# University of Missouri-Columbia, Department of Economics Economics 4357/7357: Health Economics

Room: Middlebush Hall 13, Tuesday/Thursday, 12:30–1:45pm.

Instructor: Liisa Laine Email: lainel@missouri.edu

Office: Locust Street Building (615 Locust Street), Office #E223

Office hours: Thursdays 2:15—3:15pm or by appointment (please email me to set the appointment) Zoom link: TBA. Note that this class meets *in person*. The link is to be used in case we need to switch meeting virtually (in Zoom). Class meets virtually only if notified by the instructor (e.g. due to severe weather or illness).

#### **COURSE DESCRIPTION:**

Health and health care are one of the central aspects of human life and well-being throughout the lifecycle. Health economics is a growing field within economics that explores the determination of prices, quality, and quantities, and allocation of scarce resources devoted to health and health care.

This course introduces the key concepts of health economics. The course will cover various features of health care markets and their implications such as: uneven and unpredictable incidence of illness; externalities; asymmetric information between consumers, insurers, and health care providers; the demand and consequences of health insurance; restricted market entry; labor market monopsony. We will study how economic behavior factors into health and health care decisions and discuss how to apply economic thinking to understand issues in health care and policy.

Prerequisite(s): ECONOM 3251 or ECONOM 4351 and (STAT 2200 or STAT 2500) or equivalent.

#### **LEARNING OBJECTIVES:**

After completing the course, you will be able to:

- Identify and explain the key concepts of health economics.
- Explain how economic behavior factors into health and health care decisions.
- Apply economics to understand issues in health care and policy.

## **TEXTBOOK:**

Health Economics, by Jay Bhattacharya, Timothy Hyde, and Peter Tu, 2014 Palgrave MacMillan.

Alternative books: Health Economics, by Sloan, Frank A. & Hsieh, Chee-Ruey, 2016. MIT Press Books, The MIT Press, edition 2. (A comprehensive book on health economics with more updates related to ACA).

*Better Health Economics*, by Tal Gross and Matthew J. Notowidigdo. 2024, The University of Chicago Press. (An entry point into health economics).

Additional course materials including slides, supplemental readings, homework assignments, and course announcements will be posted on Canvas site.

#### ASSIGNMENTS AND GRADING:

Grading: This course will use a plus/minus grading system, as per the university's grading policy.

For 4357 students, your grades will be based on Homework (25%, the lowest homework score will be dropped), Exam 1 (25%), Exam 2 (25%), Exam 3 (25%). A curve will be applied for Exams 1 – 3.

For 7357 students, your grades will be based on Homework (15%, the lowest homework score will be dropped), Exam 1 (25%), Exam 2 (25 %), Exam 3 (25%), and a Final Paper (10%). A stricter curve than for 4357 students will be applied for Exams 1 - 3.

Assignments: Six online homework assignments (quizzes or homework that will be returned on canvas as a file upload) will be given throughout the semester. The objective of homework is to support your learning, so I recommend you start working on your assignments early. Homework assignments and class material are your primary guide for the exams. I expect you to work on homework assignments independently and will specifically mention if group work is allowed. For possible group assignments, I will ask you to state your group members. All homework assignments are due at 6pm CST on the due date.

Grades will be determined as follows: A + 98 - 100 A 92 - 97 A - 90 - 91 B + 88 - 89 B 82 - 87 B - 80 - 81 C + 78 - 79 C 72 - 77 C - 70 - 71 D + 68 - 69 D 62 - 67 D - 60 - 61 F < 60 Note that a 97.9 is not a 98. The minimum grade average for an A + is 98.0. Grade averages are not rounded.

#### ATTTENDANCE/LATE ASSIGMNENTS/MISSED EXAMS:

Attendance is not mandatory, although highly recommended. If you miss class, please arrange to get notes from a classmate. I may use Panopto as a last resort back up option, but technical issues happen and may not be reliably available, particularly for discussion-based lectures. Late homework assignments are not accepted since they will be available online and can be completed at any time. An extension will only be granted for certain circumstances (e.g., severe sickness, death in the family, etc.). If you miss an exam due to a university excused absence, then you must notify me as soon as feasibly possible and present written documentation to receive a make-up exam. All general class correspondence, especially questions about course material, should be submitted to the Discussion Board on Canvas.

## **EMAIL PROTOCOL:**

Please direct emails to me with "ECONOM 4357/7357: Health economics" in the subject line. I will try to respond within 24 hours. If I have not responded within 48 hours, please feel free to resend the email. Emails should be professional and include a greeting (e.g., Hello Professor Laine, Dear Professor Laine, etc.), purpose of email (it is perfectly fine to keep it brief), and sign-off (e.g., Thanks, Sincerely, etc).

### **UNUSUAL CIRCUMSTANCES:**

I realize these are unusual circumstances and that each student may have their own unique obstacles this semester. A common issue might be issues with childcare. Should childcare fall through on a class day, please feel free to bring your child to class. This is not meant to be a regular solution, but these things are bound to come up and I am happy to welcome a visitor to the class. Please just sit near an exit so that you can leave if necessary to tend to your child.

## **DECREASING THE RISK OF COVID-19 IN CLASSROOMS:**

You may choose to mask at any time. If you have tested positive for COVID-19 or have been identified as someone who needs to quarantine, do not attend class in person until the mandated period for isolation or quarantine has passed. Additionally, if you are experiencing any COVID-related symptoms, or are otherwise feeling unwell, do not attend in-person classes and contact your health care provider and/or student health immediately. Please consult <a href="MU COVID-19 Information">MU COVID-19 Information</a> for further guidelines. For more detailed information, please see DECREASING THE RISK OF COVID-19 IN CLASSROOMS AND LABS in ADMINISTRATIVE MATTERS, below.

#### **ACADEMIC INTEGRITY:**

Please see the University of Missouri guidelines on academic integrity. Cases of academic dishonesty will be taken very seriously.

## FOR SUCCESSFUL LEARNING:

- 1. Attend classes. Print the slides for the topic of the week beforehand so you can make notes during class. Keep cellphones silent. It is good to keep cellphones etc. in the bag to improve focus.
- 2. Go through the slides and ask clarifying questions. Read the textbook chapters as they provide useful examples and additional material to support your learning.
- 3. Get to know your classmates or form a study group!
- 4. Do not wait until the last day to start working on your homework. The due dates of all homework assignments are listed on the outline of the course and *all of them are due at 6pm CST on the due date*. If you start working on the homework assignment on the day it is due, you may (and will, on many occasions) run out of time as some of the material can be difficult, you may get distracted by other tasks and requirements, etc.
- 5. Don't be late with your homework submissions. All homework assignments must be submitted electronically (for example by completing a quiz or uploading a file). Keep in mind that once the due date and time have passed even by 1 second the link to submit disappears. *Because you can work on homework at any time, no extensions or make-up-homework are possible.*
- 6. Stay ahead of schedule. For example, it is useful to skim the textbook chapter at least partly before the class.
- 7. Completing homework assignments will guide you on what to study for the exam and how to prepare to be successful in the exam. Practice the concepts studied in class and homework assignments (and similar) multiple times prior exam.

#### **OUTLINE OF THE COURSE:**

The schedule outlined below is subject to change as the semester progresses. Depending on how we are doing on time I may adjust the schedule and will notify everyone in class and on Canvas. It is your responsibility to keep up with any changes to the pace of the course. Some lectures may include material that is not covered in the book, so attendance is important for learning.

Week, dates		Topic	Homework	Chapters
1	Jan 16	What is health economics?		1–2
	Jan 18	Health care demand		
2	Jan 23	Demand for health: the		3–4
	Jan 25	Grossman model.		

		Socioeconomic disparities in health.		
3	Jan 30 Feb 1	Socioeconomic disparities in health.  Health care workforce.	HW 1 due Jan 30	4–5
4	Feb 6 Feb 8	The hospital industry.	HW 2 due Feb 8	6
5	Feb 13 Feb 15	Review Exam 1		Exam chapters: 1–6
6	Feb 20 Feb 22	Demand for insurance. Adverse selection: Akerlof's market for lemons.		7–8
7	Feb 27 Feb 29	Adverse selection: Akerlof's market for lemons. Adverse selection: The Rothschild–Stiglitz model.	HW 3 (Ch 7–8) due Feb 29	8–9
8	Mar 5 Mar 7	Adverse selection: The Rothschild–Stiglitz model. Adverse selection: empirical evidence	HW 4 (Ch 9–10) due Mar 7	9–10
9	Mar 12 <b>Mar 14</b>	Review Exam 2		Exam chapters: 7–10
10	Mar 19 Mar 21	Moral Hazard Health care prices.		11, 13
	March 23– March 31	Spring break		
11	Apr 2 Apr 4	Pharmaceuticals and innovation. Health technology assessments.		12, 14
12	Apr 9 Apr 11	Health care systems	HW 5 (Ch 11– 14) due Apr 18	15, 16
13	Apr 16 Apr 18	Health care systems		17, 18
14	Apr 23 Apr 25	Health policy topics/ Student presentations	HW 6 (Ch 15– 19) due Apr 23 For 7357 students, final paper due April 25th	19
15	April 30 May 2	Review <b>Exam 3</b>		Exam chapters: 11–18

## **ADMINISTRATIVE MATTERS**

## **ACADEMIC INTEGRITY**

Academic integrity is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person's work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards breaches of the academic integrity rules as extremely serious matters.

## Standard of Conduct for Academic Integrity

In addition, students are expected to adhere to this honor pledge on all graded work whether or not they are explicitly asked in advance to do so: "I strive to uphold the University values of respect, responsibility, discovery, and excellence. On my honor, I pledge that I have neither given nor received unauthorized assistance on this work."

## **STUDENTS WITH DISABILITIES**

If you anticipate barriers related to the format or requirements of this course, if you have emergency medical information to share with me, or if you need to make arrangements in case the building must be evacuated, please let me know as soon as possible.

If disability related accommodations are necessary (for example, a note taker, extended time on exams, captioning), please establish an accommodation plan with the <u>MU Disability Center</u>, S5 Memorial Union, 573-882-4696, and then notify me of your eligibility for reasonable accommodations. For other MU resources for persons with disabilities, click on "Disability Resources" on the MU homepage.

#### ACCEPTABLE USE

The University of Missouri's Acceptable Use Policy (AUP) for information technology applies to Mizzou websites. The AUP addresses federal and state laws, university regulations, intellectual-property rights, software-licensing requirements and prohibitions against plagiarism and obscenity. This policy applies to all users including faculty, staff, students, and guest users of University of Missouri computer networks, equipment, or connecting resources.

# UM System Acceptable Use Policy

#### **COPYRIGHT**

This section helps you understand copyright in course materials, student work and pages published on Mizzou websites.

#### **UM System Copyright Information**

## **EXECUTIVE ORDER No. 38**

When you record something that happens in a course (a lecture, class discussions, meetings, etc.) it has an impact on the rights of the people captured in that recording. For example, your instructor and the University may have rights to the intellectual property contained in that recording. At the same time, another student who may have been recorded has the right to privacy. In order to protect these rights, MU employs a policy (called "Executive Order No. 38") to govern both situations you may encounter while taking a course--when your instructor allows recordings and when he or she does not allow them.

# Executive Order No. 38

## **FERPA**

The University of Missouri maintains educational records of students in accordance with the Family Educational Rights and Privacy Act of 1974 (FERPA). Related topics include privacy policies at MU, display of student directory information, and details about how MU manages FERPA-protected information.

Family Educational Rights and Privacy Act (FERPA)

## **INTELLECTUAL PLURALISM**

The University community welcomes intellectual diversity and respects student rights. Students who have questions or concerns regarding the atmosphere in this class (including respect for diverse opinions) may contact the departmental chair or divisional director, the director of the Office of Students Rights and Responsibilities, or the MU Equity Office.

# Statement on Intellectual Pluralism

## **STATEMENT OF NONDISCRIMINATION**

The University of Missouri does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, age, genetics information, disability, or status as a protected veteran.

# MU Statement of Nondiscrimination

If you experience discrimination or sexual violence, you are encouraged (but not required) to report the incident to the Office of Institutional Equity. Learn more about your rights and options at the Office of Institutional Equity or by calling 573-882-3880. You also may make an anonymous report online.

If you are a survivor, or someone concerned about a survivor, and need immediate information on what to do, see <u>RSVP resources page</u>. Both the Office of Institutional Equity and the RSVP Center can provide assistance to students who need help with academics, housing, or other issues.

In the event that you choose to write or speak about having experienced any of these forms of prohibited discrimination or harassment, Mizzou policies require that, as your instructor, I share this information with the MU Office of Institutional Equity. They will contact you to offer information about resources, as well as your rights and options as a member of our campus community.

## MENTAL HEALTH

The University of Missouri is committed to supporting student well-being through an integrated network of care, with a wide range of services to help students succeed. The MU Counseling Center offers professional mental health care, and can help you find the best approach to treatment based on your needs. Call to make an appointment at 573-882-6601. Any student in crisis may call or go to the MU Counseling Center between 8:00-5:00 M-F. After hours phone support is available at 573-882-6601.

Visit our website at <a href="https://wellbeing.missouri.edu/">https://wellbeing.missouri.edu/</a> to take an online mental health screening, find out about workshops and resources that can help you thrive, or learn how to support a friend. Download Sanvello, a phone app that teaches skills and strategies to help you maintain good mental health. Log in with your Mizzou e-mail to unlock all the tools available through Sanvello at no additional cost to you.

# LAST DATE OF ATTENDANCE AND IMPACT ON FINANCIAL AID

Federal regulations for financial aid require the student financial aid office to document the attendance of students who have received federal financial aid if they do not successfully complete any courses during the term. As a result, the last day of attendance (or activity) for any student receiving an F, U, or FN in this course will be recorded in the grade roster and reported to the financial aid office. **Based on the last day of attendance, students may be required to repay a portion of their financial aid award for the semester.** 

A student's last day of attendance (or activity) is the last day on which a student participates in an academically-related activity at the University. These include:

- Attendance in class, lab, or an instructor's office hours
- The completion of an assignment or examination
- An appointment with a professor or e-mail correspondence regarding course material
- (Online courses only) For online courses, the last day a student submits an assignment or exam. Only logging into an online class without participating is <u>not</u> acceptable for last day of attendance

Please note that discussing a course withdrawal or notifying the instructor of an absence in class does not constitute participation for financial aid purposes. Moreover, any office hour visits or email correspondence must be related to the course material.

## **NETIQUETTE**

Your instructor and fellow students wish to foster a safe online learning environment. All opinions and experiences, no matter how different or controversial they may be perceived, must be respected in the tolerant spirit of academic discourse. You are encouraged to comment, question, or critique an idea but you are not to attack an individual. Our differences, some of which are outlined in the University's nondiscrimination statement, will add richness to this learning experience. Please consider that sarcasm and humor can be misconstrued in online interactions and generate unintended disruptions. Working as a community of learners, we can build a polite and respectful course ambiance.

## RELIGIOUS HOLIDAYS & ACCOMMODATIONS

Many religious faiths are represented in the student body. The University of Missouri does not restrict student free exercise of religion, unless 1) the restriction is in the form of a rule of general applicability, and does not discriminate against religion or among religions; and 2) it can be demonstrated that the application of the restriction is essential to furthering a compelling university interest, and is not unduly restrictive considering the relevant circumstance. The policy of the University attempts to strike a reasonable balance between accommodating the religious practice of students and meeting academic needs and standard.

Consult IDE's <u>Guide to Religions</u> for the form that can be used to notify an instructor of an absence associated with religious practice. Students are expected to notify their instructor(s) by completing and submitting this form in a manner that is consistent with the procedure outlined in the university's policy on student religious accommodation. Providing false information regarding sincerely held religious practice is a violation of the university's Standard of Conduct and will not be tolerated.

## DECREASING THE RISK OF COVID-19 IN CLASSROOMS AND LABS

If you have tested positive for COVID-19 or have been identified as someone who needs to quarantine, do not attend class in person until the mandated period for isolation or quarantine has passed. Your instructor will work with you on arrangements to access class material while you are in isolation or quarantine. People may choose to mask at any time.

People who have been exposed to someone with COVID-19 should wear a mask. If you have symptoms, you should stay home. If you are at high risk for severe illness, talk to your health care provider about whether you need to wear a mask and take other precautions.

Additionally, if you are experiencing any COVID-related symptoms, or are otherwise feeling unwell, do not attend in-person classes and contact your health care provider and/or student health immediately. Symptoms may appear 2-14 days after exposure to the virus. Anyone can have mild to severe symptoms. Possible symptoms include: Fever or chills, Cough, Shortness of breath or difficulty breathing, Fatigue, Muscle or body aches, Headache, New loss of taste or smell, Sore throat, Congestion or runny nose, Nausea or vomiting, Diarrhea (list does not include all possible symptoms). Symptoms may change with new COVID-19 variants and can vary depending on vaccination status.

Please consult MU COVID-19 Information for further guidelines.