

Econ 590 Special Topics. Applied microeconomics in health care

Fall semester 2021

Summary

This 3 credit-hour course will apply microeconomic methods to health, health care, and other related topics. The course will emphasize social policy and consider the economics of current issues such as the opioid crisis and other substance use; mental health care; issues related to behavioral health such as criminal justice and homelessness; social determinants of health; the Patient Protection and Affordable Care Act; and public health insurance (Medicaid, etc). Pre-requisites are a C or better in ECON 400 (Introduction to Econometrics) and 410 (Intermediate Microeconomics).

Who should take this course?

Motivated students majoring in economics or a related major

Learning objectives

- ✓ Understand and apply economic models to health and health care, crime and criminal justice, housing among the poor and homelessness, and other socially relevant areas
- ✓ Review and evaluate empirical evidence
- ✓ Think critically about issues in health, criminal justice, and homelessness
- ✓ Apply economic principles to a research project to be decided during the class
- ✓ Master economic concepts to the degree of being able to discuss them in conversation
- ✓ Demonstrate an ability to use skills valued in the wider world of work such as formulating an idea and then testing and researching it, and communicating results to a defined audience

When do we meet?

Monday and Wednesday 3:35pm to 4:50pm, starting Wednesday August 18, 2021; Gardner Hall (GA) 309

Instructor information

Alex Cowell. Virtual office hours are by appointment. Main email address: acowell@unc.edu. Back-up, personal email address alexcowell@protonmail.com. I check my UNC email at least every other day.

What to call me (to my face)

Alex or Dr. Cowell. My pronouns are he, him, and his.

Grading schema and scale

Grading

- ✓ Whenever possible I hide a student's name when grading. This is possible with the midterm, the paper, and the final.
- ✓ Final numeric grades are automatically rounded up or down to the nearest integer, with 0.5 being rounded up.
- ✓ The group project grade depends on the contribution of both you and your fellow group members. As part of determining the group project grade, I ask every group member to report on their own contribution as well as the contribution of each of their fellow group members.

Grading weight

Midterm Exam	15%
Final Exam	30%
Paper	30%
Group project	15%
In-class quizzes	10%

Grading Scale

At least 93%	A
At least 90% but less than 93%:	A-
At least 87% but less than 90%:	B+
At least 83% but less than 87%	B
At least 80% but less than 83%:	B-
At least 77% but less than 80%:	C+
At least 73% but less than 77%:	C
At least 70% but less than 73%:	C-
At least 67% but less than 70%:	D+
At least 60% but less than 67%:	D
Less than 60%:	F

Late work or tardy submissions

See the Econ 590 Schedule on Sakai for project details and deadlines. If your paper is late, your grade on that assignment will drop 20 points, which is the equivalent of one letter grade, (for example, from an A to a B). All class projects and activities including participation activities are due at the deadline. Late submissions will be penalized for each day they are late. If it's not ready at deadline time, it's already considered a day late. Failure to meet some deadlines may earn a zero grade.

Grade appeal

Although grades are not negotiable, I will carefully consider a concern about an assignment grade if the concern is promptly identified. If you have questions or dispute a particular grade, please bring it to my attention **within a week of receiving that grade**. The only grades that I will discuss at the end of the semester are those assignments you complete at the end of the semester.

You have the right to appeal any grade in this course. You are free to talk with me about a grade in this course and discuss the determination of that grade. If you are not satisfied, you may submit your appeal in writing along with the assignment or project in question. I will respond to your appeal. If you are not satisfied, you may appeal to your academic dean. The academic dean will consider the merits of the grade appeal. After careful consideration, the dean may reject or accept your grade appeal. The dean may also appoint a grade-appeal committee to consider your complaint. That committee would then recommend action to the dean who appointed the committee.

Once reported, permanent course grades may not be changed except for clerical or arithmetical error or by a successful grade appeal, as outlined above. A formal grade appeal, if any, must be filed no later than the last day for late registration of the next semester.

Policies and resources

Expectations of students

- ✓ Engage in class and with the materials. Students will participate in regular discussions during class.
- ✓ You are expected to read the class materials ahead of time so that we can discuss the materials in class. Exceptions to this expectation – such as the first day of class – will be noted.
- ✓ Use the library resources to obtain the readings. Most readings are in academic journals, and these are available through the UNC library. Although I will link readings when possible through the Sakai platform, it is your responsibility to obtain the readings.
- ✓ Contribute to a group project. The group will be small (four to six students). Your grade from the project will depend both on the overall product from the group as well as your own individual contribution. The product will likely be a combination of a presentation and a briefing document of no more than 10 pages.
- ✓ Please show good phone and device courtesy. Be present with what is going on in the class. Refrain from making calls or messaging. Feel free to discretely type your notes and research topics live.

Attendance policy

- ✓ This course depends on instruction and your own independent study. Attend class and be present when in class.
- ✓ Per Economics Department policy, I take attendance during the first week of the semester and drop from the course who do not show up for the first two days of class. This action opens seats for students who are waiting to get into filled courses.
- ✓ While this is a discussion class that requires your real-time participation, I will attempt to accommodate those who are unable to attend due to COVID-19 issues. If you are in that situation, please let me know as soon as you can.
- ✓ UNC-Chapel Hill's attendance policy stipulates that *"No right or privilege exists that permits a student to be absent from any class meetings, except for these University Approved Absences."*
- ✓ The Econ 590 attendance policy conforms to the UNC-Chapel Hill's attendance, grading, and examination policies and procedures, as documented in the [Academic Catalog](#) (click link to read [the policy](#)).

Academic integrity

All students are expected to adhere to the Honor Code (honor.unc.edu). Any violation will result in an F for the course, and other sanctions may apply.

Community standards

We are in the midst of a global pandemic. This semester all enrolled students are required at all times to wear a mask covering the mouth and nose in our classroom. This requirement is to protect our educational community — your classmates and me — as we learn together. If you choose not to wear a mask, or wear it improperly, I will ask you to leave immediately, and I will submit a report to the [Office of Student Conduct](#). At that point you will be disenrolled from this course for the protection of our educational community. Students who have an authorized accommodation from Accessibility Resources and Service have an exception. For additional information, see [Carolina Together](#).

Counselling and Psychological Services

Counselling and Psychological Services is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate

services, whether for short or long-term needs. Go to their website: <https://caps.unc.edu/> or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

Peer tutoring is available at <https://econ.unc.edu/undergraduate/econaid/>

Title IX resources

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Please contact the Director of Title IX Compliance (Adrienne Allison – Adrienne.allison@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at safe.unc.edu.

Accessibility Resources and Service

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities. Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Website for contact information: <https://ars.unc.edu> or email ars@unc.edu.

Important dates (As of August 18, 2021)






What	When
Mid-term	October 4
Paper	November 1
Group presentations	November 10 or 15
Final	4pm Thurs December 9

Week-By-Week Schedule and Readings

- ✓ Go to the **Econ 590 Sakai course space** to read the updated course schedule and readings.
- ✓ A reminder, with a few exceptions (like the first day of class), students are expected to complete readings ahead of class so that we can discuss the readings in class.
- ✓ Listen carefully and pay attention to which readings will be emphasized in the next class or two. The readings in the schedule below may include more material than then minimum necessary. I will endeavor to highlight in yellow which readings were/will be assigned for the following class.
- ✓ **The schedule and readings will change frequently.** So, check Sakai after every class.
- ✓ Course schedule and readings will change as the semester evolves **to create the best learning environment for you.**
- ✓ The schedule includes two flex classes where the material may depend on our needs at that time. During these classes, we may need to review or complement previous material or decide to complement material with additional learnings.
- ✓ **Some readings can be difficult and technical.** Some readings are intended to stretch your ability to comprehend something in which the detail is a level or so above your training. You will see

the warning “TTA!” on some readings. This is a Technical Terminology Alert. The math or language may be challenging. See how far you can get with the detail, but don’t get bogged down.

Econ 590 Schedule (As of August 23, 2021)

	Week Beginning	Readings	Mon	Weds
1	August 16		---	Life and death: the demand for health 
2	August 23	Case et al., 2017; CDC, 2019; Cutler et al., 2006; Finkelstein et al., 2012; Jayachandran et al., 2010; Kleiner, 2000; Kravitz, 2014; Stange, 2014; Timmons, 2017; Vaughn et al., 2010	Life and death: the demand for health 	Supply of health 
3	August 30	Dranove et al., 2003; Dunlap et al., 2008; Einav and Finkelstein, 2011, 2018; Geruso and Layton, 2017	Supply of health 	Insurance – theory and evidence
4	September 6	Anderson et al., 2012; Buchmueller et al., 2011; Card et al., 2008; Cowell et al., 2018; Einav and Finkelstein, 2011 & 2018	 LABOR DAY – no class!	Insurance– evidence: the ACA really is a big deal
5	September 13	Cutler and Ly, 2011; Hartman et al., 2018	The cost of healthcare	So how do others do it? International health and healthcare (<i>flex class</i>)
6	September 20	Kruk et al., 2009	So how do others do it? International health and healthcare	So how do others do it? International health and healthcare
7	September 27	Case & Deaton, 2021; Case, A.; Sen, 2002	Equity and health care	Equity and health care
8	October 4	Karoly et al., 2011; Jones, 2012	Midterm	Prevention and social determinants of health
9	October 11	Weinberger, 2014; Kim and Goldie, 2008	Prevention and Social determinants of health	Economics and epidemiology

	Week Beginning	Readings	Mon	Weds
10	October 18		Obesity	The opioid crisis
11	October 25	Cowell et al., 2012; Fenwick et al., 2004; Bala & Zarkin, 2000 & 2002	Other substances	Mental health
12	November 1		Crime and criminal justice (<i>flex class</i>)	Crime and criminal justice
13	November 8		Crime and criminal justice	Group presentations
14	November 15		Group presentations	Housing and homelessness
15	November 22		Housing and homelessness	A pandemic special
16	November 29		A pandemic special	Last Day of Class

Bibliography (as of August 23, 2021)

Useful Reference

The following two books are *not* assigned class textbooks. Rather they are reference books for some of the basic concepts and statistics that may be useful as supplementary reading. You will likely be able to complete this course without using them.

Jay Bhattacharya, Peter Tu, Timothy Hyde (BTH; 2013). *Health Economics*. Palgrave Macmillan. ISBN: 113702996X, 9781137029966.

Sloan, F. A., & Hsieh, C. R. (2017). *Health Economics*. MIT Press. ISBN: 9780262035118

In-depth readings

The following are references for class readings. The syllabus indicates which of these map to which sections of the course. Pay attention in class as to which are required and what you should be getting from the materials when you do read them. This list will grow over the duration of the course. There's more here than you need to pass the course.

Anderson, M, Dobkin, C. & Gross, T. (2012). The effect of health insurance coverage on the use of medical services. *American Economic Journal: Economic Policy*, 4(1), 1-27

Bala, M. V., & Zarkin, G. A. (2000). Are QALYs an appropriate measure for valuing morbidity in acute diseases?. *Health Economics*, 9(2), 177-180.

Bala, M. V., & Zarkin, G. A. (2002). Application of cost-effectiveness analysis to multiple products: a practical guide. *American Journal of Managed Care*, 8(3), 211-220.

<http://www.med.mcgill.ca/epidemiology/courses/EPIB654/Summer2010/EF/ef%20mgd%20care.pdf>

Buchmueller, TC., DiNardo, J., & Valletta, R.G. (2011). The effect of an employer health insurance mandate on health insurance coverage and the demand for labor: Evidence from Hawaii. *American Economic Journal-Economic Policy*, 3(4), 25-51.

Card, D, Dobkin, C, & Maestas, N. (2008). The impact of nearly universal health insurance coverage on health care utilization: Evidence from Medicare. *American Economic Review*, 98(5), 2242- 58. ^{TTA!}

Case, A., & Deaton, A. (2017). *Mortality and Morbidity in the 21st Century*. Brookings Papers on Economic Activity, Spring 2017. https://www.brookings.edu/wp-content/uploads/2017/03/casedeaton_sp17_finaldraft.pdf

Centers for Disease Control & Prevention (CDC) (2021) *Health, United States* <https://www.cdc.gov/nchs/data/hus/hus19-508.pdf>

Cowell, A. J., Brown, J. M., Mills, M. J., Bender, R. H., & Wedehase, B. J. (2012). Cost-effectiveness analysis of motivational interviewing with feedback to reduce drinking among a sample of college students. *Journal of Studies on Alcohol and Drugs*, 73(2), 226-237.

Cowell, A. J., Prakash, S., Jones, E., Barnosky, A., & Wedehase, B. (2018). Behavioral health coverage in the individual market increased after ACA parity requirements. *Health Affairs*, 37(7), 1153-1159. <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2017.1517>

Cutler, David M., Angus Deaton, and Adriana Lleras-Muney, The determinants of mortality. *Journal of Economic Perspectives*, 20(3), Summer 2006, 97-120.

Cutler, D. M., & Ly, D. P. (2011). The (paper) work of medicine: understanding international medical costs. *Journal of Economic Perspectives*, 25(2), 3-25.

Case, A. (2021). *Deaths of despair* (audio). Social Science Space. <https://www.socialsciencespace.com/2020/05/anne-case-on-deaths-of-despair/>

Case, A., & Deaton, A. (2021). Life expectancy in adulthood is falling for those without a BA degree, but as educational gaps have widened, racial gaps have narrowed. *Proceedings of the National Academy of Sciences*, 118(11).

Dranove, D, Kessler, D, McClellan, M, & Satterthwaite, M. (2003). Is more information better? The effects of “report cards” on health care providers. *Journal of Political Economy*, 111(3), 555- 88. ^{TTA1}

Dunlap, L. J., Zarkin, G. A., & Cowell, A. J. (2008). Examining variation in treatment costs: a cost function for outpatient methadone treatment programs. *Health Services Research*, 43(3), 931-950. https://onlinelibrary.wiley.com/doi/full/10.1111/j.1475-6773.2007.00799.x?casa_token=9Fta3czW9vUAAAAA%3A9LnIHex9Q318JdzduarMng2nMylihs7fmru1q84Th6Kop_370PUiBXv3QqnYFTt1WdRDGtoeDleV6DiZ

Einav, L., & Finkelstein, A. (2011) Selection in insurance markets: theory and empirics in pictures. *Journal of Economic Perspectives*. 25 (1): 115-138. <https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.25.1.115>

Einav, L., & Finkelstein, A. (2018). Moral hazard in health insurance: What we know and how we know it. *Journal of the European Economic Association*, 16(4), 957-982. ^{TTA1}

Fenwick, E., O'Brien, B. J., & Briggs, A. (2004). Cost-effectiveness acceptability curves—facts, fallacies and frequently asked questions. *Health Economics*, 13(5), 405-415.

Finkelstein, A., Taubman, S., Wright, B., Bernstein, M., Gruber, J., Newhouse, J. P., ... & Oregon Health Study Group. (2012). The Oregon health insurance experiment: evidence from the first year. *The Quarterly Journal of Economics*, 127(3), 1057-1106. ^{TTA1} https://www.nber.org/system/files/working_papers/w17190/w17190.pdf

Geruso, M. & Layton, T.J. (2017). Selection in health insurance markets and its policy remedies. *Journal of Economic Perspectives* 31, no. 4 (2017): 23-50.^{TTA!}

Hartman, M., Martin, A.B., Benson, J., and Catlin, A. et al. (2018). National health care spending in 2018: Growth driven by accelerations In Medicare and private insurance spending. *Health Affairs*, v.37, no. 1

Jayachandran, S; Lleras-Muney, A. & Smith, K.V. (2010). Modern medicine and the Twentieth Century decline in mortality: evidence on the impact of sulfa drugs. *American Economic Journal-Applied Economics*, 2(2), 118- 46.

Jones, DJ. (2012). Primary prevention and health outcomes: treatment of residential lead-based paint hazards and the prevalence of childhood lead poisoning. *Journal of Urban Economics*, 71(1), 151- 64.

Karoly, L. A., Kilburn, M. R., & Cannon, J. (2005). *Proven benefits of early childhood interventions*. RAND report. https://www.rand.org/pubs/research_briefs/RB9145.html (also download related full brief)

Kim, J.J., & Goldie, S.J. 2008. Health and economic implications of HPV vaccination in the United States. *New England Journal of Medicine*, 359(8), 821- 32.

Kleiner, M. M. (2000). Occupational licensing. *Journal of Economic Perspectives*, 14(4), 189-202.
<https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.14.4.189>

Kravitz, RL. (2014). Physician incomes in the twenty-first century: time for a new social contract." *Journal of General Internal Medicine*, 29, (2014): 1425-1426.
<https://link.springer.com/article/10.1007%2Fs11606-014-3012-9>

Kruk, M., Goldmann, E., & Galea, S. (2009). Borrowing and selling to pay for health care in Low- and Middle-income countries. *Health Affairs*. July/August, 28(4) 1056- 1066.

Newhouse, J.P. and the Health Insurance Experiment Group. *Free for All? Lessons from the RAND Health Insurance Experiment*. Cambridge: Harvard University Press, 1996.

Sen, Amartya K. Why Health Equity? *Health Economics* 11(2002): 659-666.

Stange, K. (2014). How does provider supply and regulation influence health care markets? Evidence from nurse practitioners and physician assistants. *Journal of Health Economics*, 33, 1-27.

Timmons, E. J. (2017). The effects of expanded nurse practitioner and physician assistant scope of practice on the cost of Medicaid patient care. *Health Policy*, 121(2), 189-196.

Vaughn, B. T., DeVrieze, S. R., Reed, S. D., & Schulman, K. A. (2010). Can we close the income and wealth gap between specialists and primary care physicians? *Health Affairs*, 29(5), 933-40. Retrieved from <http://libproxy.lib.unc.edu/login?url=https://www-proquest-com.libproxy.lib.unc.edu/scholarly-journals/can-we-close-income-wealth-gap-between/docview/304560686/se-2?accountid=14244>

Weinberger, E. (2014) The governor is very interested. A teaching case from the strategic training initiative for the prevention of eating disorders. <https://cdn1.sph.harvard.edu/wp-content/uploads/sites/1267/2014/10/Revised-Narrative-CEA-Case-Oct-3-14.pdf>

Weeks, W. B., & Wallace, A. E. (2002). The more things change: revisiting a comparison of educational costs and incomes of physicians and other professionals. *Academic Medicine*, 77(4), 312-319.

TTA! – Technical terminology alert! The math or language may be challenging. See how far you can get with that, but don't get bogged down.

HELP KEEP ILLNESS FROM SPREADING



COVER YOUR FACE

when you cough and sneeze with a tissue, then throw the tissue in the trash.



AVOID TOUCHING

your eyes, nose and mouth with unwashed hands.



CLEAN AND DISINFECT

frequently touched objects and surfaces using a regular household cleaning spray or wipe.



WASH YOUR HANDS

frequently with soap and water for at least 20 seconds. Use hand sanitizer if soap and water are not available.



STAY HOME AND REST

when you are ill. Avoid close contact with people who are ill. Contact a medical professional with concerns.