#### **ECON 552**

# THE ECONOMICS OF HEALTH CARE MARKETS AND POLICY UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL SPRING 2024

(This version: January 8, 2024)

<b>Time &amp; location:</b> TR 9:30-10:45am, GA308	<b>Prerequisites:</b> ECON 400, 410, and at least one
Credit units: 3	of 445 and 450, with a grade of C or better
Instructor: Dr. Qing Gong	Office hours: Thu 3-5 pm, GA201 or Zoom
Email: qinggong@email.unc.edu	Sign up: appointment required, sign up here

Teaching Assistant: Alex Sides (azsides@live.unc.edu)

Graduate Research Consultant: Meagan Madden (mkmadden@unc.edu; sign up here)

**Course synopsis:** The market for health care is perhaps the single most important sector of the US economy. In this course, we will examine how the strategic choices of supply-side actors in this market (e.g. insurance companies, health care providers, pharmaceutical firms) affect the welfare of patients, and discuss the role government regulation can play in shaping market outcomes. To inform our discussion, we will read academic papers covering a list of topical issues in health care markets, and use tools from Industrial Organization and other related empirical literature to develop theoretical frameworks to analyze them. Examples include:

- The structure of payment models to incentivize health care providers to deliver low-cost and high-quality care.
- How the consolidation of health care providers affects the allocation of patients, hospital prices, and insurance premiums.
- The choice of capitation (fixed amount per patient) vs. fee-for-service (unbundled payments based on the kind and number of services) in incentivizing health care providers and their impact on the cost and quality of care.
- How provider preferences in a referral network affect health care delivery.
- The impact of price regulation in the pharmaceutical market.

<sup>&</sup>lt;sup>1</sup>The instructor reserves the right to make changes to the syllabus, including the reading list. These changes will be announced as early as possible.

**Course objective:** The aim of this course is to provide you with a clear understanding of the prominent policy issues in U.S. health care markets, with a focus on how they affect supply-side actors. You will learn how economists think about topics related to the provision of health care, the structure of health care markets, and the relationships between different players in those markets. Throughout the course, we will equip you with tools used by economists to analyze health-related markets. Some of these tools will be generally applicable to any market, while others will be specific to health care.

**Approach and prerequisites:** This course uses a combination of lectures on the essential methodology, surveys of the recent literature on the supply-side topics of health care markets, and empirical exercises that familiarize you with the prominent econometric tools, data sources, and programming techniques. Whenever a new tool is required, we will first review the methodology and then come back to its application in the health care market.

This course is an addition to the existing health economics and industrial organization courses offered each year by the UNC Economics Department. Its focus on the supply side of health care markets complements existing 400-level and 500-level courses such as ECON 445 and 545, ECON 450 and 550. This course also employs a different set of analytical tools and conceptual frameworks that spans various fields of empirical microeconomics, such as bargaining, learning, and cost and adverse selection.

Knowledge of microeconomics and econometric tools, particularly those related to Industrial Organization and individual decision-making, is needed throughout the course. Thus in addition to ECON 400 (Statistics and Econometrics) and 410 (Microeconomics), students are also expected to have taken at least one of ECON445 (Industrial Organization) and 450 (Health Economics and Policy). Students who have not taken these courses but may fulfill the requirements (by taking similar courses offered by other departments) are welcome to contact the instructors and discuss their specific cases before enrollment.

**Course requirement:** Your course grade will be calculated based on the weights below:

- Homework: 25% (5 assignments in total, equally weighted)
  - a. **Due dates:** Homework assignments are designed to help your team build your research paper throughout the course. They must be submitted before the deadline. Late sub-

missions will NOT be accepted, but you can miss one assignment among HW3-5 $\frac{2}{2}$  If you do, the weight will be shifted to the research paper.

- b. **Submission:** Submit your homework in the required format on Canvas. Please do not email in your homework. Only one copy needs to be submitted per group.
- c. See the **class calendar** at the end of this syllabus for the list of homework assignments and their due dates. The dates might be subject to changes, which will be announced well in advance.
- Participation: 25%. Your participation will be evaluated according to the following criteria:
  - a. Assessment of required readings (5%): It is essential that everyone finishes the required readings before they are discussed in class and complete the relevant shortanswer questions on Canvas. The required readings to be completed before each class are listed in the class calendar. Students will also be (randomly) selected in class to answer basic, factual questions on the reading such as the research question, the empirical strategy, the key findings, etc.
  - b. In-class presentation of required readings (10%): Each team will deliver a short, 15-minute presentation of a required reading in class. Please sign up here by 9:30 am on Thu. Jan. 18. All team members are expected to contribute, with each person covering one of the following aspects:
    - \* What's the research question? Why is it important/interesting? What is the specific empirical context in which the author(s) answered this question?
    - \* What's the take-away answer? How did the author(s) reach these answers?
    - \* What do you like the most in the paper? Pick one or two things and explain.
    - \* What do you like the least in the paper, or what do you find the most confusing?
      Pick one thing and explain.
  - c. In-class discussions and activities (10%): Students are expected to voluntarily participate in and contribute to the in-class discussions and activities. You need to be fully engaged, communicate your ideas clearly, and be respectful to your peers and the instructors. Students are also encouraged to ask questions both during and after class, as well as during fellow students' presentations. Good questions are most often not factual ones, but ones that demonstrate critical thinking and intellectual engagement.

<sup>&</sup>lt;sup>2</sup>You cannot skip HW1 or HW2, unless, of course, your received an "Accept" for HW1.

- d. Note on attendance: Attendance (being present in the classroom) per se does not contribute to your participation grade, only because it is the most basic requirement. With the exception of University-Approved Absences, you are expected to attend all classes. It is your responsibility to get the content/announcements you missed during the class you did not attend.
- Final presentation: 20%
  - a. **Date and time:** Presentations are scheduled during the last few class meetings, depending on the class size. All final presentations will be on Zoom to minimize transition time and to facilitate peer-to-peer comments.
  - b. Parameters: Each team will deliver a 20-minute oral presentation on their paper.
  - c. **Attendance**: *Everyone* is expected to attend the presentation sessions, and provide constructive feedback for your peers. Failure to do so will hurt your participation grade.
  - d. **Evaluation:** Key areas of evaluation include the content, clarity and organization, and delivery. Content-related evaluation will be shared by the entire team, while delivery-related evaluation will be specific to individual members.
- Research paper [due Tue. May 7 at noon]: 30%
  - a. **Basic requirements** Students will work in teams to write an empirical paper, which must
    - \* Ask and answer an empirical question on a topic that is related to those covered in class and has receive the instructor's approval (assignment 2 and 2B).
    - \* Include original empirical analysis, i.e., using real-world data, conducting econometric analyses, and ultimately answering the research question being asked.
    - \* Be a complete (albeit short) empirical paper that has an introduction, a clear statement of the research question, a literature review, the theory (or conceptual framework), sufficiently clear descriptions of the data and the empirical strategy, and, most importantly, results and conclusions.
  - b. **Parameters**: 10 pages maximum, 12 pt, single space, 1 inch margin on all sides. The page limit is for the entire paper, including all tables, figures, bibliography, and any supplemental materials.

c. More guidelines will be provided in class, including instructions on how each format will be graded, getting instructor approval of your choice of format and topic, keeping the instructors updated on your progress, and other more detailed requirements.

**About the Graduate Research Consultant:** This semester we have Ms. Meagan Madden as a Graduate Research Consultant (GRC). The GRC Program is sponsored by the Office for Undergraduate Research, and you may be able to use this course to meet a requirement of the Carolina Research Scholar Program. Here are some guidelines for seeking help from our GRC:

- Our GRC is a consultant who helps with your research projects (as the title indicates), and is thus not responsible for grading, logistics, or questions that are specific to what we discussed in the lectures (please direct such questions to me and/or our TA, Ms. Alex Sides).
- The GRC is hired to work a total of 25 hours, i.e., an average of 2.5 hours per team. Please make an appointment via the link provided on the first page of this syllabus.
- What the GRC can help with things such as:
  - Assisting you to formulate a research question. The GRC will not hand out research questions if you haven't "done your homework," but can certainly help you polish an interest in a broad/vague *topic* into a specific and feasible research *question*.
  - Referring you to potential data sources, empirical tools, and the relevant literature.
  - Advising on the high-level empirical strategy and the interpretation of results.
  - Answering general questions in doing empirical research, such as what type of summary statistics to report, how broad/deep the literature review should be, what to show and what to skip during the final presentation.
- What the GRC cannot help with things such as:
  - Acquiring or processing data.
  - Debugging.
  - Answering questions about the required readings that you will present in class.

**Research and Discovery:** This course meets the "Research and Discovery" objective of the IDEAs in action curriculum. Students immerse themselves in a research project and experience the reflection and revision involved in producing and disseminating original scholarship or creative works.

## • Questions for Students

- How do I establish my point of view, take intellectual risks, and begin producing original scholarship or creative works?
- How do I narrow my topic, critique current scholarship, and gather evidence in systematic and responsible ways?
- How do I evaluate my findings and communicate my conclusions?

## • Learning Outcomes

- Frame a topic, develop an original research question or creative goal, and establish a point of view, creative approach, or hypothesis.
- Obtain a procedural understanding of how conclusions can be reached in a field and gather appropriate evidence.
- Evaluate the quality of the arguments and/or evidence in support of the emerging product.
- Communicate findings in clear and compelling ways.
- Critique and identify the limits of the conclusions of the project and generate ideas for future work.

**University Policies and Resources:** Please see the policy insert at the end of this syllabus for information on university policies and resources.

#### List of topics and readings

Below is a tentative list of topics to be covered in the course and a subset of (highly recommended/required) readings. The list of readings will be continually updated with additional materials, such as new working papers and exemplary job market papers. A few important notes:

- Required readings are marked with an asterisk (\*). See Class Calendar for the date **before which** each paper should be read.
- Part 5 (Pharmaceutical Markets) is built on materials prepared and generously shared by Prof. Luca Maini, who was the co-instructor for this course in Spring 2021 and Spring 2022.
- 1. Introduction: Topics and Tools
  - \*Finkelstein, Amy, Matthew Gentzkow, and Heidi Williams, "Sources of Geographic Variation in Health Care: Evidence From Patient Migration," *The Quarterly Journal of Economics*, nov 2016, 131 (4), 1681–1726.
  - Arrow, Kenneth J., "Uncertainty and the Welfare Economics of Medical Care," American Economic Review, 1963, 53 (5), 940–973. of Health Insurance: Evidence from the Introduction of Medicare," The Quarterly Journal of Economics, 2007, 122 (1), 1–37.

#### 2. Providers: Incentives and Behaviors of Health Care Providers

- (a) Agency I: Induced Demand
  - \*Johnson, Erin M. and M. Marit Rehavi, "Physicians treating physicians: Information and incentives in childbirth," *American Economic Journal: Economic Policy*, 2016, 8 (1), 115–141.
  - Schnell, Molly, "Physician Behavior in the Presence of a Secondary Market: The Case of Prescription Opioids," *Working Paper*, 2022.
- (b) Agency II: Other Margins
  - \*Eliason, Paul J., Paul L. E. Grieco, Ryan C. Mcdevitt, and James W. Roberts, "Strategic Patient Discharge: The Case of Long-Term Care Hospitals," *American Economic Review*, 2018, 108 (11), 3232–3265.
  - Alexander, Diane. "How do doctors respond to incentives? unintended consequences of paying doctors to reduce costs." *Journal of Political Economy*, 2020, 128(11)): 4046-4096.

- \*Geruso, Michael, and Timothy Layton. "Upcoding: evidence from Medicare on squishy risk adjustment." *Journal of Political Economy* 128.3 (2020): 984-1026.
- (c) Provider Productivity
  - \*Doyle, Joseph J., John A. Graves, Jonathan Gruber, and Samuel A. Kleiner, "Measuring Returns to Hospital Care: Evidence from Ambulance Referral Patterns," *Journal of Political Economy*, feb 2015, 123 (1), 170–214.
  - Chandra, Amitabh and Douglas O. Staiger, "Productivity spillovers in health care: Evidence from the treatment of heart attacks," *Journal of Political Economy*, 2007, 115 (1), 103–140.
- (d) Provider learning
  - **\*Kolstad, Jonathan T,** "Information and Quality When Motivation Is Intrinsic: Evidence from Surgeon Report Cards," *American Economic Review*, 2013, 103 (7), 2875– 2910.
  - \*Crawford, Gregory S and Matthew Shum, "Uncertainty and Learning in Pharmaceutical Demand," *Econometrica*, 2005, 73 (4), 1137–1173.

#### 3. Policies: Prices, Qualities, and Inequalities

- (a) Design of Physician Payment Schemes
  - \*Clemens, Jeffrey and Joshua D. Gottlieb, "Do Physicians' Financial Incentives Affect Medical Treatment and Patient Health?," *American Economic Review*, 2014, 104 (4), 1320–1349.
  - Dafny, Leemore, "How do Hospitals Respond to Price Changes?," American Economic Review, 2005, 95 (5), 1525–1547.
- (b) Government-provided insurance and the pricing of care
  - \*Clemens, Jeffrey, and Joshua D. Gottlieb. "In the shadow of a giant: Medicare's influence on private physician payments." Journal of Political Economy, 2017, 125 (1): 1-39.
  - \*Chan, David C., and Michael J. Dickstein. "Industry input in policy making: Evidence from Medicare." The Quarterly Journal of Economics, 2019, 134 (3): 1299-1342.
- (c) Hospital readmissions reduction programs

- \*Gupta, Atul, "Impacts of Performance Pay for Hospitals: The Readmissions Reduction Program." *American Economic Review*, 2021, 111 (4): 1241-83.
- Darden, Michael, Ian McCarthy, and Eric Barrette. "Who Pays in Pay-for-Performance? Evidence from Hospital Prices and Financial Penalties." *American Journal of Health Economics*, 2023, 9 (3): 435-460.
- (d) Homophily in the referral network and beyond
  - \*Zeltzer, Dan, "Gender homophily in referral networks: Consequences for the Medicare physician earnings gap," *American Economic Journal: Applied Economics*, 2020, 12(2), 169-97.
  - \*Cabral, Marika, and Marcus Dillender, "Gender Differences in Medical Evaluations: Evidence from Randomly Assigned Doctors," *American Economic Review*, forthcoming.
  - Marcella Alsan, Owen Garrick, and Grant Graziani. "Does Diversity Matter for Health? Experimental Evidence from Oakland." *American Economic Review* 2019, 109(12): 4071–4111.
- (e) Quality and cost of emergency care
  - \*Cooper, Zack, Fiona Scott Morton, and Nathan Shekita. "Surprise! Out-ofnetwork billing for emergency care in the United States." *Journal of Political Economy*, 2020, 128(9): 3626-3677.
  - Silver, David. "Haste or Waste? Peer pressure and productivity in the emergency department," *The Review of Economic Studies*, 2021, 88 (3): 1385-1417.

#### 4. Payers: Health Insurance Markets

- (a) Moral Hazard and Insurance Design
  - \*Zarek C. Brot-Goldberg, Amitabh Chandra, Benjamin R. Handel, Jonathan T. Kolstad, "What does a Deductible Do? The Impact of Cost-Sharing on Health Care Prices, Quantities, and Spending Dynamics," *The Quarterly Journal of Economics*, 132 (3), 2017, 1261–1318.
  - Dranove, David, Christopher Ody, and Amanda Starc, "A Dose of Managed Care: Controlling Drug Spending in Medicaid," *American Economic Journal: Applied Economics*, 2021, 13 (1): 170-97.

- (b) Competition and Adverse Selection
  - \*Dafny, Leemore, Jonathan Gruber, and Christopher Ody, "More Insurers Lower Premiums: Evidence from Initial Pricing in the Health Insurance Marketplaces," *American Journal of Health Economics*, 2015, 1 (1), 53–81.
  - David M. Cutler, Sarah J. Reber, "Paying for Health Insurance: The Trade-Off between Competition and Adverse Selection," *The Quarterly Journal of Economics*, 113 (2), 1998, 433–466.
- (c) Fixes for Adverse Selection
  - \*Finkelstein, Amy, Nathaniel Hendren, and Mark Shepard, "Subsidizing Health Insurance for Low-Income Adults: Evidence from Massachusetts." *American Economic Review*, 2019, 109 (4): 1530-67.
  - **Tebaldi**, **Pietro**, "Estimating Equilibrium in Health Insurance Exchanges: Price Competition and Subsidy Design under the ACA," *Review of Economic Studies*, forthcoming.

#### 5. The Pharmaceutical Market

- (a) Introduction to pharmaceutical markets
  - \*Lakdawalla, Darius N., "Economics of the pharmaceutical industry," *Journal of Economic Literature*, 2018, 56 (2), 397–449.
  - Kakani, Pragya, Michael Chernew, and Amitabh Chandra, "Rebates in the Pharmaceutical Industry: Evidence from Medicines Sold in Retail Pharmacies in the U.S.," *Journal of Health Politics, Policy and Law*, 2022, 47 (7).
- (b) Competition in pharmaceutical markets
  - \*Maini, Luca, Josh Feng, Thomas Hwang, and Jacob Klimek, "Biosimilar Entry and the Pricing of Biologic Drugs," *Working Paper*, 2022.
  - Grabowski, Henry, Genia Long, Richard Mortimer, and Ani Boyo, "Updated trends in US brand name and generic drug competition," *Journal of Medical Economics*, 2016, 19 (9), 836–844.

Week	Date	Торіс	Required reading (+: to be presented)	Assignment	
Introduction: topics and methods (3 lectures)					
1	1/11	Course overview: goals and expectations			
2	1/16	Toolkit for empirical research I: an example	Finkelstein, Gentzkow, Williams (2016 QJE)		
	1/18	Toolkit for empirical research I: RUM			
Part 1: Providers (6 lectures)					
3	1/23	Agency I - induced demand	+Johnson and Rehavi (2016 AEJ:P)		
	1/25	Agency II - other margins	+Eliason et al. (2018 AER)	HW1 due	
4	1/30	Agency II - other margins	+Geruso and Layton (2020 JPE)		
	2/1	Provider productivity	+Doyle et al. (2015 JPE)		
5	2/6	Provider learning I	Kolstad (2013 AER)		
	2/8	Provider learning II	Crawford and Shum (2005 EMCA)	HW2 due	
6	2/13	Well-being Day			
Part 2: Policies (7 lectures)					
	2/15	Design of physician payment schemes	Clemens and Gottlieb (2014 AER)		
7	2/20	Government-provided insurance	+Clemens and Gottlieb (2017 JPE)		
	2/22	Pricing of care	+Chan and Dickstein (2019 QJE)	HW2B due	
8	2/27	Quality monitoring programs	+Gupta (2021 AER)		
	2/29	Physician homophily	+Zeltzer (2020 AEJ:App)		
9	3/5	Physician-patient gender and racial concordance	+Cabral and Dillender (forthcoming in AER)		
	3/7	Quality and cost of emergency care	Cooper, Morton, Shekita (2020 JPE)	HW3 due	
10	3/12	Spring Break			
	3/14	Spring Break			
	Toolkit for Empirical Research II				
11	3/19	Data description and analysis	-		
	3/21	Linking theory and empirics	-		

## **Class Calendar**

Week	Date	Торіс	Required reading (+: to be presented)	Assignment
Part 3: Payers (4 lectures)				
12	3/26	Moral hazard and insurance design	Brot-Goldberg et al. (2018 AJE)	HW4 due
	3/28	Well-being Day		
13	4/2	Competition and adverse selection I	+Dafny, Gruber, and Ody (2015 AJHE)	
	4/4	Competition and adverse selection II	-	
14	4/9	Fixes for adverse selection	Finkelstein, Hendren, and Shepard (2019 AER)	
Part 4: Pharma (2 lectures)				
	4/11	Intro to pharmaceutical markets	Lakdawalla (2018 JEL)	
15	4/16	Competition in drug markets	Maini et al. (2022 WP)	
	4/18	Presentations 1 (20 min/team, on Zoom)	-	HW5 due
16	4/23	Presentations 2 (20 min/team, on Zoom)	-	
	4/25	Presentations 3 (20 min/team, on Zoom)	-	
17	4/30	Presentations 4 (20 min/team, on Zoom)	-	
18	5/7*	Papers due at noon (12pm)		
	5/10	Final: last chance to make up for missed readings (by 11am)		

## **Class Calendar (continued)**

Notes:

- All the papers listed in this table are required readings.

- Papers that are marked with a plus sign ("+") also need to be presented in class.

- Teams and in-class presentations should be finalized by Thu. Jan 18 in the same Google Sheet linked here.

- Final papers are due online Tue. May 7 at noon (12 pm). There is no class meeting, nor is this the final exam.

- The latest time to make up for missed readings is 11am on the final exam day, May 10.

## University of North Carolina at Chapel Hill Statements for Undergraduate Classes Spring 2024

#### **Attendance Policy**

**University Policy:** As stated in the University's <u>Class Attendance Policy</u>, no right or privilege exists that permits a student to be absent from any class meetings, except for these University Approved Absences:

- Authorized University activities: <u>University Approved Absence Office (UAAO) website</u> provides information and <u>FAQs for students</u> and <u>FAQs for faculty</u> related to University Approved Absences
- 2. Disability/religious observance/pregnancy, as required by law and approved by <u>Accessibility</u> <u>Resources and Service</u> and/or the <u>Equal Opportunity and Compliance Office</u> (EOC)
- Significant health condition and/or personal/family emergency as approved by the <u>Office of the</u> <u>Dean of Students</u>, <u>Gender Violence Service Coordinators</u>, and/or the <u>Equal Opportunity and</u> <u>Compliance Office</u> (EOC).

#### Honor Code

All students are expected to follow the guidelines of the UNC honor code. In particular, students are expected to refrain from "lying, cheating, or stealing" in the academic context. If you are unsure about which actions violate that honor code, please consult <u>honor.unc.edu</u>.

#### Artificial Intelligence (AI) Use Policy

Generative AI is extremely useful; however, it has the following limitations:

- How output is arrived at is not clear as the internal processes used to produce a particular output within the generative AI cannot be determined.
- The output is based on existing data (often scraped from online sources) and may reflect biases that should be acknowledged; it may also be inaccurate or entirely fabricated, even if it appears reliable or factual.
- Al evokes a range of intellectual property concerns; sourcing and ownership of information is unclear, and the status of Al output raises numerous questions—e.g., is output equivalent to a published resource? What citational responsibilities are in place for various Al interactions?

The following sections provide the philosophy and specific guidelines for using these tools and features (increasingly, generative AI capabilities will be integrated with everyday applications).

#### Use of generative AI in your coursework is based on the following principles:

- 1. Al should help you think. Not think for you. Use these tools to give you ideas, perform research (in compliance with point 2 below), and analyze problems. Do not use them to do your work for you, e.g., do not enter an assignment question into ChatGPT and copy & paste the response as your answer.
- 2. Engage with AI Responsibly and Ethically: Engage with AI technologies responsibly, critically evaluating AI-generated outputs and considering potential biases, limitations, and ethical implications in your analysis and discussions. Utilize AI technologies ethically, respecting privacy,

confidentiality, and intellectual property rights. Ensure that the data used for AI applications is obtained and shared responsibly and in compliance with relevant regulations.

- 3. You are 100% responsible for your final product. You are the user. If the AI makes a mistake, and you use it, it's your mistake. If you don't know whether a statement about any item in the output is true, then your responsibility is to research it. If you cannot verify it as factual, you should delete it. You hold full responsibility for AI-generated content as if you had produced the materials yourself. This means ideas must be attributed, facts are true, and sources must be verified.
- 4. **The use of AI must be open and documented**. The use of any AI in the creation of your work must be declared in your submission and explained. Details on how to source your AI usage are explained below.
- 5. These guidelines are in effect unless I give you specific guidelines for an assignment or exam. It is your responsibility to ensure you are following the correct guidelines.
- 6. Data that are confidential or personal should not be entered into generative AI tools. Putting confidential or personal data (e.g., your One Card details) into these tools exposes you and others to the loss of important information. Therefore, do not do so.

#### **Guideline Specifics**

Not following these guidelines may be a reportable violation to the UNC Honor Court.

- Writing and Presentation: In principle, you may submit material that contains AI-generated content, or is based on or derived from it, if this use is properly documented. This may include drafting an outline, preparing individual sections, combining elements, removing redundant parts, and compiling and annotating references. Your documentation must make the process transparent the submission itself must meet the relevant standards of attribution and validation.
- Mathematical and Statistical Analysis, Data Analysis, Data Interpretation, Coding of Data, generalizing data to a problem set or any other forms of quantification of language or concepts, etc.: Generative AI can be used for these purposes; however, the output must be verified via your own mathematical calculations and proof of work provided in your assignment.
- **Readings and Discussions**: Generative AI can be used to analyze readings. However, you must also do the readings. Generative AI analysis is not a substitute for reading the works themselves. Similarly, participating in online discussions of readings requires that you provide your own contributions. Unless I specifically allow it, do not generate responses to readings using AI.
- **Research**: If you use AI to support your research, you must account for and document your use. Possibilities include topic brainstorming, search assistance, source evaluation, and summaries and source documentation. Track your use of AI throughout these stages, and then document this assistance as you submit the project. Any material generated through AI in your projects should also be documented in your citations.

#### Sourcing Use of AI

• Accuracy: Generative AI may invent both facts and sources for those facts. Verification is your responsibility, whether the source of the error is you or the AI makes no difference. You need to check the facts, the quotes, the arguments, and the logic, and document what you did to validate your material.

- Attribution: All ideas that are not originally your own have a source and that source must be attributed. Please be aware that generative Al tends to invent sources. You have a two-fold obligation with respect to attribution:
  - (1) If a source is identified, find and attribute the original source of the idea, identify the location of the text within the source, and provide a working link to the location (if the source is available online). If you are not able to locate the source, delete that content.
  - (2) Document the process by explaining how you used generative AI in a work statement that will accompany your submission of major projects in the class. As you submit a project, develop, and include an appropriate version of the below statements:

"I attest that this project did not use AI at any stage in its development or in the creation of any of its components."

"I attest that this project made use of AI in the following ways: ..." (provide details)

#### Syllabus Changes

The instructor reserves the right to make changes to the syllabus including project due dates and test dates. These changes will be announced as early as possible.

#### **Accessibility Resources and Service**

<u>Accessibility Resources and Service</u> (ARS – <u>ars@unc.edu</u>) receives requests for accommodations, and through the Student and Applicant Accommodations Policy determines eligibility and identifies reasonable accommodations for students with disabilities and/or chronic medical conditions to mitigate or remove the barriers experienced in accessing University courses, programs and activities.

ARS also offers its Testing Center resources to students and instructors to facilitate the implementation of testing accommodations.

### **Counseling and Psychological Services**

UNC-Chapel Hill is strongly committed to addressing the mental health needs of a diverse student body. The <u>Heels Care Network</u> website is a place to access the many mental health resources at Carolina. CAPS is the primary mental health provider for students, offering timely access to consultation and connection to clinically appropriate services. Go to their website <u>https://caps.unc.edu/</u> or visit their facilities on the third floor of the Campus Health building for an initial evaluation to learn more. Students can also call CAPS 24/7 at 919-966-3658 for immediate assistance.

#### Title IX and Related 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. Reports can be made online to the EOC at <a href="https://eoc.unc.edu/report-an-incident/">https://eoc.unc.edu/report-an-incident/</a> or by contacting the University's Title IX Coordinator (Elizabeth Hall, <a href="titleixcoordinator@unc.edu">titleixcoordinator@unc.edu</a>) or the Report and Response Coordinators in the Equal Opportunity and Compliance Office (<a href="reportandresponse@unc.edu">reportandresponse@unc.edu</a>). Confidential resources include Counseling and Psychological Services and the Gender Violence Services Coordinators (<a href="gysc@unc.edu">gysc@unc.edu</a>). Additional resources are available at <a href="mailto:safe.unc.edu">safe.unc.edu</a>.