

QUEEN'S UNIVERSITY -- SCHOOL OF POLICY STUDIES

**MPA 838: Health Economics**

Winter 2018

Tuesdays 2:30 to 4:00 pm in **Room 334** (Robert Sutherland Hall)  
Wednesdays 10:00 to 11:20 am in **Room 334** (Robert Sutherland Hall)

**Instructor:** Steven Lehrer  
**Office:** Sutherland Hall 324  
**Telephone:** 613-533-6692 (office)

**Hours:** Monday, Wednesday 2:15 – 3:30pm  
and by appointment  
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**Course Description:** The purpose of this course is to extend students' understanding of economic theory and empirical research in key areas of health economics and enable students to leverage that knowledge and apply it to timely issues in health policy and management. My aim is not to indoctrinate you with hip ideas or rehash opinions based on personal passions or political correctness.

Health economics is an active field of microeconomics with a large and growing literature. In the course we will cover topics such as measurement and determinants of health, health disparities, unhealthy behaviors and health insurance. We will also be ambitious and consider how recent developments in several scientific fields ranging from neuroscience, genetics, biomedical engineering and epidemiology can be integrated in to economic models and policy design. The less ambitious goals of this course are twofold. One is to better understand the economic theory of health and healthcare. We will study several economic models in detail, including models of health, addiction, demand for healthcare and demand for insurance. The emphasis will be on key economic concepts that health economists use to analyze health and healthcare markets. The second goal of the class is to learn to evaluate and interpret empirical findings in health economics. We will read some of the papers in detail, spending a lot of time understanding the econometric models and the findings reported in those papers.

**Course Prerequisites:** Students are expected to be comfortable with basic statistics and microeconomics at an introductory level. Students are expected to be under take regression analysis with a computer package such as Microsoft Excel or SPSS or Stata. If you have any questions about these requirements, please see me.

**Website:** Additional information, lecture outlines, links to readings, the calendar/reading list, and other useful information about this class can be found on onQ.

**Objectives:** After completing this course, you will be able to:

- Explain and utilize the concepts of time value of money, cost, present value and discount.
- Improve critical thinking skills
- Improve your ability to synthesize evidence, and apply statistical financial, economic and cost-effectiveness tools/techniques in organizational analysis.
- Improve the ability to present convincingly to individuals and groups the evidence to support a point of view, position or recommendation.

- improve the ability to communicate and interact productively (via listening, speaking and writing) on matters of healthcare with a diverse and changing industry, work force and citizenry.
- Realize that learning economic analysis has many practical applications within health policy.

**Required Readings:** A reading list will appear on the course calendar. A copy of all the readings listed on the calendar in this syllabus will be placed on reserve at the library. You may be assigned additional readings dealing with topics covered in class. **Specifically assigned** supplementary readings are integral parts of the course, and therefore, exam questions dealing with those readings are **highly likely**.

In general, readings are assigned for each lecture period, and the material in these readings will be discussed in class. Please complete all readings prior to the class in which they will be discussed. The lectures will also cover material not included in the readings. To a large degree, the readings and lectures are not substitutes – they are chosen and designed to complement each other.

**Textbook:** Health Economics Authors Jay Bhattacharya, Peter Tu, Timothy Hyde Publisher Palgrave Macmillan, 2013 ISBN 113702996X, 9781137029966

**Supplementary Readings:** You may be assigned additional readings in the form of articles dealing with topics covered in class. **Specifically assigned** supplementary readings are integral parts of the course, and therefore, exam questions dealing with those readings are **highly likely**.

**Software:** In order to complete the assignments in this course and several others in the MPA program, you will need to apply spreadsheet and potentially econometric software to data. You are required to have your own license to use Stata to do so. Stata Corp. offers student discounts on the purchase of Stata through what is called GradPlan and also has shorter term licenses available at a discount at <https://www.stata.com/order/new/edu/gradplans/student-pricing/>. The “GradPlan” has been established for Queen’s and students could purchase Stata also online at the following link <https://www.stata.com/order/new/edu/gradplans/campus-gradplan/>.

The most recent release of Stata is version 15 and there are several different flavors of Stata: MP, SE, IC, Small. These different flavors vary by the number of variables and observations they are able to handle. I highly recommend that you buy at least Stata/IC since you will work with datasets that exceed the capabilities of Small Stata. Note the University does not provide access to Stata in any of its general computer labs.

**Grading:** This course is designed to be very rigorous and demanding. You are expected to work hard, actively participate in class, ask questions when you have any doubts, and perform to the very best of your ability. Although the material is challenging, the purpose of this course is to teach you something about program evaluation, not to destroy your GPA.

Grading will follow QSPS guidelines. The course grade will be computed using the following weights

Cost Benefit Exercise	12.5%
Class Participation/Attendance	10%
Assignments	15%

Presentation	12.5%
Final Exam	<u>50%</u>
Total	100%

**Exam:** The final exam will be cumulative and account for 50 percent of the course grade. Missing the exam without advance notice will result in a zero grade. As well, evidence of the calamity must be provided before as discussed below.

**Exam Policy:** During the exam students are allowed to use calculators, rulers, pens, pencils and erasers. No other materials will be permitted without prior permission from the instructor.

**On class participation:** Class discussion is important for both individual and collective learning. The quality of a student's participation is at least as important as the quantity, and the following points characterize effective participation: . Do comments draw on the text and materials from this and other courses? Do they show evidence of analysis? Does the student distinguish between positive and normative analysis? Does the student distinguish between opinion and well-supported analysis? . Are the points made substantive? Are they linked to the comments of others? Do they advance or deepen the discussion? Do they deepen the analysis? Do comments clarify and highlight the important aspects of earlier comments and lead to a clearer statement of the concepts being considered? Is there an attempt to synthesize the discussion?

**On assignments:** Assignments will be created and graded to ensure that each student can better assess their progress in the course.

**Class Presentation:** This assignment will enhance your experience at delivering a presentation to a lay audience. In this presentation, you will summarize a recent paper in the economics literature and relate it to a Canadian policy debate. You are limited to an eight slide Powerpoint or Beamer presentation. In a nutshell, your presentation should deal with the following questions

- 1) What question does it ask and why should this audience (or government department) care?
- 2) What data is used? What are the key variables?
- 3) What empirical model is used? What is the key parameter to be identified?
- 4) What is the variation in the *treatment*? Do you believe this variation?
- 5) What are the results and their interpretation?
- 6) Is there a plausible alternative interpretation?
- 7) How does the paper contribute to the literature?
- 8) Are there any insights for public policy?

My hope is that the presenter will make critical analytical comments as well as simply presenting the paper, and that other students will be prepared to discuss the article. In presentations, please avoid having to write out lots of equations in class and focus on the intuition underlying these equations. At times, I will provide brief background lectures on related literature. The presentation should last 10-12 minutes followed by a brief question period from the class. To enhance the efficiency of class presentations, each presenter is also expected to prepare a maximum two-page handout for distribution to the entire class. The handout should contain pertinent aspects of the formal presentation to ensure that the audience has a clear sense of the main message. Note, the exact number of presentations and how these will take place depends on the final enrollment.

**If you need help:** If you find that you are having difficulty with any of the material in this course:

(1) DO NOT let it build up. The material is very cumulative in nature and you are likely to find yourself only falling further behind.

(2) DO come and see me, either after class or by making an appointment. Be forewarned: I expect that you have read the appropriate sections of the textbook and reviewed your notes BEFORE you come to my office.

**Attendance and Lateness:** All students are expected to attend class regularly. Although attendance will not be taken each and every class, be warned that you are responsible for all material covered in class including that, which is not in the text. You are expected to make every effort to be on time to class. If for some reason you must be late, try not to disturb others while entering the classroom.

If you are unable to write the exam (i.e. if you are sick, personal issues, etc.), you must let me know BEFORE the exam time. If you cannot write the exam for some reason, do not sit down to write the exam. In the interest of fairness, you will be graded if you come into the exam room and see the exam. If you are attending a Queen's activity, you must provide me with notice at least two weeks prior to the exam date so that an equivalent make-up exam can be created.

**Academic Integrity:** Academic Integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility (see [www.academicintegrity.org](http://www.academicintegrity.org)). These values are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the Senate Report on Principles and Priorities <http://www.queensu.ca/secretariat/policies/senate/report-principlesand-priorities>).

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity. Information on academic integrity is available in the Graduate Studies Calendar ([http://www.queensu.ca/calendars/sgsr/Academic\\_Integrity\\_Policy.html](http://www.queensu.ca/calendars/sgsr/Academic_Integrity_Policy.html)). Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

**Disability Accommodations:** Queen's University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact Student Wellness Services (SWS) and register as early as possible. For more information, including important deadlines, please visit the Student Wellness website at: <http://www.queensu.ca/studentwellness/accessibility-services/>

**Teaching Style:** There are many ways to learn. And different styles are more effective for some students than others. Therefore, we will utilize several different approaches: straight lectures, Powerpoint slides, problem sets, and exam preparation.

**Accommodation after the fact:** Once a student has written an exam or submitted an assignment, they may not subsequently be granted accommodation such as being offered a second opportunity to write the exam or assignment or have it count for less than originally specified in the course syllabus (reweighted). Students who cannot perform to the best of their abilities due a serious, extenuating circumstance must inform their instructor before attempting an exam or completing a course to arrange appropriate accommodation.

**Receiving a grade below 70:** In the event of receiving a final grade between 60 and 69.5 in this course, the School of Policy Studies will allow the student to write a qualifying examination to assess if the students' knowledge of this field meet the minimum standard for the respective degree. Passing the qualification exam will result in receiving a passing grade of B- for the course. The qualifying exam is not a make-up exam. The qualifying exam must be written by May 31, 2018.

Receiving a grade below 60 will result in a course failure. In this case, students will be required to either repeat the course or take an approved substitute. Note that The School of Graduate Studies regulations require students to have no more than one course failure.

**Travel during exams:** According to university regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods as well as during any scheduled class times. Requests to write a make-up exam because of conflicting travel plans (e.g. flight bookings) or requests to miss an in class exam due to other plans will NOT be considered except under extraordinary circumstances. Students are advised to wait until the final exam schedules are posted before making any travel arrangements.

**Office Hours:** The office hours are tentatively set for Monday and Wednesday 2:15-3:30pm. If you have a class conflict, please email me so that we can come up with another mutually convenient slot. Please internalize externalities and avoid unscheduled visits to my office.

**References:** In general, I am happy to provide references for employers or write letters of reference for students who plan to attend graduate school. The strength of my recommendation remains positively correlated with your performance in my course. For job references, please email me with a heads up that a potential employer might call or email. Please also let me know if there are any skills of yours that I should highlight in my reply to them. Naturally, make sure that these claims are credible as my reputation is on the line. If you would like a letter of reference for graduate school please place an addressed and stamped enveloped in my mailbox along with a short note explaining what the reference is for and when it is due. Also attach a statement of purpose (if relevant) as well as a current CV. Please allow 3 weeks for the completion of letters.

## Tentative Calendar and Reading List

(Subject to Change)

Date	Topic	Assigned Reading
January 9	Course Introduction	Chapter 1
January 10	Demand for Health	Chapter 2
January 16	Health Care Production	Chapter 3
January 17	Health measurement, determinants and long run trends	
January 23	Cost Benefit Analysis	Chapter 14
January 24	Cost Effectiveness and Cost Utility Analysis	Chapter 14
January 30	Health and SES	Chapter 4
January 31	Moral Hazard 1	Chapter 7
February 6	Moral Hazard 2	Chapter 11
February 7	Adverse Selection in Health Insurance 1	Chapters 8 and 9
February 13	Adverse Selection in Health Insurance 2	Chapter 10
February 14	International Health Care Systems and Alternative Designs	Chapter 15-17
February 27	Unhealthy behavior: evidence and policy issues 1	
February 28	Marijuana Legalization	
March 6	Behavioral Economics of Health 1	Chapter 23
March 7	Behavioral Economics of Health 2	Chapter 24
March 13	The Opiod Epidemic	
March 14	Genetics	
March 20	Pharmaceuticals and Technological Innovation	Chapter 12 and 13
March 21	Externalities and public health	
March 27	Health and Development	
March 28	Equity Weights	
April 4	Market Design/Kidney Exchange	
April 5	Catch Up and Final Review	
Week of April 12 or 19	Final Exam	Location and time to be determined

Readings for lectures will be announced in week 2 and 3.