Term Information

Effective Term   Autumn 2022

General Information

Course Bulletin Listing/Subject Area   Political Science
Fiscal Unit/Academic Org   Political Science - D0755
College/Academic Group   Arts and Sciences
Level/Career   Undergraduate
Course Number/Catalog   2120
Course Title   Follow the Science: The Politics of Health
Transcript Abbreviation   Politics of Health
Course Description   In the 20th Century, chronic conditions became the leading killers of Americans and the federal government came to play a much more expansive role in health, including the approval of treatments, regulation of harmful substances, promotion of healthy habits, and funding healthcare. Students will survey these developments and apply the resulting insights to contemporary health policy debates.
Semester Credit Hours/Units   Fixed: 3

Offering Information

Length Of Course   14 Week, 8 Week, 7 Week, 6 Week
Flexibly Scheduled Course   Never
Does any section of this course have a distance No
education component?
Grading Basis   Letter Grade
Repeatable   No
Course Components   Lecture
Grade Roster Component   Lecture
Credit Available by Exam   No
Admission Condition Course   No
Off Campus   Never
Campus of Offering   Columbus, Lima, Mansfield, Marion, Newark

Prerequisites and Exclusions

Prerequisites/Corequisites
Exclusions
Electronically Enforced   Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code   45.1001
Subsidy Level   Baccalaureate Course
Intended Rank   Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

Citizenship for a Diverse and Just World; Health and Well-being

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes	• students will analyze various important health policy topics or ideas at an advanced and in-depth level
Content Topic List	• Controversy over the link between smoking and cancer
	• Strategies used by both tobacco companies and anti-smoking advocates to influence public policy
	• The rise of heart disease in the 20th Century and the proposed "diet-health" hypothesis
	• Development of federal nutritional guidelines
	• Federal funding for research on Alzheimer's disease
	• Changing scientific standards for FDA drug approval
	• Federal funding of hospitals and doctors through the Medicare program
Sought Concurrence	Yes

Attachments

• Citizenship ELOs.pdf: new GE Citizenship ELOs

   (Other Supporting Documentation. Owner: Smith,Charles William)

• Concurrence request list.pdf: list of concurrences sought

   (Other Supporting Documentation. Owner: Smith,Charles William)

• Health and Wellness ELOs.pdf: new GE Health and Well-being ELOs

   (Other Supporting Documentation. Owner: Smith,Charles William)

• POLITSC 2120 Politics of Health syllabus.pdf: PS 2120 syllabus

   (Syllabus. Owner: Smith,Charles William)

• Curriculum Map BA Political Science.pdf: Curriculum Map BS Poli Sci

   (Other Supporting Documentation. Owner: Smith,Charles William)

• Curriculum Map BA World Politics.pdf: Curriculum Map BA World POl

   (Other Supporting Documentation. Owner: Smith,Charles William)

• Curriculum Map BS Political Science.pdf: Curriculum Map BS Poli Sci

   (Other Supporting Documentation. Owner: Smith,Charles William)

• POLITSC 2120 Politics of Health PH Concurrence.pdf: Concurrence from Public Health

   (Concurrence. Owner: Smith,Charles William)

Comments

• need correction *(by Caldeira,Gregory Anthony on 02/01/2022 10:19 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Smith,Charles William	02/01/2022 03:59 PM	Submitted for Approval
Revision Requested	Caldeira,Gregory Anthony	02/01/2022 10:19 PM	Unit Approval
Submitted	Smith,Charles William	02/01/2022 10:23 PM	Submitted for Approval
Approved	Caldeira,Gregory Anthony	02/01/2022 10:24 PM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	02/08/2022 04:43 PM	College Approval
Pending Approval	Cody,Emily Kathryn Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Hilty,Michael Vankeerbergen,Bernadette Chantal Steele,Rachel Lea	02/08/2022 04:43 PM	ASCCAO Approval

POLITICAL SCIENCE 2120:
'FOLLOW THE SCIENCE?'
THE POLITICS OF HEALTH

Wednesdays and Fridays, 12:45 to 2:05 p.m. (3 credit hours)
Class Location
Fall 2022

Professor Vladimir Kogan
Office: Derby Hall 2004
Office Hours via Zoom:
- In person: Wednesdays, 2:15 to 3:30 p.m.
- On Zoom: Wednesdays, 8 to 9 p.m.
- By appointment (in person or Zoom)

E-mail: kogan.18@osu.edu

Top Hat Course URL: *app.tophat.com/e/XXXXXX*
Top Hat Course Join Code: *XXXXXX*

Course Description:
The second half of the 20th Century marked a dramatic change in the leading causes of mortality and morbidity among Americans and the public policy approaches aimed to address them. First, chronic conditions — including heart disease, cancer, and neurogenerative disorders — replaced infectious disease as the leading killers of Americans. Because these conditions tend to develop over long periods of time, traditional methods for identifying the causes of disease and developing new therapeutic treatments such as randomized controlled trials proved to be of limited use, leading to the invention of new analytic tools and methods in the field of epidemiology. Second, the federal government came to play a much more active and expansive role in health, including in the approval and review of new medical treatments, the regulation of harmful substances (e.g., tobacco), the promotion of healthy habits (e.g., national dietary guidelines), and the funding of medical care.

Together, these developments interacted in unpredictable and surprising ways to reshape the landscape of health and health care in our country. Powerful interest groups — some eyeing an opportunity to further their own financial interest, others seeing their profits threatened by government action — and patient advocates mobilized to influence the political process and enact policies most aligned with their own self-interest. These groups exploited unsettled scientific debates and the limitations of the epidemiological methods to sometimes block urgent policy change by pointing to scientific uncertainty and, at other times, to push through dramatic policy changes on the basis of limited (and subsequently discredited) evidence.

In this course, we'll survey these developments, with an eye for understanding both how we got to where we are today as well as for applying these insights to understand most controversial political debates in the field of health policy in the present day.

Goals and Expected Learning Outcomes:

This course is part of both the Citizenship for a Just and Diverse World and Health and Well-being themes in the university's General Education program.

General Theme Goals and Expected Learning Outcomes:

GOAL 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

ELO 1.1 Engage in critical and logical thinking about the topic or idea of the theme.

ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme.

Rationale: In this course, students will engage in an in-depth study of politics and policymaking in the United States with a focus on health. Rather than a general overview of these topics, students will get in the weeds on important topics related to key political institutions — including the committee system in Congress and decision-making in the Food and Drug Administration — and complex policy questions, including the evidentiary standards for the approval of new drugs and the precise formulae used to reimburse hospitals and doctors under the Medicare program. Specifically, we will focus on (1) cancer linked to smoking; (2) relationship between diet and heart disease; (3) the causes of Alzheimer's disease and the struggle of scientists to develop effective treatments; and (4) funding models for medical care provided by government-funded programs.

The focal policy and health issues that will be examined in the course are controversial and contested. Students will carefully study and engage the historical and ongoing policy and evidentiary debates in these fields. In the process, students will practice critically evaluating the research produced by epidemiologists and advocacy groups to promote their preferred policies, understanding the limitations of observational studies and research designs often used to make causal inferences from observational data.

Course-specific learning goals and expected learning outcomes:

- Students critically evaluate competing political and policy arguments, identifying whether the crux of the disagreement is over facts or normative values
- Students appreciate the role of key political institutions involved in the protection and promotion of health as well as the mechanisms used by external actors to influence decision-making within these institutions.
- Students understand the challenges of drawing causal inferences from observational data and the strengths and weaknesses of various epidemiological methods and research designs intended to establish causal relationships.

GOAL 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

ELO 2.1 Identify, describe, and synthesize approaches or experiences as they apply to the theme.

ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

Rationale: Students will engage critical readings from a variety of disciplines — including epidemiology, political science, economics, and medicine. In addition to scholarly journal articles, other course readings will include official government reports, journalistic accounts, and secondary historical sources. The group research projects will also give student practice taking the knowledge they gain in the classroom and applying it to current policy debates, engaging in their own independent research and analysis of both medical and policy research, and producing written work products (including a policy strategy memo and an op-ed written for a general audience) that will prepare them for professional careers.

Course-specific learning goals and expected learning outcomes:
- Students identify the connection between changing evidence and knowledge on health-related issues and the dynamics of political and policy debates surrounding these issues.
- Students accurately describe the inherent uncertainty or tentative nature of current scientific knowledge and how such uncertainty can be exploited strategically to serve desired political or policy goals.
- Students develop their skills as self-directed learners by carrying independent research, practice leadership and teamwork skills by working in groups, and practice career-relevant writing skills.

Citizenship Goals and Expected Learning Outcomes:

GOAL 1: Successful students will explore and analyze a range of perspectives on local, national, or global citizenship, and apply the knowledge, skills, and dispositions that constitute citizenship.

ELO 1.1 Describe and analyze a range of perspectives on what constitutes citizenship and how it differs across political, cultural, national, global, and/or historical communities.

ELO 1.2 Identify, reflect on, and apply the knowledge, skills and dispositions required for intercultural competence as a global citizen.

Rationale: Citizenship focuses on the relationship of individuals and their communities, and how diverse preferences are aggregated together through democratic processes to make public policy. This course is organized around both historical and ongoing policy and political debates in health. Much of the course will involve reading and thinking about disagreement and debates in these areas. A core goal of the class is for students to come to terms with the fact that reasonable people may disagree about many of these issues, and to separate areas where such disagreement is entirely appropriate in democracies (e.g., over values) and where consensus should at least theoretically be achievable (e.g., over the state of scientific knowledge, understanding, and uncertainty). In

addition, understanding how policy is made in the face of uncertainty and competing arguments and demands is a critical skill for individuals to be able to navigate the modern political process both as citizens and also potentially as policymakers.

Course-specific learning goals and expected learning outcomes:
- Students understand competing values, perspectives, and cultural norms related to the role of the state in regulating individual behaviors and market relationships and on the use of public policy to promote healthier decision-making and choices.

GOAL 2: Successful students will examine notions of justice amidst difference and analyze and critique how these interact with historically and socially constructed ideas of citizenship and membership within societies, both within the US and/or around the world.

ELO 2.1 Examine, critique, and evaluate various expressions and implications of diversity, equity, inclusion, and explore a variety of lived experiences.

ELO 2.2 Analyze and critique the intersection of concepts of justice, difference, citizenship, and how these interact with cultural traditions, structures of power and/or advocacy for social change.

Rationale: The inequities of American society are manifest in aggregate health outcomes and in our health care system, with historically under-represented groups often disproportionately affected both by the health conditions that we examine in this course and by policies designed to ameliorate them. Students will examine how these inequities impact the policymaking process and the types of arguments made by self-interested policy actors in their effort to influence policy. We will apply the DEI lens to examine (1) whose voices and interests are most effectively represented in the political process and (2) which communities are most affected by the policies and debates over salient health issues. We will also examine the historical origins of health inequities and the extent to which the gaps have narrowed or widened over time through public policy efforts.

Course-specific learning goals and expected learning outcomes:
- Students examine how social and demographic inequities are replicated or ameliorated through the political process, and think critically about whose interests are most effectively represented in this process.

Health and Well-being Goals and Expected Learning Outcomes:

GOAL 1: Students will explore and analyze health and wellbeing through attention to at least two dimensions of wellbeing. (Ex: physical, mental, emotional, career, environmental, spiritual, intellectual, creative, financial, etc.).

ELO 1.1 Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.

ELO 1.2 Identify, reflect on, or apply strategies for promoting health and well-being.

Rationale: As noted above, this course will focus specifically on three leading causes of mortality and morbidity in the United States — cancer, heart disease, and neurogenerative disease. While all three clearly have physical manifestations, they also affect other dimensions of health (e.g., patients diagnosed with Alzheimer's disease often suffer from depression in the early stages of their disease; costly cancer treatments can result in "financial toxicity" that affect not only the patients but also their families). When examining these conditions, we will focus both different kinds of causes (e.g., environmental exposure vs. individual health decisions and actions) and on the state of the knowledge about their prevention.

There are three overarching goals embedded in the design of the course with respect to helping students apply strategies for achieving and maintaining their health and well-being. First, students will develop a deep understanding of the current state of knowledge on the causes, treatments, and effective prevention strategies for the leading chronic conditions that affect the U.S. population. More generally, students will develop skills to become informed consumers of clinical trial and medical research — with the ability to go beyond the headlines in newspapers to understand the strength and limitations of various research methods and strategies. These skills will allow students to continue to stay informed on the changing state of medical knowledge on issues relevant to their health and well-being. Finally, students will develop and practice skills necessary to advocate for policies that can promote their own and broader community health.

Course-specific learning goals and expected learning outcomes:
- Students identify the connection between changing evidence and knowledge on health-related issues and the dynamics of political and policy debates surrounding these issues.
- Students accurately describe the inherent uncertainty or tentative nature of current scientific knowledge and how such uncertainty can be exploited strategically to serve desired political or policy goals.
- Students understand the challenges of drawing causal inferences from observational data and the strengths and weaknesses of various epidemiological methods and research designs intended to establish causal relationships.

Course Materials:

1. *All required course readings are posted on Carmen*

2. *Students need to create a free Top Hat account*
   Top Hat is a mobile audience response system that is used campus-wide at OSU. It is free and we will use Top Hat extensively throughout the course for both reading quizzes and class discussion. You can access the system via the URL on the front page of the syllabus or use the Top Hat app on your iOS or Android device.

Assignments:

1. **Class Participation (20% of Overall Grade)**
   Students can earn participation points daily by using Top Hat on their mobile devices to respond to questions incorporated into the course, by taking part in class discussions, and by participating in office hours. The bulk of the participation points will be earned through Top

Hat. You can earn extra credit by participating in class discussions and by taking part in office hours.

Points for Top Hat participation will be tracked automatically and can be viewed on the Top Hat course website. They will be updated on Carmen daily as well. Points for taking part in class discussions will be posted on Carmen after each class.

2. **Daily Reading Quiz (25% of Overall Grade)**
   Students are expected to complete the readings assigned for each class *prior* to the start of class. In the beginning of each class, students will use Top Hat to complete a short multiple-choice quiz covering basic comprehension and recall of major facts and ideas from the readings assigned for that day.

   To prepare for the quizzes, I strongly encourage students to carefully read and think about the "Reading Questions" included in the detailed course calendar below. If you can answer each of these questions, you will do well on the quiz. You are free refer to your notes or readings when completing the quizzes. *Quizzes missed due to absences cannot be made up, but the lowest four quiz scores will be dropped automatically for all students prior to the calculation of the final grades.*

3. **Midterm (20% of Overall Grade)**
   The midterm will consist of two parts. Several longer take-home questions will be posted on Carmen by Friday, Oct. 1, and will be due by 9 p.m. on Wednesday, Oct. 13. On Oct. 13, students will also complete a multiple-choice exam on Carmen. Students will have previously seen at least of half of the multiple-choice questions during the daily quizzes. *All* of the questions will be available for review on Carmen for approximately one week prior to the multiple-choice exam.

4. **Group Research Project (15% of Overall Grade)**
   Students will work in groups to research a current controversy at the intersection of politics and health. The possible research topics are listed below. The goal of the project is understanding both the scientific controversies at the heart of these issues as well as the associated political debates. In addition to presenting their findings to the class (5% of overall class grade), students will <u>work as a group</u> to write a five-page *policy strategy memo* laying out both the state of scientific knowledge and the recommended political strategy to pursue the optimal policy (5% of overall class grade). Finally, students will <u>individually</u> also draft an 800 to 1,000 word op-ed on the topic (5% of overall class grade). Both the memo and op-ed will be due on the day of each group's presentation (see detailed schedule below).

   Research topics:
   - Controversy over the U.S. Preventative Services Task Force recommendations for breast and prostate cancer screening
   - Masking of school children to prevent transmission of SARS-COV-2
   - Medicaid coverage for newly developed hepatitis C treatments
   - Legal mandates for gender-affirming treatment for transgender teens
   - Nutritional requirements for school lunches
   - Federal funding for biomedical research involving fetal stem cells

- Federal funding of gain-of-function research for viruses
- Proposed bans on flavored cigarettes (including menthol cigarettes)

5. **Final Exam (25% of Overall Grade)**
   The final exam will have the same format as the midterm. Several take-home questions will be posted on Carmen by Friday, Nov. 19. These will be due by 9 p.m. on Monday, Dec. 13. Students will complete the multiple-choice portion of the exam on Carmen on Monday, Dec. 13.

Academic Integrity:
It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:
- Committee on Academic Misconduct web page (go.osu.edu/coam)
- Ten Suggestions for Preserving Academic Integrity (go.osu.edu/ten-suggestions)
- Eight Cardinal Rules of Academic Integrity (go.osu.edu/cardinal-rules)

You are free to use any of your readings or notes when completing the quizzes, assignments, and exams. However, you are expected to submit your own work and to complete all assignments independently (with the exception of the group presentations and policy memos). If you are unsure about whether specific types of collaboration are appropriate, please reach out.

Students are required to upload their written exams to Carmen, which utilizes Turnitin.com for plagiarism detection. This online service analyzes student submissions for plagiarism from published or online sources and compares their work to submissions made by other students (including students who have taken the course in previous semesters). To avoid plagiarism issues, students must cite all sources from which they get their information and use quotation marks when quoting directly from these sources, including the readings and cases assigned for class. Students may use any standard citation format but are responsible for knowing how to correctly cite their sources.

Late and Make-Up Policy:
All take-home exam questions are due by 9 p.m. on the relevant due date. All assignments submitted more than 15 minutes after the relevant due date will be assessed a 5 percentage point late penalty. There will be an additional 5 percentage point penalty for each subsequent day that the assignment is late. *No assignments will be accepted more than one week late.*

Grade Appeals:
You have one week from when the grades are posted on Carmen to appeal the grade. You must submit a typed, double-spaced statement directly to the teaching assistant explaining why you are appealing your grade and justify it with evidence from your paper, exam, readings, lectures, and/or answer keys.

Accommodations for Disabled Students:

The university strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability including mental health, chronic or temporary medical conditions, please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; 098 Baker Hall, 113 W. 12th Avenue.

PLEASE TAKE CARE OF YOURSELF:
As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

If you are or someone you know is suffering from any of the above conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling (614) 292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at (614) 292-5766.

If you are thinking of harming yourself or need a safe, non-judgmental place to talk, or if you are worried about someone else and need advice about what to do, 24-hour emergency help is also available through the Suicide Prevention Hotline: (614) 221-5445 (Columbus); (800) 273-8255 (national); text "4hope" to 741741; or visit suicidepreventionlifeline.org.

Course Grade Scale:

Grade	From	To
A	100%	93%
A-	<93%	90%
B+	<90%	87%
B	<87%	83%
B-	<83%	80%
C+	<80%	77%
C	<77%	73%
C-	<73%	70%
D+	<70%	67%
D	<67%	60%
E	<60%	0%

Course Overview and Schedule:

Week 1

Wednesday, August 25 — Introduction and Course Overview

PART I. SMOKING AND CANCER

Friday, August 27 — Rise of Lung Cancer and Competing Hypotheses
Reading:
- Alton Ochsner and Michael DeBakey, 1939, "Primary Pulmonary Malignancy: Treatment by Total Pneumonectomy; Analysis of 79 Collected Cases and Presentation of 7 Personal Cases," *Journal of the American College of Surgeons* 68: 435-451.
- "Episode 44: The Great Smog," *Bedside Rounds* podcast.

Reading Questions:
- What first caused doctors to notice the sharp increase the prevalence of lung carcinoma cases in the first half of the 20th Century?
- What were the plausible explanations offered for this increase, and which explanations were seen as more vs. less plausible?
- Why did anti-German attitudes make American doctors initially reluctant to believe the smoking-cancer link?

Week 2

Wednesday, September 1 — Smoking: Cause and Effect?

Reading:

- E. Cuyler Hammond and Daniel Horn, 1954, "The Relationship Between Human Smoking Habits and Death Rates: A Follow-up Study of 187,766 Men," *Journal of the American Medical Association* 155(15): pp. 1316-1328.
- Richard Doll and A. Bradford Hill, 1954, "The Mortality of Doctors in Relation to Their Smoking Habits," *British Medical Journal* 1: pp. 1451-1455.

Reading Questions:

- How did the "prospective" cohort analysis method that Hamond and Horn and Doll and Hill developed compare to previous observational studies of the relationship between smoking and cancer?
- Why was this method an improvement, in terms of providing more credible estimates of causal effects?
- What was the magnitude of the relationship between smoking and lung cancer these studies uncover? How did it vary depending on the type of smoking and the "dosage?"

Friday, September 3 — The Smoking-Lung Cancer 'Controversy'

Reading:

- Jan P. Vandenbroucke, 1989, "Those Who Were Wrong," *American Journal of Epidemiology* 130(1): pp. 3-5.
- Paul D. Stolley, 1991, "When Genius Errs: R. A. Fisher and the Lung Cancer Controversy," *American Journal of Epidemiology* 133(5): pp. 416-425.
- Mark Parascandola, 2004, "Two Approaches to Etiology: The Debate Over Smoking and Lung Cancer in the 1950s," *Endevour* 28(2): pp. 81-86.

Reading Questions:

- Which prominent scientists at the time remained skeptical of the cancer-smoking link?
- Why did these critics not believe the correlational "associations" uncovered in the epidemiological data represented true "causal" effects? What alternative explanations did they offer for these associations?
- What alternative research designs did these scientists propose and what did these designs conclude?
- What is the relevance of this historical disagreement for current methodological debates in medicine and science more generally?

Week 3

Wednesday, September 8 — Tobacco Lobby Fights Back

Reading:

- A. Lee Fritschler and Catherine E. Rudder, 2006, *Smoking and Politics: Bureaucracy Centered Policymaking,* Pearson: "Chapter 2: The Grip of Tobacco Interests on Policymaking."

- Harvey M. Sapolsky, 1980, "The Political Obstacles to the Control of Cigarette Smoking in the United States," *Journal of Health Politics, Policy, and Law* 5(2): pp. 277-290.

Reading Questions:
- Through what mechanisms did the tobacco industry influence the political process to block and delay federal efforts to regulate the sale of cigarette and reduce the negative health consequences?
- What made the tobacco industry political influential, relative to voices of those who advocated stricter regulation?
- How did the internal design of American political institutions — such as the committee system in Congress and the importance of seniority — amplify the influence of the tobacco industry?
- What role did fiscal concerns (e.g., about tax revenues) play in these policy debates?

Friday, September 10 — Politics of Health Warnings and Liability Waivers
Reading:
- Elizabeth Brenner Drew, 1965 "The Quiet Victory of the Cigarette Lobby: How It Found the Best Filter Yet—Congress," *Atlantic Monthly*, September, pp. 76-80.
- Jonathan Kwitny, 1972, "Defending the Weed: How Embattled Group Uses Tact, Calculation to Blunt Its Opposition Tobacco Institute Manages Cigaret Firms' Strategy," *Wall Street Journal*, Jan. 24, p. 1.

Reading Questions:
- Why did the tobacco industry ultimately agree to mandated safety warnings on cigarette packages?
- What policy concessions did industry win in exchange for agreeing to warnings?

Week 4

Wednesday, September 15 — Second-Hand Smoke and the New Politics of Tobacco
- Ronald Bayer and James Colgrove, 2002, "Science, Politics, and Ideology in the Campaign Against Environmental Tobacco Smoke," *American Journal of Public Health* 92(6): pp. 949-954.

Reading Questions:
- Compare and contrast the early evidence on the direct impact of cigarette smoking on smokers to the evidence on the health impacts of second-hand smoke.
- Why was it politically easier to mobilize support on efforts to prevent second-hand smoke than earlier efforts to reduce smoking itself?
- How did anti-smoking advocates use policies designed to prevent second-hand smoke to change social norms about the acceptability of smoking itself?

PART II. DIET AND ARTHROSCLEROSIS

Friday, September 17 — Ancel Keys and the Diet-Health Hypothesis
   Reading:
   - "Fat of the Land," 1961, *Time*, Jan. 13: 48-52.
   - Ancel Keys, 1953, "Atherosclerosis: A Problem in Newer Public Health," *Journal of Mount Sinai Hospital* 20(2): pp. 118-139.
   - J. Yerushalmy and Herman E. Hilleboe, 1957, "Fat in the Diet and Mortality from Heart Disease: A Methodological Note," *New York State Journal of Medicine* 57(14): pp. 2343-2354.

   Reading Questions:
   - How did the rate of atherosclerosis — cardiovascular disease caused by the hardening of arteries — change in the first half of the 20th Century?
   - What hypothesis did Ancel Keys propose to explain the rising incidence of atherosclerosis, and what evidence did he present in the support of this hypothesis?
   - What were the strengths and weaknesses of the data and methods Keys use?

Week 5

Wednesday, September 22 — Congress and the 'Dietary Guidelines for the United States'
   Reading:
   - Gary Taubes, 2007, *Good Calories, Bad Calories: Challenging the Conventional Wisdom on Diet, Weight Control, and Disease*, New York: Alfred A. Knopf: Chapter 3 ("Creation of Consensus") and Chapter 4 ("The Greater Good")

   Reading Questions:
   - Why did Congress decide to formulate dietary guidelines in the 1970s? Who led the effort and what political incentives drove their participation?
   - What was the basis and evidence on which the dietary guidelines were based?
   - What criticisms against these guidelines were offered at the time, and who made these criticisms?

Friday, September 24 — The Margarine Lobby, Trade Policy, and the "Palm Oil Wars"
   Reading:
   - Donald J. McNamara, 2010, "Palm Oil and Health: A Case of Manipulated Perception and Misuse of Science," *Journal of the American College of Nutrition* 29 (Supplement 3): pp. 240S-244S.
   - Shakila Yacob, 2019, "Government, Business and Lobbyists: The Politics of Palm Oil in US-Malaysia Relations," *International History Review* 41(4): pp. 909-930.

   Reading Questions:
   - What trade policies did the U.S. government adopt to reduce the import of palm oil?

- What major industries advocated in favor of trade barriers to palm oil importation and what did they hope to gain?
- What role did U.S. dietary guidelines and beliefs about the impact of saturated fat on heart disease play in building political support for these trade policies?
- How accurate was the evidence presented by organized lobbies about the alleged health risks of palm oil (relative to domestically produced alternatives)?

Week 6

Wednesday, September 29 — Oops! Unintended Consequences and the Political Origins of Trans Fats

Reading:
- David Schleifer, 2012, "The Perfect Solution: How Trans Fats Became the Healthy Replacement for Saturated Fats," *Technology and Culture* 53(1): pp. 94-119.
- Nina Teicholz, 2014, *The Big Fat Surprise: Why Butter, Meat and Cheese Belong in a Healthy Diet*, New York: Simon & Schuster: Chapter 8 ("Exit Saturated Fats, Enter Trans Fats").

Reading Questions:
- What are trans fats, how were they invented, and how do they compare to other fats?
- Why did U.S. health guidelines and policies encourage food manufacturers to use trans fats in place of saturated fats?
- What are the health impacts of trans fats (compared to other types of fats and macronutrients)?

Friday, October 1 — Reevaluating the Scientific Evidence

Reading:
- Nina Teicholz, 2015, "The Scientific Report Guiding the US Dietary Guidelines: Is It Scientific?" *BMJ: British Medical Journal* 351.
- Arne Astrup et al., 2021, "Dietary Saturated Fats and Health: Are the U.S. Guidelines Evidence-Based?" *Nutrients* 13(1): Article 3305.

Reading Questions:
- What do current U.S. dietary guidelines recommend in terms of the ideal breakdown of calory consumption from different kinds of macronutrients? What do they recommend regarding the consumption of saturated fats?
- What is the evidence base for these recommendations?

PART III. Alzheimer's Disease

Week 7

Wednesday, October 6 — Discovery and Diagnosis of Alzheimer's Disease
Reading:
- Jason Karlawish, 2021, *The Problem of Alzheimer's: How Science, Culture, and Politics Turned a Rare Disease into a Crisis and What We Can Do About It*, New York: St. Martin's Press: Introduction ("The Disease of the Century") and Chapter 9 ("Alois Alzheimer: An Unwitting Revolutionary").

Reading Questions:
- What is Alzheimer's disease and how does it compare to other causes of dementia?
- How was Alzheimer's disease discovered and how did its discovery change both popular and doctors' beliefs about the nature of old-age dementia?
- What percent of the population is expected to be diagnosed with Alzhemer's disease before the end of their life?

Friday, October 8 — The Amyloid Hypothesis and the Research 'Cabal'
Reading:
- Sharon Begley, 2019, "Special Report: The Maddening Saga of How an Alzheimer's 'Cabal' Thwarted Progress Toward a Cure for Decades," *STAT News.*

Reading Questions:
- What is the "amyloid hypothesis" and what are alternative and competing explanations for the causes of Alzheimer's disease?
- Why were proponents of the "amyloid hypothesis" successful in steering the direction of federal funding efforts on Alzheimer's disease? Did these efforts ultimately bear fruit?

Week 8

Wednesday, October 13 — MIDTERM EXAM
- **Multiple-choice portion of exam will be available on Carmen all day, but you will have only 45 minutes to complete it once you start.**
- **Take-home questions must be uploaded by 9 p.m.**

Friday, October 15 — No Class (Fall Break)

Week 9

Wednesday, October 20 — Wonder Drug or Fiscal Ruin? The Aduhelm Approval
- Nicholas Bagley and Rachel Sachs, 2021, "The Drug That Could Break American Health Care," *The Atlantic.*

- Matthew Herper, Damien Garde, and Adam Feuerstein, 2021, "Newly Disclosed FDA Documents Reveal Agency's Unprecedented Path to Approving Aduhelm," *STAT News.*
- Pam Belluck, Sheila Kaplan, and Rebecca Robins, 2021, "How an Unproven Alzheimer's Drug Got Approved," *New York Times.*
- Beth Snyder Bulik, 2022, "Critics push back on Alzheimer's Association ad blitz to get Medicare to change its Aduhelm ruling: 'Dead wrong'," *Endpoint News.*

Reading Questions:
- What is aduhelm and what was the evidentiary basis for its effectiveness in reducing mild cognitive impairment at the time that it received FDA approval?
- Why did his approval prove to be so controversial?
- Who were the key interest groups and political actors that provided support for the approval of this controversial drug? What were their motivations and goals? What strategies have they used to try to influence the key federal agencies?

PART IV. Government Policy and the Health Care System

Friday, October 22 — Politics vs. Science in FDA Drug Approval

Reading:
- Laura E. Bothwell and Scott H. Podolsky, 2016, "The Emergence of the Randomized, Controlled Trial," *New England Journal of Medicine* 375(6): pp. 501-504.
- Russell Katz, 2004, "FDA: Evidentiary Standards for Drug Development and Approval," *NeuroRX* 1: pp. 307-316.
- Jerry Avorn and Aaron S. Kesselheim, 2017, "New 'The 21st Century Cures' Legislation: Speed and Ease vs. Science" *Journal of the American Medical Association* 317(6): pp. 581-582.

Reading Questions:
- How did the scientific and evidentiary basis for the federal approval of new drugs and medical devices change over the course of the 21st Century?
- Why do critics object to the current evidentiary requirements and what alternatives do they propose?
- What changes to the drug approval process did the 21st Century Cure Act make, and how is this likely to change the kinds of evidence used and the types of drugs that are approved?

Week 10

Wednesday, October 27 — Clinical Evidence and "Surrogate" End Points
- Eric Budish, Benjamin N. Roin, and Heidi Williams, 2015, "Do Firms Underinvest in Long-Term Research? Evidence from Cancer Clinical Trials," *American Economic Review* 105(7): pp. 2044-2085.
- Chul Kim and Vinay Prasad, 2015, "Cancer Drugs Approved on the Basis of a Surrogate End Point and Subsequent Overall Survival: An Analysis of 5 Years of

US Food and Drug Administration Approvals," *JAMA Internal Medicine* 175(12): pp. 1992-1994.

Reading Questions:
- How does the length of patents awarded for new drugs affect the types of diseases that pharmaceutical companies target in their research?
- What is the difference between "surrogate" vs. more "hard" end points used in clinical trials? How and why does the end point used in clinical trial change the incentives in the drug discovery process?

Friday, October 29 — Why do Bad Drugs Get Approved?
Reading:
- Vinayak K. Prasad, 2020, *Malignant: How Bad Policy and Bad Evidence Harm People with Cancer*, Baltimore: Johns Hopkins University Press: Chapter 14 ("What Can Three Federal Agencies Do Tomorrow?")

Reading Questions:
- How long do recently approved cancer drugs typically extend someone's life? How much do these drugs typically cost?
- What is "progression-free survival" and how is this measure used in clinical trials?
- What strategies do drug companies build into their clinical trials to increase the odds that the trials will find that their drugs work?
- Why do drugs typically have a much smaller benefit when used by regular people in the real world than found in the pivotal clinical trials that lead to FDA approval?

Week 11

Wednesday, November 3 — Who Pays for Health Care?
Reading:
- Zack Cooper, Amanda E. Kowalski, Eleanor N. Powell, and Jennifer Wu, 2020, "Politics and Health Care Spending in the United States," National Bureau of Economic Research Working Paper No. 23748.

Reading Questions:
- Which government programs cover the cost of health insurance?
- Overall, what share of the U.S. population gets their health insurance through the government? What is the total annual cost of these programs?
- What changes to Medicare reimbursement rates did the 2003 Medicare Modernization Act make?
- How did this law affect hospitals located in congressional districts represented by those who voted in favor of the bill compared to those who opposed it?

Friday, November 5 — Perverse Incentives: Bundled Payments, "Cream Skimming," and Upcoding

    Reading:

- Leemore S. Dafny, 2005, "How Do Hospitals Respond to Price Changes?" *American Economic Review* 95(5): pp. 1525-1547.

    Reading Questions:

- How does Medicare reimburse hospitals for the care provided to patients during hospitalizations under the Prospective Payment System?
- What are diagnosis-related groups?
- How were federal reimbursement formulas changed in 1988? How did hospitals respond to these changes in terms of their billing practices, admission volumes, and treatment intensities?

Week 12

Wednesday, November 10 — 'Relative Value Units' and Physician Compensation

    Reading:

- William C. Hsiao, Peter Braun, Daniel Dunn, and Edmund R. Becker, 1988, "Resource-Based Relative Values: An Overview," *Journal of the American Medical Association* 260(16): pp. 2347-2353.

    Reading Questions:

- What are relative value units and what role do they play in how doctors get paid for services provided through Medicare?
- How are relative value units calculated?

Friday, November 12 — No Class (Veterans Day)

Week 13

Wednesday, November 17 — RVU Politics and Unintended Consequences

    Reading:

- Thomas Bodenheimer, Robert A. Berenson, and Paul Rudolf, 2007, "The Primary Care-Specialty Income Gap: Why It Matters," *Annals of Internal Medicine* 146(4): pp. 301-306.
- John D. Goodson, 2007, "Unintended Consequences of Resource-Based Relative Value Scale Reimbursement," *Journal of the American Medical Association* 298(19): pp. 2308-2310.
- Sanford C. Gordon and Steven D. Rashin, 2021, "Stakeholder Participation in Policy Making: Evidence from Medicare Fee Schedule Revisions," *Journal of Politics* 83(1): pp. 409-414.

    Reading Questions:

- Who decides how many relative value units are assigned to a given medical service, procedure, or treatment?

- How do differences in relative value units explain pay disparities in pay across different medical specialties? Why do they contribute to deficits in primary care physicians?
- What political strategies do doctors use to try to influence revisions in the Medicare fee schedule?

Friday, November 19 — The Politics of Health
Take-home portion of final exam posted on Carmen

Week 14

Wednesday, November 24 — No Class (Thanksgiving Break)

Friday, November 26 — No Class (Thanksgiving Break)

Week 15

Wednesday, December 1 — Student Group Research Presentations 1 and 2

Friday, December 3 — Student Group Research Presentations 3 and 4

Week 16

Wednesday, December 8 — Student Group Research Presentations 5 and 6

**FINAL EXAM: Monday, December 13
- **Multiple-choice portion of exam will be available on Carmen all day, but you will have only 45 minutes to complete it once you start.**
- **Take-home questions must be submitted by 9 p.m. on Dec. 13.**

Political Science 2120
'Follow the Science?' The Politics of Health
Citizenship Theme Goals and ELO Rationale

General Theme Goals and ELOs:

GOAL 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations. Please briefly identify the ways in which this course represents an advanced study of the focal theme. In this context, "advanced" refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities.

In this course, students will engage in an in-depth study of politics and policymaking in the United States. Rather than a general overview of the type typically found an in "Intro to US Government" class, students will get in the weeds on important topics related to key political institutions — including the committee system in Congress and decision-making in the Food and Drug Administration — and complex policy questions, including the evidentiary standards for the approval of new drugs and the precise formulae used to reimburse hospitals and doctors under the Medicare program.

Rather than using a standard textbook, students will read cutting-edge scholarly research (including not-yet-published working papers).

ELO 1.1 Engage in critical and logical thinking about the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.

General critical and logical thinking
The focal policy issues that will be examined in the course are controversial and contested. Students will carefully study and engage the historical and ongoing policy and evidentiary debates in these fields. In the process, students will practice evaluating the strengths and weaknesses of arguments made by proponents and opponents of various policies, become proficient at identifying the "crux" of the disagreement in these debates, and practice independently evaluating competing arguments.

Course-specific ELOs, Topics, and Examples

General ELA 1.1.1: Students critically evaluate competing political and policy arguments, identifying whether the crux of the disagreement is over facts or normative values.

> *Example Topics:*
> - Debate over appropriate government role in regulating cigarette and protecting people from its negative health consequences

- Historical development of government nutritional guidelines and disagreement about specific recommendations (e.g., limits on saturated fats)
- Disagreement about whether randomized controlled trials should be required for FDA approval for new drugs, and whether current regulations set the bar too high for approval (preventing beneficial therapeutics from reaching those suffering from disease) or too low (causing society to spend exorbitant sums of money on drugs that do little to improve how long or how well people live)

Example Discussion and Exam Questions:
- Why were federal efforts to limit second-hand smoke so much more successful than earlier proposals to protect the health of smokers themselves?
- Many cancer drugs approved by the FDA in recent years have been shown to extend the life of cancer suffers by only a few months, often at a cost of hundreds of thousands of dollars per course of treatment. Why did these drugs get approved, and what would be the unintended consequences of raising the evidentiary bar for approval?

ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.

General in-depth, scholarly exploration
Related to the citizenship theme, students will study key government institutions involved in the making and regulation of health policy, including Congress, bureaucratic agencies (including the Food and Drug Administration), as well as external actors (e.g., industry-backed interest groups, patient advocacy groups). In this exploration, students will read cutting-edge, scholarly texts that engage and elucidate ongoing, live questions and debates about the policy-making process.

Course-specific ELOs, Topics, and Examples

General ELO 1.2.1: Students appreciate the role of key political institutions involved in the protection and promotion of health as well as the mechanisms used by external actors to influence decision-making within these institutions.

Example Topics:
- The design of the committee system in Congress and the role of seniority in the policymaking process
- History of the FDA and ongoing debates about how current law weighs the costs and benefits of requirements for new drug approval
- Government's role in paying for health care (through Medicare and Medicaid) and debates about the incentives built into these payment models

Example Discussion and Exam Questions:
- What role did the representation of tobacco-growing states by senior congressmen on key congressional committees play in efforts to delay and derail early government efforts to regulate cigarettes?
- How did federal government policy designed to protect the income of tobacco growers impede the efforts of health advocates focused on reducing the harms from tobacco smoke?
- How did anti-smoking advocates take advantage of the FCC "fairness doctrine" to gain access to the airwaves to disseminate anti-smoking messages?
- Which external actors are actively involved in lobbying both Congress and federal agencies like the FDA in debates about drug approval and dietary standards, and what are their motivations?
- How has the federal government tried to link reimbursement to the quality (rather than quantity) of health care provided, and what have been the unintended consequences of these efforts?

GOAL 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

In this course, students will engage critical readings from a variety of disciplines — including epidemiology, political science, economics, and medicine. In addition to scholarly journal articles, other course readings will include official government reports, journalistic accounts, and secondary historical sources.

The research projects will also give student practice taking the knowledge they gain in the classroom and applying it to current policy debates, engaging in their own independent research and analysis of both medical and policy research, and producing written work products (including a policy strategy memo and an op-ed written for a general audience) that will prepare them for professional careers.

> **ELO 2.1 Identify, describe, and synthesize approaches or experiences as they apply to the theme. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.**
>
> General synthesis
> A key theme in the course is the extent to which changes in medical knowledge (including through the publication of new research) shape policy debates, as well as how residual uncertainty in the state of the current knowledge can be strategically exploited by self-interested political actors both to promote their preferred policy goals and to block government action that might threaten their interests.

<u>Course-specific ELOs, Topics, and Examples</u>

General ELO 2.1.1: Students identify the connection between changing evidence and knowledge on health-related issues and the dynamics of political and policy debates surrounding these issues.

General ELO 2.1.2: Students accurately describe the inherent uncertainty or tentative nature of current scientific knowledge and how such uncertainty can be exploited strategically to serve desired political or policy goals.

Example Topics:
- Public debates about the strength of the evidence on the "causal" connection between smoking and cancer
- The role that Ancel Keys' now-discredited theory about the "diet-health" hypothesis played in shaping federal dietary guidelines since the 1970s
- How the changing understanding of the causes of Alzheimer's disease has shaped federal funding on research designed to find new treatments
- The basis for the controversy over FDA approval of aduhelm, the first agent approved in decades designed to slow cognitive mild impairment that is the first clinical symptom of Alzheimer's disease

Example Discussion and Exam Questions:
- Why did many leading scientists initially side with tobacco companies and agree that the "association" between smoking and cancer was not proven to be "causal?" At what point did the evidence become strong enough to justify federal government action?
- Why did Congress decide to draft federal dietary guidelines that blamed rising rates of heart disease on dietary fat when the scientific community remained deeply divided on this question?
- How did margarine manufacturers distort the science on the health impacts of saturated fats to advance federal tariffs on the importation of palm oil?

ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.

<u>Development of Self-Learners</u>
A core part of the course will be student-led research projects that will help students practice reflection, self-assessment, and apply the concepts and ideas learned in class to current debates in health policy. Students will take charge of their own learning by first selecting the topic that most interests them, work together with peers to build important teamwork and leadership skills, practice career-relevant writing by drafting an op-ed and policy memo on

their topic of choice, and then also take charge of the instruction by presenting their findings to the class. Indeed, the last three days of class are set aside for student presentations, an opportunity to learn by teaching.

Course-specific ELOs, Topics, and Examples

General ELO 2.2.1: Students develop their skills as self-directed learners by carrying independent research, practice leadership and teamwork skills by working in groups, and practice career-relevant writing skills.

Citizenship Theme Goals and ELOs:

GOAL 1: Successful students will explore and analyze a range of perspectives on local, national, or global citizenship, and apply the knowledge, skills, and dispositions that constitute citizenship.

This course is organized around both historical and ongoing policy and political debates in health policy. Much of the course will involve reading and thinking about disagreement and debates in these areas. Working through disagreements, understanding the underlying issues driving these divisions, and separating disputes involving facts vs. values are absolutely essential citizenship skills that students will develop in this course.

In addition, understanding how policy is made in the face of remaining uncertainty and competing arguments and demands is a critical skill for individuals to be able to navigate the modern political process both as citizens and also potentially as policymakers.

> **ELO 1.1 Describe and analyze a range of perspectives on what constitutes citizenship and how it differs across political, cultural, national, global, and/or historical communities. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.**

General Citizenship Perspectives
Citizenship focuses on the relationship of individuals and their communities, and how diverse preferences are aggregated together through democratic processes to make public policy. In this course, students will study both historical and live debates focusing on the appropriateness of state action and fundamental disagreement about the role of the government in promoting and protecting the health of individuals.

Course-specific ELOs, Topics, and Examples

Citizenship ELO 1.1.1: Students understand competing values, perspectives, and cultural norms related to the role of the state in regulating individual behaviors and market

relationships and on the use of public policy to promote healthier decision-making and choices.

> *Example Topics:*
> - Appropriateness of state policy to discourage individual smoking and protect others from second-hand smoke
> - Role of federal government in promotion of healthier dietary habits (e.g., through nutritional standards for school lunches)
> - Impact of federal regulation on availability and access to new therapeutic products and essential health services

> *Example Discussion and Exam Questions:*
> - Why were federal efforts to limit second-hand smoke so much more successful than earlier proposals to protect the health of smokers themselves?
> - How does the federal government resolve competing demands between public school districts (who care concerned with the costs of school meals), health advocates, and agricultural interests (who rely on the School Lunch Program to generate demand for their products)?
> - Which groups have their interests most effectively represented in the federal policymaking and regulatory process? Whose interests are insufficiently incorporated into policy? What explains the disparities in political representation?

ELO 1.2 Identify, reflect on, and apply the knowledge, skills and dispositions required for intercultural competence as a global citizen. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.

Intercultural Competence and Perspective Taking
Students will study and debate competing perspectives and cultural norms that influence public opinion on health-related policies. A core goal of the class is for students to come to terms with the fact that reasonable people may disagree about many of these issues, and to separate areas where such disagreement is entirely appropriate in democracies (e.g., over values) and where consensus should at least theoretically be achievable (e.g., over the state of scientific knowledge, understanding, and uncertainty).

Course-specific ELOs, Topics, and Examples

Citizenship ELO 1.1.1: Students understand competing values, perspectives, and cultural norms related to the role of the state in regulating individual behaviors and market relationships and on the use of public policy to promote healthier decision-making and choices.

> *Example Activity:*

- In writing an op-ed on a controversial policy area, students will practice thinking about how to frame and articulate arguments that are likely to be persuasive to a broad range of readers and perspectives.

Relevant Research Topics:
- Controversy over the U.S. Preventative Services Task Force recommendations for breast and prostate cancer screening
- Masking of school children to prevent transmission of SARS-COV-2
- Medicaid coverage for newly developed hepatitis C treatments
- Legal mandates for gender-affirming treatment for transgender teens
- Federal funding for biomedical research involving fetal stem cells

GOAL 2: Successful students will examine notions of justice amidst difference and analyze and critique how these interact with historically and socially constructed ideas of citizenship and membership within societies, both within the US and/or around the world.

The inequities of American society are manifest in aggregate health outcomes and in our health care system, with historically under-represented groups often disproportionately affected both by the health conditions that we examine in this course and by policies designed to ameliorate them. Students will examine how these inequities impact the policymaking process and the types of arguments made by self-interested policy actors in their effort to influence policy.

ELO 2.1 Examine, critique, and evaluate various expressions and implications of diversity, equity, inclusion, and explore a variety of lived experiences. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.

Diversity, Equity, and Inclusion
Students will apply the DEI lens to examine (1) whose voices and interests are most effectively represented in the political process and (2) which communities are most affected by the policies and debates over salient health issues. We will also examine the historical origins of health inequities and the extent to which the gaps have narrowed or widened over time through public policy efforts.

Course-specific ELOs, Topics, and Examples

Citizenship ELO 2.1.1: Students examine how social and demographic inequities are replicated or ameliorated through the political process, and think critically about whose interests are most effectively represented in this process.

Example Topics:
- Racial, ethnic, and SES differences in the incidence of cancer, heart disease, and Alzheimer's disease

- Racial, ethnic, and SES differences among doctors across different medical specialties, and extent to which federal reimbursement policy exacerbates these disparities
- Community-level disparities in access to health care

Example Discussion and Exam Questions:
- Why is menthol cigarette use heavily concentrated in the African-American community? How has this complicated FDA's efforts to ban flavored cigarettes?
- How has the American Alzheimer's Association social media campaign to overturn the Center for Medicare and Medicaid's decision to limit coverage for adulehm emphasized racial disparities in Alzheimer's diagnosis? How should such disparities influence federal policy in this area?

Relevant Research Topics:
- Medicaid coverage for newly developed hepatitis C treatments
- Legal mandates for gender-affirming treatment for transgender teens
- Federal funding for biomedical research involving fetal stem cells
- Proposed bans on flavored cigarettes (including menthol cigarettes)

ELO 2.2 Analyze and critique the intersection of concepts of justice, difference, citizenship, and how these interact with cultural traditions, structures of power and/or advocacy for social change. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.

(In)Justice and Structures of Political Power
By design, this course focuses on efforts of various organized groups to influence public policy in the areas of health and how these efforts interact with the structure of American government institutions to produce the policies and outcomes we ultimately see. By the end of the course, students should be able to explain whose interests and voices are most likely to be represented through these institutions and the conditions under which government policy helps reduce existing social inequities and conditions under which the political process only amplifies them or makes them worse.

Course-specific ELOs, Topics, and Examples

Citizenship ELO 2.2.1: Students examine how social and demographic inequities are replicated or ameliorated through the political process, and think critically about whose interests are most effectively represented in this process.

Example Topics:
- Role of industry interest groups and patient advocacy groups in federal drug approval and lobbying over legislation related to health issues

- How lobbying influences the legislative executive branches of government and the decisions made by regulatory bodies
- Role of HIV/AIDS activists in the creation of the "accelerated approval" process for new drugs in the 1990s
- Despite federal efforts to reduce smoking in the U.S. in the 1990s, trade negotiators continued to demand that developing countries reduce their tariffs on the importation on American-made cigarettes

Example Discussion and Exam Questions:
- Why is menthol cigarette use heavily concentrated in the African-American community? How has this complicated FDA's efforts to ban flavored cigarettes?
- How has the American Alzheimer's Association social media campaign to overturn the Center for Medicare and Medicaid's decision to limit coverage for adulehm emphasized racial disparities in Alzheimer's diagnosis? How should such disparities influence federal policy in this area?
- How did frustrations with efforts to develop effective treatments for HIV/AIDS lead to the creation of the "accelerated approval" process at the FDA? Which advocacy strategies did HIV/AIDS activists pursue, and which proved to be most effective at influencing federal policy?

Relevant Research Topics:
- Medicaid coverage for newly developed hepatitis C treatments
- Legal mandates for gender-affirming treatment for transgender teens
- Proposed bans on flavored cigarettes (including menthol cigarettes)

Political Science 2120
'Follow the Science?' The Politics of Health
Health and Well-Being Theme Goals and ELO Rationale

General Theme Goals and ELOs:

GOAL 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations. Please briefly identify the ways in which this course represents an advanced study of the focal theme. In this context, "advanced" refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities.

In this course, students will engage in an in-depth study of health policy in the United States, with a specific focus on (1) cancer linked to smoking; (2) relationship between diet and heart disease; (3) the causes of Alzheimer's disease and the struggle of scientists to develop effective treatments; and (4) funding models for medical care provided by government-funded programs. We will examine these topics in depth — much more thoroughly than would typically be done an in introductory class — and apply a number of different disciplinary lenses through which to think about them.

Rather than using a standard textbook, students will read cutting-edge scholarly research (including not-yet-published working papers).

> **ELO 1.1 Engage in critical and logical thinking about the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.**

> General critical and logical thinking
> The focal policy and health issues that will be examined in the course are controversial and contested. Students will carefully study and engage the historical and ongoing policy and evidentiary debates in these fields. In the process, students will practice critically evaluating the research produced by epidemiologists and advocacy groups to promote their preferred policies, understanding the limitations of observational studies and research designs often used to make causal inferences from observational individual- and population-level health data.

> Course-specific ELOs, Topics, and Examples

> *General ELO 1.1.2: Students understand the challenges of drawing causal inferences from observational data and the strengths and weaknesses of various epidemiological methods and research designs intended to establish causal relationships.*

> *Example Topics:*

- Decades-long dispute about whether the "association" between smoking and cancer was indeed "causal," and how the limitations of observational research methods enabled the tobacco industry to continue to claim that a causal relationship had not yet been established convincingly
- Strength of the evidence linking dietary habits (in particular, saturated fat intake) and the incidence of heart disease
- The "amyloid hypothesis" as the cause of Alzheimer's disease and the strength and weakness of evidence on its behalf

Example Discussion and Exam Questions:
- Compare and contrast the strength of the scientific evidence used to establish the link between smoking and lung cancer with the evidence on the harms of second-hand smoke? Why was research on second-hand smoke more persuasive to policymakers and ultimately more impactful in influencing public policy?
- What was the strength of the evidence for the "diet-health" hypothesis at the time that Congress decided to adopt the dietary guidelines for the United States?

Relevant Research Topics:
- Masking of school children to prevent transmission of SARS-COV-2
- Legal mandates for gender-affirming treatment for transgender teens
- Federal funding of gain-of-function research for viruses

ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.

General in-depth, scholarly exploration
In this course, students will read cutting-edge research related to health and wellness published in the top scholarly journals of the associated disciplines (e.g., *Journal of the American Medical Association*; *New England Journal of Medicine*; *British Medical Journal*; *American Journal of Epidemiology*; *Journal of Health Politics, Policy, and Law*; *American Journal of Public Health*; *Nutrients*) and investigative reports in top media outlets that cover the health industry (e.g., *STAT News*; *Endpoint News)*. Rather than merely reading to memorize facts, students will engage the literature with a critical eye, to understand both the strengths and the weaknesses of methodologies used and the basis for remaining disagreement among researchers on these issues.

Course-specific ELOs, Topics, and Examples

General ELA 1.1.2: Students understand the challenges of drawing causal inferences from observational data and the strengths and weaknesses of various epidemiological methods and research designs intended to establish causal relationships.

- Decades-long dispute about whether the "association" between smoking and cancer was indeed "causal," and how the limitations of observational research methods enabled the tobacco industry to continue to claim that a causal relationship had not yet been established convincingly
- Strength of the evidence linking dietary habits (in particular, saturated fat intake) and the incidence of heart disease
- The "amyloid hypothesis" as the cause of Alzheimer's disease and the strength and weakness of evidence on its behalf

Example Discussion and Exam Questions:
- Why did world renowned academics, including statistician R.A. Fischer, remain skeptical about the idea that smoking caused lung cancer? What alternative explanations did they propose for the apparent correlation between smoking and cancer and what evidence did they offer in support of these alternatives?
- What role did the *National Academies of Sciences* play in reconciling competing research claims about the link between diet and heart disease, and what impact did the reports produced by *NAS* play in influencing Congressional and federal agency actions in this area?
- What problems or limitations were present in clinical studies done by company Biogen to support its application for FDA approval for its Alzheimer's drug aduhelm? What did these studies ultimately find and which questions did they leave unaddressed?

GOAL 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

In this course, students will engage critical readings from a variety of disciplines — including epidemiology, political science, economics, and medicine. In addition to scholarly journal articles, other course readings will include official government reports, journalistic accounts, and secondary historical sources.

The research projects will also give student practice taking the knowledge they gain in the classroom and applying it to current policy debates, engaging in their own independent research and analysis of both medical and policy research, and producing written work products (including a policy strategy memo and an op-ed written for a general audience) that will prepare them for professional careers.

ELO 2.1 Identify, describe, and synthesize approaches or experiences as they apply to the theme. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.

<u>General synthesis</u>
A key theme in the course is the extent to which changes in medical knowledge (including through the publication of new research) shape policy debates, as well as how residual uncertainty in the state of the current knowledge can be strategically exploited by self-interested political actors both to promote their preferred policy goals and to block government action that might threaten their interests.

<u>Course-specific ELOs, Topics, and Examples</u>

General ELO 2.1.1: Students identify the connection between changing evidence and knowledge on health-related issues and the dynamics of political and policy debates surrounding these issues.

General ELO 2.1.2: Students accurately describe the inherent uncertainty or tentative nature of current scientific knowledge and how such uncertainty can be exploited strategically to serve desired political or policy goals.

> *Example Topics:*
> - Public debates about the strength of the evidence on the "causal" connection between smoking and cancer
> - The role that Ancel Keys' now-discredited theory about the "diet-health" hypothesis played in shaping federal dietary guidelines since the 1970s
> - How the changing understanding of the causes of Alzheimer's disease has shaped federal funding on research designed to find new treatments
> - The basis for the controversy over FDA approval of aduhelm, the first agent approved in decades designed to slow cognitive mild impairment that is the first clinical symptom of Alzheimer's disease

> *Example Discussion and Exam Questions:*
> - Why did many leading scientists initially side with tobacco companies and agree that the "association" between smoking and cancer was not proven to be "causal?" At what point did the evidence become strong enough to justify federal government action?
> - Why did Congress decide to draft federal dietary guidelines that blamed rising rates of heart disease on dietary fat when the scientific community remained deeply divided on this question?
> - How did margarine manufacturers distort the science on the health impacts of saturated fats to advance federal tariffs on the importation of palm oil?

ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.

<u>Development of Self-Learners</u>
A core part of the course will be student-led research projects that will help students practice reflection, self-assessment, and apply the concepts and ideas learned in class to current debates in health policy. Students will take charge of their own learning by first selecting the topic that most interests them, work together with peers to build important teamwork and leadership skills, independently carry out a literature review of published clinical and medical research on topics related to their project, practice career-relevant writing by drafting an op-ed and policy memo on their topic of choice, and then also take charge of the instruction by presenting their findings to the class. Indeed, the last three days of class are set aside for student presentations, an opportunity to learn by teaching.

<u>Course-specific ELOs, Topics, and Examples</u>

General ELO 2.2.1: Students develop their skills as self-directed learners by carrying independent research, practice leadership and teamwork skills by working in groups, and practice career-relevant writing skills.

Health and Wellness Theme Goals and ELOs:

GOAL 1: Students will explore and analyze health and wellbeing through attention to at least two dimensions of wellbeing. (Ex: physical, mental, emotional, career, environmental, spiritual, intellectual, creative, financial, etc.).

As noted above, this course will focus specifically on three leading causes of mortality and morbidity in the United States — cancer, heart disease, and neurogenerative disease. While all three clearly have physical manifestations, they also affect other dimensions of health (e.g., patients diagnosed with Alzheimer's disease often suffer from depression in the early stages of their disease; costly cancer treatments can result in "financial toxicity" that affect not only the patients but also their families). When examining these conditions, we will focus both different kinds of causes (e.g., environmental exposure vs. individual health decisions and actions) and also on the state of the knowledge about their prevention.

ELO 1.1 Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.

<u>Exploration and Analysis</u>
In studying health and wellbeing, we will focus primarily on the evolution of the science and research base, from the initial formulation of hypotheses (largely a theoretical endeavor) to the development of research methods to study population-level data and make inferences about causal processes using observational evidence. We will also bring a historical lens to

the literature, examining how the state of scientific knowledge and scholarly understanding of these health issues evolved over time and how the changing state of knowledge (and residual uncertainty) influenced policymaking.

Course-specific ELOs, Topics, and Examples

General ELO 2.1.1: Students identify the connection between changing evidence and knowledge on health-related issues and the dynamics of political and policy debates surrounding these issues.

General ELO 2.1.2: Students accurately describe the inherent uncertainty or tentative nature of current scientific knowledge and how such uncertainty can be exploited strategically to serve desired political or policy goals.

   Example Topics:
- History of research on the causal relationship between smoking and lung cancer
- Debates about the causes of Alzheimer's disease and how these disagreements have shaped federal funding priorities
- How efforts to reduce the consumption of saturated fat led to the introduction of even more atheroscloretic trans fats into the American diet
- Changes made to the FDA drug approval process by the 21st Centuries Cure Act
- How does federal patent law affect the types therapeutics treatments developed by pharmaceutical companies and the pipeline of clinical research these companies pursue?

   Example Discussion and Exam Questions:
- What role did U.S. dietary guidelines play in the increasing consumption of trans fats?
- What is the "amyloid hypothesis" and what are alternative and competing explanations for the causes of Alzheimer's disease?
- How did the scientific and evidentiary basis for the federal approval of new drugs and medical devices change over the course of the 20st Century?
- How does focusing on "surrogate" rather than "clinical" endpoints affect the incentives for the development of new drugs and the kinds of treatments studied in clinical trials? Under what conditions do "surrogate" end points provide meaningful information about whether new treatments allow patients to live longer or live better?

ELO 1.2 Identify, reflect on, or apply strategies for promoting health and well-being. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met.

Promoting Health and Well-Being
There are three overarching goals embedded in the design of the course with respect to helping students apply strategies for achieving and maintaining their health and well-being. First, students will develop a deep understanding of the current state of knowledge on the causes, treatments, and effective prevention strategies for the leading chronic conditions that affect the U.S. population (cancer, heart disease, and neurogenerative disease). More generally, students will develop skills to become informed consumers of clinical trial and medical research — with the ability to go beyond the headlines in newspapers to understand the strength and limitations of various research methods and strategies. These skills will allow students to continue to stay informed on the changing state of medical knowledge on issues relevant to their health and well-being. Finally, students will develop and practice skills necessary to advocate for policies that can promote their own and broader community health.

Course-specific ELOs, Topics, and Examples

General ELO 1.1.2: Students understand the challenges of drawing causal inferences from observational data and the strengths and weaknesses of various epidemiological methods and research designs intended to establish causal relationships.

Example Activity:
- Students will independently carry out literature review on health and wellness topic of ongoing policy debate
- In writing an op-ed on a controversial health policy area, students will practice thinking about how to frame and articulate arguments that are likely to be persuasive to a broad range of readers and perspectives.

Relevant Research Topics:
- Controversy over the U.S. Preventative Services Task Force recommendations for breast and prostate cancer screening
- Masking of school children to prevent transmission of SARS-COV-2
- Federal funding for biomedical research involving fetal stem cells
- Federal funding of gain-of-function research for viruses

Political Science 2120 Politics of Health
Concurrence sought from College of Public Health

The Ohio State University
College of the Arts and Sciences Concurrence Form

The purpose of this form is to provide a simple system of obtaining departmental reactions to course requests. **An e-mail may be substituted for this form.**

An academic unit initiating a request should complete Section A of this form and send a copy of the form, course request, and syllabus to each of the academic units that might have related interests in the course. Units should be allowed two weeks to respond to requests for concurrence.

Academic units receiving this form should respond to Section B and return the form to the initiating unit. Overlap of course content and other problems should be resolved by the academic units before this form and all other accompanying documentation may be forwarded to the Office of Academic Affairs.

A. Proposal to review

Initiating Academic Unit   Course Number   Course Title

Type of Proposal (New, Change, Withdrawal, or other)   Date request sent

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Academic Unit Asked to Review   Date response needed

B. Response from the Academic Unit reviewing
Response: include a reaction to the proposal, including a statement of support or non-support (continued on the back of this form or a separate sheet, if necessary).

Signatures

	Vice Dean, Academic Affairs and Academic Administration	College of Public Health	2/2/21
1. Name	Position	Unit	Date
2. Name	Position	Unit	Date
3. Name	Position	Unit	Date