

Health Systems Course • Mondays 6:30-9:20p

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Office hours by appointment

“Society will permit you to use drugs and instruments that can do great harm as well as great good, and that in the hands of others would be weapons.”

- *Donald M. Berwick, MD, MPP, Yale Medical School Graduation Address, May 24, 2010*

Course Description: Health Systems is a foundational course that introduces students to many of the broad subjects that will be detailed in more advanced course work. The goal of this course is to provide an overview of the health care delivery system and the stakeholders involved in providing care and treatment. You will gain an understanding of many complexities within the US health care system, including (but not limited to) applicable professional principles for those in health care, the role of government, quality improvement initiatives, and concepts related to health equity. Case studies, small group discussions, scholarly readings, and videos will demonstrate the importance of dynamics within health care delivery systems and the myriad motivations of stakeholders involved in the healing process.

Course Objectives: By the end of the course, students will be able to 1) Understand the history, milestones, and current models of US health care delivery, 2) Recognize strengths and weaknesses of various reimbursement models, 3) Comprehend the health care inequities and their consequences in the US, 4) Understand initiatives to improve health care and what such endeavors mean for the future. Each of these objectives will be assessed through class participation, presentations, and papers.

Materials: All class materials, except those students must research on their own, are posted in the Canvas course site.

Expectations: This course requires significant reading, writing, and discussion. It is expected that everyone will come to class prepared to discuss the readings. My goal is to make this an excellent learning experience for you. I ask that you be respectful of others by arriving to class on time and not using your electronic devices in class without discussing with me first.

All students are expected to display critical thinking and express their perceptions and conclusions in class discussions and activities. Sharing your own knowledge and experience benefits the entire class. Constructive contribution to the class discussion and genuine listening to others is an important element of learning.

To attend class meetings in person, all students are expected to abide by all behaviors indicated in [A Tartan’s Responsibility](#), including any timely updates based on current conditions. In terms of specific classroom expectations, whenever the requirement to wear a facial covering is in effect on campus, students are expected to wear a facial covering throughout class. If you do not wear a facial covering to class when directed by the university, I will ask you to put one on (and if you don’t have one with you, I will direct you to a distribution location on campus, see <https://www.cmu.edu/coronavirus/health-and-wellness/facial-covering.html>). If you do not comply, you will be referred to the Office of Community Standards and Integrity for follow up, which could include student conduct action. Finally, please note that sanitizing wipes should be available in our classroom for those who wish to use them.

Evaluation/Grading/Assessment: All assignments and class participation are graded on a point scale as outlined below. The maximum points one can achieve for the entire semester is 200. Final course grades will be assigned as follows:

| Letter Grade | % | Letter Grade | % |
|--------------|---------|--------------|--------|
| A+ | 97-100% | B | 83-86% |
| A | 93-96% | B- | 80-82% |
| A- | 90-92% | C+ | 77-79% |
| B+ | 87-89% | | |

| Activity | Possible Points | Due Date |
|-------------------------------|-----------------|----------|
| In-class participation | 10 | Ongoing |
| Prompt responses (4 @10 each) | 40 | Ongoing |
| Perceptions of HC interviews | 40 | 9/11/24 |
| AI & data innovations project | 40 | 9/18/24 |
| Group presentations | 25 | 10/9/24 |
| Panel participation | 15 | 10/9/24 |

Assessment 1: Participation – 50 point maximum. There will be four in-class responses required by students, each worth 10 points. These points are all or nothing; no partial credit will be provided for responses that do not demonstrate clear understanding of material. The remaining ten points, also all or nothing, will reflect student’s level of engagement throughout the term. It is not possible to pass this class having missed more than 2 sessions.

Assessment 2: Perceptions of HC interviews – 40 pt maximum. For this assignment, students will speak with two different individuals and record the answers to questions provided by the instructor. Students should prompt their interviewees for the reasons behind their answers and detail those reasons in a two-page paper. A snapshot profile of each interviewee should be included, detailing their ages, occupations, and number of years accessing the US healthcare system.

Assessment 3: AI & data innovations – 40 pt maximum. In either a 2-page paper or 4-minute video, students will identify an AI innovation within healthcare, evaluate how well the current and/or predicted use of this specific AI upholds at least three of the World Health Organization’s guiding principles, and

discuss risks and benefits associated with this specific AI. This exploration can be focused on an innovation within the health insurance industry **or** hospital settings **or** pharma/device industry.

Assessment 5: Group presentation – 25 pt maximum. Students will provide a 15-minute presentation focused on one of the instructor-provided topics.

Assessment 6: Panel participation – 15 pt maximum. Students will form a panel consisting of the same people in their presentation group. Panelists will receive a pre-scripted question from the instructor to pose after another group has concluded their presentation. Panelists will then convene with each other to evaluate the response provided by the group presenters and formulate three additional questions. All panel members are expected to participate in the formulation of questions. All panel members will receive the same grade for this assignment.

Academic Statement: You are expected to attend class, be prepared for class and participate in the discussions. Written assignments are due on or before the due date. If you must miss a class, please notify me with as much advanced notice as possible; if you cannot talk with me directly, please leave a message on my voice mail or e-mail. For any class that you miss, you are responsible for obtaining the notes and related materials from another student. Please let me know if you do not understand class material or requirements or if any special circumstance prevents you from completing a class requirement on time.

You are responsible to know and adhere to all University policies on academic integrity. The Heinz School provides a booklet on Plagiarism and Cheating and the University lists all policies on the web at www.cmu.edu/policies/documents/Cheating.html. Please acquaint yourself with their contents. Any cheating or plagiarism will result in failure in the course and your case will be referred to the Associate Dean, who may decide to take further action.

Recording academic classroom activities, lectures, etc and use of electronic devices: Classroom activities, lectures, etc. may not be recorded without my written permission in advance. If a student is permitted to record classroom activities, lectures, etc., the student may do so for his/her own personal use only; additionally, no copies of the original recording can be made. All electronic devices such as cell phones, iPods, laptops, tablets, etc., are to be turned off and stowed prior to entering the classroom. There is no difference between texting/instant messaging/etc and holding a full conversation in person while in a classroom setting. Students using such devices for personal reasons within the classroom without prior approval will be asked to leave the room until they are finished with their task.

Use of Generative AI:

You are welcome to use generative AI programs (ChatGPT, DALL-E, etc.) in this class. These programs can be powerful tools for learning and other productive pursuits, including completion of some assignments in less time, helping you generate new ideas, or serving as a personalized learning tool.

However, your responsibilities as a student remain the same. You must follow the academic integrity guidelines of the university and of this class. If you use one of these generative AI tools to develop content for an assignment, you are required to cite the tool's contribution to your work. In practice, cutting and pasting content from any source without citation is plagiarism. Likewise, paraphrasing content from a generative AI without citation is plagiarism. Similarly, using any generative AI tool without appropriate acknowledgement will be treated as plagiarism. The university's policy on

plagiarism applies to all uncited or improperly cited use of work, whether that work is created by human beings alone or in collaboration with a generative AI. In this class, you may use generative AI programs to:

- Brainstorm new ideas
- Develop example outlines or approaches to your work
- Research topics, or generate different ways to talk about a problem

You may not use generative AI programs to:

- Generate content that you cut and paste into an assignment with a written component without quotations and a citation
- Generate content that is not adequately paraphrased without a citation
- Generate bibliographies for topics that you haven't researched yourself
- Generate other content (images, video, others) unless expressly permitted and following provided guidance
- Otherwise use or present generative AI content that you pass off as your own work, when really it is not

Finally, it is important that you recognize that large language models frequently provide users with incorrect information, create professional-looking citations that are not real, generate contradictory statements, incorporate copyrighted material without appropriate attribution, and can sometimes integrate biased concepts. Code generation models may produce inaccurate outputs. Image generation models may create misleading or offensive content.

While you may use these tools in the work you create for this class, it is important to note that you understand you are ultimately responsible for the content that you submit. Work that is inaccurate, biased, unethical, offensive, plagiarized, or incorrect will be penalized.

Course Schedule

| Date | Topic(s) | Homework | Items Due |
|---------|---|--|--------------------------------------|
| 8/26/24 | Class overview, introduction and history: fundamentals of the US health care system | Perceptions of healthcare interviews; assigned readings | N/A |
| 9/9/24 | Costs and financing | Perceptions of healthcare interviews; assigned readings | |
| 9/16/24 | Healthcare models, Quality/Safety; Value Based Care | Professional interview; assigned readings | Perceptions of healthcare interviews |
| 9/23/24 | Tech | Assigned readings | Professional interview |
| 9/30/24 | Health equity | AI & data innovations analysis; assigned readings; group presentations | |

| | | | |
|---------|---------------------|---------------------|---|
| 10/7/24 | Group presentations | Group presentations | Group presentations; panel participation |
|---------|---------------------|---------------------|---|

Please note:

Student Wellness - The last few years have been challenging. We are all under a lot of stress and uncertainty. I encourage you to reach out to your support system or me [rebekaha@andrew.cmu.edu] if you need. We can all benefit from support in times of stress, and this semester is no exception.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services (CaPS) is here to help: call 412-268-2922 and visit their website at <http://www.cmu.edu/counseling/>. Consider reaching out to a friend, faculty or family member you trust for help getting connected to the support that can help.

If you are worried about affording food or feeling insecure about food, there are resources on campus that can help. Email the CMU Food Pantry Coordinator to schedule an appointment: Pantry Coordinator, cmu-pantry@andrew.cmu.edu, 412-268-8704 (SLICE office).

CMU offers resources for students with international status, who primarily speak languages other than English, and/or have attended high school or undergraduate programs in the US. If you or someone you know is interested in honing language and cross-cultural skills for academic and professional success, please visit: <https://www.cmu.edu/student-success/programs/language-support/index.html>.

Diversity Statement:

We must treat every individual with respect. We are diverse in many ways, and this diversity is fundamental to building and maintaining an equitable and inclusive campus community. Diversity can refer to multiple ways that we identify ourselves, including but not limited to race, color, national origin, language, sex, disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, or genetic information. Each of these diverse identities, along with many others not mentioned here, shape the perspectives our students, faculty, and staff bring to our campus. We, at CMU, will work to promote diversity, equity and inclusion not only because diversity fuels excellence and innovation, but because we want to pursue justice. We acknowledge our imperfections while we also fully commit to the work, inside and outside of our classrooms, of building and sustaining a campus community that increasingly embraces these core values.

Each of us is responsible for creating a safer, more inclusive environment.

Unfortunately, incidents of bias or discrimination do occur, whether intentional or unintentional. They contribute to creating an unwelcoming environment for individuals and groups at the university. Therefore, the university encourages anyone who experiences or observes unfair or hostile treatment on the basis of identity to speak out for justice and support, within the moment of the incident or after the incident has passed. Anyone can share these experiences using the following resources:

Center for Student Diversity and Inclusion: csdi@andrew.cmu.edu, (412) 268-2150

Report-It online anonymous reporting platform: reportit.net username: tartans password: plaid

All reports will be documented and deliberated to determine if there should be any following actions.

Regardless of incident type, the university will use all shared experiences to transform our campus climate to be more equitable and just.

Accommodations for Students with Disabilities - If you have a disability and have an accommodations letter from the Disability Resources office, I encourage you to discuss your accommodations and needs with me as early in the semester as possible. I will work with you to ensure that accommodations are provided as appropriate. If you suspect that you may have a disability and would benefit from accommodations but are not yet registered with the Office of Disability Resources, I encourage you to contact them at access@andrew.cmu.edu.