
</tr>
<tr>
<td>Research Design</td>
<td></td>
</tr>
<tr>
<td>4. Small-n Research: Case Studies and Comparative Approaches</td>
<td>7</td>
</tr>
<tr>
<td>5. Sample Selection and Probability Theory</td>
<td>8</td>
</tr>
<tr>
<td>6. Data Sources</td>
<td>9-12</td>
</tr>
<tr>
<td>Data Analysis</td>
<td></td>
</tr>
<tr>
<td>7. Describing the Political and Economic Worlds: Univariate Statistics</td>
<td>14</td>
</tr>
<tr>
<td>8. Assessing the Political and Economic Worlds: Inferential Statistics</td>
<td>15</td>
</tr>
<tr>
<td>9. Explaining the Political and Economic Worlds: Measures of Association</td>
<td>16</td>
</tr>
</tbody>
</table>

Other Important Dates
First day of classes: January 5
Last day to adjust registration (Add/Drop) with full tuition refund (less deposit): January 13
Last day to withdraw from a course with a “W” grade: March 17
Last day of classes: April 12
Final exam period: April 18-28

Family Day Holiday and Reading Break: February 20-24
Good Friday and Easter Monday Holidays: April 14 and 17

Library Orientation Sessions: January 25 and March 8 (MRU Library Classroom)
*POST 2209 class cancelled* to focus on group projects: April 10-12
Group Project: Project Guidelines

In groups of three students (four if the total number of students in the class is not divisible by three), you are required to apply what you learned in this class, as well as conduct additional independent research to critically examine an important Canadian public policy issue (see pp. 10-11 for examples). I urge you to start thinking about your topic immediately, and to talk with me about this topic outside of class. This will help to ensure that you remain on the right track from the beginning of the course, rather than being surprised after I grade your proposal.

Only one copy of the paper is required to be submitted to me, but I will keep it for my files. My evaluations of your proposal, literature review and paper will be type-written using evaluation criteria on pp. 13-18 of this course outline. Also, I will NOT accept papers submitted by e-mail, primarily because there is a risk that the e-mail will not arrive to me (as has occurred in the past).

The paper should be 18-20 typewritten pages in length (8.5” x 11” sized pages, double-spaced, 1” margins on all four sides), excluding bibliography and title page, both of which are required. This 18-20 page length also excludes graphs, tables, charts, pictures and appendices. Marks will be deducted for papers that are inconsistent with these guidelines. Furthermore, 10% of the total grade of the paper will be given for style and structure, which includes spelling, grammar, and the general format of the paper. The title page should include the title of your paper, as well as your name and student number, the course number and title, and the submission date.

With respect to how to cite other people’s work and to write bibliographies, you are more than welcome to come to me with questions. You are also encouraged to make an appointment with a Writing and Learning Strategist in Student Learning Services, located at T123 (403-440-6452, sls@mtroyal.ca). More information can be found at http://www.mtroyal.ca/Library/Research/CiteSources/index.htm. You may use any official citation format, as long as you are consistent.

Mount Royal librarians can also be helpful with other areas of research assistance, such as how to efficiently find relevant sources (see http://www.mtroyal.ca/Library/Research/index.htm). The Subject Specialist in Economics and Policy Studies is Janet Monteith (403-440-6137).

As stated above in the section “Other Important Mount Royal Policies”, plagiarism can result in suspension or expulsion from MRU. Thus, cite all sources from which you borrowed your ideas. If you are unsure whether a source should be cited, then follow the “better-safe-than-sorry” guideline and cite it. Useful sources are books and peer-reviewed journal articles, as well as the official web sites of governments and agencies (e.g., Statistics Canada).

Note that while you are required to conduct a thorough critical review of the relevant literature, this does not necessarily mean you must cite every source that you can find. For example, if you find an important idea in a paper by Jane Doe, but you learned of her paper by reading John Doe’s paper, then you only need to cite Jane Doe. For more detailed guidance on what to cite in papers, see http://robjhyndman.com/hyndsight/what-to-cite/.

Finally, Wikipedia and blog entries are not valid references. You are encouraged to use these sources to find information on your topic, but you must verify this information using reliable sources, and only cite these sources. Marks will be deducted if you cite Wikipedia or blogs.
Group Project: Potential Topics
The following topics are suggestions only; you are welcome to come up with your own topics. Also, you do not necessarily need to answer every question that I ask in a topic. Therefore, more than one student might focus on the same general topic, but ask different questions. You are also encouraged to think of additional questions for your topic, as the ones below are only provided to motivate your research. In short, be creative.

I have also included links to research papers that might help you when deciding what you want to accomplish in this paper. I have also cited blog posts, not because they are valid references for academic papers (they are not valid references), but because there are some interesting arguments and references provided in these posts that might help you with your own papers.

Note that the peer-reviewed journal articles might only be available for free download if you are using a computer on the MRU campus. Also remember that this is a Policy Studies course, so you are expected to focus on the economic and political issues of your topic.

1. You could examine environmental policies from the perspective of a policy analyst. For example, do current Canadian environmental policies stand up to economic scrutiny (e.g., do they effectively deal with the negative externalities of pollution)? How do (and should) Canada’s environmental policies compare (or not compare) to the Kyoto Protocol?

2. You could instead write a paper on certain taxation policies. For example, are alcohol and/or tobacco taxes too high? Too low?
3. Education is considered by economists to be a positive externality because one person’s education can benefit many other people in terms of economic growth, etc. In this respect, should Canada subsidize tuitions more or less than is currently the case? Alternatively, you could focus on the pros and cons of early childhood education.


4. You might want to critically assess Canada’s healthcare system relative to other healthcare systems around the world. Could Canada’s healthcare system be made more efficient? Would a two-tiered healthcare system be economically wise? If so, could such a system be politically realistic? What about health policies surrounding obesity, tobacco consumption, and alcohol abuse? What about the link between inequality and health?


5. Other topics could address important Canadian policy issues such as our pension system, the social welfare system, Employment Insurance (EI), and “social inclusion”.

Group Project: Potentially Useful Internet Sources


Bank of Canada: [http://www.bankofcanada.ca](http://www.bankofcanada.ca)
B.C. Government Data: [http://www.data.gov.bc.ca/](http://www.data.gov.bc.ca/)
CHASS Data Centre, Faculty of Arts and Science, U of T: [http://dc1.chass.utoronto.ca/cansimts/](http://dc1.chass.utoronto.ca/cansimts/)


Alberta Education: [http://education.alberta.ca/](http://education.alberta.ca/)
B.C. Ministry of Education: [http://www.gov.bc.ca/bced/](http://www.gov.bc.ca/bced/)

B.C. Ministry of Health Services: [http://www.gov.bc.ca/health/](http://www.gov.bc.ca/health/)
Saskatchewan Ministry of Health: [https://www.saskatchewan.ca/government/government-structure/ministries/health](https://www.saskatchewan.ca/government/government-structure/ministries/health)

Canada Pension Plan Investment Board: [http://www.cppib.ca/](http://www.cppib.ca/)
Employment and Social Development Canada: [http://www.esdc.gc.ca/](http://www.esdc.gc.ca/)
Fisheries and Oceans Canada: [http://www.dfo-mpo.gc.ca/](http://www.dfo-mpo.gc.ca/)

Group Project: Evaluation Criteria for Term Paper Proposal

The purpose of the proposal is to provide a concise overview of how your paper will be written, as well as why your topic is relevant for a critical assessment. It should be at least two 8.5” x 11” sized pages, double-spaced, with 1” margins on all four sides, and a 12-point Times New Roman font. I also want each group to focus on a different topic to ensure that each group independently on them. Thus, if I read multiple proposals that are too similar then I will suggest modifications so that each group has a different focus on that topic. The basic components are:

1. **Members of Your Group and Division of Responsibilities**
   
   How do you intend to divide responsibilities equally among each specific group member?

2. **Motivation for Your Empirical Policy Analysis**
   
   Briefly explain what public policy issue you are tackling, and why it is interesting from a policy perspective (economic and political). For example, topics focused on public healthcare systems are interesting economically since one could examine whether the system of one country/province is more economically efficient than a system in another jurisdiction. They are also interesting from the political and policy perspectives because public provision of healthcare services has important implications for equity, which is difficult to measure economically. Therefore, a critical empirical analysis could provide guidance on how governments can design their healthcare systems to deal with the efficiency-equity tradeoff in an attempt to maximize the welfare of their citizens.

   This is something that researchers must do when writing grant proposals, for example: we have to put a lot of work into convincing grant reviewers that our research is worth conducting, and that our research is more important than other research. We obviously feel that our research is interesting because we would otherwise not even attempt it, but the readers of our proposals often have to rank many competing proposals, so we have to really “sell” it to them.

3. **Tentative Outline for Paper**
   
   Next, you need to discuss how your critical analysis is expected to proceed, section by section. A very general example is as follows: Section 1 will provide an introduction/motivation to the paper; Sections 2 and 3 will review the theoretical and empirical literatures, respectively; Section 4 will discuss issues that have not been adequately addressed in the literature; Section 5 will contain an independent data analysis based on the literature and its drawbacks; and Section 6 will conclude. Keep in mind that you will need to expand on this example, such as providing some indication of which theories will be reviewed, and how they have been tested.

   To be clear, at this point you do not need to discuss every relevant source out there. However, you should already have a few key references that you can summarize in this outline, in order to show me that this topic is an important one to critically review in your group project.

4. **Key References**
   
   As stated above, you do not need to list every reference that you will use. Just provide some key references (some of which must be peer-reviewed) that will demonstrate the importance of your topic. Also, remember to explain clearly in your proposal how each citation specifically fits with your tentative outline (so do not just give me a list of references with no context). Finally, remember to use a valid citation format guideline (see page 9 of this outline).
Group Project: Evaluation Criteria for Literature Review

The point of a literature review is to summarize all of the important academic articles and non-academic studies that have been published in the past by other authors, and which relate directly to the topic that you have chosen to study for your project. For an example of a literature review, please see my publication from *The Energy Journal*, which is in the “Group Projects” folder on Blackboard. Once you have completed this review, I will provide detailed recommendations to you so that you can improve it, and then include it as the literature review in your final paper.

For more details on my expectations for this review, please see the grading rubric below, as well as the additional information provided on pages 15-16 of this course outline.

1. **Style and Structure (/10)**
   a. Spelling, grammar, and flow of ideas
   b. Delineation of paper into sections (e.g., Introduction, Summary Remarks, etc.)
   c. Brief sections for Introduction and Summary Remarks (approx. 1 page total)
   d. Length (6-7 pages, not including bibliography, title page, graphs, tables, etc.)
   e. Format (8.5” x 11” pages, double-spaced, 1” margins, 12-pt Times New Roman)
   f. Bibliography and title page
   g. Page numbers

2. **Theoretical Literature (/45, approx. 3 pages)**
   a. Are all of the relevant theories identified and discussed?
   b. Are the differences between the theories clear?
   c. What are the drawbacks/limitations of each theory?
   d. Are the sources of theoretical arguments appropriately cited?
   e. Please do not cite my class notes
   f. Please see page 15 of this course outline for more detailed expectations

3. **Empirical Literature (/45, approx. 3 pages)**
   a. Is all of the relevant empirical literature identified and discussed?
   b. Are the majority of your empirical references peer-reviewed?
   c. What data are used in each study (frequency, aggregation, size of data set, etc.)?
   d. Limitations of data and/or focus of each empirical study
   e. Are sources of empirical findings appropriately cited?
   f. Please do not cite my class notes
   g. Please see page 16 of this course outline for more detailed expectations
Group Project: More Information Regarding Theoretical Literature Review

My most significant recommendation for this part of your paper is that all theories should be tied together, and their concepts and hypotheses identified so that we can get one key hypothesis and set of concepts in the end. Thus, I recommend that you summarize each theory very briefly in a single section, and make sure that you answer the following questions:

1. **What assumptions are made in the theory?** For example, in my *Energy Journal* paper (available on Blackboard), I wrote that the Maskin and Tirole (1988) theory assumed that the market was a duopoly, that firms were engaged in an alternating moves game, that firms were identical to one another, that the game involved repeated interaction, that marginal cost was constant, and that the lowest-priced firm would serve all customers in the market (so the higher-priced firm would have zero demand for itself).

2. **What are the predictions?** For example, in my *Energy Journal* paper I wrote that the Maskin and Tirole (1988) theory predicted that firms would continuously undercut one another’s price by the smallest increment (one unit) until they reached marginal cost. Then they would engage in a war of attrition until one of them set their price one unit above the monopoly price, after which the other would undercut that price by one unit. The game would then be repeated.

3. **How does this theory differ from previously-summarized theories?** Obviously, you cannot answer this question for the first theory, so try to start out with the most basic theory first. In my *Energy Journal* paper, all other theories were extensions of Maskin and Tirole (1988), so I summarized that theory first.

As you can see in my *Energy Journal* paper, if a theory merely extends a previously-summarized theory, then you do not need to repeat all of the common assumptions. For example, when I summarized Eckert (2003) I wrote that he made all of the same assumptions as Maskin and Tirole (1988) with one exception: he made the firms differ in size. That avoidance of duplication saved me a lot of space.

After you summarize all of your theories, then you can clearly state your null and alternative hypotheses, and clearly define your dependent and independent concepts. Then you can move on to the empirical part of the literature review.
Group Project: More Information Regarding Empirical Literature Review

Once again, I recommend that you look at my Energy Journal paper on Blackboard for guidance on how to summarize studies briefly but completely. In general, please answer eight questions:

1. **What kind of data do they use?** For example, there can be price data, income data, healthcare expenditure data, etc.

2. **Where do they get their data?** Do they use survey data, government data, focus group data, experimental data, observational data, elite interview data, or content analysis data? However they obtained their data, you need to explain where they got them and the data collection method.

3. **What is the aggregation of the data?** For example, are the data aggregated by country, region, province, or city/town? Which provinces, countries, regions and towns?

4. **What is the frequency of the data?** For example, were the data collected annually, quarterly, monthly, or according to some other frequency?

5. **What is the size of the data set?** For example, a survey could have been completed by 998 individuals. Alternatively, if someone collected prices for 27 gasoline stations eight times per day for 131 days, then they would have $27 \times 8 \times 131 = 28,296$ price observations.

6. **What empirical techniques did they use?** For example, did they use simple summary statistics, like I did in my Energy Journal paper? Did they use econometric techniques? Or did they use other empirical techniques? Please provide details on these techniques.

7. **What are the findings of the study?** For example, in my Energy Journal paper I told the reader that Eckert (2003) found that large firms tend to lead price increases, and small firms tend to lead price decreases.

8. **How does this study relate to the relevant theory?** You should clarify how the studies specifically address your chosen theory, because otherwise they are not really very useful for your analysis.

After you summarize all of your empirical literature, then you can clearly summarize how it all relates to your null and alternative hypotheses, and to your dependent and independent concepts. Furthermore, explain to me which standard level of significance (1%, 5%, or 10%) you prefer to use in your statistical tests, based on your literature review; you must make this choice before collecting your data, and we will discuss how to make this choice in class.

To be clear, you do not need to explain where you will collect your own data as that should be put in your data analysis section. However, you should summarize for me what you learned throughout the literature review so that the reader has a preview of what is to come in the data analysis section.
Group Project: Evaluation Criteria for Final Term Paper

1. **Style and Structure (/10)**
   a. Spelling, grammar, and flow of ideas
   b. Delineation of paper into sections (e.g., Introduction, Conclusion, etc.)
   c. Length (18-20 pages, not including bibliography, title page, graphs, tables, etc.)
   d. Format (8.5” x 11” pages, double-spaced, 1” margins, 12-pt Times New Roman)
   e. Bibliography, title page, and page numbers

2. **Introduction/Motivation (/10, approx. 2 pages)**
   a. What is examined in this paper? In other words, what is your main question?
   b. Why is this topic interesting/important?
   c. How will you proceed to argue your thesis (i.e., answer your main question)?
   d. What are your overall conclusions?

3. **Theoretical Literature (/15, approx. 3 pages)**
   a. Are all of the relevant theories identified and discussed?
   b. Are the differences between the theories clear?
   c. What are the drawbacks/limitations of each theory?
   d. Are the sources of theoretical arguments appropriately cited?
   e. Please do not cite my class notes

4. **Empirical Literature (/15, approx. 3 pages)**
   a. Is all of the relevant empirical literature identified and discussed?
   b. Are the majority of your empirical references peer-reviewed?
   c. What data are used in each study (frequency, aggregation, size of data set, etc.)?
   d. Limitations of data and/or focus of each empirical study
   e. Are sources of empirical findings appropriately cited?
   f. Please do not cite my class notes

5. **Independent Data Analysis (/30, approx. 6-7 pages)**
   a. What data do you use (frequency, aggregation, size of data set, etc.)?
   b. What are the sources of your data (e.g., government, survey, elite interview)?
   c. What are the limitations of your data? How could they distort your conclusions?
   d. What empirical techniques do you use? Why? Interpret your results contextually
   e. Please do not cite my class notes
   f. Please e-mail me an Excel file containing *all* of your data and data analyses

6. **Independent Thought/Critique & Policy Recommendations (/20, approx. 4-5 pages)**
   a. Which theories/empirical results are most convincing to you? Why?
   b. How might the theory be extended to make more appropriate predictions?
   c. How might the existing theories be more appropriately tested empirically?
   d. Other areas of future research? Policy recommendations?
Group Project: Peer-Evaluation Questions

Every student is required to complete the following evaluation and give it to me personally (not by e-mail) no later than when the paper is submitted; anyone who does not submit an evaluation will get a grade of zero for the paper. I expect that each group member will contribute equally to the final paper. However, if these evaluations clearly indicate that one or more team members “shirked” their responsibilities, then the grades of these shirkers will be reduced accordingly.

To be absolutely clear, no one’s grade will be raised if one or more of their partners shirk their responsibilities to the team. The above grading rubrics have been designed so that every group member’s grade is based on the entire paper, even if they divided their responsibilities by sections. The purpose of a group project is to help students develop teamwork skills, so to grade students based solely on their own individual contribution would defeat that purpose. This policy is consistent with team projects in the real world: even when shirkers are punished for their lack of effort, the entire team suffers the negative consequences of such shirking.

A copy of this questionnaire (in Word format) is on Blackboard in the “Group Projects” folder.

**Full Name:**
**Date:**
**Topic:**
**Names of Other Group Members:**

1. How many cumulative hours did your group *as a whole* spend on the group project?

2. How many hours did you *personally* spend on the group project?

3. As a group member, what was your primary task?

4. How often did the group meet?

5. To the best of your knowledge, how much work did you *personally* do on the group project (as a percentage of the total group contribution)? Explain.

6. To the best of your knowledge, was there anyone in your group who did not participate fully in meeting the objectives of your group?

7. If your answer to Question 6 is “yes”, who is this person? How much work did this person do on the group project (as a percentage of the total group contribution)? Explain.

8. Any additional comments?

Signature: __________________________________________________