Term Information

Effective Term	Spring 2024
Previous Value	*Autumn 2020*

Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)

We are submitting Public Affairs 2620 as a course for the Citizenship for a Diverse and Just World theme in the new General Education. Additionally, we are changing the credit hour value of the class to make it worth 4 credit hours and comply with the High Impact Practice: Research & Creative Inquiry designation for the new GE.

What is the rationale for the proposed change(s)?

Faculty have revised the syllabus to reflect the the new GE theme.

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

N/A

Is approval of the request contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

General Information

Course Bulletin Listing/Subject Area	Public Affairs, John Glenn Col
Fiscal Unit/Academic Org	John Glenn College of Pub Aff - D4240
College/Academic Group	John Glenn College of Pub Aff
Level/Career	Undergraduate
Course Number/Catalog	2620
Course Title	Science, Engineering, and Technology for Policy and the Public Interest
Previous Value	*Contemporary Issues in Science, Engineering, and Technology Policy*
Transcript Abbreviation	SciEngTech Policy
Course Description	Science, engineering and technology policy problems are inherently interdisciplinary and challenging: science and engineering can be used to inform public policy; and public policy shapes the conditions and manner in which science and engineering are performed. This survey course will provide a fast-paced introduction to these realities using examples drawn from contemporary events and analyses.
Previous Value	*This course provides a fast-paced introduction to the way Science and Engineering and Public Policy affect each other using examples drawn from contemporary events and analyses.*
Semester Credit Hours/Units	Fixed: 4
Previous Value	*Fixed: 3*

Offering Information

Length Of Course	14 Week, 12 Week, 7 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	No
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, Wooster
Previous Value	*Columbus*

Prerequisites and Exclusions

Prerequisites/Corequisites	
Exclusions	
Electronically Enforced	No

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code	44.0401
Subsidy Level	Baccalaureate Course
Intended Rank	Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors
    Citizenship for a Diverse and Just World
The course is an elective (for this or other units) or is a service course for other units

Previous Value

Required for this unit's degrees, majors, and/or minors
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	• Grasp the breadth of science and engineering endeavors that have public policy dimensions and appreciate the diversity and interdisciplinary nature of public affairs
	• Demonstrate a firm grasp of basic public affairs concepts and tools employed in this space, specifically: Governmental, financial, economic, legal, and political institutions.
	• Practice essential professional skills that form the basis for engaging in science, engineering, and technology policy, specifically: human behavior – individual, group, and organizational – in the context of the public and nonprofit sectors
	• Demonstrate the role of citizenship and ethical public service in a democratic process and just outcomes

Previous Value

- *Grasp the breadth of science and engineering endeavors that have public policy dimensions and appreciate the diversity and interdisciplinary nature of public affairs*
- *Demonstrate a firm grasp of basic public affairs concepts and tools employed in this space, specifically:Governmental, financial, economic, legal, and political institutions*
- *Practice essential professional skills that form the basis for engaging in science, engineering, and technology policy, specifically: human behavior – individual, group, and organizational – in the context of the public and nonprofit sectors*

Content Topic List

- Institutions in the Science, Engineering, and Technology Policy (SETP) landscape
- Policy Process: How does Policy Influence Science, Engineering, and Technology? How and Why does Policy Change?
- Analytical Tools: Analyzing and Communicating Complex Issues
- Current topics in SETP
- Mechanisms of SETP Change
- Pathways in the SETP landscape

Sought Concurrence No

Attachments

- 2620 GE cover letter.pdf: Cover letter in response to GE feedback

  (Cover Letter. Owner: Adams,Christopher John)

- GE Citizenship Inventory PA2620.pdf: GE Theme course submission worksheet: Citizenship

  (Other Supporting Documentation. Owner: Adams,Christopher John)

- Fall OAA_PA2620Syllabus.pdf: Revised Syllabus

  (Syllabus. Owner: Adams,Christopher John)

- Fall_2620 GE letter_OAA.pdf: Cover Letter addressing committee feedback

  (Cover Letter. Owner: Adams,Christopher John)

- R&CI Inventory PA2620_revised.pdf: Research & Creative Inquiry Course Inventory

  (Other Supporting Documentation. Owner: Adams,Christopher John)

Comments

- Please see Panel feedback email sent 05/01/2023. *(by Hilty,Michael on 05/01/2023 08:43 AM)*
- We have responded to the panel feeback from 4/27/22 and made changes to the syllabus and GE proposal documents so that the course complies with the High Impact Practice: Research & Creative Inquiry designation for the new GE. *(by Adams,Christopher John on 03/27/2023 10:11 AM)*
- The filled-out form for team-teaching high impact practice has not been uploaded. *(by Vankeerbergen,Bernadette Chantal on 01/20/2022 03:19 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Adams,Christopher John	11/17/2021 01:40 PM	Submitted for Approval
Approved	Adams,Christopher John	11/17/2021 01:41 PM	Unit Approval
Approved	Adams,Christopher John	11/17/2021 01:42 PM	SubCollege Approval
Approved	Greenbaum,Robert Theodore	11/17/2021 02:42 PM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	11/18/2021 03:06 PM	ASCCAO Approval
Submitted	Adams,Christopher John	11/24/2021 09:12 AM	Submitted for Approval
Approved	Adams,Christopher John	11/24/2021 09:18 AM	Unit Approval
Approved	Adams,Christopher John	01/20/2022 01:11 PM	SubCollege Approval
Approved	Greenbaum,Robert Theodore	01/20/2022 01:55 PM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	01/20/2022 03:19 PM	ASCCAO Approval
Submitted	Adams,Christopher John	01/20/2022 04:55 PM	Submitted for Approval
Approved	Adams,Christopher John	01/20/2022 04:55 PM	Unit Approval
Approved	Adams,Christopher John	01/20/2022 04:56 PM	SubCollege Approval
Approved	Greenbaum,Robert Theodore	01/20/2022 04:58 PM	College Approval
Revision Requested	Hilty,Michael	04/27/2022 04:14 PM	ASCCAO Approval
Submitted	Adams,Christopher John	03/27/2023 10:11 AM	Submitted for Approval
Approved	Adams,Christopher John	03/27/2023 10:13 AM	Unit Approval
Approved	Adams,Christopher John	03/27/2023 10:13 AM	SubCollege Approval
Approved	Greenbaum,Robert Theodore	03/27/2023 10:29 AM	College Approval
Revision Requested	Hilty,Michael	05/01/2023 08:43 AM	ASCCAO Approval
Submitted	Adams,Christopher John	08/14/2023 03:35 PM	Submitted for Approval
Approved	Adams,Christopher John	08/14/2023 03:36 PM	Unit Approval
Approved	Adams,Christopher John	08/14/2023 03:37 PM	SubCollege Approval
Approved	Greenbaum,Robert Theodore	08/24/2023 02:14 PM	College Approval
Pending Approval	Hanlin,Deborah Kay Hilty,Michael Vankeerbergen,Bernadette Chantal Steele,Rachel Lea Jenkins,Mary Ellen Bigler	08/24/2023 02:14 PM	ASCCAO Approval

THE OHIO STATE UNIVERSITY

John Glenn College of Public Affairs
Battelle Center for Science, Engineering and Public Policy
Columbus, OH 43210

614-688-2073 Office
Frazier.202@osu.edu

August 10, 2023

Dear ASC Curriculum Committee Themes Panel:

Thank you for your May 1ˢᵗ feedback on our submission of PUBAFRS 2620 for general education (GE) course status. Please find below our responses and descriptions of noteworthy revisions in our submission.

GEN Theme: Citizenship for a Just and Diverse World

Thank you for accepting this course within this theme. Note that we have addressed and integrated both contingencies and recommendations provided by the committee in their May feedback by adding the Citizenship for a Just and Diverse World theme goals and the university's academic misconduct statement and by removing the embedded literacy ELOs.

High Impact Practice: Research & Creative Inquiry

We appreciate the opportunity to respond to the committee's May feedback concerning appropriateness of the high impact designation. We feel strongly that the designation is appropriate based on the standards of research, evidence, and methodology in the policy sciences and offer below an explanation of those standards in our field, as well as explanation of how those standards are taught and practiced in PUBAFRS 2620.

Policy science, policy evidence and primary sources

The *policy sciences* refer to a set of fields that study the processes of choosing and evaluating the options for intervention into collective action problems. This includes problems within a wide range of contexts, including across the public, non-profit, and private sectors and across various forms of governments of economies. In one of the field's seminal works, Harold Lasswell identifies policy scientists as unique among scholars in their problem-oriented and contextual outlook, noting that they cannot focus only on the positive elements of any phenomenon, but must attend equally to the normative elements of the social, political, and historical contexts in which the phenomenon occurs.[1] The policy scientist, therefore, is a mediator and "integrator of *knowledge* and *action*" (Laswell 1970, p 13; emphasis added).

Because the policy sciences are concerned with collective decision making, *policy evidence* is thus always a combination of scientific facts *and social values*. For example, a policy scientist studying the use of artificial intelligence (AI) in law enforcement must understand both the technical aspects of how AI is and can be used in that context *and* the social, historical, ethical, and democratic values shaping the use and response to use of the technology in law enforcement domains. Both the positive elements of the technology itself *and* normative elements of attitudes about AI use and what ought to be done about it are essential in policy evidence.

Both scientific research and lay statements may thus serve as *primary sources* in the policy sciences. To return to the AI example, peer-reviewed research on the accuracy of a particular facial recognition technology is a primary source; so, too, is polling on public perceptions of fairness, codified police departmental guidance, formal statements on legality of use by the American Bar Association, and public statements on its use made by elected officials.

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[1] Lasswell, Harold D. "The emerging conception of the policy sciences." *Policy sciences* 1, no. 1 (1970): 3-14.

Research methodologies in the policy sciences

Lasswell notes that policy research is "less and less method-bound" (p 11) as policy scientists must leverage a range of methodologies as appropriate to the type of data and type of question with which they are concerned. The research questions of the policy sciences are concerned with what can and should be done about a collective problem given the relevant context and constraints. Therefore, the disciplinary methods of policy research utilize many different analytical techniques (e.g., content analysis, econometric modeling, computer simulation, and budget forecasting) to systematically interrogate the "interdependence among the functional components" of the policy process (Lasswell 1970, p 9). Policy scientists use four core methodologies in carrying out this systematic interrogation: issue analysis (regarding the problem/phenomenon), policy analysis (regarding current and possible interventions), stakeholder analysis (regarding individual and group incentives, values, goals), and market analysis (regarding current and projected economic impact).

Original research in the policy sciences

The goal of original policy research is to bridge knowledge and action on a collective problem. Students in PUBAFRS 2620 are both *taught* the tenets of policy research (and the policy sciences) and engaged in *conducting* original policy research through topics, activities, discussions, and deliverables concerning contemporary issues in science, engineering, and technology (SET) policy. In the revised version of the syllabus and inventory submitted with this letter for the committee's consideration, we have specified where and how each element is covered. To summarize:

Novel Research Questions   In the first segment of the course, students learn about the institutional, historical, and scholarly contexts in which policy problems are defined, and practice systematically defining a problem for policy research. The Problem Statement deliverable requires that they synthesize these lessons with their original research (in the form of an issue analysis) to pose a novel SET policy research question.

Collecting & Analyzing Policy Data In the first four segments of the course, students learn the fundamentals of complex systems thinking and the complexity and diversity of policy evidence, data sources, and methodologies. They get hands-on practice a) identifying data sources appropriate to various SET policy research questions, b) collecting and coding those data, and c) analyzing evidence during in-class workshops (i.e., "lab" periods). In producing their Shifting Public Opinion, Legislative Engagement, and Private Sector Pitch deliverables, they use what they have learned through course content and practice to identify, collect, code, and analyze data relevant to their original research question and carry out an issue analysis, stakeholder analysis, policy analysis, and marketing analysis.

Policy Research Presentation   In segments two through five of the course, students learn about strategic communications skills and their essential role in conducting and presenting policy research. In producing their Shifting Public Opinion, Legislative Engagement, and Private Sector Pitch deliverables, students must synthesize and interpret the results from their analyses (i.e., issue, stakeholder, policy, and market) for the appropriate audience and purpose, and employ a voice and medium appropriate for that audience and purpose.

In this letter, the inventory form, and the revised syllabus (with special items of note in red), we have sought to clarify to people outside of our field how the content and deliverables of the course are explicitly and consistently oriented toward learning and practicing original policy research. This course revolves around providing students with the knowledge, skills, and opportunity to practice being an SET *policy scientist* – i.e., to develop "knowledge *of* the policy process and of the relevance of knowledge *in* the process," (Lasswell 1970, p1) to guide

collective action on a pressing science, engineering, or technology problem in public life.

We look forward to working with you to bring this 4-credit high impact course to fruition.

Kind Regards,

Lisa A. Frazier, PhD, MPH
Senior Researcher, Battelle Center for Science, Engineering and Public Policy
Instructor, John Glenn College of Public Affairs
The Ohio State University

Copies to:
Rob Greenbaum, Associate Dean for Curriculum, Glenn College
Jill Clark, Director of Undergraduate Studies, Glenn College
Kevin Cullen, Interim Executive Director, Battelle Center for Science, Engineering and Public Policy

ASC Curriculum Committee feedback for PUBAFRS 2620 from May 1, 2023.
GEN Theme: Citizenship for a Diverse and Just World
- The Panel unanimously approved the request with two contingencies and one recommendation. As a reminder, the Panel's contingencies must be satisfied in a revision submitted via curriculum.osu.edu while the Panel's recommendation may be implemented when the course is next taught.
    - **Contingency:** The reviewing faculty ask that the Goals of the GEN Theme category be added to the course syllabus, as it is a requirement of all GE courses to include the Goals, ELOs, and brief explanatory rationale. The Goals can be found on the ASC Curriculum and Assessment Services in an easy to copy-and-paste format here: https://asccas.osu.edu/new-general-education-gen-goals-and-elos.
    - **Contingency:** The reviewing faculty ask that the required academic misconduct statement be added to the course syllabus. The required statement can be found on the ASC Curriculum and Assessment Services website at: https://asccas.osu.edu/curriculum/syllabus-elements.
    - **Recommendation:** The reviewing faculty strongly encourage the Embedded Literacy ELOs be removed from the course syllabus (as found on pages 3 and 4), as this course will only meet the Embedded Literacies for students within your unit's major program and

this could cause potential confusion to students. If the unit would like to keep these ELOs on their syllabus, the reviewing faculty ask that they clearly be labeled for which specific major programs they fulfill the Embedded Literacy requirement for and acknowledge that they will not fulfill the Embedded Literacy requirement for any other major program.

High-Impact Practice: Research & Creative Inquiry
- The Panel did not vote on the request for High-Impact Practice: Research & Creative Inquiry, as they would like the following feedback items addressed.
  - The reviewing faculty thank the unit for their revisions but are unable to approve the proposal for High-Impact Practice at this time. They are unable to see where this course will be engaging students in conducting original research and teaching students about research methodologies within the discipline, as required to be included within the High-Impact Practice. They note that the required coursework and deliverables being produced do not appear to be engaging in original research, but rather primarily with secondary sources.

Science, Engineering and Technology for Policy and the Public Interest

PUBAFRS 2620 | SEM YEAR

Part of the Glenn College undergraduate minor *Science and Engineering in the Public Interest*
A *Citizenship for a Just & Diverse World* General Education Theme course

Course Information

Class Schedule and Delivery Mode

Course times and location: Tuesdays and Thursdays, 11:00 a.m.-12:30 p.m. in Haggerty Hall 0186, Fridays, 3:30-4:30 p.m. online (asynchronous)

Credit hours: 4
According to Ohio State bylaws on instruction (go.osu.edu/credithours), students should expect to spend approximately [4] hours per week actively learning during scheduled classes and up to [8] hours per week on work outside of class times.

Mode of delivery: Hybrid: 75% in-person, 25% online

Instructor

Dr. Lisa A. Frazier, PhD, MPH *(she/her)*, **Battelle Center for Science, Engineering and Public Policy**

Contact information: frazier.202@osu.edu, 614-688-2073 (Office), 240B Page Hall

Preferred modes of communication: My preferred method for questions is **email.** You can also message me in CarmenCanvas. My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your notification preferences (go.osu.edu/canvas-notifications) to be sure you receive these messages.
Note: I will check my email regularly during the week, but if you email me after 8pm, you will likely not receive a response until the following morning. I check my email less regularly on the weekend.

Office hours for student questions and support: by appointment, virtually or in person

Course Description

Technology is woven into the fabric of our lives and society. It has enabled us to stay connected with each other over long distances, expand educational opportunities, and realize more efficient and sustainable energy solutions. However, new technologies have also accelerated the spread of violent ideologies and misinformation, undermined democratic elections, and facilitated the climate-changing industrial activity that revolutionized the world.

Science, engineering, and technology are tools: their effects – good and bad – depend on human use. In this course, we explore current issues in science, engineering, and technology (SET) policy through the lens of **citizenship** and social welfare in order to establish the foundational understanding of how we can use SET to address complex problems and innovate in the public's interest.

This survey course will provide a fast-paced introduction to these realities using examples drawn from contemporary events and analyses. As an interdisciplinary, high-impact class, it emphasizes applied research activities – in both independent and team-based efforts – carried out over the course of the semester with frequent feedback from peers and faculty.

Students will explore the ethical, social, historical, and psychological dimensions of science, engineering, and technology and reflect on their individual values and role as informed citizens. Course content and activities help students develop understanding of diverse perspectives on the role of SET in citizenship and notions of justice, both globally and in the U.S. In addition to gaining familiarity with core issues, processes, and frameworks in the SET policy and citizenship, students will develop skills in the policy sciences and their associated research methodologies, including identifying, analyzing, and communicating innovative solutions to a range of policy audiences. This is a foundational course of the Glenn College's *Science and Engineering in the Public Interest* (SEPI) minor and a valuable experience for STEM majors who are interested in using their skills to build a more just, resilient, and healthy society.

Learning Outcomes

Because this is an integrative, high impact general education course and foundational course for the Glenn College's SEPI minor, by the end of this course, students should successfully be able to:

Course ELOs

1. Grasp the breadth of science and engineering endeavors that have public policy dimensions and appreciate the diversity and interdisciplinary nature of public affairs.

2. Demonstrate a firm grasp of basic public affairs concepts and tools employed in this space, specifically:

    a) Governmental, financial, economic, legal, and political institutions and systems that constitute public and nonprofit sectors;

    b) Public sector policy making and administrative processes;

    c) The role of citizenship and ethical public service in a democratic process and just outcomes;

    d) Core research methodologies employed to bridge scientific knowledge and public action.

3. Practice essential professional skills that form the basis for engaging in science, engineering, and technology policy, specifically:

    a) Use primary sources and research methodologies appropriate to the policy sciences to describe, analyze, and evaluate public policy problems;

    b) Recognize and interpret human behavior – individual, group, and organizational – in the context of public policy and policy research and systematically incorporate human behaviors and values into empirical research;

    c) Communicate effectively via written, oral, and electronic methods for varied policy audiences and consumers of policy research;

    d) Appreciate individual and group differences in perspectives, backgrounds, interests, and needs.

SEPI Minor ELOs

1. Understand and conceptualize a range of contemporary issues in SET policy, the factors that drive SET innovation and the way it is accomplished, and the role of the public sector in SET and its processes.

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2. Identify, analyze, and navigate complex modern challenges at the intersection of the policy, science, engineering, and technology worlds using interdisciplinary perspectives and methods.

3. Apply effective communication skills to develop, propose, and advocate for innovative, evidence-based policies to both public- and private-sector decision makers.

Citizenship for a Just and Diverse World Theme Goals and ELOs

Goals:

1. Successful students will analyze an important topic or idea at a more advanced and in-depth level than in the Foundations component. [Note: 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.]

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.

3. 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.

4. Successful students will examine notions of justice amid difference and analyze and critique how these interact with historically and socially constructed ideas of citizenship and membership within society, both within the United States and around the world.

This course fosters an integrative approach to the Citizenship GE theme by engaging students in an advanced examination of citizenship, justice, and diversity through the interdisciplinary lens of Science, Engineering, and Technology Policy (SETP). In developing knowledge and skills of how SET and SETP are used as a means of strengthening citizenship and justice, students are able to:

1.1 Engage in critical and logical thinking about the topic or idea of citizenship for a just and diverse world.

1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of citizenship for a just and diverse world.

2.1 Identify, describe and synthesize approaches or experiences as they apply to citizenship for a just and diverse world.

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.

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

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

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

4.2 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.

Research & Creative Inquiry ELOs

This course requires that students conduct inquiry that makes an original and innovative contribution to the fields of SETP using interdisciplinary methods and diverse perspectives on citizenship and social welfare. Through their

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semester-long research efforts, students:

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

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

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

    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.

Course Materials and Technology

Required Materials

There is no textbook for this course. All materials (e.g., readings, videos, podcasts) are posted and accessible through the course CarmenCanvas website, making it essential that you regularly access and engage with the site. Additional readings and media (e.g., free *New York Times* subscription) will be available through OSU Libraries.

Menu of Pre-Approved Texts

Each student will choose a book from this list to read over the course of the semester. Each of these books represent a case study of a historical event or lived experience that was fundamentally intertwined with science, engineering, and technology policy. You will have several opportunities to reflect on the connections between the subject matter of the book and course concepts.

All of these texts are available through OSU Libraries or the Libby free e-lending library.

- Skloot, Rebecca (2011): The Immortal Life of Henrietta Lacks
- Ball, Philip (2013). Serving the Reich: The Struggle for the Soul of Physics under Hitler
- Lizhi, Fang (2016). The Most Wanted Man in China: My Journey from Scientist to Enemy of the State (translated by Perry Link)
- Paul, Richard and Steven Moss (2016). We Could Not Fail: The First African Americans in the Space Program
- Brynjolfsson, Erik and Andrew McAfee (2016). The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies
- Eubanks, Virginia (2018). Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor
- O'Mara, Margaret (2019). The Code: Silicon Valley and the Remaking of America
- Holmes, Jamie (2020). 12 Seconds of Silence: How a Team of Inventors, Tinkerers, and Spies Took Down a Nazi Superweapon

Technology

This course requires a Computer (current Mac (MacOS) or PC (Windows 10) with stable internet connection, webcam, speakers, and microphone) and BuckeyePass on a mobile device (smartphone or tablet) to use for authentication. If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at go.osu.edu/student-tech-access.

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week:

https://it.osu.edu/students

Grading and Evaluation

Course Overview

As a research-oriented survey course in public affairs, this course develops skills essential for a career as a policy scientist; i.e., a mediator and integrator of knowledge and action, having "knowledge *of* the policy process and of the relevance of knowledge *in* the process" (Lasswell 1970, p 4).

The first 3-week segment of the course establishes foundational knowledge: What is the Science, Engineering, and Technology Policy [SETP] landscape? What are the mechanisms by which policy influences or addresses science and engineering? How can science and engineering shape policy? How and why does policy change? What are the policy sciences and what are the central methods of policy research? Students complete a set of knowledge assessments on the material to demonstrate their readiness for: a) deeper engagement with the themes of technology, citizenship and justice, and b) the conduct and presentation of original policy research.

In segments 2, 3, and 4 (weeks 4-12), students work in groups, during class and outside class via Microsoft Teams or other collaboration platforms, to conduct an original SET policy research project and produce three strategic policy communication deliverables (described below). Students develop their original research questions from current SETP issues that reflect critical challenges of the time, utilizing primary sources and novel data collection. Examples from 2020-22 include global pandemic response, climate-driven wildfires in Latin America, Australia, and the U.S., the cybersecurity implications of 5G rollout in developed economies, building public interest and investment in space exploration, investing in the hydrogen grid for sustainable energy, and addressing carcinogens in period care products. Coursework covers the disciplinary research methodologies (i.e., issue, stakeholder, policy, and market analysis) and skills (i.e., strategic communication, complex systems thinking) that are essential to carrying out the project and creating the deliverables.

The team-based original research project provides students with practice applying foundational SETP knowledge and carrying out policy research aimed at affecting public action by:

Systematically defining a SETP problem. Each student independently identifies a public problem and carries out an issue analysis to develop a rigorous problem statement. Crafting an effective, research-based issue brief is an essential skill of the policy scientist.

Shifting popular opinion. These deliverables explore the role of media in shaping public perceptions of policy issues. After working together to choose a specific problem based on their problem statements, each team collaborates to revise and expand their issue analysis and carry out a stakeholder analysis of the problem, synthesizing these analyses into an expanded issue brief. In addition, students choose to: (1) record a short podcast in the Digital Union recording studio; (2) create a compelling infographic or visualization of the policy issue; (3) write a persuasive op-ed; or (4) create a social media campaign. The audience for these deliverables is a defined segment of the general public.

Directly engaging legislators. These deliverables emulate the role of think tanks, non-governmental organizations (NGOs), and grassroots organizations and advocates in influencing policymakers. Teams revisit and revise their issue and stakeholder analyses and extend their research by carrying out a policy analysis. They synthesize these analyses into a policy brief. Additionally, each team chooses to: (1) create and deliver a video or an oral briefing to an imagined legislator/staff at the Ohio Statehouse or US Congress; or (2) create a funding package for delivery at either the state or federal legislature level that outlines, as an example, a budgetary roadmap for funding the development of a new technology or a risk mitigation strategy. The audience for these deliverables is a member of Congress and their staff.

Catalyzing private sector activity. These deliverables delve into the private sector's role in shaping policy. Teams revisit and revise their issue, stakeholder, and policy analyses and extend their research by carrying out a market analysis for a specific private or non-profit organization that engages in activity relevant to the issue. They synthesize these analyses into a policy report (i.e., a longer, more detailed version of the policy brief). Students also choose to: (1) create a communication strategy for a private

sector organization that promotes a policy agenda; (2) create an investment pitch for an emerging technology that could solve a policy challenge; or (3) make the case with data visualization for the long-term benefits of mitigating adverse consequences of a technology. The audience for these deliverables is a private or non-profit sector executive and their board.

The final course segment (weeks 13-15) will focus on exploring career journeys in the SETP domain and fostering the development of personal frameworks for supporting and making ethical decisions based on diverse perspectives of citizenship and justice. Guests and readings will showcase individuals working in the public science, engineering, and technology realm. Course discussions and a close reading of one of a pre-approved list of case studies in the field provide the basis for two reflection essays submitted via Carmen. In these essays, students have the opportunity to reflect on and synthesize what they have learned from their original research activities and course materials, including how technologies, their contexts, and their use interact to produce a range of consequences, both intended and unintended.

Throughout the semester, participation and engagement are assessed through in-class activities, polls, and written reflections.

Detailed descriptions, prompts, and deadlines for all course deliverables can be found on the CarmenCanvas site.

How Your Grade is Calculated

Assignment	Points	Assignment Type
Intro & interest discussion post	25	Individual
Participation & Engagement	100	Individual
Knowledge assessment I *	25	Individual
Knowledge assessment II *	50	Individual
Knowledge assessment III *	75	Individual
Problem Statement	75	Individual
Shifting Public Opinion deliverables *	125	Team/group
Legislator Engagement deliverables *	125	Team/group
Private Sector Pitch materials *	125	Team/group
Peer & Self-Assessment	100	Individual
Reflection Essay 1	100	Individual
Reflection Essay 2	100	Individual

* Opportunity for revision/resubmission

Grading Scale

93–100: A
90–92.9: A-
87–89.9: B+
83–86.9: B

80–82.9: B-
77–79.9: C+
73–76.9: C
70–72.9: C-

67–69.9: D+
60–66.9: D
Below 60: E

Course Schedule

Refer to the CarmenCanvas course for up-to-date due dates.

Should in-person classes be canceled, I will notify you as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via CarmenCanvas.

Week	Date	Topic	Assignment / Activity
Segment 1: Principles of Science & Engineering in the Public Interest			
1	Tuesday	Welcome & Introduction **Institutions in STEP Landscape**	Green jobs booming[1] *Pair introduction activity*
	Thursday	Institutions (cont) Science & Citizenship Engineering & Government Technology & Policy	Foreword to The Endless Frontier[2] Daniel Gross interview on history of STEP[3] S&T and National Defense[4] *Pair STEP roadmap activity*
	Friday	Institutions (cont)	***Intro & interest discussion post*** ***Knowledge assessment I (institutions)***
2	Tuesday	**How Policy Process Influences STEP**	S&T Policymaking[5] The Legislative Process[6]
	Thursday	Policy Process (cont)	The Federal Budget Process[7] The Congressional Appropriations Process[8] *In-class reflection (Individual)*
	Friday	Policy Process (cont)	When Robot and Crow Saved East St. Louis[9] ***Knowledge assessment II (process)***
3	Tuesday	**The Policy Sciences: Research Methods & Tools** - Issue analysis - Stakeholder analysis - Policy analysis - Market analysis	**The…Policy Sciences[10]** Kranzberg's Laws[11] *Small group activity: budgeting, R&D, and the citizen-workforce*
	Thursday	Policy Research Methods (cont): Issue Analysis and writing problem statements	**Research Question & Problem Statements[12]** *In-class reflection (Individual)*

	Friday	Policy Research Methods (cont)	Woman on the Moon[13] **Knowledge assessment III (research methods)**
Segment 2: Fundamentals of Strategic Policy Communication			
4	Tuesday	**Team deliverables, choosing topics** <u>Issue 1</u>: The promise, power, and danger of ubiquitous AI	AI Freaks Me Out[14] Synthetic Humanity: AI & What's At Stake[15] *In-class reflection (Individual)*
	Thursday	**The basic tasks of science communication, issue framing & analysis**	The Democratization of Science[16] Science Communications[17] *Select book for semester* *Select topic, sort into teams*
	Friday	Science communication (cont)	**Knowledge assessment revisions (optional)**
5	Tuesday	**Overview of policy communication; Stakeholder analysis and shifting popular opinion** <u>Issue 2</u>: ChatGPT as knowledgeable or conversant? AI chatbots, honesty, and misinformation	**Stakeholder Analysis[18]** Wicked Problems[19] *In-class reflection (Individual)*
	Thursday	Public opinion (cont)	**Problem Statement (issue analysis) due** *Team workshop: Issue identification & naming audiences*
	Friday	Public opinion (cont)	Bad beliefs – ethics of misinformation[20]
6	Tuesday	**Accounting for human cognition** <u>Issue 3</u>: Bias in our STE: data, algorithms, decision-making	What are Heuristics?[21] 12 common biases[22] *Team workshop: Public audience characteristics*
	Thursday	Human cognition (cont)	Cognitive Bias Codex[23] What to do about Bias in data?[24] *Team workshop: Priming and anchoring your public audience*
	Friday	Human cognition (cont)	*Yourbias.is activity (Individual)*
7	Tuesday	**Team Presentations on Shifting Popular Opinion**	**Team Deliverable 1 (issue & stakeholder analysis) due**
	Thursday	**Systems thinking & the innovation**	Overview of Systems Thinking[25]

		mindset <u>Issue 4</u>: What does "smart" mean and who benefits from a "smart" society?	*Team workshop: Mapping your system*
	Friday	Systems thinking (cont)	Smart Enough Cities webinar[26]
Segment 3: Legislative Engagement			
8	Tuesday	**Policy Analysis &** **Engaging with legislators** <u>Issue 5</u>: Citizenship, privacy, human surveillance through data	**Policy Analysis**[27] The 'And' Method[28] Revisit: S&T Policymaking[29] & Science Communications[30] *Team workshop: Legislator ID, characteristics*
	Thursday	**Complex Adaptive Systems**: Where unintended consequences come from	Overview of Complex Adaptive Systems[31] Bunge's System Model for Complexity[32] *Team workshop: Framing, navigating for legislative audience*
	Friday	CAS (cont)	*Discussion post on Complex Adaptive Systems*
9	Tuesday	**Policy Resistance** <u>Issue 6</u>: Sustainability, clean transit, equity & justice	Complexity Explained[33] Learning from Evidence in a Complex World[34] *Group activity: Traffic simulation*
	Thursday	**Team Presentations on Engaging Legislators**	**Team Deliverable 2 (issue, stakeholder & policy analysis) due**
	Friday	Policy resistance (cont)	The MIT Beer Distribution Game[35] *Discussion post on the Beer Game*
10		*Spring Break*	
Segment 4: Spurring Action in the Private Sector			
11	Tuesday	**Catalyzing Private Sector Activity:** **Market analysis and crafting a value proposition** <u>Issue 7</u>: Digital profiles, virtual social experiences	**Market Research and Competitive Analysis**[36] What is Human-Centered Design?[37] *Team workshop: Private sector ID, characteristics*
	Thursday	Private sector (cont)	Revisit: The Endless Frontier[38] **Reflection Essay 1**

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			Team workshop: Applying human-centered design principles
	Friday	Private sector (cont)	Film: *Sight*
12	Tuesday	**How to do/ think about the future** Issue 8: Futurism, technologism	Guest speaker: David Staley (History)
	Thursday	Designing for the future (cont)	*Team workshop: Refining innovation pitch*
	Friday	Designing for the future (cont)	*Discussion post: reflection (Individual)*
Segment 5: Exploration on Technology's Impact and Individual Crossroads, Choice			
13	Tuesday	**Team Presentations on Catalyzing the Private Sector**	**Team Deliverable 3 (issue, stakeholder, policy & market analysis) due**
	Thursday	**Reflections on STEP as a career; the citizen-workforce** Data science for the public	Guest speaker: Dr. Samantha Howe, Ohio Department of Medicaid
	Friday	STEP career (cont)	*Discussion post on STEP career options*
14	Tuesday	**Biotechnology, organic technology, and the body** Issue 9: Prenatal imaging	Guest speaker: Prof. David Staley (History)
	Thursday	More on the body, tech, and privacy	*The Borg, Data, & Isaac Debate Autonomy activity*
	Friday	Biotech (cont)	Film: *Gattaca*
15	Tuesday	**Reflections:** on technology's impact on individuals, choice Issue 10: National or personal security?	The State Machine[39] *In-class reflection (Individual)*
	Thursday	Reflections: on technology's societal impact, unintended consequences	*Final team workshop: Finishing touches and wrap-up*
	Friday	Reflections (cont)	
Final	Official exam day		**Reflection Essay 2** **Peer & Self-Assessment** **Full team portfolio of research & communications materials due**
	TBD	**Innovation in the Public Interest Research Day**	

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University Academic Policies

Refer to **https://oaa.osu.edu/academic-policies** for academic policies, including student rights and responsibilities related to the following

Accessibility: Arrange for accommodations if you anticipate barriers to your learning based on a disability.

Safe learning environment: Know the university's commitments to an environment free from discrimination or harassment, and find resources for reporting or finding support.

Academic integrity: Understand your rights and responsibilities related to academic integrity and review the university's processes for addressing claims of academic misconduct.

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/**.

Course Policies

Attendance and Participation Expectations

Attendance and participation are required. If you have a situation that might cause you to miss class, please notify in writing and discuss with the Instructor immediately.

Teamwork is required for the successful completion of the course, and team-assignment is a privilege. This interdisciplinary course is a team-based learning experience designed to engage and leverage perspectives from multiple disciplines and lived-experiences. In keeping with our goal of promoting professional work standards, individuals' behavior and teamwork are monitored by the instructor. The instructor will intervene when conduct is deemed detrimental to a team's progress or damaging to another individual's learning or sense of belonging or value. Possible interventions include instructors' providing one-on-one coaching or group coaching, or an individual's losing the privilege to continue on a team. Loss of team-assignment will result in a failing grade in the course.

Late Assignments and Making Up Work

Please refer to CarmenCanvas for due dates. Due dates are set to help you stay on pace and to allow timely feedback that will help you complete subsequent assignments.

Extensions or modified deadlines will be granted for family emergencies, religious observances, or unanticipated/unavoidable work-related contingencies, provided the instructor receive**s** such requests before the applicable deadline. Extensions will automatically be granted in the case of *force majeure* events including natural disasters or other Acts of God. However, in such cases, we will attempt to collaborate online using video conferencing or other tools and will adjust deliverables' deadlines as appropriate.

Copyright

The materials used in connection with this course, including those created by the instructor or classmates, may be

subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Your Mental Health and Well-Being Matter

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 your ability to participate in daily activities. Whether or not you are engaged in distance learning, the Office of Student Life has numerous resources and services available to you at no charge to help you address those concerns.

If you find yourself feeling isolated, anxious or overwhelmed, on-demand mental health resources (go.osu.edu/ccsondemand) are available from Ohio State University's Student Life Counseling and Consultation Service (CCS). You can reach an on-call counselor when CCS is closed at 614- 292-5766. 24-hour emergency help is available through the National Suicide Prevention Lifeline website (suicidepreventionlifeline.org) or calling 1-800-273-8255(TALK). The Ohio State Wellness app (go.osu.edu/wellnessapp) is also a great resource.

For students in recovery or seeking recovery from substance use disorders, learn more about support on campus by visiting the Collegiate Recovery Community. For students facing food insecurity, learn more about the free on-campus food pantry by visiting the Buckeye Food Alliance. For students interested in speaking with a peer to learn more about campus resources, call the Buckeye Peer Access Line. For students interested in meeting with a peer and setting holistic wellness goals, learn more about Wellness Coaching.

Please see additional mental health and well-being resources under the "Resources" module on Carmen.

The Glenn College Values Diversity

The Glenn College is committed to nurturing a diverse and inclusive environment for our students, faculty, staff, and guests that celebrates the fundamental value and dignity of everyone by recognizing differences and supporting individuality. We are dedicated to creating a safe space and promoting civil discourse that acknowledges and embraces diverse perspectives on issues and challenges that affect our community.

Ohio State will have an environment free from Harassment, Discrimination, and Sexual Misconduct. The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation. To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity at: the online reporting form at equity.osu.edu; or call 614-247-5838 or TTY 614-688-8605; or email equity@osu.edu.

Our inclusive environment allows for religious expression. Students requesting accommodations based on faith, religious or a spiritual belief system in regard to examinations, other academic requirements or absences, are required to provide the instructor with written notice of specific dates for which the student requests alternative accommodations at the earliest possible date. For more information about religious accommodations at Ohio State, visit odi.osu.edu/religious-accommodations.

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Disability Services Statement

Accommodation Policy

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; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue

COVID Process SLDS Statement

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. 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; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Land Acknowledgement

We would like to acknowledge the land that The Ohio State University occupies is the ancestral and contemporary territory of the Shawnee, Potawatomi, Delaware, Miami, Peoria, Seneca, Wyandotte, Ojibwe and Cherokee peoples. Specifically, the university resides on land ceded in the 1795 Treaty of Greeneville and the forced removal of tribes through the Indian Removal Act of 1830. As a land grant institution, we want to honor the resiliency of these tribal nations and recognize the historical contexts that has and continues to affect the Indigenous peoples of this land.

[1] Boon, Chirstopher and Karen C. Seto (Jan 5, 2023). "Green jobs are booming, but too few employees have sustainability skills to fill them – here are 4 ways to close the gap." *The Conversation.*

[2] Bush, Vannevar (1945) *The Endless Frontier (75th Anniversary Edition)* or online https://www.nsf.gov/about/history/EndlessFrontier_w.pdf

[3] ~10min reading of Interview Transcript: Daniel Gross, 3 December 2020. *Wartime Innovation: Lessons from the Office of Scientific R&D,* https://www.aaas.org/news/wartime-innovation-lessons-office-scientific-rd

[4] 1h 3m Audio/Video: *What Science and Technology Owe the National Defense*, moderated event recording https://www.newamerica.org/future-tense/events/online-what-science-and-technology-owe-national-defense/

[5] 38page PDF document: Stine, Deborah (2009). Science and Technology Policymaking: A Primer. Also online https://fas.org/sgp/crs/misc/RL34454.pdf, Congressional Research Service, May 27, 2009

[6] 30min 30s Video: The Legislative Process: Overview https://www.congress.gov/legislative-process

[7] 4-page Website article and PDF: The Federal Budget Process 101 by Matt Hourihan, American Association for the Advancement of Science https://www.aaas.org/news/federal-budget-process-101

[8] 20-page PDF document: The Congressional Appropriations Process: An Introduction, Congressional Research Service, November 30, 2016 (https://crsreports.congress.gov/product/pdf/R/R42388)

[9] Pages 49-67 Short Story: "When Robot and Crow Saved East St. Louis," *Future Tense Fiction: Stories of Tomorrow,* 2019. Also available online at https://slate.com/technology/2018/12/annalee-newitz-short-story-when-robot-and-crow-saved-east-st-louis.html

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Optional supplement: https://www.isixsigma.com/getting-started/how-to-write-an-effective-problem-statement/

[13] 13:29m Video: CBS *60 Minutes* NASA's New Race to Put a Woman on the Moon, aired March 7, 2021. https://youtu.be/IijMSgCZV_4

[14] Lieu, Ted (Jan 23, 2023). I'm a Congressman Who Codes. AI Freaks Me Out. *The New York Times.* https://www.nytimes.com/2023/01/23/opinion/ted-lieu-ai-chatgpt-congress.html?smid=url-share

[15] Synthetic Humanity (Feb 16, 2023). Synthetic Humanity: AI & What's At Stake. Center for Humane Technology. https://www.humanetech.com/podcast/synthetic-humanity-ai-whats-at-stake

[16] 5-page PDF article: Zember, Christopher, April 13, 2016: "The Democratization of Science Ushers in a New World Order". Also online https://warontherocks.com/2016/04/the-democratization-of-science-ushers-in-a-new-world-order/

[17] 20-page PDF document: Suhay, Cloyd, Heath, and Nash (20). Recommended Practices for Science Communications with Policymakers. Also online https://www.american.edu/spa/scicomm/upload/recommended-practices-booklet_v17-digital.pdf

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Optional supplement: https://www.indeed.com/career-advice/career-development/stakeholder-analysis

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[20] Torcello, Lawrence (2023). Bad beliefs: Misinformation is factually wrong – but is it ethnically wrong, too? *The Conversation.* https://theconversation.com/bad-beliefs-misinformation-is-factually-wrong-but-is-it-ethically-wrong-too-196551?utm_medium=email&utm_campaign=Latest%20from%20The%20Conversation%20for%20February%2016%202023%20-%202545825579&utm_content=Latest%20from%20The%20Conversation%20for%20February%2016%202023%20-%202545825579+CID_e5bfa9d25afa5f199ff0ec373b6695a9&utm_source=campaign_monitor_us&utm_term=Bad%20beliefs%20Misinformation%20is%20factually%20wrong%20%20but%20is%20it%20ethically%20wrong%20too

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[39] Short Story: 16 September 2020 Wijeratne, Yudhanjaya, *The State Machine*, https://slate.com/technology/2020/09/state-machine-yudhanjaya-wijeratne.html and response essay by Divya, S.B. 26 September 2020, https://slate.com/technology/2020/09/yudhanjaya-wijeratne-state-machine-response-essay.html

Research & Creative Inquiry Course Inventory

Overview

The GE allows students to take a single, 4+ credit course to satisfy a particular GE Theme requirement if that course includes key practices that are recognized as integrative and high impact. Courses seeking one of these designations need to provide a completed Integrative Practices Inventory at the time of course submission. This will be evaluated with the rest of the course materials (syllabus, Theme Course submission document, etc). Approved Integrative Practices courses will need to participate in assessment both for their Theme category and for their integrative practice.

Please enter text in the boxes below to describe how your class will meet the expectations of Research & Creative Inquiry Courses. It may be helpful to consult the Description & Expectations document for this pedagogical practice or to consult with the OSU Office of Undergraduate Research and Creative Inquiry. You may also want to consult the Director of Undergraduate Studies or appropriate support staff person as you complete this Inventory and submit your course.

Please use language that is clear and concise and that colleagues outside of your discipline will be able to follow. You are encouraged to refer specifically to the syllabus submitted for the course, since the reviewers will also have that document Because this document will be used in the course review and approval process, you should be *as specific as possible*, listing concrete activities, specific theories, names of scholars, titles of textbooks etc.

Accessibility

If you have a disability and have trouble accessing this document or need to receive it in another format, please reach out to Meg Daly at daly.66@osu.edu or call 614-247-8412.

Pedagogical Practices for Research & Creative Inquiry

Course subject & number

Performance expectations set at appropriately high levels (e.g. students investigate their own questions or develop their own creative projects). Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. *(50-500 words)*

Significant investment of time and effort by students over an extended period of time (e.g., scaffolded scientific or creative processes building across the term, including, e.g., reviewing literature, developing methods, collecting data, interpreting or developing a concept or idea into a full-fledged production or artistic work) Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. *(50-500 words)*

Interactions with faculty and peers about substantive matters including regular, meaningful faculty mentoring and peer support. Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. *(50-500 words)*

Students will get frequent, timely, and constructive feedback on their work, iteratively scaffolding research or creative skills in curriculum to build over time. Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. *(50-500 words)*

Periodic, structured opportunities to reflect and integrate learning in which students interpret findings or reflect on creative work. Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. *(50-500 words)*

Opportunities to discover relevance of learning through real-world applications (e.g., mechanism for allowing students to see their focused research question or creative project as part of a larger conceptual framework). Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. *(50-500 words)*

Public Demonstration of competence, such as a significant public communication of research or display of creative work, or a community scholarship celebration. Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. *(50-500 words)*

Experiences with diversity wherein students demonstrate intercultural competence and empathy with people and worldview frameworks that may differ from their own. Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. *(50-500 words)*

Explicit and intentional efforts to promote inclusivity and a sense of belonging and safety for students, (e.g. universal design principles, culturally responsible pedagogy). Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. *(50-500 words)*

Clear plan to market this course to get a wider enrollment of typically underserved populations.
Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. *(50-500 words)*

GE Theme course submission worksheet: Citizenship for a Just & Diverse World

Overview

Courses in the GE Themes aim to provide students with opportunities to explore big picture ideas and problems within the specific practice and expertise of a discipline or department. Although many Theme courses serve within disciplinary majors or minors, by requesting inclusion in the General Education, programs are committing to the incorporation of the goals of the focal theme and the success and participation of students from outside of their program.

Each category of the GE has specific learning goals and Expected Learning Outcomes (ELOs) that connect to the big picture goals of the program. ELOs describe the knowledge or skills students should have by the end of the course. Courses in the GE Themes must meet the ELOs common for **all** GE Themes <u>and</u> those specific to the Theme, in addition to any ELOs the instructor has developed specific to that course. All courses in the GE must indicate that they are part of the GE and include the Goals and ELOs of their GE category on their syllabus.

The prompts in this form elicit information about how this course meets the expectations of the GE Themes. The form will be reviewed by a group of content experts (the Theme Advisory) and by a group of curriculum experts (the Theme Panel), with the latter having responsibility for the ELOs and Goals common to all themes (those things that make a course appropriate for the GE Themes) and the former having responsibility for the ELOs and Goals specific to the topic of **this** Theme.

Briefly describe how this course connects to or exemplifies the concept of this Theme (Citizenship)

In a sentence or two, explain how this class "fits' within the focal Theme. This will help reviewers understand the intended frame of reference for the course-specific activities described below.

(enter text here)

Connect this course to the Goals and ELOs shared by *all* Themes

Below are the Goals and ELOs common to all Themes. In the accompanying table, for each ELO, describe the activities (discussions, readings, lectures, assignments) that provide opportunities for students to achieve those outcomes. The answer should be concise and use language accessible to colleagues outside of the submitting department or discipline. The specifics of the activities matter—listing "readings" without a reference to the topic of those readings will not allow the reviewers to understand how the ELO will be met. However, the panel evaluating the fit of the course to the Theme will review this form in conjunction with the syllabus, so if readings, lecture/discussion topics, or other specifics are provided on the syllabus, it is not necessary to reiterate them within this form. The ELOs are expected to vary in their "coverage" in terms of number of activities or emphasis within the course. Examples from successful courses are shared on the next page.

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

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.

	Course activities and assignments to meet these ELOs
ELO 1.1 Engage in critical and logical thinking.	
ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or ideas within this theme.	
ELO 2.1 Identify, describe, and synthesize approaches or experiences.	
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.	

Example responses for proposals within "Citizenship" (from Sociology 3200, Comm 2850, French 2803):

| *ELO 1.1 Engage in critical and logical thinking.* | *This course will build skills needed to engage in critical and logical thinking about immigration and immigration related policy through:*
 Weekly reading response papers which require the students to synthesize and critically evaluate cutting-edge scholarship on immigration;
 Engagement in class-based discussion and debates on immigration-related topics using evidence-based logical reasoning to evaluate policy positions;
 Completion of an assignment which build skills in analyzing empirical data on immigration (Assignment #1) |

	Completion 3 assignments which build skills in connecting individual experiences with broader population-based patterns (Assignments #1, #2, #3)
	Completion of 3 quizzes in which students demonstrate comprehension of the course readings and materials.
ELO 2.1 *Identify, describe, and synthesize approaches or experiences.*	*Students engage in advanced exploration of each module topic through a combination of lectures, readings, and discussions.*
	Lecture
	Course materials come from a variety of sources to help students engage in the relationship between media and citizenship at an advanced level. Each of the 12 modules has 3-4 lectures that contain information from both peer-reviewed and popular sources. Additionally, each module has at least one guest lecture from an expert in that topic to increase students' access to people with expertise in a variety of areas.
	Reading
	The textbook for this course provides background information on each topic and corresponds to the lectures. Students also take some control over their own learning by choosing at least one peer-reviewed article and at least one newspaper article from outside the class materials to read and include in their weekly discussion posts.
	Discussions
	Students do weekly discussions and are given flexibility in their topic choices in order to allow them to take some control over their education. They are also asked to provide information from sources they've found outside the lecture materials. In this way, they are able to explore areas of particular interest to them and practice the skills they will need to gather information about current events, analyze this information, and communicate it with others.
	Activity Example: Civility impacts citizenship behaviors in many ways. Students are asked to choose a TED talk from a provided list (or choose another speech of their interest) and summarize and evaluate what it says about the relationship between civility and citizenship. Examples of Ted Talks on the list include Steven Petrow on the difference between being polite and being civil, Chimamanda Ngozi Adichie's talk on how a single story can perpetuate stereotypes, and Claire Wardle's talk on how diversity can enhance citizenship.
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.*	*Students will conduct research on a specific event or site in Paris not already discussed in depth in class. Students will submit a 300-word abstract of their topic and a bibliography of at least five reputable academic and mainstream sources. At the end of the semester they will submit a 5-page research paper and present their findings in a 10-minute oral and visual presentation in a small-group setting in Zoom.*
	Some examples of events and sites:
	The Paris Commune, an 1871 socialist uprising violently squelched by conservative forces

	Jazz-Age Montmartre, where a small community of African-Americans– including actress and singer Josephine Baker, who was just inducted into the French Pantheon–settled and worked after World War I. *The Vélodrome d'hiver Roundup, 16-17 July 1942, when 13,000 Jews were rounded up by Paris police before being sent to concentration camps* *The Marais, a vibrant Paris neighborhood inhabited over the centuries by aristocrats, then Jews, then the LGBTQ+ community, among other groups.*

Goals and ELOs unique to Citizenship for a Just & Diverse World

Below are the Goals and ELOs specific to this Theme. As above, in the accompanying Table, for each ELO, describe the activities (discussions, readings, lectures, assignments) that provide opportunities for students to achieve those outcomes. The answer should be concise and use language accessible to colleagues outside of the submitting department or discipline. The ELOs are expected to vary in their "coverage" in terms of number of activities or emphasis within the course. Examples from successful courses are shared on the next page.

GOAL 3: 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.

GOAL 4: 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.

	Course activities and assignments to meet these ELOs
ELO 3.1 Describe and analyze a range of perspectives on what constitutes citizenship <u>and</u> how it differs across political, cultural, national, global, and/or historical communities.	
ELO 3.2 Identify, reflect on, and apply the knowledge, skills and dispositions required for intercultural competence as a global citizen.	
ELO 4.1 Examine, critique, and evaluate various expressions and implications of diversity, equity, inclusion, and explore a variety of lived experiences.	
ELO 4.2 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.	

Example responses for proposals within "Citizenship" (Hist/Relig. Studies 3680, Music 3364; Soc 3200):

ELO 3.1 Describe and analyze a range of perspectives on what constitutes citizenship <u>and</u> how it differs across political, cultural,	*Citizenship could not be more central to a topic such as immigration/migration. As such, the course content, goals, and expected learning outcomes are all, almost by definition, engaged with a range of perspectives on local, national, and global citizenship.*

national, global, and/or historical communities.	Throughout the class students will be required to engage with questions about what constitutes citizenship and how it differs across contexts. The course content addresses citizenship questions at the global (see weeks #3 and #15 on refugees and open border debates), national (see weeks #5, 7-#14 on the U.S. case), and the local level (see week #6 on Columbus). Specific activities addressing different perspectives on citizenship include Assignment #1, where students produce a demographic profile of a U.S-based immigrant group, including a profile of their citizenship statuses using U.S.-based regulatory definitions. In addition, Assignment #3, which has students connect their family origins to broader population-level immigration patterns, necessitates a discussion of citizenship. Finally, the critical reading responses have the students engage the literature on different perspectives of citizenship and reflect on what constitutes citizenship and how it varies across communities.
ELO 3.2 Identify, reflect on, and apply the knowledge, skills and dispositions required for intercultural competence as a global citizen.	This course supports the cultivation of "intercultural competence as a global citizen" through rigorous and sustained study of multiple forms of musical-political agency worldwide, from the grass-roots to the state-sponsored. Students identify varied cultural expressions of "musical citizenship" each week, through their reading and listening assignments, and reflect on them via online and in-class discussion. It is common for us to ask probing and programmatic questions about the musical-political subjects and cultures we study. What are the possibilities and constraints of this particular version of musical citizenship? What might we carry forward in our own lives and labors as musical citizens Further, students are encouraged to apply their emergent intercultural competencies as global, musical citizens in their midterm report and final project, in which weekly course topics inform student-led research and creative projects.
ELO 4.1 Examine, critique, and evaluate various expressions and implications of diversity, equity, inclusion, and explore a variety of lived experiences.	Through the historical and contemporary case studies students examine in HIST/RS 3680, they have numerous opportunities to examine, critique, and evaluate various expressions and implications of diversity, equity, and inclusion, as well as a variety of lived experiences. The cases highlight the challenges of living in religiously diverse societies, examining a range of issues and their implications. They also consider the intersections of religious difference with other categories of difference, including race and gender. For example, during the unit on US religious freedom, students consider how incarcerated Black Americans and Native Americans have experienced questions of freedom and equality in dramatically different ways than white Protestants. In a weekly reflection post, they address this question directly. In the unit on marriage and sexuality, they consider different ways that different social groups have experienced the regulation of marriage in Israel and Malaysia in ways that do not correspond simplistically to gender (e.g. different women's groups with very different perspectives on the issues). In their weekly reflection posts and other written assignments, students are invited to analyze the implications of different regulatory models for questions of diversity, equity, and inclusion. They do so not in a simplistic sense of assessing which model is

	"right" or "best" but in considering how different possible outcomes might shape the concrete lived experience of different social groups in different ways. The goal is not to determine which way of doing things is best, but to understand why different societies manage these questions in different ways and how their various expressions might lead to different outcomes in terms of diversity and inclusion. They also consider how the different social and demographic conditions of different societies shape their approaches (e.g. a historic Catholic majority in France committed to laicite confronting a growing Muslim minority, or how pluralism *within* Israeli Judaism led to a fragile and contested status quo arrangement). Again, these goals are met most directly through weekly reflection posts and students' final projects, including one prompt that invites students to consider Israel's status quo arrangement from the perspective of different social groups, including liberal feminists, Orthodox and Reform religious leaders, LGBTQ communities, interfaith couples, and others.
ELO 4.2 *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.*	As students analyze specific case studies in HIST/RS 3680, they assess law's role in and capacity for enacting justice, managing difference, and constructing citizenship. This goal is met through lectures, course readings, discussion, and written assignments. For example, the unit on indigenous sovereignty and sacred space invites students to consider why liberal systems of law have rarely accommodated indigenous land claims and what this says about indigenous citizenship and justice. They also study examples of indigenous activism and resistance around these issues. At the conclusion of the unit, the neighborhood exploration assignment specifically asks students to take note of whether and how indigenous land claims are marked or acknowledged in the spaces they explore and what they learn from this about citizenship, difference, belonging, and power. In the unit on legal pluralism, marriage, and the law, students study the personal law systems in Israel and Malaysia. They consider the structures of power that privilege certain kinds of communities and identities and also encounter groups advocating for social change. In their final projects, students apply the insights they've gained to particular case studies. As they analyze their selected case studies, they are required to discuss how the cases reveal the different ways justice, difference, and citizenship intersect and how they are shaped by cultural traditions and structures of power in particular social contexts. They present their conclusions in an oral group presentation and in an individually written final paper. Finally, in their end of semester letter to professor, they reflect on how they issues might shape their own advocacy for social change in the future.