

PUBLIC POLICY

Department Website: <https://harris.uchicago.edu/academics/undergraduate> (<https://harris.uchicago.edu/academics/undergraduate/>)

Email List

Students majoring in Public Policy or interested in the major should subscribe to our email list, which disseminates announcements concerning courses, internships, events, and other information connected with the major. You can subscribe by emailing publicpolicy-ugrad@lists.uchicago.edu or through this link (<https://lists.uchicago.edu/web/info/publicpolicy-ugrad/>). Students can email UChicagoPBPL@uchicago.edu (uchicagopbpl@uchicago.edu) with general questions and requests.

PROGRAM OF STUDY

Public Policy is a multidisciplinary major grounded in the social sciences, with substantial inputs from economics, sociology, political science, and law, among other disciplines. The major recognizes that public issues are not neatly contained within traditional disciplinary boundaries and that analysts possessing a broad range of social scientific understanding, quantitative expertise, and communication skills are well placed to contribute to improved public policies. The Public Policy major strives to put analysis before advocacy, stressing that compelling policy analysis is a central component of effective advocacy. Public Policy involves direct contact with policy problems, ensuring that academic inquiry is well-informed and connected to real-world conditions.

LEARNING OBJECTIVES

The BA degree in Public Policy is designed to introduce students to policy analysis and implementation. The major has the following learning objectives. Students will:

- learn the basics of the workings of the economy and politics.
- learn how to use a variety of quantitative and qualitative methods to carry out policy analysis.
- learn the principles of critical thinking essential for careful and credible policy analysis.
- gain in-depth knowledge in at least one sub-field of public policy.
- develop fluency in the spoken and written communication of policy.
- experience hands-on contact with policy problems.
- learn to engage in original policy research.

PROGRAM REQUIREMENTS

These are the necessary components for completing the Public Policy major: two quarters of calculus, one quarter of statistics, five core Public Policy courses, one Methods and one Windows course, an area of specialization comprised of three related courses, a BA Capstone course, and a successful Capstone thesis or project. Students have considerable flexibility in terms of when in their undergraduate career they take the required courses.

Calculus and Statistics: Public Policy students take two quarters of calculus, typically MATH 13100 Elem Functions and Calculus I and MATH 13200 Elem Functions and Calculus II (or MATH 15100-15200 (<http://collegecatalog.uchicago.edu/search/?P=MATH%2015100-15200>) Calculus I-II), and one quarter of statistics, either STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods.

Five Public Policy Core Courses: Students are required to take PBPL 20000 Economics for Public Policy; however, ECON 20000 The Elements of Economic Analysis I is an acceptable substitute. Completion of PBPL 20000 Economics for Public Policy (or ECON 20000 The Elements of Economic Analysis I) is a prerequisite for the required course PBPL 22200 Public Policy Analysis. The remaining core courses can be taken in any order, and the core requirements can be fulfilled over multiple academic years.

When possible, we encourage students to complete STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods prior to enrolling in PBPL 26400 Quantitative Methods in Public Policy. PBPL 22100 Politics and Policy, PBPL 20000 Economics for Public Policy, and PBPL 22300 Policy Implementation are common starting points in the major. The major strives to offer PBPL core courses multiple times per year; please check departmental resources when planning your coursework schedule.

The five core courses are listed in the table below.

PBPL 20000	Economics for Public Policy	100
PBPL 22100	Politics and Policy	100
PBPL 22200	Public Policy Analysis	100
PBPL 22300	Policy Implementation	100
PBPL 26400	Quantitative Methods in Public Policy	100

Methods and Windows

Students must take one Methods course and one Windows course to fulfill the practicum requirement of the major. The practicum requirement is designed to help students learn research methods (e.g., demography, interviewing, GIS mapping, survey design) and then apply their methodological skills in a real world context, opening a window from the ivory tower to the outside world. Some Windows courses focus on individual research projects while others involve collective work on a substantive policy problem with a community organization or government entity.

Samples of pre-approved Methods and Windows courses are listed in the tables below; for a more complete list, please see our website (<http://harris.uchicago.edu/academics/undergraduate/overview/practicum/>). In addition, students can select courses from the quarterly list shared through our email list and on our website. Students can also petition to fulfill their Methods or Windows requirements with other appropriate courses.

All students must submit their Specialization, Methods, and Windows courses for review through the PBPL petition form (<https://forms.gle/C6aySLc2g1FdBnvZ9/>). If you would prefer to have your Specialization or Practicum reviewed separately, you may enter "Not Applicable" in the relevant section of the form. If your plans change after submitting, you can resubmit the form with updated information. The practicum courses listed in the catalog and the quarterly list won't be "approved" (i.e. show up in My Planner) until submitted through the form and approved.

Some pre-approved Methods courses:

PBPL 26302	Practicum: Interview Project on Gun Violence	100
PBPL 26303	Practicum: Interview Project on Public Education	100
PBPL 26305	Practicum: Qualitative Research in Urban Transportation	100
PBPL 28498	Practicum: Women and Society	100
PBPL 28550	Methods of Data Collection: Social Experiments, Quasi-Experiments and Surveys	100
PBPL 28560	Evaluating Interventions and Public Policies: Tools and Applications	100
PBPL 28829	Artificial Intelligence for Public Policy	100

Some pre-approved Windows courses:

PBPL 23300	Justice, Equity, and Opportunity: Shifting Approaches to Criminal Justice Reform	100
PBPL 24751	The Business of Non-Profits and The Evolving Social Sector	100
PBPL 24752	Impact investing: Using Impact Capital to Address Social Problems	100
PBPL 26302	Practicum: Interview Project on Gun Violence	100
PBPL 26303	Practicum: Interview Project on Public Education	100
PBPL 26305	Practicum: Qualitative Research in Urban Transportation	100
PBPL 28498	Practicum: Women and Society	100
PBPL 28502	Policing in America: Black, White and Blue	100

Area of Specialization

Area of Specialization: Students are required to complete three policy-relevant, 200-level (or higher) courses that together constitute their area of specialization. The specialization courses must be related with respect to a policy sub-field. Examples of specializations include Urban Policy, Data Science, Human Rights, Education Policy, Health Policy, International Development, and Environmental Policy. At least one of the three courses must be listed in Public Policy, and the remaining two courses can be drawn from any academic department. Proposed areas of specialization can be pre-approved before some or all of the constituent courses have been taken. Please see the Public Policy website (<http://harris.uchicago.edu/academics/undergraduate/overview/specialization/>) for examples of recommended specializations and to access the petition form (<https://forms.gle/C6aySLc2g1FdBnvZ9/>).

Capstone Requirement

All Public Policy majors must complete the Capstone requirement. There are two ways to complete this requirement: the year-long BA Thesis Seminar ((<http://collegecatalog.uchicago.edu/search/?P=PBPL%2022200>)PBPL 29800 BA Thesis Seminar: Public Policy), and the one-quarter BA Project Seminar (PBPL 29500 BA Project Seminar). Each seminar requires students to complete a capstone paper that showcases the skills they acquired throughout their studies in the major.

PBPL 29800 BA Thesis Seminar: Public Policy guides students in conducting original, independent research (e.g., developing methodological skills, collecting and analyzing data) as part of a year-long project

that culminates in a BA thesis. More information about the BA Thesis process can be found here (<https://harris.uchicago.edu/academics/undergraduate/thesis/>).

PBPL 29500 BA Project Seminar is a one-quarter course offered in autumn, winter, and spring that focuses on critical policy-relevant writing and results in a project that highlights student analysis of a vital public policy problem. More information about the Capstone Project requirement can be found here (<https://harris.uchicago.edu/academics/undergraduate/capstone-projects/>).

DOUBLE MAJORS

The Public Policy major is quite accessible for students looking to graduate with a double major. Frequently, one or two of the PBPL Area of Specialization courses can be drawn from 200-level course electives in other majors. Students can also complete their PBPL Practicum requirement through coursework in another department. Public Policy generally does not accept course substitutions for the core courses PBPL 22100 Politics and Policy, PBPL 22300 Policy Implementation, or PBPL 26400 Quantitative Methods in Public Policy. Public Policy is receptive to students who wish to use a single BA thesis for multiple majors.

Counting the BA Thesis for Two Majors

Students may submit a single BA thesis to fulfill the thesis requirements for Public Policy and another major. Students pursuing this option must:

- Submit the “Single Bachelor’s Paper for Two Majors (<https://college.uchicago.edu/sites/default/files/documents/College%20Dean%20of%20Students/Single%20Bachelors%20Paper%20for%20Two%20Majors.pdf>)” petition, and
- Participate in the year-long thesis writing process.

PBPL 29800 BA Thesis Seminar: Public Policy is required for all students wishing to complete the Public Policy thesis. Beginning in Academic Year 2026-27, requests to substitute PBPL 29800 BA Thesis Seminar: Public Policy for other undergraduate departments’ BA seminar(s) will not be approved. However, requests from students in joint degree programs to substitute PBPL 29800 with a graduate-level Thesis Seminar course may be considered on a case-by-case basis. The Thesis Seminar course must be taken for a quality grade to fulfill the requirement.

Students who have enrolled in a Thesis Seminar in another department may defer enrollment in the Public Policy BA Thesis Seminar (PBPL 29800) to the Winter quarter. PBPL 29800 BA Thesis Seminar: Public Policy consists of weekly lectures and TA sessions in Autumn and preceptor-led workshops in Winter.

Double Majoring in Public Policy and Economics

Important information for students who double major in Public Policy and Economics can be found here (<https://harris.uchicago.edu/academics/undergraduate/overview/#double%20majors>); note that the PBPL 22200 Public Policy Analysis requirement can be met with a combination of two courses, ECON 20100 The Elements of Economic Analysis II (or ECON 20110 The Elements of Economic Analysis II Honors), and an approved Public Policy (PBPL) elective at the 200-level or higher. Please contact the department for approval of the PBPL elective to be used in combination with ECON 20100 The Elements of Economic Analysis II as a substitute for the PBPL 22200 Public Policy Analysis requirement. Please note that PBPL electives taken to fulfill this requirement can’t be used to satisfy other requirements within the major.

SUMMARY OF REQUIREMENTS

GENERAL EDUCATION

MATH 13100-13200	Elementary Functions and Calculus I-II (or higher)	200
Total Units		200

MAJOR

STAT 22000 or STAT 23400	Statistical Methods and Applications Statistical Models and Methods	100
PBPL 20000	Economics for Public Policy	100
PBPL 22100	Politics and Policy	100
PBPL 22200	Public Policy Analysis	100
PBPL 22300	Policy Implementation	100
PBPL 26400	Quantitative Methods in Public Policy	100
Approved Methods Course		100
Approved Windows Course		100
Three Courses in an Area of Specialization		300
PBPL 29800	BA Thesis Seminar: Public Policy	100

or PBPL 29500	BA Project Seminar
Total Units	1200

GRADING

All courses counting toward the Public Policy major must be taken for quality grades.

HONORS

Only students who satisfy the BA Thesis Seminar requirement and have an overall GPA of 3.5 or higher are eligible for honors within the Public Policy major. Qualifying students are recommended for honors if their BA papers are judged to be of superior quality. For additional information about honors, please visit our website (<https://harris.uchicago.edu/academics/undergraduate/overview/thesis/>).

STUDY ABROAD

The University of Chicago's Spring Quarter Barcelona Public Policy program provides University of Chicago students with an opportunity to study comparative public policy in the exciting cultural and political capital of Catalonia in northeastern Spain. The program is designed to expose students to policy-making in a non-U.S. setting through a combination of courses and excursions that will allow students to learn how the political and policy-making system operates in other nations. The three-course Public Policy sequence will meet the requirement for three courses in an area of specialization within the Public Policy major (though students need not be Public Policy majors to participate in the program). In addition to the Public Policy sequence, participants take a fourth course in Spanish language. Students with sufficient knowledge of Catalan may substitute a Catalan language course in place of the Spanish language course. For more information, or to apply, visit the Study Abroad website (<http://study-abroad.uchicago.edu/programs/barcelona-public-policy/>).

PUBLIC POLICY STUDIES (PBPL) COURSES

PBPL 20000. Economics for Public Policy. 100 Units.

This course develops the microeconomic theories of consumer and producer choices, as well as demonstrates the application of these theoretical tools to policy problems. Supply, demand, and competitive markets are examined, along with the conditions under which government policy can increase efficiency.

Instructor(s): Ryan Kellogg Terms Offered: Autumn

Prerequisite(s): Completion of two quarters of calculus required; prior knowledge of economics not required. For ECON majors and students who have taken ECON 20000: consent of instructor required.

Note(s): PBPL 20000 or ECON 20000 is required of all students who are majoring in public policy. PBPL 20000 satisfies the ECON 20000 prerequisite for PBPL 22200. Students who have taken ECON 20000 require the instructor's consent to enroll in PBPL 20000.

PBPL 20115. Women, Peace and Security. 100 Units.

This course focuses on critical feminist theorizing and scholarship on militarization, war and masculinities, and on feminist articulations of peace and (demilitarized) security. Students will learn about the transnational feminist research, policy and advocacy network known as the Women, Peace and Security (WPS) agenda, and the important inroads this network has made in establishing international and national policies in the fields of gender, conflict, peace and development. The course highlights the background, history and policy significance of the historic Security Council Resolution 1325 on Women, Peace and Security, as well as subsequent and related UN resolutions. Students will also learn about alternative feminist approaches and visions for international peace and security, through powerful case study examples of feminist activism, solidarity and diplomacy.

Instructor(s): Maliha Chishti Terms Offered: Spring

Equivalent Course(s): PPHA 47420, GNSE 40115, GNSE 20115

PBPL 20150. Sustainable Urban Development. 100 Units.

The course covers concepts and methods of sustainable urbanism, livable cities, resiliency, and smart growth principles from a social, environmental and economic perspective. In this course we examine how the development in and of cities - in the US and around the world - can be sustainable, especially given predictions of a future characterized by increasing environmental and social volatility. We begin by critiquing definitions of sustainability. The fundamental orientation of the course will be understanding cities as complex socio-natural systems, and so we will look at approaches to sustainability grouped around several of the most important component systems: climate, energy, transportation, and water. With the understanding that sustainability has no meaning if it excludes human life, perspectives from both the social sciences and humanities are woven throughout: stewardship and environmental ethics are as important as technological solutions and policy measures.

Instructor(s): Evan Carver Terms Offered: Autumn Spring

Equivalent Course(s): GLST 20150, ARCH 20150, CEGU 20150

PBPL 20305. The Construction of Education Inequality: Policy and Practice. 100 Units.

The problems confronting urban schools are bound to the social, economic, and political conditions of the urban environments in which schools reside. Thus, this course will explore social, economic, and political issues, with an emphasis on issues of race and class as they have affected the distribution of equal educational opportunities in urban schools. We will focus on the ways in which family, school, and neighborhood characteristics intersect

to shape the divergent outcomes of low- and middle-income children residing with any given neighborhood. Students will tackle an important issue affecting the residents and schools in one Chicago neighborhood. This course is part of the College Course Cluster: Urban Design.

Instructor(s): M. Keels Terms Offered: Autumn

Note(s): CHDV Undergrad Distribution: B; Grad distribution: 2

Equivalent Course(s): RDIN 30305, EDSO 20305, RDIN 20305, CHDV 30315, EDSO 40315, CHDV 20305

PBPL 20521. Sociology of urban planning: cities, territories, environments. 100 Units.

This course provides a high-intensity introduction to the sociology of urban planning practice under modern capitalism. Building upon urban sociology, planning theory and history as well as urban social science and environmental studies, we explore the emergence, development and continual transformation of urban planning in relation to changing configurations of capitalist urbanization, modern state power, sociopolitical insurgency and environmental crisis. Following an initial exploration of divergent conceptualizations of "planning" and "urbanization," we investigate the changing sites and targets of planning; struggles regarding the instruments, goals and constituencies of planning; the contradictory connections between planning and diverse configurations of power in modern society (including class, race, gender and sexuality); and the possibility that new forms of planning might help produce more socially just and environmentally sane forms of urbanization in the future.

Instructor(s): N. Brenner Terms Offered: Winter

Equivalent Course(s): KNOW 30521, ARCH 20521, SOCI 30521, SOCI 30521, PLSC 30521, CEGU 20521, PLSC 20521, PPHA 30521, GEOG 20521, CHST 20521

PBPL 20562. Democracy and Its Critics. 100 Units.

This course provides an introduction to the study of self-government. Over the course of the quarter, we will investigate the strengths and weaknesses of democracy as a political regime and a form of social organization. We will explore the relationship between democracy and values such as equality and freedom; democratic threats to minorities; the risks of elite capture and manipulation; and democratic erosion and collapse. Drawing on writings from advocates, analysts, and critics of democracy, we will introduce students to the study of democracy in several different disciplines, including history, philosophy, political science, and sociology. Written assignments will be satisfied through a set of short papers. This course is offered annually (the quarter varies depending on the year) and will next be offered in Spring 2026. Graduate students may enroll with instructor consent.

Instructor(s): Clifford Ando Terms Offered: Spring

Equivalent Course(s): SOCI 20562, HIST 18103, PLSC 20562, DEMS 15000, CLCV 26726

PBPL 20815. New Directions in Formal Theory. 100 Units.

In this seminar we will survey recent journal articles that develop formal (mathematical) theories of politics. The range of topics and tools we touch on will be broad. Topics include models of institutions, groups, and behavior, and will span American politics, comparative politics, and international relations. Tools include game theory, network analysis, simulation, axiomatic choice theory, and optimization theory. Our focus will be on what these models are theoretically doing: What they do and do not capture, what makes one mathematical approach more compelling than another, and what we can ultimately learn from a highly stylized (and necessarily incomplete) mathematical representation of politics. The goal of the course is for each participant, including the professor, to emerge with a new research project.

Instructor(s): Luo, Z & Myerson, R

Prerequisite(s): PLSC 30901, PLSC 31000 or consent of instructor.

Equivalent Course(s): PLSC 20815, PECO 40815, PLSC 40815, PPHA 40815

PBPL 21011. Clinical Research Design and Interpretation of Health Data. 100 Units.

This course will introduce the interdisciplinary field of clinically oriented health services research with a focus on the interpretation of health-related metrics and policy-related applications. We will examine how translational medical science informs healthcare providers, payers, and professional societies. COVID-19 and postmenopausal hormone replacement therapy will illustrate the challenges of data interpretation, translation of research findings into clinical medicine, and the adoption of evidence-based guidelines. Using a highly interactive approach, students will gain experience in selection of research study designs, measurement of health status, risk adjustment, causal inference, and understanding the placebo effect. We will discuss how clinicians, administrators, and public reporting entities judge and use information derived from investigations. The COVID-19 pandemic will demonstrate the challenges that varied clinical presentations, diagnostic accuracy, and case definition (identification of diseased patients) create in the formulation of health statistics (e.g., case-fatality rates and disease attribution of mortality). We will also discuss methods of defining study populations for both clinical research and public health reporting.

Instructor(s): Gregory Ruhnke Terms Offered: Spring

Equivalent Course(s): BIOS 29331, HLTH 21011, CCTS 21011, CCTS 41011

PBPL 21025. Climate Crossroads: Policy, Diplomacy, and the Global Future. 100 Units.

The world's atmosphere and oceans are rapidly warming—the result of human economic progress fueled by fossil fuels and other greenhouse gas emissions. A 2018 analysis by the Intergovernmental Panel on Climate Change concluded that stabilizing the atmosphere requires reaching "net zero" emissions, where as much greenhouse gas is removed from the atmosphere as is emitted. Achieving this demands a transformation of the global economy on a scale without historic precedent. This course begins by describing the nature and complexity of the climate

policy challenge. It then explores the policy levers available to governments at both national and international levels to address it. The course considers perspectives from wealthy, advanced economies-historically the largest source of emissions-as well as emerging economies with significant development needs and rising emissions. It reviews the international framework for cooperation and negotiation on climate change through the United Nations Framework Convention on Climate Change. Finally, students will examine the challenges democratic societies face in maintaining public consensus on climate action, focusing on shifting U.S. policy frameworks. The course will be taught by three experienced practitioners: the White House lead on climate policy in the Obama and Biden Administrations, the former Foreign Minister of Pakistan, and the U.S.'s longtime lead negotiator at the UNFCCC and other international treaty negotiations.

Instructor(s): John Podesta, former White House Chief of Staff and Senior Advisor for International Climate Policy; Hina Rabbani Khar, former Foreign Minister of Pakistan; Sue Biniaz, Principal Deputy Special Envoy for Climate at the U.S. State Department; and Conor Carney Terms Offered: Autumn

Note(s): This course can count towards the Politics, Economics, and Society specialization in for the Climate and Sustainable Growth major.

Equivalent Course(s): GLST 21025, CCSG 21025, ECON 26740, CEGU 21025

PBPL 21425. Health in a Changing America: Social Context and Human Rights. 100 Units.

In this interdisciplinary course, students will consider the social context of health and the social and political commitments necessary to protect health as a human right. We will analyze recent trends in population health, such as the obesity epidemic, the opioid crisis, and the large gaps in life expectancy between neighborhoods in urban centers. Using case studies, students will envision a human rights-based response to these and other health challenges. We will examine the ways that framing health as personal versus public responsibility is consequential for social policy.

Instructor(s): Alicia Riley, Graduate Lecturer in Human Rights Terms Offered: Spring

Equivalent Course(s): HMR 21403

PBPL 21800. Economics and Environmental Policy. 100 Units.

This course combines basic microeconomic theory and tools with contemporary environmental and resources issues and controversies to examine and analyze public policy decisions. Theoretical points include externalities, public goods, common-property resources, valuing resources, benefit/cost analysis, and risk assessment. Topics include pollution, global climate change, energy use and conservation, recycling and waste management, endangered species and biodiversity, nonrenewable resources, congestion, economic growth and the environment, and equity impacts of public policies.

Instructor(s): S. Shaikh Terms Offered: Autumn

Prerequisite(s): ECON 10000 or higher, or PBPL 20000

Note(s): Not offered in Autumn of the 2020-21 academic year.

Equivalent Course(s): CEGU 21800, ECON 16520

PBPL 21850. Legislative Politics. 100 Units.

This course will introduce students to the policymaking process and politics of legislatures. We will study legislative institutions; the decision-making processes of individual legislators; and the role of outside advocates and interests. Our goal is to understand how legislatures work - in terms of producing policy that incorporates expertise and responds to policy demands from the public - and why they often don't.

Instructor(s): Zelizer, A Terms Offered: Spring

Equivalent Course(s): PPHA 31850

PBPL 22006. Decision Modeling for Health Economic Evaluation. 100 Units.

This course introduces decision science and economic evaluation that has been increasingly used to inform public health and health care decisions. With a specific focus on the development and application of decision-analytic models, students will learn the state of the current practice of economic evaluation, new tools and methodologies to conduct decision modeling, and emerging areas of research, including the value of information analysis. The course will provide hands-on computer-based learning using the R programming language for data analysis and modeling. A prior experience in R is welcomed, but not required. Applying the concepts and techniques learned in the course, students will undertake a course project of their choice to conduct economic evaluation using decision-analytic models. By the end of this course, students will gain knowledge and practical skills in economic evaluation and decision modeling to help make informed decisions.

Instructor(s): David Kim Terms Offered: Winter

Equivalent Course(s): PBHS 38120, CCTS 22006, CCTS 42006, PPHA 42006, HLTH 22006

PBPL 22100. Politics and Policy. 100 Units.

This course has two fundamental aims. The first is to introduce students to a set of analytical tools and concepts for understanding how political institutions generate public policy. The second is to apply these tools in examining the major institutions of democracy in the United States. Note(s): Public Policy 22100-22200-22300 may be taken in any order.

Instructor(s): C. Berry Terms Offered: Autumn

Note(s): Public Policy 22100-22200-22300 may be taken in any order.

Equivalent Course(s): DEMS 22100

PBPL 22200. Public Policy Analysis. 100 Units.

This course reviews and augments the basic tools of microeconomics developed in the first quarter of microeconomics and applies these tools to policy problems. Topics may include intertemporal choices, choice under uncertainty, and nonlinear budget sets. Applications may include human capital, insurance, labor markets, price controls, and taxation. Our goal is to allow students to comprehend, develop, and respond to economics arguments when formulating or evaluating public policy.

Instructor(s): Sheng-Hao Lo Terms Offered: Winter

Prerequisite(s): Students must take PBPL 20000 or ECON 20000 before enrolling in PBPL 22200.

Note(s): PBPL 22100-22200-22300 may be taken in any order. PBPL 22200 is not intended for students majoring in public policy who are majoring in economics (standard track) or planning to take advanced economics courses; those students can satisfy the PBPL 22200 requirement by petition via email to uchicagobpl@uchicago.edu. A combination of ECON 20100 plus a PBPL elective is generally accepted.

PBPL 22300. Policy Implementation. 100 Units.

Good public policy has the potential to advance justice in society. However, once a policy or program is put in place, policymakers often face challenges in getting it carried out in the ways it was intended. This course explores some of the structural and cultural challenges that government and organizations face as they attempt to put policies into effect. Focusing on the United States, we will draw on organizational theory as well as case studies from education, policing, healthcare, and the corporate world in order to investigate the broader context of policy implementation. In addition to the lectures, there will be a weekly discussion section with the TA, the exact time of which will be determined during Week 1 of the quarter.

Instructor(s): Chad Broughton (spring), Karlyn Gorski (winter, spring, summer) Terms Offered: Autumn Spring Summer Winter

Prerequisite(s): Open to all UChicago undergraduate students

PBPL 22312. Cities, Nature and the Planet. 100 Units.

Cities face major challenges in addressing environmental risk and vulnerability, but also great opportunity to reconsider the design, planning and economic systems upon which they have traditionally relied. This course takes a contemporary look into how urbanization affects planetary health, focusing on cities as sites of global resource extraction, waste generation, biodiversity loss, and increasing social inequality and climate vulnerability; but also as centers of population, innovation and social organization, which can facilitate climate solutions. Using a range of social science approaches and methods, students will consider critiques of historical urban planning and linear city resource economies, and analyze contemporary approaches related to climate action, green space planning, and nature-based solutions, with specific attention on environmental goals and equity outcomes. Through critical exploration of both historical urban planning, and contemporary frameworks for sustainable city agenda setting, students will consider the environmental past, present and future of global cities. In Autumn 2024, this course will be part of the Paris Urbanism Study Abroad program. Students will focus on Paris but take a comparative look at cities across the Global North and Global South.

Instructor(s): Sabina Shaikh Terms Offered: Autumn

Note(s): This course is part of the Paris Urbanism Study Abroad program

Equivalent Course(s): GLST 22312, CEGU 22312

PBPL 22510. The Climate and Growth Challenge. 100 Units.

The global energy and climate challenge is perhaps the most important problem society faces. It requires identifying approaches to ensure people have access to the inexpensive and reliable energy critical for human development, without causing disruptive climate change or unduly compromising health and the environment. The course pairs technical and economic analysis to develop an understanding of policy challenges in this area. Lecture topics will include the past, present, and future of energy supply and demand, global climate change, air pollution and its health consequences, selected energy technologies such as solar photovoltaics, nuclear power, unconventional oil and gas, and an analysis of theoretical and practical policy solutions in developed and emerging economies.

Instructor(s): Michael Greenstone Terms Offered: Spring

Prerequisite(s): BPRO 22510: third or fourth-year status. CEGU 22510, CCSG 19000, ECON 16550, PBPL 22510:

First-year student by permission of instructor only.

Equivalent Course(s): BPRO 22510, CEGU 22510, ECON 16550, CCSG 19000

PBPL 23007. Clinical and Health Services Research: Methods and Applications. 100 Units.

This course will introduce the interdisciplinary field of clinically-oriented health services research with a focus on policy-related implications. Through exposure to theoretical foundations, methodologies, and applications, students without significant investigative experience will learn about the design and conduct of research studies. We will cover the integration of research within the stages of translational medicine, and how science conducted across the translational medicine spectrum informs policy through purveyors of clinical services (e.g. physicians, hospitals), government, insurers, and professional societies. We will use the examples of postmenopausal hormone replacement therapy and autologous bone marrow transplantation to illustrate pitfalls in the progression from basic science research to clinical trials leading to diffusion in clinical medicine that can complicate the creation of logical, evidence-based practice guidelines, reimbursement, and clinical practice.

Instructor(s): Greg Ruhnke Terms Offered: Spring

Equivalent Course(s): CCTS 21007, HLTH 21007, CCTS 43007, BIOS 29329

PBPL 23011. Beyond the Culture Wars: Social Movements and the Politics of Education in the U.S. 100 Units.

Passionate conflicts over school curriculum and educational policy are a recurring phenomenon in the history of US schooling. Why are schools such frequent sites of struggle and what is at stake in these conflicts? In this discussion-based seminar, we will consider schools as battlegrounds in the US "culture wars": contests over competing visions of national identity, morality, social order, the fundamental purposes of public education, and the role of the state vis-à-vis the family. Drawing on case studies from history, anthropology, sociology and critical race and gender studies, we will examine both past and contemporary debates over school curriculum and school policy. Topics may include clashes over: the teaching of evolution, sex and sexuality education, busing/desegregation, prayer in schools, multiculturalism, the content of the literary canon, the teaching of reading, mathematics and history, and the closure of underperforming urban schools. Our inquiry will examine how social and political movements have used schools to advance or resist particular agendas and social projects.

Instructor(s): Lisa Rosen Terms Offered: Spring. Offered spring 2025

Equivalent Course(s): EDSO 23011, RDIN 33011, HIST 37718, CHDV 23011, RDIN 23011, CHDV 33011, SOCI 20588, SOCI 30588, EDSO 33011, HIST 27718

PBPL 23015. Approaches to School Reform & Improvement. 100 Units.

The U.S. preK-12 education landscape is covered in the vestiges of failed or only partially fulfilled efforts to improve our schools. Yet our public schools now educate more people, for more time, in content areas beyond the "3 R's", and with better results than at any time in our history as a nation. This course gives students an opportunity to critically examine several promising school-level improvement strategies within the context of larger reform efforts. Students will consider the role that values, beliefs about learning and people, and local context play in the success of school improvement efforts. Additionally, students will consider the factors that are necessary for sustaining the implementation of school improvement strategies. Ultimately, students will leave the course with a deeper understanding of what they believe the purpose of school is, how people and organizations learn and change, and strategies for influencing change in their own careers, regardless of sector. The course includes one field experience for students to consider the impact of reforms on preK-12 education institutions.

Instructor(s): Adam Parrott-Sheffer Terms Offered: Spring. Offered 2025-2026

Equivalent Course(s): CHDV 23015, EDSO 23015, CHST 23015

PBPL 23100. Environmental Law. 100 Units.

This course will examine the bases and assumptions that have driven the development of environmental law, as well as the intersection of this body of law and foundational legal principles (including standing, liability, and the Commerce Clause). Each form of lawmaking (statutes, regulations, and court decisions) will be examined, with emphasis on reading and understanding primary sources such as court cases and the laws themselves. The course also analyzes the judicial selection process in order to understand the importance of how the individuals who decide cases that determine the shape of environmental law and regulations are chosen.

Instructor(s): Ray Lodato Terms Offered: Winter

Prerequisite(s): 3rd or 4th year standing, or consent of instructor

Equivalent Course(s): CCSG 22503, CEGU 23100

PBPL 23215. Poverty and Public Policy. 100 Units.

This course covers the extent and nature of poverty, mainly in the United States and other rich countries. We begin with the measurement of poverty, deprivation and homelessness. We then discuss causes of these problems, rationales for government interventions, and the effectiveness of various public policies. The course will focus on the empirical evidence on each topic, but begin with the theoretical foundation in each area.

Instructor(s): Meyer, Bruce Terms Offered: Winter

Equivalent Course(s): ECON 25540

PBPL 23220. Public Economics. 100 Units.

Public Economics is the study of the role that the government plays in the economy, including both the theoretical rationale for government intervention, and the efficiency and equity consequences of its actions. In this course, we will study four broad themes related to the role of the government: (1) public goods and externalities, including education, infrastructure and the environment, (2) redistribution and social insurance, including health insurance, social security, and cash transfer programs, (3) taxation, and (4) policies to promote economic growth. For each thematic area, we will study the economic theory and read and evaluate the empirical evidence regarding the impacts of government intervention. As part of this course, we will consider government programs in policies in both higher- and lower-income countries.

Instructor(s): Barker, Nathan Terms Offered: Spring

PBPL 23300. Justice, Equity, and Opportunity: Shifting Approaches to Criminal Justice Reform. 100 Units.

The events revolving the death of George Floyd have proliferated the discourse about the criminal justice system in the United States, including the role of police and incarceration. Historically, this public discourse has been dominated mostly by media and political advocacy, with the balance of evidence-based policy solutions and political acumen receiving relatively short shrift. In this practicum, students will be trained to approach these issues from the perspective of a senior criminal justice policymaker in government who has practiced multiple theories of change, from community organizing to litigation. In turn, we will develop criminal justice policy intelligence and knowledge on the history, core themes, debates, and concepts, such as the movement to defund the police, abolish the cash bail system, and decriminalize drugs. The discussions will allow students to interrogate the extent to which efforts have been successful, imagine new strategies in the future, and learn

from additional visiting guests, including politicians, community organizers, academics, artists, and formerly incarcerated individuals. We will exit with a sophisticated understanding of the skills and tools necessary to handle criminal justice policy problems raising complex legal, political and social questions.

Instructor(s): Rallins, Quinn Terms Offered: Winter

Note(s): In addition to a seminar component examining criminal justice policy, students engage in a hands-on policy project involving identifying and defining key criminal issues, conducting primary and secondary research, analyzing research findings and making policy recommendations to a client in the criminal justice policy arena.

PBPL 23305. Justice in an Unjust World: Theories of Justice. 100 Units.

Justice as a possibility, an ideal, and as a telos is fundamental to theological and philosophical systems of ethics. Yet, each theory was formulated within and against a deeply unjust world. Every theory of justice implies an anthropology and an ontology, and each asks the question: Why isn't life fair? How can we create a just society against a world that is so obviously unjust? Each theory then proposes a just solution and every theory implies a set of practices that can be interrogated. As our contemporary society becomes more sharply divided, the issues of distribution, obligation, entitlement, fair exchanges of social goods and labor, and the fair sharing of social burdens becomes more important and demanding of more inquiry. This seminar will interrogate several theories of justice, beginning in classic Hellenistic texts and moving forward to the animating theories of the classic liberal tradition: libertarianism, utilitarianism, social contract theory, and Marxism. We will then turn to other sources of justice theory such as Catholic liberation theology, capacity theory, and Jewish justice theory. We will also use our seminar to explore contemporary cases in law, medicine, science and policy that raise issues of justice and injustice. While the seminar will focus on distributive practices, we will also explore how these practices structure our systems of retributive and restorative justice.

Instructor(s): Laurie Zoloth Terms Offered: Spring

Note(s): This course counts as an elective course for the "Inequality, Social Problems, and Change" minor.

Equivalent Course(s): RLST 24102, GLST 24202

PBPL 23606. Political Culture, Social Capital, and The Arts. 100 Units.

Many analysts like Robert Putnam hold that bowling alone signals a decline in social capital, with major consequences for trust and legitimacy of the political system. But new work finds that certain arts and cultural activities are rising, especially among the young, in many countries. This course reviews core related concepts-- political culture, social capital, legitimacy--and how they change with these new developments. We lay out new concepts and related methods, such as a grammar of scenes, measured for 40,000+ U.S. zip codes. Scenes, nightlife, design, the internet, and entertainment emerge as critical drivers of the post-industrial/knowledge society. Older primordial conflicts over class, race, and gender are transformed with these new issues, which spark new social movements and political tensions. The course has two halves: first to read and discuss major works and complete a mid-term exam, second to continue as a seminar where the main requirement is writing a paper.

Equivalent Course(s): SOCI 20184, SOCI 30184

PBPL 23607. Economics of Cultural Policy. 100 Units.

What are the public policy issues facing arts practitioners in the United States in the 21st century? How will the next generation of arts and culture leaders influence and shape policy beyond seeking appropriations of funds? How can the arts operate both as intrinsically valuable and as key creative tools to apply to tough community issues? Through a combination of lecture/discussion, engagement with leading voices from the field, and scholarly research, this course will provide an overview of cultural policy in the US and explore the evolving intersections of public policy and the arts in the current context.

Instructor(s): Coursey, D Terms Offered: Spring

Equivalent Course(s): PPHA 39611

PBPL 24102. Environmental Politics. 100 Units.

Politics determines not only what particular faction holds power, but the parameters upon which contests for power are conducted. Competing political factions may diverge in the details of the policies they favor, but may agree on a central organizing principle upon which their policy differences are contested. This course acknowledges that such principles exist and structure politics, economics, and social arrangements, but also challenges the notion that these are immutable, and argues that other principles could be substituted which would drastically change these arrangements. The course introduces students to alternative theories of economics, politics, and environmental policy that challenge mainstream notions of what is acceptable under the current structural and institutional constraints, including how the retreat to notions of realism and practicality place limits on changes necessary to preserve and protect the natural environment.

Instructor(s): R. Lodato Terms Offered: Spring

Equivalent Course(s): CCSG 22504, CEGU 24102

PBPL 24105. Urban Design: The Chicago Experience. 100 Units.

This course examines the theory and practice of urban design at the scale of block, street, and building--the pedestrian realm. Topics include walkability, the design of streets, architectural style and its effect on pedestrian experience, safety and security in relation to accessibility and social connection, concepts of urban fabric, repair and placemaking, the regulation of urban form, and the social implications of civic spaces. Students will analyze

normative principles and the debates that surround them through readings and discussion, as well as firsthand interaction with the urbanism of Chicago.

Equivalent Course(s): GEOG 24100, GEOG 34100, SOSC 26001, SOSC 36001

PBPL 24501. Macroeconomics for Public Policy. 100 Units.

This course examines the working of the aggregate economy. It aims to understand the key determinants of business cycle fluctuations and of long-run economic development. This includes coverage of the role of employment, productivity, trade and fiscal deficits, inflation, and interest rates. The emphasis of the course is on the impact of monetary and fiscal policies on the macro economy. Students will be able to analyze and discuss important current economic issues, such as government spending and tax reforms, Social Security reforms, the conduct of monetary policy, and the impact of changing economic conditions around the world.

Instructor(s): Sullivan, D Terms Offered: Winter

Equivalent Course(s): PPHA 34500

PBPL 24599. Historical and Contemporary Issues in U.S. Racial Health Inequality. 100 Units.

This course explores persistent health inequality in the U.S. from the 1900s to the present day. The focus will be on racial gaps in urban health inequality with some discussion of rural communities. Readings will largely cover the research on Black and White gaps in health inequality, with the understanding that most of the issues discussed extend to health inequalities across many racial and ethnic groups. Readings cover the broad range of social determinants of health (socioeconomic status, education, access to health care, homelessness) and how these social determinants are rooted in longstanding legacies of American inequality. A major component of class assignments will be identifying emerging research and innovative policies and programs that point to promising pathways to eliminating health disparities.

Instructor(s): M. Keels Terms Offered: Autumn

Prerequisite(s): Only students with 2nd year standing or above.

Note(s): Fulfills grad requirement: 2,4 and undergrad major requirement B.

Equivalent Course(s): AMER 24599, HLTH 24599, CHST 24599, RDIN 24599, CHDV 44599, CHDV 24599, RDIN 44599

PBPL 24605. Introduction to Urban Sciences. 100 Units.

This course is a grand tour of conceptual frameworks, general phenomena, emerging data and policy applications that define a growing scientific integrated understanding of cities and urbanization. It starts with a general outlook of current worldwide explosive urbanization and associated changes in social, economic and environmental indicators. It then introduces a number of historical models, from sociology, economics and geography that have been proposed to understand how cities operate. We will discuss how these and other facets of cities can be integrated as dynamical complex systems and derive their general characteristics as social networks embedded in structured physical spaces. Resulting general properties of cities will be illustrated in different geographic and historical contexts, including an understanding of urban resource flows, emergent institutions and the division of labor and knowledge as drivers of innovation and economic growth. The second part of the course will deal with issues of inequality, heterogeneity and (sustainable) growth in cities. We will explore how these features of cities present different realities and opportunities to different individuals and how these appear as spatially concentrated (dis)advantage that shape people's life courses. We will show how issues of inequality also have consequences at more macroscopic levels and derive the general features of population and economic growth for systems of cities and nations.

Instructor(s): Luis Bettencourt Terms Offered: Autumn

Prerequisite(s): STAT 22000

Equivalent Course(s): GISC 24600, GISC 34600, SOCI 20285, CEGU 24600

PBPL 24701. U.S. Environmental Policy. 100 Units.

How environmental issues and challenges in the United States are addressed is subject to abrupt changes and reversals caused by extreme partisanship and the heightened significance of the issues for the health of the planet and all its inhabitants. The relatively brief history of this policy area, and the separate and distinct tracts in which public lands and pollution control issues are adjudicated, makes for a diverse and complex process by which humanity's impact on the natural world is managed and contained. This course focuses on how both types of environmental issues are addressed in each branch of the Federal government, the states and localities, as well as theories of how environmental issues arrived onto the public agenda and why attention to them is cyclical. Students are encouraged to understand the life cycle of public policy from its initial arrival on the public agenda to the passage of legislation to address adverse conditions, as well as how changes in the policy occur after the inevitable decline of intensive attention.

Instructor(s): R. Lodato Terms Offered: Autumn

Equivalent Course(s): CCSG 22505, CEGU 24701

PBPL 24751. The Business of Non-Profits and The Evolving Social Sector. 100 Units.

Led by an experienced practitioner, this course aims to provide both an intellectual and experiential understanding of the contemporary nonprofit sector. In addition to a seminar component examining the rapidly evolving social sector, students engage in a hands-on consulting project for an area nonprofit involving analysis, reporting, and presentation. This course satisfies the Public Policy practicum WINDOWS requirement.

Instructor(s): C. Velasquez Terms Offered: Spring Winter

Prerequisite(s): Instructor consent required. In the preceding quarter, students must submit an application to campusCATALYST, an RSO managing student, client, and mentor recruitment for the class. Please see the campusCATALYST website or their social media accounts to find the quarterly time schedules and application link: <https://www.campuscatalyst.uchicago.edu/apply-now>. You can reach them at uchicagocampuscatalyst@gmail.com if you have any questions.
Equivalent Course(s): CHST 24751

PBPL 24753. Philanthropy and Public Policy in the US. 100 Units.

Philanthropy in the U.S. plays a unique role in advancing social change by influencing public policy, both directly and indirectly. Philanthropy's role and actions in shaping policy has long been a subject of scrutiny and debate, which has intensified under the current administration. Foundations can utilize a range of tools including grantmaking, convenings/collaborations, educating and advocating, amplifying their grantee partner's work and more. They may engage in these activities with the intent of directly or indirectly educating, influencing, or mobilizing the broad public, voters, policymakers, and/or other decisionmakers. Led by an experienced practitioner and supplemented by guest speakers, this course will provide both an intellectual and experiential understanding of the contemporary philanthropic field in the U.S. and how it can influence public policy. In addition to a seminar component examining the philanthropic landscape, students engage in hands-on case studies and other exercises involving identifying and defining key social and/or environmental issues, conducting primary and secondary research on possible interventions, analyzing research findings and developing a philanthropic strategy to influence public policies that address that problem.

Instructor(s): Velasquez, Christa Terms Offered: Autumn

Note(s): This course can satisfy the windows requirement for PBPL

PBPL 24776. International Environmental Policy. 100 Units.

Environmental issues have become a prominent part of the work of international organizations and their member nations. However, the resolution to issues and concerns shared in common by the nations of the world often faces obstacles based on access to wealth and resources, political and military power, and the demands of international economic institutions. While multinational agreements have been achieved and successfully implemented, resolutions to issues such as climate change have been harder to achieve. The course will look at the origins of international cooperation on environmental issues, several case studies of issues upon which the international community has attempted to bring about cooperative solutions (climate change, the ozone hole, climate refugees, etc.), and the work that regional associations of nations have done to jointly address shared environmental challenges. In addition, speakers from various consulates have addressed the class to discuss environmental policymaking in their countries.

Instructor(s): R. Lodato Terms Offered: Spring

Equivalent Course(s): CCSG 22506, CEGU 24776

PBPL 24901. Trade, Development and Poverty in Mexico. 100 Units.

With a focus on the past two decades, this interdisciplinary course explores the impact of economic integration, urbanization, and migration on Mexico and, to a lesser extent, on the United States—in particular, working class communities of the Midwestern Rust Belt. The course will examine work and life in the borderland production centers; agriculture, poverty, and indigenous populations in rural Mexico; evolving trade and transnational ties (especially in people, food products and labor, and drugs) between the U.S. and Mexico; and trade, trade adjustment, and immigration policy.

Instructor(s): C. Broughton Terms Offered: Autumn

Note(s): Students can take this course with a windows option. Offered in 2024-25.

Equivalent Course(s): SOCI 20251, LACS 24901

PBPL 25003. Immigration, Law and Society. 100 Units.

Law is everywhere within the social world. It shapes our everyday lives in countless ways by permitting, prohibiting, protecting and prosecuting native-born citizens and immigrants alike. This course reviews the major theoretical perspectives and sociological research on the relationship between law and society, with an empirical focus on immigrants in the United States, primarily from Mexico and Central America. To begin, we explore the permeation of law in everyday life, legal consciousness, and gap between "law on the books" and "law on the ground." The topic of immigration is introduced with readings on the socio-legal construction of immigration status, theories of international migration, and U.S. immigration law at the national and subnational levels. We continue to study the social impact of law on immigrants through the topics of liminal legality; children, families, and romantic partnerships; policing, profiling, and raids; detention and deportation; and immigrants' rights. This course adopts a "law in action" approach centered on the social, political, and cultural contexts of law as it relates to immigration and social change. It is designed to expose you to how social scientists study and think about law, and to give you the analytical skills to examine law, immigration, and social change relationally.

Terms Offered: TBD

Equivalent Course(s): RDIN 25003, SSAD 25003, HMRT 25003, SOCI 28079, LACS 25003

PBPL 25120. Child Development and Public Policy. 100 Units.

The goal of this course is to introduce students to the literature on early child development and explore how an understanding of core developmental concepts can inform social policies. This goal will be addressed through an integrated, multidisciplinary approach. The course will emphasize research on the science of early child development from the prenatal period through school entry. The central debate about the role of early

experience in development will provide a unifying strand for the course. Students will be introduced to research in neuroscience, psychology, economics, sociology, and public policy as it bears on questions about "what develops?", critical periods in development, the nature vs. nurture debate, and the ways in which environmental contexts (e.g., parents, families, peers, schools, institutions, communities) affect early development and developmental trajectories. The first part of the course will introduce students to the major disciplinary streams in the developmental sciences and the enduring and new debates and perspectives within the field. The second part will examine the multiple contexts of early development to understand which aspects of young children's environments affect their development and how those impacts arise. Throughout the course, we will explore how the principles of early childhood development can guide the design of policies and practices that enhance the healthy development of young children, particularly for those living in adverse circumstances, and thereby build a strong foundation for promoting equality of opportunity, reducing social class disparities in life outcomes, building human capital, fostering economic prosperity, and generating positive social change. In doing so, we will critically examine the evidence on whether the contexts of children's development are amenable to public policy intervention and the costs and benefits of different policy approaches.

Instructor(s): A. Kalil Terms Offered: Autumn

Prerequisite(s): Attendance on the first day of class is required or registration will be dropped.

Equivalent Course(s): PSYC 25120, EDSO 25120, CHDV 25120

PBPL 25136. The Era of Democratic Pessimism. 100 Units.

According to the end of history thesis and the nineties optimism that fueled it, the world would converge in a combination of liberal democracy and market economy. However, in recent years, a specter of political pessimism haunts the globe. Although democracies do not die as dramatically as they used to, new kinds of authoritarianisms have emerged. Some say that populism is to blame, others point to economic crises, identity politics and even the rise of social media, not to mention the elephant in the room: whether democracy can handle the climate crisis. Is democracy really receding? Are these its causes? Can survive its most pressing challenges?

Instructor(s): Cristobal Bellolio Terms Offered: Autumn

Equivalent Course(s): LACS 25136, LACS 35136, PLSC 25136, PLSC 35136

PBPL 25220. Constructing a Society of Human Rights: A Psychological Framework. 100 Units.

This course is designed to discuss the ways that cultural and social psychology contribute to understandings about human rights conceptually, and how human rights issues emerge from social dynamics. Over the course of the quarter, students will learn about theories on intergroup conflict and prejudice, how an individual's beliefs emerge from social contexts and shape their relationships with others, how obedience to authority is created and abused, and how social positioning and narratives influence conceptions of self and other. We will also discuss the relevance and impact of psychological study and data on human rights issues.

Equivalent Course(s): INRE 30600, CHDV 25220, HMRT 25220

PBPL 25510. Evidence in Health Policy. 100 Units.

In this course, we will consider the role of evidence and empirical studies in helping inform us about important health policy topics, such as the consequences of expanding the Medicaid program, the effects of private equity acquisitions of medical facilities, and the burden of medical debt. The course will be divided into two-lecture modules where, in the first, we will read an editorial or descriptive piece that helps introduce a health policy context, and, in the second, we will read a study that confronts the topic using modern empirical methods.

In class, we will learn both about health policy and how to read and understand evidence in support or opposition of those policies. Out of class activities will include synthesizing studies to inform a prospective policy proposal and reanalyzing prior studies using actual data and statistical programming. This course was previously named Issues in Health Policy.

Instructor(s): Brot, Z Terms Offered: Winter

Equivalent Course(s): ECON 17720, PPHA 38050

PBPL 25540. Introduction to Critical Development Studies. 100 Units.

This course provides an introductory overview of Critical Development Studies (CDS), covering the main critical historical, philosophical and theoretical undercurrents that shape and inform the field of global development. In the first part of the course we delve into key philosophical concepts and major theoretical frameworks and trends of international development from the post-World War II era to the present. Students will explore the underlying assumptions and modalities of modernization theory, dependency and world-systems theory, post-colonial and post-development thought and the contemporary articulation of decoloniality by Latin American and African scholars. The latter part of the course delves into major trends, approaches, and best practices of CDS. This course is designed to be a theory-intensive reading course, appropriate for students interested in the theoretical debates and the ethico-political tensions that continue to shape and inform the field and practice of global development.

This course was previously named Critical Development Theories and Approaches.

Instructor(s): Chishti, M Terms Offered: Autumn

Equivalent Course(s): RDIN 25540, PPHA 35530, AASR 35530, GLST 25540

PBPL 25550. Economic Development and Policy. 100 Units.

The course will introduce students to the main concepts in development economics, such as modern growth theories and their relevance for low-income countries, and major topics in policy and research within the field. In the first part of the course, we will concentrate on the development facts, the main explanations highlighted

in the field of economics for differences in growth and income levels between rich and poor countries, and the concept and measurement of poverty. In the second part of the course we will study microeconomic fundamentals of economic development. We will concentrate on topics such as fertility, nutrition and health, education, labor markets, intra-household allocation of resources and infrastructure and the relation among them. Empirical evidence from developing economies will be employed extensively paying special attention to the methods used.

Instructor(s): Autumn: Menendez, A.; Spring: Montero, E. Terms Offered: Autumn Spring

PBPL 25563. Does American Democracy Need Religion? 100 Units.

In the United States, we find ourselves living as part of a democracy. But that simple fact doesn't necessarily make us fans of democracy by default. In fact, it leaves many questions unanswered: Is democracy a good thing? If so, why and on what grounds? Why should you or I value democracy and its ideals (e.g., equality, liberty, fraternity)? If we do, what (if anything) grounds our devotion to this shared political tradition? And does, can, or should religion have a role to play? In this course, we will explore American democracy as a normative tradition and its relationship to various religious traditions in American society. Through examining key interpreters of American democracy such as Danielle Allen, Abraham Lincoln, Martin Luther King, Jr., Cornel West, Joshua Abraham Heschel, and Amanda Gorman, we will approach the question of how religion and democracy relate to one another. We'll investigate the relative independence of democracy and religion, focusing on philosophers and poets who emphasize American democracy as tradition in its own right. We will also consider "Civil Religion in America," through the work of sociologists and historians who suggest the dependence of the democratic on religion or something like it. Finally, we'll question the relative interdependence of American democracy and religious traditions by turning to claims of influential religious and political leaders and activists. No prerequisite knowledge required.

Instructor(s): Derek Buyan

Equivalent Course(s): AMER 25563, DEMS 25563, RLST 25563

PBPL 25585. The Chinese Economy, Chinese Economy. 100 Units.

This course provides an overview of the Chinese economy, with two main focuses. First, we will review the significant reforms that happened in China in the past four decades, which fundamentally reshaped the modern China as we see today. Second, we will discuss some of China's key political and economic institutions, and their implications on China and the rest of the world. Throughout the course, special emphasis will be given to the role of the state in China's growth experience, at both the central- and local-levels. This course provides an overview of the Chinese economy, with two main focuses. First, we will review the significant reforms that happened in China in the past four decades, which fundamentally reshaped the modern China as we see today. Second, we will discuss some of the China's key political and economic institutions, and their implication on China and the rest of the world. Throughout the course, special emphasis will be given to the role of the state in China's growth experience, at both the central- and local-levels.

Instructor(s): Wang, S Terms Offered: Spring

Equivalent Course(s): ECON 22030, PPHA 35585

PBPL 25595. Power and Development. 100 Units.

This course offers a perspective on the role of power in the evolution of societies. First, we will study narratives of political economy of development, dominant until recently, which draw on explanations for what made Europe, and parts of North America, exceptional, such as their innovation, trade, culture, or institutions. Second, we will explore research by historians, anthropologists, and sociologists that challenged these narratives on the grounds that they silenced the role played by European military domination over the rest of the world in the rise of Europe; the rise of the "West" coincides with the exceptional use of power at a global scale to expropriate, enslave, and even replace other societies whose welfare is not even part of current GDP calculations. Third, we will explore institutions, historical processes, worldviews, socio-political traditions, and ideas in societies outside the so-called West, and how those have contributed to the history of human societies but also to the set of possible ideas and models for "development." One ambitious aim of the course is to make sense of how we got into the world of today while navigating this epistemic imbalance, beyond "us" vs. "them," and through research and policies that do not carry the presumption of pitying, saving, or fixing as the main starting point. This course was previously name Political Economics of Developing Countries offered as PBPL 28776.

Instructor(s): Sanchez de la Sierra, R Terms Offered: Spring

Equivalent Course(s): PPHA 35556

PBPL 25600. Why We Fight: The Roots of War and the Paths to Peace. 100 Units.

Most countries in the world have been independent for about 50 years. Some are peaceful and have prospered, while some remain poor, war-torn, or both. What explains why some countries have succeeded while others remain poor, violent, and unequal? Moreover, fifty years on, a lot of smart people are genuinely surprised that these countries' leaders have not been able to make more progress in implementing good policies. If there are good examples to follow, why haven't more countries followed these examples into peace and prosperity?

Finally, we see poverty and violence despite 50 years of outside intervention. Shouldn't foreign aid, democracy promotion, peacekeeping, and maybe even military intervention have promoted order and growth? If not why not, and what should we do about it as citizens? This class is going to try to demystify what's going on. There are good explanations for violence and disorder. There are some good reasons leaders don't make headway, bureaucrats seem slothful, and programs get perverted. The idea is to talk about the political, economic, and natural logics that lead to function and dysfunction.

Instructor(s): Blattman, Chris Terms Offered: Autumn
Equivalent Course(s): PLSC 25601

PBPL 25630. Poverty, Work, and Family Policy. 100 Units.

This course examines contemporary policy questions regarding the dual spheres of work and family life, with a particular focus on economically impoverished families and communities. Students will analyze the relative merits of different policies designed to improve the conditions of work and family life and mitigate the effects of poverty on children's wellbeing. Throughout the ten-week quarter, we will consider demographic, labor market, and policy trends contributing to family poverty and income inequality in American society; interrogate policy debates concerning the responsibility of government, corporate, and informal sectors to address these critical social problems; and examine specific policy and program responses directed at (1) improving employment and economic outcomes and (2) reconciling the competing demands of employment and parenting. Although our primary focus will be on policies that promote the wellbeing of low-income families in the United States, relevant comparisons will be made cross-nationally, across race/ethnicity, and across income. This course is part of the Inequality, Social Problems, and Change minor.

Equivalent Course(s): SSAD 25630, SSAD 45630, LLSO 25630

PBPL 25640. Labor Markets: a Global Perspective. 100 Units.

In this course we will explore standard models that form the core of labor economics including labor supply, labor demand, job search models, wage setting, discrimination, and migration. For each topic we will then examine empirical applications of these models with a focus on middle and low-income countries. We will discuss how these traditional models are useful, or not, in understanding labor market outcomes in these settings and how they can be expanded to better capture relevant features of labor markets outside high-income countries.

Instructor(s): Lane, G Vellekoop, N Terms Offered: Winter
Equivalent Course(s): PPHA 44302, ECON 14020

PBPL 25663. Urban Studies: Placemaking. 100 Units.

This course considers the values that drive neighborhood transformation, how policy is shaped and implemented, and the role that arts and culture can play in mindful city-building. Classroom hours will be spent with Theaster Gates, professor, Department of Visual Art, in addition to other UChicago faculty, discussing key principles in guiding city redevelopment in mindful and equitable ways. Students will gain field experience working with Place Lab, Gates's multidisciplinary team that documents and demonstrates urban ethical redevelopment strategies initiated through arts and culture. Working across a variety of projects, students will be exposed to programming, data collection, development, community building, strategy, and documentation. Weekly site visits will give students the opportunity to see analogous projects and meet practitioners throughout Chicago.

Equivalent Course(s): ARTV 20663

PBPL 25695. The Workplace and Family Policy. 100 Units.

The topics covered in the course will include: the demographic transition, human capital accumulation, gender wage and employment gaps, discrimination in the workplace, family leave and childcare policies, tax policies including subsidies like the Earned Income Tax Credit (ETIC), and related welfare policies. We will draw on the theory of static and dynamic labor supply, theories of labor demand, and labor market equilibrium to guide its investigation, and use empirical tools to answer research questions. For each topic covered in this course, I will introduce an elementary treatment of the canonical theoretical model and give examples of its empirical application. In studying empirical applications, we will often draw on analysis from international experience.

Equivalent Course(s): ECON 14030, GNSE 25695

PBPL 25704. Environmental Justice in Chicago. 100 Units.

This course will examine the development of environmental justice theory and practice through social scientific and ethical literature about the subject as well as primary source accounts of environmental injustices. We will focus on environmental justice issues in Chicago including, but not limited to waste disposal, toxic air and water, the Chicago heat wave, and climate change. Particular attention will be paid to environmental racism and the often understudied role of religion in environmental justice theory and practice. Throughout the course we will explore how normative commitments are expressed in different types of literature as well as the basis for normative judgments and the types of authorities authors utilize and claim as they consider environmental justice.

Instructor(s): Sarah Fredericks Terms Offered: Winter

Equivalent Course(s): CEGU 25704, CHST 25704, AMER 25704, HMRT 25704, KNOW 25704, RDIN 25704, RLST 25704

PBPL 25834. Populism. 100 Units.

This course will examine the rise of populism throughout advanced democracies. We will discuss different ways of conceptualizing and measuring populism and how it differs from left-right ideology. We will discuss various potential causes of populism including globalism, corruption, inequality, identity politics, the COVID-19 pandemic, and the growing bureaucracy. We will also discuss various populist politicians and political movements, including Brexit, Trump, Vox, and Podemos.

Instructor(s): Anthony Fowler Terms Offered: Spring, Barcelona Pub Pol Program

Prerequisite(s): Admission to Barcelona Pub Pol Program

Equivalent Course(s): PLSC 25834

PBPL 25835. The Political Economy of Cities. 100 Units.

The course introduces students to the latest scholarship on the political economy of cities and metropolitan areas. We will focus on a few basic concepts of urban political economy (e.g., externalities, agglomeration, fragmentation, sorting), and explore how the interaction of economic forces and political institutions forms the foundation of many current policy challenges facing cities. We analyze the sources of urban growth, the institutions of local government and their role in the federal system, competition among cities, and the importance of real estate markets in shaping local politics.

Instructor(s): Christopher Berry Terms Offered: Spring

Prerequisite(s): Admission to Barcelona Pub Pol Program

Equivalent Course(s): PLSC 25835

PBPL 25850. No Justice, No Speech! Free Speech and the Place that Shall Not Be Named. 100 Units.

Are there-or should there be-limits to free speech? What is the relationship between free speech and hate speech? Does speech deserve special kinds of protections (or limits) in the context of the university campus? In this course, we will critically engage with these questions as they relate to political organizing and political expression on (and in) P_____. Our course will examine these foundational questions before turning to some of the sticking points in the debate over free speech and P_____ today: What is freedom of expression in I____-P_____, and what does it have to do with the politics of US campuses? What is the call for Boycott Divest and Sanctions, and is it intended to foster or limit academic freedom? Is anti-Z_____ anti-S_____? To consider these questions, we will do critical readings of primary texts such as the guidelines issued by PACBI (P_____ Campaign for the Academic and Cultural Boycott of I_____) and the definition of anti-S_____ issued by the IHRA (International Holocaust Remembrance Alliance), as well as ethnographic and other accounts of the problem of political expression in P_____ today.

Instructor(s): Callie Maidhof Terms Offered: Autumn

Equivalent Course(s): DEMS 25850, NELC 25850, LLSO 25850, GLST 25850, PARR 22100

PBPL 26002. Urban Design Studio: Reconstructing Chicago's Lost Neighborhoods Using Machine Learning. 100 Units.

This course offers a hands-on learning experience in which students will digitally recreate the "lost neighborhoods" of Chicago using machine learning techniques. Students will be guided through the process of turning historical Sanborn maps into 3D models of historic urban neighborhoods. The creation of these historic urban models will be contextualized through archival research at the Chicago History Museum, as well as readings and lectures designed to advance student understanding of urban development within the historical context of U.S. cities in the 20th century, and Chicago specifically. Programming experience is helpful, but not required.

Instructor(s): Talen, E Terms Offered: Autumn

Equivalent Course(s): GEOG 24200, CHST 26002, PPHA 36002, SOSC 26002

PBPL 26008. Introduction to Historic Preservation. 100 Units.

This course is an introduction to the preservation of the built environment. What are the benefits of preserving historic resources? Students will conduct studies of historic buildings in Chicago, exploring their cultural significance and impact on neighborhoods, and applying preservation tools and methods to formulate policies to advance preservation goals. We will also debate preservation's role in addressing climate change and its role in advancing social goals, such as maintaining neighborhood diversity. Through readings, archival research, mapping, field visits, and interaction with professionals in the field, we will consider the possibilities of leveraging historic preservation to advance social, economic, and environmental goals.

Instructor(s): Emily Talen Terms Offered: Not offered in 2023-2024 academic year.

Equivalent Course(s): MAPS 26009, CHST 26008, ARCH 26008, MAPS 36009

PBPL 26021. Sense & Sensibility & Science. 100 Units.

In Sense & Sensibility & Science, you will learn how to better incorporate into your thinking and decision making the problem-solving techniques of science at its best. Many insights and conceptual tools from scientific thinking are of great utility for solving problems in your own day-to-day life. Yet, as individuals, as groups, as whole societies we fail to take full advantage of these methods. The focus in this course is on the errors humans tend to make, and the approaches scientific methodology has developed (and continues to develop) to minimize those errors. The course includes a discussion of the nature of science, what makes science such an effective way of knowing, how both non-scientific thinking and scientific thinking can go awry, and how we can reason more clearly and successfully as individuals, as members of groups, and as citizens of a democracy. This undergraduate course is simultaneously taught at UC Berkeley, Harvard and UChicago in spring. UChicago's course, premiered in 2024, built on a decade of experience developing and teaching the popular course at Berkeley and Harvard's adoption of its own version in 2021.

Terms Offered: Spring

Prerequisite(s): PQ: Third or fourth-year standing.

Equivalent Course(s): BPRO 26021, SCPD 26021, DIGS 26021, SOSC 26021, HIPS 26021

PBPL 26080. Government Accountability in the Trump Era. 100 Units.

The second Trump Presidential Administration has made novel and broad claims of executive authority across many areas of government activity. Students will explore the legal and normative bases for these

claims, how they are changing the existing systems of government oversight, and how courts are shaping public understanding of these issues. The first half of the course will cover foundational concepts of government structure: checks and balances, federalism, and the role of the federal courts, and the growth of the administrative state. In the latter half of the course, we will focus on Trump Administration claims of authority in the domain of domestic law enforcement and the future of policing and police reform.

Instructor(s): Robert Owens Terms Offered: Spring

Equivalent Course(s): DEMS 26080

PBPL 26260. Environmental Justice in Principle and Practice I. 100 Units.

This course will investigate the foundational texts on environmental justice as well as case studies, both in and out of Chicago. Students will consider issues across a wide spectrum of concerns, including toxics, lead in water, waste management, and access to greenspaces, particularly in urban areas. These topics will be taught in accompaniment with a broader understanding of how social change occurs, what barriers exist to producing just outcomes, and what practices have worked to overcome obstacles in the past. The class will welcome speakers from a variety of backgrounds to address their work on these topics.

Instructor(s): Ray Lodato Terms Offered: Autumn

Equivalent Course(s): CEGU 26260, CHST 26259, CCSG 22507

PBPL 26261. Environmental Justice in Principle and Practice II. 100 Units.

In this quarter, students will learn and practice methods to conduct a research project with a local environmental organization. Building on knowledge gained in the first half of this course, students will examine what makes a condition an environmental justice issue, how to conduct a literature review, how to develop and administer a questionnaire for key informant interviews, and how to access, understand, and utilize Census data. Students should expect to work in the community as well as the classroom, and in close collaboration with classmates. The class will conduct "deep-dive" research into the community selected, and will learn not only about the area, but techniques for how to do community-based research in a manner that acknowledges and appreciates the lived wisdom of the neighborhood's residents. The result will be a research report delivered to the community organization with students in the class listed as co-authors.

Instructor(s): Ray Lodato Terms Offered: Winter

Equivalent Course(s): CCSG 22508, CHST 26261, CEGU 26261

PBPL 26303. Practicum: Interview Project on Public Education. 100 Units.

This one-quarter practicum in qualitative methods aims to develop interview research skills, including instrument design, questioning, transcription, thematic analysis, and write-up, in the context of a mini-BA thesis trial run. The topic of this version of the practicum is public education. Students will engage in interviews with informants in different roles in education, potentially including teachers, administrators, policymakers, and education researchers. Meant to prepare Public Policy Studies students for the BA thesis process, each student, using interviews conducted by themselves and their classmates, will formulate a question related to public education and construct the component parts of their own research paper, which they will submit at the end of the quarter.

Instructor(s): Karlyn Gorski Terms Offered: Spring

Note(s): For Public Policy majors, this course can fulfill either the "Methods" or "Windows" major requirement. Recommended for third-year students preparing to write a BA thesis, but any student interested in conducting primary research is welcome.

Equivalent Course(s): EDSO 26303, CHST 26303

PBPL 26305. Practicum: Qualitative Research in Urban Transportation. 100 Units.

This one-quarter practicum in qualitative methods aims to develop interview and observational research skills, including instrument design, questioning, transcription, ethnographic note-taking, thematic analysis, and write-up, in the context of a mini-BA thesis trial run. The topic of this version of the practicum is urban transportation. Students will engage in interviews with informants in different roles in transportation, potentially including public servants, activists, policymakers, and users of multiple modes of urban transportation. This class will include field trips within the city of Chicago. Meant to prepare Public Policy Studies students for the BA thesis process, each student, using interviews/observations conducted by themselves and their classmates, will formulate a question related to urban transportation and construct the component parts of their own research paper, which they will submit at the end of the quarter.

Terms Offered: Autumn

Equivalent Course(s): CHST 26305

PBPL 26306. Practicum: Interview Project on Artificial Intelligence. 100 Units.

This one-quarter practicum in qualitative methods aims to develop interview research skills-including instrument design, effective questioning, transcription and thematic analysis, and structured write-up-in the context of a BA thesis trial run. The topic of this version of the practicum is artificial intelligence and its uneven effects on work, opportunity, social control, and life chances. Students will conduct in-class and out-of-class interviews depending on area of interest. Potential respondents include scholars and other experts about the future of work and AI regulation; college students and young professionals facing career uncertainty; individuals subject to algorithmic decision-making in policing, healthcare, and public service provision; visual artists, writers, musicians and other creative professionals; individuals involved with prediction markets and algorithmic high-frequency trading and sports betting; and advocates, nonprofit leaders, and policymakers

working to govern AI. Each student will formulate a research question, conduct original fieldwork and construct the component parts of their own "Mini-Thesis," which they will submit at the end of the quarter. This practicum class can fulfill either the "Methods" or "Windows" major requirement in PBPL. Recommended for third-year students; open to all.

Instructor(s): C. Broughton Terms Offered: Autumn

PBPL 26308. Practicum: Pillars of Public Safety. 100 Units.

This practicum course introduces students to hands-on social policy research in the service of a client. In two respects, the course will be distinct from a typical undergraduate course: (1) in the independence expected of students formulating and pursuing a research question; and (2) in working in the service of a client. The research project will be a group project. For those of you preparing to write a BA thesis in Public Policy or a related discipline, it should also help to inform your approach to defining and refining a research question, identifying methods, and conducting exploratory analysis. The course will give you introductory, hands-on experience in interviewing and analyzing public data, two research techniques relevant to many fields of academic research and much work outside the academy as well. An introductory course on statistics or data science will be helpful background. The client for our research projects is the Civic Committee of the Commercial Club of Chicago. Understanding our client's interests and priorities will require us to have an initial grounding in the history of Chicago, public/private partnerships in the city, and current public policy debates around public safety, which we will cover in the first two weeks of the course.

Instructor(s): Robert Owens Terms Offered: Spring

Note(s): This course satisfies the Windows or Methods requirement.

PBPL 26366. Planning for Land and Life in the Calumet. 100 Units.

The collaborative plan to create a Calumet National Heritage Area that touches aspects of environmental conservation, economic development, cultural heritage, recreation, arts, and education will ground this course's exploration of landscape history and landscape planning in the Calumet region. Students will investigate this planning process and its relationship to other local and regional plans. A strong focus of the course is on the opportunities and challenges this complex and richly textured industrial region faces in its transition to a more sustainable future.

Instructor(s): Mark Bouman Terms Offered: Spring. not offered in 2022-23

Note(s): This course is part of the Chicago Studies Quarter: Calumet. This course includes required field trips every Friday from 9am-3pm.

Equivalent Course(s): CHST 26366, CEGU 26366, HIST 27313

PBPL 26400. Quantitative Methods in Public Policy. 100 Units.

This class will provide an introduction to quantitative analysis in public policy. Much of the class is devoted to learning about the effects of policies and answering empirical, policy-relevant questions from observational data. In doing so, the course provides an introduction to critical and quantitative thinking in general. Students will be introduced to the basic toolkit of policy analysis, which includes sampling, hypothesis testing, Bayesian inference, regression, experiments, instrumental variables, differences in differences, and regression discontinuity. Students will also learn how to use a statistical software program to organize and analyze data. More importantly, students will learn the principles of critical thinking essential for careful and credible policy analysis.

Instructor(s): Anthony Fowler Terms Offered: Winter

Equivalent Course(s): CEGU 26400

PBPL 26415. The Fundamental Disequilibrium in Latin America. 100 Units.

This course presents an overview of the political economy of public policy and development in Latin America and presents a new theory which can help explain many of the anomalies in the existing evidence. There are no technical prerequisites for the course, except a desire to read a lot and think deeply about Latin America in comparative perspective. Some familiarity with the history and culture of the region is desirable, but enthusiasm and commitment can compensate for that.

Instructor(s): Robinson, J Terms Offered: Spring

Equivalent Course(s): PPHA 39790

PBPL 26705. Economics of Education. 100 Units.

This course explores economic models of the demand for and supply of different forms of schooling. The course examines the markets for primary, secondary, and post-secondary schooling. The course examines numerous public policy questions, such as the role of government in funding or subsidizing education, the design of public accountability systems, the design of systems that deliver publicly funded (and possibly provided) education, and the relationship between education markets and housing markets.

Instructor(s): D. Neal

Prerequisite(s): ECON 21020 or ECON 21030

Equivalent Course(s): ECMA 36700, EDSO 26700

PBPL 26930. Environmental Economics: Theory and Applications. 100 Units.

This course presents a broad-based treatment of the theory and application of environmental economics. Topics are introduced in the context of real-world environmental policy questions (with special emphasis on energy policy), then translated into microeconomic theory to highlight the salient constraints and fundamental trade-offs faced by policymakers. Topics include property rights, externalities, Pigouvian taxes, command-and-

control regulation, cap-and-trade, valuation of environmental quality, cost-benefit analysis, policymaking under uncertainty, and inter-regional competition. Students who have previously taken PBPL 28525 should not enroll in this course.

Instructor(s): Wang, S Terms Offered: Winter

Equivalent Course(s): PPHA 36930

PBPL 27000. International Economics. 100 Units.

This course covers international economics with an emphasis on international trade. The basic theories of international trade are introduced and used to analyze welfare and distributional effects of international trade, government policies, and technology diffusion. In addition, this course also discusses the main empirical patterns of international trade and international investment.

Instructor(s): J. Castro-Vincenzi Terms Offered: Spring

Prerequisite(s): ECON 20100/20110

Equivalent Course(s): ECON 27000

PBPL 27070. Philanthropy: Private Acts and Public Goods. 100 Units.

Under what conditions do philanthropy and other forms of private action come to be significant elements of the provision of public goods? What are the consequences of organizing society in this way? In this course, we will address the social role of philanthropy, its historical development as a significant economic and political institution, and the place of philanthropy in contemporary public policy and civic projects.

Instructor(s): E. Clemens Terms Offered: Winter

Prerequisite(s): Completion of at least 2 quarters of SOSC

Equivalent Course(s): SOCI 20222

PBPL 27106. Police Reform and Police Legitimacy. 100 Units.

This course introduces students to the concept of legitimacy in policing, the related reform efforts implemented in police departments throughout the United States in recent years, and the challenges to reform from activist movements to defund or abolish the police. Policing in the United States is in crisis. Ubiquitous video records of police-civilian interactions have changed the relationships among the police, the public, local political authorities, and the media. At the same time, policing itself is changing in profound ways. New technological capabilities have increased public expectations of transparency and efficiency in policing while raising concerns about privacy and due process rights. Local police have taken on an expanding portfolio of responsibilities, including presence in public schools, mental health crisis response, and counter-terrorism. This course will equip students to understand the issues at stake in the contemporary policy debates surrounding policing and the foundational scholarly knowledge underpinning those debates. Course topics include: the organizational structure of policing, its functional purpose, the normative expectations of citizens and communities that rely on the police for protection and how police performance is measured.

Instructor(s): Owens, R Terms Offered: Winter

Equivalent Course(s): PPHA 37106

PBPL 27110. Consider the Lobster: Animal Law and Policy. 100 Units.

Brief Description: Humans share the Earth with countless multitudes of sentient, non-human beings. We categorize our fellow earthlings into, for example, farm animals; pets; wild animals; pests; and so on. For each of these animal categories, we have laws, policies, and norms that influence our interactions with our fellow creatures and also profoundly affect the births, lives, and deaths of animals. This discussion-based course examines animal-related policies. We will look at broad questions - should animal wellbeing be directly taken into account in policy analysis, or only accounted for via human interest in animal wellbeing? - as well as specific policies with respect to farm animals, zoo animals, companion animals, and so on.

Instructor(s): James Leitzel Terms Offered: Spring

Equivalent Course(s): PPHA 37450, CEGU 27111

PBPL 27156. Urban Design with Nature. 100 Units.

This course will use the Chicago region as the setting to evaluate the social, environmental, and economic effects of alternative forms of human settlement. Students will examine the history, theory and practice of designing cities in sustainable ways - i.e., human settlements that are socially just, economically viable, and environmentally sound. Students will explore the literature on sustainable urban design from a variety of perspectives, and then focus on how sustainability theories play out in the Chicago region. How can Chicago's neighborhoods be designed to promote environmental, social, and economic sustainability goals? This course is part of the College Course Cluster program: Urban Design. In Autumn 2025, Urban Design with Nature will focus on sustainable and accessible mobility with a focus on campus and the neighborhoods we transverse and inhabit. Students will consider how mobility is central to urban sustainability and how to reimagine cities, neighborhoods and campuses as social and economic spaces connected by safe, low impact, environmental, equitable and efficient networks of transit. Students enrolled in Autumn 2025 must be willing to spend time outdoors, moving about campus and its surroundings.

Instructor(s): Sabina Shaikh and Emily Talen Terms Offered: Autumn

Equivalent Course(s): CEGU 27155, ARCH 27155, CCSG 22502, CEGU 37155, GISC 27155, CHST 27155, BPRO 27155

PBPL 27300. Regulation of Vice. 100 Units.

This course discusses government policy regarding traditional vices (i.e., drinking, smoking, gambling, illicit sex, recreational drug use). Among policies considered are prohibition, taxation, treatment, decriminalization, and legalization. The intellectual framework employed to evaluate various policies is primarily economic, though other disciplines are drawn upon. This course is offered in alternate years.

Instructor(s): J. Leitzel Terms Offered: Winter

Prerequisite(s): ECON 20000 or PBPL 20000

Equivalent Course(s): ECON 27300

PBPL 27818. Philosophical Foundations of Public Policy. 100 Units.

Evidence-based policy making" sounds like a slogan everyone can get behind. But its central components, cost-benefit analysis and program evaluation, have each been subject to severe philosophical questioning. Does cost-benefit analysis ignore important ethical concerns? Does program evaluation ignore valuable kinds of knowledge? We will introduce each of these debates, and then take up the question of how evidence-based policy might be reconciled with democratic theory. Class discussion and assignments will consider these topics in the context of specific policy areas, including climate change, discrimination, and education.

Instructor(s): S. Ashworth Terms Offered: Autumn

Prerequisite(s): ECON 20000, PBPL 20000, ECON 20100, or PBPL 22200.

Equivalent Course(s): PLSC 27818, DEMS 27818

PBPL 27905. Global Health Metrics. 100 Units.

This course provides an overview of the causes of illness and injury in populations across the world and the most important risk factors. We will discuss how population health is measured using summary indicators that combine mortality and non-fatal health outcomes. We will use these indicators to compare and contrast the health of populations across global regions and in time. Sound measurement of the global burden of disease is essential for prioritizing prevention strategies. Therefore, there will be a strong emphasis on understanding how data sources in information-poor settings are used to generate estimates of population health.

Instructor(s): Kavi Bhalla Terms Offered: Spring

Prerequisite(s): N/A

Note(s): PBHS 30910; Limited to 3rd & 4th yr undergrads

Equivalent Course(s): PBHS 31900, HLTH 27905

PBPL 27919. Research in School Improvement. 100 Units.

Research evidence and data play an increasingly important and complex role in efforts to reform underperforming school systems in the United States. Both education policy and practice increasingly rely on sophisticated understandings of a dynamic interplay of complex organizations, systems, and policymaking. This course introduces students to cutting edge models for using research and data public school reform efforts, including examples of randomized control trials, district-based research, research-practice partnerships, and quality improvement strategies. The course includes concrete illustrations of research that reshaped educational practice drawn from the UChicago Consortium on School Research.

Instructor(s): David Johnson Terms Offered: TBD. Offered 2022-23

Equivalent Course(s): CHST 27919, EDSO 37919, EDSO 27919

PBPL 28300. Health Economics and Public Policy. 100 Units.

This course analyzes the economics of health and medical care in the United States with particular attention to the role of government. The first part of the course examines the demand for health and medical and the structure and the consequences of public and private insurance. The second part of the course examines the supply of medical care, including professional training, specialization and compensation, hospital competition, and finance and the determinants and consequences of technological change in medicine. The course concludes with an examination of recent proposals and initiatives for health care reform. Must have completed PPHA 32300 Principles of Microeconomics and Public Policy I or equivalent to enroll.

Instructor(s): Meltzer, D Terms Offered: Spring

Equivalent Course(s): PPHA 38300, CCTS 38300, ECON 27700

PBPL 28350. Education and Economic Development. 100 Units.

This course covers policy issues related to education in developing contexts. We will analyze education policies and reforms, develop skills to be a critical consumer of relevant research on each topic, and examine implications of the findings to policy and practice. Topics include discrimination and inclusion in education, understanding factors that influence educational decisions, provision of basic needs in schools, teacher pay and incentives, education in emergency settings, and school choice.

Instructor(s): A. Adukia Terms Offered: Winter

Prerequisite(s): Recommended prerequisite courses: Microeconomics and econometrics. Students in their last years will be given priority.

Equivalent Course(s): EDSO 28350, ECON 16710

PBPL 28498. Practicum: Women and Society. 100 Units.

Although the inequities between men and women have diminished during the last decades, large gaps are still evident and resistant to change. Throughout this course, we will explore the origins of these disparities which are all fundamentally rooted in the patriarchal nature of society. Understanding how patriarchy came to be the dominant order requires a multidisciplinary and historical approach. The first lectures will cover debates

in biology, human evolution, history and archeology that explain the deep roots and the spread of this order throughout the centuries. The next set of lectures will cover how current cultural practices and social norms facilitate the reproduction of the patriarchy and will also examine alternative ways in which societies have organized themselves where women have powerful roles or live in matriarchies. The class will also capture how women from the Global South contest this order within their societies and on their own terms. Finally, we will evaluate policies that have aimed to close the gap between men and women around the world. A central theme of the course is that to understand how to craft effective policies one needs to understand the mechanisms which created patriarchy and led it to persist. The students will offer presentations that will revise these policies from a critical perspective based on the material we covered throughout the quarter. The final lectures will include a variety of guest speakers.

Instructor(s): Bautista, M. Terms Offered: Spring

Prerequisite(s): This course satisfies the methods practicum requirement and students have the option to complete additional coursework to satisfy the windows requirement.

Equivalent Course(s): LACS 28498, GNSE 20153

PBPL 28502. Policing in America: Black, White and Blue. 100 Units.

The course will focus on policing issues in Chicago and across the nation. It will feature guest speakers and class discussions. This course satisfies the Public Policy practicum Windows requirement.

Instructor(s): Clayton Harris Terms Offered: Autumn

Note(s): This course satisfies the Public Policy practicum windows requirement. Not offered in Spring 2025.

Equivalent Course(s): CHST 28502

PBPL 28525. Environmental Economics: Theory and Applications. 100 Units.

This course presents a broad-based treatment of the theory and application of environmental economics. Topics are introduced in the context of real-world environmental policy questions (with special emphasis on energy policy), then translated into microeconomic theory to highlight the salient constraints and fundamental trade-offs faced by policymakers. Topics include property rights, externalities, Pigouvian taxes, command-and-control regulation, cap-and-trade, valuation of environmental quality, cost-benefit analysis, policymaking under uncertainty, and inter-regional competition.

Instructor(s): Shaoda Wang Terms Offered: Winter

Note(s): Recommended prior coursework: Microeconomics or PBPL 20000

PBPL 28528. Household Finance: Theory and Applications. 100 Units.

This course will examine the choices households make about important financial decisions and how these individual choices can impact the aggregate economy. Each week, basic predictions from economic theory will be discussed and compared with empirical findings. Topics will include: asset market participation and household portfolio choice; human capital and student loans; housing and mortgages; retirement planning; credit card debt; payday loans; and the gig/sharing economy. Focus will also be placed on government policies affecting these topics, including so-called household financial engineering, the creation of Government Sponsored Enterprises (GSEs) like "Fannie" and "Freddie," and regulatory agencies like the Consumer Financial Protection Bureau (CFPB). The course will provide an introduction to structural modeling for conducting policy counterfactuals. Assessment will be based on problem sets, a midterm and a final. These problem sets will require students to work in R, Stata or other statistical package of the student's choice (with permission of instructor).

Instructor(s): D. Koustas Terms Offered: Spring

Prerequisite(s): Prerequisite(s): PBPL 20000 (PBPL 22200 preferred) or ECON 20000 and one undergraduate course in quantitative research methods (Statistics or Econometrics) or the equivalent or consent of the instructor.

Equivalent Course(s): ECON 13110

PBPL 28550. Methods of Data Collection: Social Experiments, Quasi-Experiments and Surveys. 100 Units.

The pressure in many fields (notably medicine, health research, politics, and education) for evidence-based results has increased the importance of the design and analysis of social investigations in providing a basis for policy decisions. This course will address: (i) the design of experiments, quasi-experiments, and surveys; and (ii) the use of these social investigations to provide data for generalization. Randomized clinical trials in medicine, field experiments in economics, psychology and political science, tests of quasi-experimental interventions, and national sample surveys will be among the examples. The course will explore the relative relevance of evidence from these different sources in formulating policy. This course satisfies the Public Policy practicum METHODS requirement.

Instructor(s): C. O'Muircheartaigh Terms Offered: Winter

PBPL 28560. Evaluating Interventions and Public Policies: Tools and Applications. 100 Units.

This course focuses on the real-world application of evaluation methods in public policy, emphasizing how to design, implement, and use evaluations to improve programs and inform decision-making. Students learn how to formulate evaluation questions, build or analyze a theory of change, and design evaluations using appropriate methods, from experimental to observational approaches. The course explores the integration of quantitative and qualitative methods, implementation and process evaluation, cost analysis, and evaluation of complex interventions. Students apply these skills to develop a full evaluation proposal for a policy or program, grounded in cases from diverse settings.

Instructor(s): Alicia Menendez Terms Offered: Autumn

Prerequisite(s): Some statistical knowledge is preferable but not required.

Equivalent Course(s): ANTH 28560

PBPL 28633. How Do We Evaluate Policies?: An Empirical Approach. 100 Units.

Correlation isn't causation -- so what is? In this course students will learn about the statistical tools deployed in contemporary quantitative research, and how to implement them in R. Furthermore, they will learn about research methods used to identify causation, such as randomized control trials, which underpin much of public policy research.

Instructor(s): Ingvil Gaarder Terms Offered: Spring

Prerequisite(s): Stats and PBPL 20000 Economics for Public Policy (or equivalent) required. PBPL 26400 or equivalent recommended.

PBPL 28670. Markets and Regulation. 100 Units.

This is an applied industrial organization course that examines economically regulated market structures. We will analyze: a) types of market structures that particularly generate economic regulation; b) common methods used by regulatory agencies given a particular market structure; and c) models of the supply of and the demand for regulation of markets, with emphasis on maximizing behavior on the part of both suppliers (regulators) and demanders (firms, consumers, political representatives). We will focus on non-financial markets, as financial markets are well-covered in other courses.

Instructor(s): Kathryn Ierulli Terms Offered: Autumn

Prerequisite(s): PQ: PBPL 20000 or equivalent

Equivalent Course(s): ECON 28030

PBPL 28681. Financial Investments for Public Policy. 100 Units.

Central banks, Treasury departments, the IMF, and sovereign wealth funds use financial data and tools to inform their decisions. This class covers the main concepts of finance theory for stocks, bonds, and investment portfolios and applies them in the public policy context. Topics covered include the following: present value, real and nominal interest rates, optimal portfolio choice, Value-at-Risk and Growth-at-Risk, risk and return, the Capital Asset Pricing Model, performance evaluation, market efficiency, and return predictability.

Instructor(s): Pflueger, C Terms Offered: Spring

Equivalent Course(s): PPHA 36101

PBPL 28683. Introduction to Corporate Finance. 100 Units.

This course presents an introduction to the principles of corporate finance and its applications. These principles are critical to understanding the nature of how corporations and many government entities present their financial condition, finance themselves and manage their financial risks. We will examine corporate structure, evaluation of new projects, financial planning and governance. Perspectives will include those of the debt the shareholders and key management members, including the Chief Executive Officer, Chief Financial Officer and Treasurer. Additional material relating to the public policy issues that certain corporate decisions create will be considered. There will be problem sets, graded and ungraded, to support most areas.

Instructor(s): Schabes, D. Terms Offered: Winter

Prerequisite(s): This course requires no prior finance or business knowledge.

PBPL 28703. Environ Policy:Amazon. 100 Units.

TBD

Equivalent Course(s): PPHA 38400, LACS 28703, ANTH 23020, HMRT 38703, LACS 38703, ANTH 31608, HMRT 28703

PBPL 28750. Conflict: Root Causes, Consequences and Solutions for the Future. 100 Units.

The goals of this course are to introduce you to key concepts in the study of conflict, and to help you develop the analytical skills you need to understand and assess key arguments advanced in this arena. Drawing primarily on economics and political science, as well as psychology, we will seek to understand: Why do human beings engage in acts of violence? How can armed groups compel atrocities? How do we prevent cycles of violence, and aid countries recovering from war? Specifically: We will examine the role of economic shocks and ethnic divisions on civil war. We will also discern whether similar factors explain the rise of terrorism. In addition, we will study the consequences of conflict on socio-economic development, and examine the role of foreign aid and post-conflict reconciliation in helping countries recover from conflict. The class will examine these questions while focusing on analytical skills needed to understand cutting edge research in this area. Thus a major emphasis of the course is on learning how to think critically about empirical evidence, and learning the methods used in quantitative empirical analysis, such as fixed effects models, differences-in-differences research designs, and instrumental variables estimation. It is ideal for students who want to learn substantively about conflict while developing an understanding of the methodology used to produce key empirical findings.

Instructor(s): Oeindrila Dube Terms Offered: Winter

Note(s): Note: While the course sets out to teach these skills, you do not need previous coursework in statistics.

Equivalent Course(s): PLSC 28750, ECON 16950

PBPL 28785. Value Creation: Social Capital, Negotiation Strategy, and Getting Things Done. 100 Units.

This course empowers students to understand and navigate the complex intersections of social networks, negotiation, and value creation within organizational structures. In the initial weeks, we dive into the principles of social organization, applying social network analysis as a central framework. You'll learn to recognize and coordinate divergent interests within a social organization, optimizing for the best outcome. Our focus is not

just on how you identify valuable opportunities within these networks but also on how to mobilize resources to actualize these opportunities. As the course progresses, we transition into the art of negotiation. Through simulated exercises, you will develop an 'interpersonal toolkit,' learning to persuade and collaborate with others effectively to achieve your objectives. We'll delve into key aspects of negotiation, such as overcoming communication obstacles, maximizing multiple interests, and tactics for coalition building. The course culminates by bringing these themes together: harnessing your social capital, leveraging effective negotiation strategies, and ultimately getting things done. Whether you're planning a future in business, policy, law, social work, academia, or beyond, these skills will prove invaluable. The goal is to equip students with the knowledge and tools to create value and drive outcomes, setting the foundation for a successful career.

Instructor(s): John Burrows Terms Offered: Winter

PBPL 28791. Behavioral Science and Public Policy. 100 Units.

Many policies are aimed at influencing people's behavior. The most well-intentioned policies can fail, however, if they are not designed to be compatible with the way people actually think and make decisions. This course will draw from the fields of cognitive, social, and environmental psychology to (1) examine the ways in which human behavior deviates from the standard rational actor model typically assumed by economics, and (2) provide strategies for improving the design, implementation, and evaluation of public-facing policies. The basic premise of this course is that a foundational understanding of human behavior can lead not only to more effective policies, but enhanced decision-making and well-being.

Instructor(s): K. Wolske Terms Offered: Spring

Equivalent Course(s): PSYC 28791

PBPL 28805. Behavioral Economics and Policy. 100 Units.

The standard theory of rational choice exhibits explanatory power in a vast range of circumstances, including such disparate decision making environments as whether to commit a crime, have children, or seek to emigrate. Nonetheless, shortfalls from full rationality seem not to be uncommon, and are themselves, to some extent, systematic. Behavioral economics documents and tries to account for these departures from full rationality. This course looks at areas in which some modification of the traditional rational choice apparatus might most be warranted; these include decisions that unfold over time, involve low probability events, or implicate willpower. To what extent should public policy respond to shortfalls from rationality or concern itself with promoting happiness?

Instructor(s): J. Leitzel Terms Offered: Autumn

Equivalent Course(s): ECON 26920

PBPL 28829. Artificial Intelligence for Public Policy. 100 Units.

It is hard to name a sector that will not be dramatically affected by artificial intelligence (or machine learning). There are many excellent courses that teach you the mechanics behind these innovations -- helping you develop an engineering skill set. This course takes a different approach. It is aimed at people who want to deploy these tools, either in business or policy, whether through start-ups or within a large organization. While this requires some knowledge of how these tools work, that is only a small part of the equation, just as knowing how an engine works is a small part of understanding how to drive. What is really needed is an understanding of what these tools do well, and what they do badly. This course focuses on giving you a functional, rather than mechanistic, understanding. By the end, you should be an expert at identifying ideal use-cases and thereby well-placed to create new products, businesses and policies that use artificial intelligence.

Instructor(s): Ludwig, J Terms Offered: Winter

Equivalent Course(s): PPHA 38829

PBPL 28925. Health Impacts of Transportation Policies. 100 Units.

Governments invest in transport infrastructure because it encourages economic growth and mobility of people and goods, which have direct and indirect benefits to health. Yet, an excessive reliance on motorized modes of transport harms population health, the environment and social well-being. The impact on population health is substantial: Globally, road traffic crashes kill over 1.3 million annually. Air pollution, to which transport is an important contributor, kills another 3.2 million people. Motorized modes of transport are also an important contributor to sedentary lifestyles. Physical inactivity is estimated to cause 3.2 million deaths every year, globally. This course will introduce students to thinking about transportation as a technological system that affects human health and well-being through intended and unintended mechanisms. The course will examine the complex relationship between transportation, land use, urban form, and geography, and explore how decisions in other sectors affect transportation systems, and how these in turn affect human health. Students will learn to recognize how the system level properties of a range of transportation systems (such as limited-access highways, urban mass transit, inter-city rail) affect human health.

Instructor(s): Bhalla, K Terms Offered: Spring

Equivalent Course(s): HLTH 28925, PPHA 41021, CEGU 28925, ARCH 28925, ENST 28925

PBPL 29070. Nuclear Policy. 100 Units.

While issues arising from technologies that have both military and civilian applications are not new, the nearly incomprehensible destruction from exploding nuclear weapons focuses the mind as few other dual-use technologies can. This course will examine the development of national policies and the international regimes on the uses of nuclear energy. We will review military doctrine and the plans for nuclear war-fighting as well as the effects on societies of developing and using nuclear weapons. We will review the history of international

proliferation of nuclear technology and fissile material and examine efforts to curtail the spread of weapons. In the second part of the course, we will focus on the development of civilian nuclear power and on current policy to prevent accidents and dispose of nuclear waste materials. Political leaders often face policy dilemmas because nuclear technology and materials offer great benefit, as well as presenting great danger. We will explore these dilemmas throughout the course.

Instructor(s): Benedict, K Terms Offered: Winter

Equivalent Course(s): PPHA 33510

PBPL 29404. Inequality, Household Finance, and Tax Policy: A Practicum. 100 Units.

The first component of this course will feature seminar discussions of inequality in the US, with respect to income, gender and race, and how these interact with US tax policy. We will have a focus on income transfers to low-income households such as the Earned Income Tax Credit. We will also review current policy topics in Household Finance, the study of how households save, borrow, and/or use insurance to overcome unexpected changes in household income. In addition, we will discuss the process of filing tax returns, the prevalence of income tax refunds, and the various industries, both non-profit and for-profit, that have arisen around this phenomenon. Next, students will go into the field, and work as volunteer tax preparers for a local, Chicago non-profit, Ladder Up. Students will be trained as tax preparers (which requires a 3-hour training session), learn how these services are delivered, and will also learn about the various social goals and public benefits that are often coupled with this process. Tax season begins in late January, and the students will volunteer weekly for about 6 weeks, until the end of the quarter. Students are also encouraged, though not required, to continue to volunteer until the end of the tax season, April 15th. Finally, students will produce a final project as a part of a group project. This course satisfies the Public Policy windows practicum requirement.

Instructor(s): Jones, Damon Terms Offered: Winter

Note(s): Not offered in 24-25

Equivalent Course(s): CHST 29404

PBPL 29500. BA Project Seminar. 100 Units.

The BA Project Seminar is a required course for public policy majors who are completing the BA Capstone Project. Students must attend one quarter of PBPL 29500 and submit a project by end of quarter to satisfy the project capstone requirement.

Instructor(s): Autumn: Jim Leitzel; Winter: Karlyn Gorski; Spring: Chad Broughton Terms Offered: Autumn Spring Winter

Note(s): Restricted to 4th year public policy studies majors. 3rd year students allowed with faculty consent.

PBPL 29600. Internship: Public Policy. 100 Units.

Students write a paper about their experience working for a government agency or nonprofit organization.

Instructor(s): J. Leitzel Terms Offered: Autumn Spring Winter

Prerequisite(s): PQ: Open only to Public Policy majors; students are required to submit the College Reading and Research course form. Consent of Program Director is required and must be obtained prior to beginning internship; P/F grades only.

Note(s): The College Reading and Research Course Form is required. Must be taken for P/F grading.

PBPL 29700. Reading and Research: Public Policy. 100 Units.

This is a reading and research course for independent study not related to BA research or BA thesis preparation.

Instructor(s): STAFF Terms Offered: Autumn Spring Winter

Prerequisite(s): Open only to Public Policy majors. Must be taken for a letter grade.

Note(s): The College Reading and Research Course Form is required.

PBPL 29800. BA Thesis Seminar: Public Policy. 100 Units.

This Seminar is designed to provide students with the resources, support, and structure to successfully complete a senior BA thesis in Public Policy Studies. During Autumn, students will articulate their research question, develop hypotheses or arguments, construct a review of the literature and consider what methods will provide answers to the hypotheses or questions (data collection and analysis). The Seminar will meet once a week for the main lecture and once a week for a separate TA session in small groups. The class will continue to meet during winter to consolidate the progress students have made in these different areas and to work on refining their research. The required winter workshop sessions with the Professor and TAs will follow autumn quarter schedule. Attendance in both autumn and winter is required. Final grade for PBPL 29800 will be provided in spring and will be based on one quarter of seminar registration, required attendance in Autumn and Winter quarters, and successful completion of the BA paper.

Instructor(s): Maria Angelica Bautista Terms Offered: Autumn Winter

Prerequisite(s): Open only to fourth-year Public Policy majors.

Note(s): Students are required to register for PBPL 29800 during Autumn of their 4th year but must attend in both autumn and winter to satisfy the requirement of the major. Must be taken for a letter grade.

PBPL 29900. BA Paper Preparation: Public Policy. 100 Units.

This is a reading and research course for independent study related to BA research and BA thesis preparation.

Instructor(s): Staff Terms Offered: Autumn Spring Winter

Prerequisite(s): Open only to 4th year Public Policy majors. Must be taken for a letter grade. The College Reading and Research Course Form is required.

