Instructor: Nicolas R. Ziebarth, Assistant Professor
Phone: (607) 255-1180
Office: 106 Martha Van Rensselaer Hall (MVR)
E-mail: nrz2@cornell.edu
Office Hours: Tuesday 4:00pm-5:30pm or by appointment

Teaching Assistants: Rong (Fiona) Huang (rh557@cornell.edu), Oude Gao (og65@cornell.edu), Katelynn Cole (kc855@cornell.edu), Delphine Huynh (dlh267@cornell.edu), Aastha Wadhwa (aw494@cornell.edu)

Office Hours (all in 3M28):
Fiona: Tuesday 3-5pm
Oude: Tuesday 1-3pm
Katie: Monday 11:30am-1:30pm
Delphine: Thursday 3-5pm
Aastha: Wednesday 1:30-3:30pm

Class Times: Tuesday & Thursday 10:10am-11:25am
Class Room: A106 Corson/Mudd Hall
Class webpage: http://blackboard.cornell.edu (after logging in, select PAM 3780)

Course Prerequisites

Required: One introductory statistics course (e.g. PAM 2100, 2101; AEM 2100; ECON 3190; ILRST 2100; MATH 1102; SOC 3010; STSCI 2100)

Course Description

This course is designed to make students familiar with comparative health care system analyses. Students learn about basic methodological tools to analyse and compare different health care systems using the example of the US. A unifying framework is presented that allows students to categorize health care systems and benchmark them against one another.

The first part of the course introduces comparative health care system analysis by studying the issue of rising health expenditures. Although the level of health expenditures is substantially higher in the US as compared to other countries, we observe almost exponentially rising health expenditures in all industrialized countries. The literature has identified various driving forces of rising health expenditures that are common to all industrialized countries. We will discuss these common driving forces in detail. Afterwards, US-specific driving forces are briefly discussed.
The next part of the course makes students more familiar with graphical, quantitative and qualitative methods that help to simplify the typically unique and complex structures of national health care systems. We will acquire these tools by analyzing a health care system that students might already be familiar with: the US health care system. Applying such a structural categorization to a familiar institutional system facilitates the learning process. Therefore, PAM 2350 (US Health Care System) is recommended as a pre-requisite, but not mandatory. However, the successful completion of an introduction to statistics course is mandatory.

Next we apply the methods and the framework acquired in the first parts of the course to other health care systems around the world. We will benchmark each non-US system with the performance of the US health care system and carve out reasons for performance differences. The focus will be on health care systems of developed countries. Developing countries are mostly discussed in PAM 4140 (Global Health Policy), taught by Hyunchol (Bryant) Kim. Simultaneously, students independently work on their own comparative research paper applying the methods learned in class (for more details, see below).

The first main non-US health care system analyzed has the oldest social health insurance system in the world: Germany—the most populous European country—with its universal multi-payer system. Chancellor Otto van Bismarck introduced a national social insurance in the 19th century through the Health Insurance Bill of 1883, the Accident Insurance Bill of 1884, and Old Age and Disability Insurance Bill of 1889. As for most health care systems in the world, the particularities of the German system are due to the fact that health care systems grow over time with an inherent path dependency based on culture, history and coincidence. In case of Germany this has led to a multi-payer two-tier system: 90 percent of the population are covered by a statutory health insurance system, while 10 percent are allowed to opt out of the public system. With the exception of Chile and the US, Germany is the only industrialized country with major coexisting public and private health insurance systems.

The second non-US health care system analyzed is Canada. Canada has a national single-payer health care system. Comparing Germany’s statutory multi-payer and Canada’s single-payer system to the US system allows students to understand systematic organizational differences in three major different health care systems with very different contrasting principles and underlying ideologies.

Next, we will study various Asian health care systems. In addition to a lecture on China, a guest lecture on South Korea, and a discussion of the Indian health care system, we will talk about Singapore. Singapore is a highly developed Asian city-state and is one the world’s leading financial centres. It is the third richest country in the world in terms GDP per capita (and purchasing power parities). At the same time, Singapore has a unique health care system that is claimed to be one of the most innovative and efficient universal health care systems worldwide. It is largely based on medical savings accounts in combination with a tight governmental regulation. The World Health Organization (WHO) (2000) ranked Singapore’s health care system #6 worldwide (US: #37).

In addition to the US health care system and the six other health care systems just listed, students will become familiar with health care systems which are researched for extra-credit team presentations. In the last years, students became familiar with many additional health care systems (Mexico, France, Taiwan, Indonesia, Vietnam,…) that were introduced in form of student team presentations.
Course Learning Objectives

- To use a unified framework to simplify, analyze, and evaluate health care systems (College of Human Ecology (CHE) undergraduate learning outcomes #1: comprehend disciplines and fields; #2: Think critically; #3: Apply multi-disciplinary perspectives; #4: innovate in research, design, or practice).

- To identify the basic organizational setups of the following health care systems with their various components and interactions: US, Germany, Canada, China, Singapore, UK, and others (CHE undergraduate learning outcomes #1: comprehend disciplines and fields; #2: Think critically; #3: Apply multi-disciplinary perspectives).

- To apply graphical, quantitative and qualitative tools to analyze health care systems (CHE undergraduate learning outcomes #1: comprehend disciplines and fields; #2: Think critically; #3: Apply multi-disciplinary perspectives).

- To apply statistical analysis to OECD indicators in order to benchmark the performance of health care systems. To be able to discuss the limitations, advantages and disadvantages of such statistical comparisons. (CHE undergraduate learning outcomes #1: comprehend disciplines and fields; #2: Think critically; #3: Apply multi-disciplinary perspectives; #4: innovate in research, design, or practice).

- To develop awareness of the challenges of political reform initiatives and why it is so difficult to fundamentally change existing health care systems. To be able to explain why most health care systems are unique and historically grown. (CHE undergraduate learning outcomes #1: comprehend disciplines and fields; #2: Think critically; #3: Apply multi-disciplinary perspectives; #7: Display commitment to ethical principles).

- To isolate objective arguments from value judgements and ideology. To assess why this is of particular importance when health care is involved (CHE undergraduate learning outcomes #2: Think critically; #7: Display commitment to ethical principles; #8 Direct own learning).

- To develop the ability to provide constructive critique and learn how to deal with constructive critique (CHE undergraduate learning outcomes #2: Think critically; #3: Apply multi-disciplinary perspectives; #5: Write, speak and use visual communications effectively; #6: Work effectively with others; #7: Display commitment to ethical principles; #8 Direct own learning).

- To acquire the ability to work effectively in teams (CHE undergraduate learning outcomes #2: Think critically; #3: Apply multi-disciplinary perspectives; #5: Write, speak and use visual communications effectively; #6: Work effectively with others; #7: Display commitment to ethical principles; #8 Direct own learning).

- To express arguments and ideas in a constructive, clear and concise manner (CHE undergraduate learning outcomes #2: Think critically; #3: Apply multi-disciplinary perspectives; #5: Write, speak and use visual communications effectively; #6: Work effectively with others; #7: Display commitment to ethical principles; #8 Direct own learning).
Grade assignments

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Grading scheme

Midterm exam: 25% (if score is worse than score in final exam; otherwise 40%)
Final exam: 40% (if score is better than score in midterm exam; otherwise 25%)
Home assignment: 25%
Extra credit team presentation (in groups of 5): up to 1% bonus
Class attendance: 5%
Unannounced quizzes: 5%
Participation: up to 1% bonus

Total: max 102%

Midterm exam (25% if score is worse than score in final exam; otherwise 40%):

The midterm exam covers the material discussed in class and assigned readings up to and including the class before the midterm exam. The exam includes multiple choice and short answer questions, calculations, as well as one essay.

The midterm exam will be a closed-book exam. Exams must be taken when scheduled and can only be made up with an excused absence pursuant to university rules. Students with documented learning disabilities or conflicts due to religious holidays should see me during the first two weeks of class.

Final exam (40% if score is better than score in midterm exam; otherwise 25%):

The final exam focuses on the material discussed in class and assigned readings since the midterm exam. However, an understanding of the major concepts discussed over the whole semester is required. The exam includes multiple choice and short answer questions, calculations, as well as one essay.

The final exam will be a closed-book exam. Exams must be taken when scheduled and can only be made up with an excused absence pursuant to university rules. Students with documented learning disabilities or conflicts due to religious holidays should see me during the first two weeks of class.

Home Assignment: Comparing Health Care Indicators (25%):  

The main objective of this assignment is to conduct your own comparative health care research. You have two months to carry your research out, which can be done in teams of two or alone (you do not get extra credit for doing it alone though). Submission deadline is Sunday, March 27th, 11:59pm (the Sunday before the Spring Break week). Please use the TA’s office hours (or mine) for feedback on your work and submit your final papers electronically via blackboard.
Here is what you should do:

(i) Go on the following OECD website that features health care system indicators:


(ii) Pick one indicator.

(iii) Compare this indicator across countries and over time for available countries and years. Generate 2-3 according neat statistical graphs of your choice with the software of your choice (e.g. a bar diagram in Excel). Format and label the axis and the figures accordingly!

(iv) Write a 4-5 page long paper that includes these graphs (1.5 spaced, font 11, 1 inch margins all around) and has the following structure and content:

- **Title**: Think about a catchy and meaningful title.

- **Background**: Briefly explain why you chose the indicator, why the indicator is important, and if you had any underlying hypotheses that could relate to this indicator (~0.5-1 pages).

- **Indicator**: Briefly describe how the indicator is constructed. What does the indicator intend to measure? Do you think that it actually measures what it should measure? What are the limitations of this indicator? What caveats should be kept in mind when interpreting the indicator across countries and over time? (1-1.5 pages)

- **Graphical Analysis**: Insert your graphs. Describe and interpret them. Write down two hypotheses for two particularly interesting observations that you make. Try to find literature or other data that might support or refute your hypotheses (~1-2 pages).

- **Conclusion**: Briefly summarize the findings of your comparative health care system research (~0.5 pages).

- **References**: List your references (~ 0.5 pages).

Note that the home assignment will be graded by the TAs under my supervision according to the following scheme.

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Title: 1 point
1. Background: 2 points
2. Indicator: 4 points
3. Graphical Analysis (total: 15 points)
   - Graph 1: 4 points
   - Graph 2: 4 points
   - Description of data: 3 points
   - 2 hypotheses for what we observe in data & possible explanations: 4 points
4. Conclusion: 1 point
5. References 1 point

Writing, layout: 1 point
Total: 25 points
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Examples of excellent completed home assignments from last year can be found on blackboard.
Extra Credit Team Presentation in Groups of Up to Four (up to 1% bonus):

This is a voluntary exercise for which students can earn bonus points up to 1% of the final grade. However, students have to team up with up to four other fellow students and let me know whether they would like to do an extra credit presentation before the midterm exam, i.e., before March 8th. Over the whole semester, there are four slots for extra credit team presentations. The team has to choose a health care system of their interest that is not covered by the general lecture. One health care system should only be covered once by a team presentation. First come, first serve. Please send Oude Gao (og65@cornell.edu) an email to inform him about the country chosen and also provide him with a list of the team members. He will then reconfirm.

Main Presentation (15%)

The main presentation should be about 40 minutes. The main objective is to present the main pillars of the health care system chosen during these 40 minutes and compare it with the performance of the US health care system.

This sounds more difficult than it is: 40 minutes equal roughly 20 power point presentation slides, i.e., 4 slides per group member (even less if you include small videos or similar elements). Once you have chosen the health care system of your choice, I will provide you with background material or help you to find information.

Class debate (5%)

An integral part of the seminar is to develop an idea for a 10-15 minute class debate that relates to the material and topic covered in the presentation. The presenting team is free to choose the topic of the debate and how to debate. One example would be the discussion of a controversial issue in a pro-contra perspective.

Proposal of exam questions (5%)

Finally, after the presentation and the class debate, the presenting team proposes five multiple choice/short answer questions covering the material of the presentation. The class is asked to verbally answer the questions. Afterwards, the presenting team should explain why they believe these would be suitable exam questions.

Feedback after fellow students’ presentations:

After the presentation and the class debate, fellow students should give constructive criticism and feedback. Presenting students should learn how to give a well-structured and concise presentation on a complex topic, how to lead a discussion and, afterwards, to receive and accept constructive criticism to improve their presentation style and communication skills. At the same time, fellow students should learn how to express criticism that is constructive and upfront, but not offending.

Class attendance (5%), quizzes (5%), and participation (up to 1% bonus):

Students must not miss the class without any excuse. Each unexcused absence from class may result in a deduction of 1% of the final grade up to 5%. Attending the class regularly is a necessary condition for meeting the learning objectives. Likewise, an active participation is essential to the education of yourself and your peers. Rong (Fiona) Huang (rh557@cornell.edu) will track your attendance. Please email her
BEFORE the class starts—i.e., before 10:00am—if you cannot make it to class. Otherwise you might lose one attendance point.

There will be three unannounced quizzes during the semester designed and graded by Katie, Aastha and Delphine. If you do not submit the quiz and did not excuse your absence, you will lose 1% of your final grade (see above). If you submit wrong answers to the quizzes, you get deducted points of your 5% quiz credit. However, the worst of the three quizzes does not count toward the quiz score.

I also might apply other methods to check your attendance and participation.

Please do not use electronic devices. It distracts you and your fellow students. Students who are attentive and participate regularly have the chance to earn an extra credit of 1% of the final grade.

**Academic integrity:**

Absolute integrity is expected of every Cornell student in all academic undertakings. Integrity entails a firm adherence to a set of values, and the values most essential to an academic community are grounded on the concept of honesty with respect to the intellectual efforts of oneself and others. Academic integrity is expected not only in formal coursework situations, but in all University relationships and interactions connected to the educational process, including the use of University resources. While both students and faculty of Cornell assume the responsibility of maintaining and furthering these values, this document is concerned specifically with the conduct of students.

A Cornell student's submission of work for academic credit indicates that the work is the student's own. All outside assistance should be acknowledged, and the student's academic position truthfully reported at all times. In addition, Cornell students have a right to expect academic integrity from each of their peers.

For further information regarding the Cornell Code of Academic Integrity see: [http://cuinfo.cornell.edu/aic.cfm](http://cuinfo.cornell.edu/aic.cfm)
Textbook:

There is no textbook required.

Readings:

Note: These readings are just background information for those interested. I will specifically tell you when reading assignments are mandatory.


COURSE OUTLINE

I. INTRODUCTION

Lecture #1: January 28, 2016

Introduction

Lecture #2-3: February 2+4, 2016

Concepts of Health (Care) and Health Insurance


II. DRIVING FORCES OF HEALTH CARE EXPENDITURES: AN INTERNATIONAL COMPARISON

Lectures #4-6: February 9-18, 2016


February 16, 2016

WINTER BREAK: no class
III. THE ORGANIZATIONAL SETUP OF HEALTH CARE SYSTEMS: THE CASE OF THE US

Lecture #7-8: February 23 +25, 2016

Private Health Insurance (in the US)

Lecture #9-10: March 1+3, 2016

Public Health Insurance in the US: Medicare, Medicaid, (S)CHIP


March 8, 2016

MID-TERM EXAM

March 10, 2016

Extra Credit Team Presentation I

Lecture #11-12: March 15 +17, 2016

Outpatient Care


Lecture #13-14: March 22+24, 2016

Inpatient Care


March 28 to April 3, 2016

SPRING BREAK: no class
April 5, 2016

**Extra Credit Team Presentation II**

Lecture #15-16: April 7+12, 2016

Quality of Care

IV. Germany’s Statutory Health Care System

Lectures #17: April 14, 2016


April 19, 2016

**Extra Credit Team Presentation III**

V. Canada’s National Health Care System

Lectures #18: April 21, 2016


VI. China’s Health Care System

Lecture #19: April 26, 2016


Guest lecture by Hyuncheol Kim: April 28, 2016

South Korean Health Care System

VII. Singapore’s Health Care System

Lecture #20: May 3, 2016


VIII. India’s Health Care System

Lecture #21: May 5, 2014

May 10, 2016

Extra Credit Team Presentation IV

May 12-15, 2016

Study period, no class

May 16-19, 2016

Final Exam