Term Information

Effective Term   Autumn 2024
Previous Value   *Spring 2024*

Course Change Information

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

A new GE course is being proposed.

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

We want to change ECON 1101 to a general education foundation course to introduce more students to the academic disciplines of social and behavioral sciences and their modes of inquiry. Making it a GE will encourage students from all parts of campus to engage with the course and the tools and scholarship of social and behavioral scholars. We think this has the potential to enhance any major's college experience, inspire critical thinking, and spur connections between disciplines across campus.

The course is about the pressing social and economic challenges of today. The course introduces students to cutting-edge research and practical applications in economics and social science in an easy-to-understand format. Key topics of the course span all social and behavioral sciences from equality of opportunity, education, and racial disparities to innovation, health care, climate change, criminal justice, and tax policy. The students also learn tools of causal inference and economics.

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

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

N/A

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

Is this a request to withdraw the course? No

General Information

Course Bulletin Listing/Subject Area	Economics
Fiscal Unit/Academic Org	Economics - D0722
College/Academic Group	Arts and Sciences
Level/Career	Undergraduate
Course Number/Catalog	1101
Course Title	Using Big Data to Solve Economic and Social Problems
Transcript Abbreviation	Econ&Soc Big Data
Course Description	This course is designed to show how "big data" can address pressing social and economic challenges of today. The curriculum introduces students to the fundamentals of economics, regression analysis, and causal inference in an accessible manner without the need for prior knowledge in economics or statistics.
Semester Credit Hours/Units	Fixed: 3

Offering Information

Length Of Course	14 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	No
Grading Basis	Letter Grade
Repeatable	No

Course Components	Lecture
Grade Roster Component	Lecture
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus, Lima, Mansfield, Marion, Newark, Wooster

Prerequisites and Exclusions

Prerequisites/Corequisites	
Exclusions	
Electronically Enforced	No

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code	45.0601
Subsidy Level	General Studies Course
Previous Value	*Baccalaureate Course*
Intended Rank	Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

Social and Behavioral Sciences

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

Previous Value

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

Course Details

Course goals or learning objectives/outcomes	• 1) to introduce students to frontier social science research on key social and economic issues
	• 2) to teach students how to analyze data using modern quantitative methods and basic programming techniques
	• 3) to show students how practitioners are using data to analyze social problems
Content Topic List	• Part I: Inequality and Social Mobility
	Part II: Education
	Part III: Racial Disparities & Criminal Justice
	Part IV: Health
	Part V: Tax Policy
	Part VI: Economic Development and Institutional Change
	Part VII: Presentations and final
Sought Concurrence	Yes

Attachments

- ge-foundations-submission.pdf: GE Rationale

  (Other Supporting Documentation. Owner: Burnell,Sydneigh Morah)

- Concurrence Approval Email.jpeg

  (Concurrence. Owner: Burnell,Sydneigh Morah)

- Concurrence Request Email.jpeg

  (Concurrence. Owner: Burnell,Sydneigh Morah)

- concurrence_request_form_AEDE_ECON1101.pdf

  (Concurrence. Owner: Burnell,Sydneigh Morah)

- ECON-1101-syllabus-spring-2025-ge.pdf: Updated Syllabus

  (Syllabus. Owner: Burnell,Sydneigh Morah)

Comments

- Please see SBS Subcommittee feedback email sent 3/14/24. *(by Neff,Jennifer on 03/14/2024 10:17 AM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Burnell,Sydneigh Morah	02/14/2024 03:45 PM	Submitted for Approval
Approved	Yang,Huanxing	02/19/2024 10:01 AM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	02/26/2024 10:07 AM	College Approval
Revision Requested	Neff,Jennifer	03/14/2024 10:17 AM	ASCCAO Approval
Submitted	Burnell,Sydneigh Morah	03/20/2024 08:56 AM	Submitted for Approval
Approved	Yang,Huanxing	03/20/2024 08:57 AM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	03/20/2024 01:08 PM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Hilty,Michael Neff,Jennifer Vankeerbergen,Bernadette Chantal Steele,Rachel Lea	03/20/2024 01:08 PM	ASCCAO Approval

Using Big Data to Solve Economic and Social Problems

Syllabus
ECON 1101 - Spring 2025

Course Information

Class Schedule and Delivery Mode

Course times and location: Tuesdays and Thursdays, 9:35 a.m. - 10:55 a.m. in Stillman Hall 235
Credit hours: 3
Final exam: TBD, see course schedule

Mode of delivery: In person

Instructor

Alex Hollingsworth, Associate Professor

Contact information: hollingsworth.126@osu.edu, 614-292-3500 (Office)

Preferred modes of communication: My preferred method for questions is **email.** My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your notification preferences (go.osu.edu/canvas-notifications) to be sure you receive these messages.

Office hours for student questions and support: Tuesdays from 12:00pm to 1:00pm in 15 minute increments. If you need another time, please email me and we can schedule something. Even if you want to come in person, please sign up using calendly, https://calendly.com/alex-hollingsworth/office-hours to sign up for office hour appointments. Once you sign up for an appointment a zoom link will be provided.

Course Description

This course is designed to show how "big data" can address pressing social and economic challenges of today. The curriculum introduces students to the fundamentals of economics, regression analysis, and causal inference in an accessible manner without the need for prior knowledge in economics or statistics. It is tailored for beginners in economics and data

science, as well as for advanced learners looking to apply and enhance their previously acquired knowledge.

The course will introduce students to cutting-edge research and practical applications in economics and social science in an easy-to-understand format. Key topics span from equality of opportunity, education, and racial disparities to innovation, health care, climate change, criminal justice, and tax policy. The course will feature work from renowned researchers and professionals who use big data in real-world applications.

Course Prerequisites
None

Learning Outcomes
This course has three principal learning objectives:
1. to introduce students to frontier social science research on key social and economic issues,
2. to teach students how to analyze data using modern quantitative methods and basic programming techniques, and
3. to show students how practitioners use data to analyze social problems.

General Education Goals and Expected Learning Outcomes

Goals
1. Successful students will critically analyze and apply theoretical and empirical approaches within the social and behavioral sciences, including modern principles, theories, methods, and modes of inquiry.
2. Successful students will recognize the implications of social and behavioral scientific findings and their potential impacts.

Expected learning outcomes
These course-specific learning outcomes will enable students to satisfy the required learning outcomes for the Social and Behavioral Sciences foundational category of the General Education curriculum, which are:

1. Explain basic facts, principles, theories, and methods of social and behavioral science.

2. Explain and evaluate differences, similarities, and disparities among institutions, organizations, cultures, societies, and/or individuals using social and behavioral science.

THE OHIO STATE UNIVERSITY

Department of Economics

3. Analyze how political, economic, individual, or social factors and values impact social structures, policies, and/or decisions.

4. Evaluate social and ethical implications of social scientific and behavioral research.

5. Critically evaluate and responsibly use information from the social and behavioral sciences.

Economics 1101 will achieve these learning outcomes by teaching students about the theories and methods of social scientific inquiry through discussion of social policy, data analysis, economics, regulation, and causal inference. The course is modeled after successful Harvard course and will attempt to each economics like a laboratory science, showing students how to *do* economics rather than only presenting lectures about long-established results. This approach draws from pedagogical work by Mehta and Fine (2019) who find that in the most effective classes, *"rather than touring students through the textbook, teachers invited students to participate in the authentic work of the field….For example, a skillful science teacher in a high-poverty-district high school offered a course in which her students designed, researched, carried out and wrote up original experiments."* This course seeks to apply this approach to teaching introductory empirical economics by discussing frontier research in lectures and having students engage in research themselves in labs and empirical projects. Students will complete four projects and take two in-person exams. These projects will engage critically with current events, social problems, public policies, and regulations. These projects will all involve the analysis of large datasets, as such students will be expected to show competency related to the use, understanding, and pitfalls of basic causal inference methods for social science.

Course Materials, Fees, and Technologies

Required Materials
- Readings of academic papers and related news articles will be made available and assigned via Canvas
- Supplemental readings that enrich our discussions of particular topics will often come from the following two textbooks, both of which are available as a free online eBooks
  - The Economy: Economics for a Changing World. 2017. Core Economics Education. ISBN: 978-0198810247
    - Available as a free eBook here, https://www.core-econ.org/project/core-the-economy/
  - The Effect. 2023. Nick Huntington-Klein, 2021. Chapman & Hall.
    - Available as a free eBook here, https://theeffectbook.net
- For library course materials and additional optional materials, refer to the CarmenCanvas course.

Fees and Additional Requirements

- All students must purchase a **one semester membership to Posit Cloud**, which is an online computing platform that allows us to use R and RStudio. All assignments will be completed using this platform. Using the same online platform ensures that we all have the same packages, instructions for use, and that any tutorials/help myself or the TAs provide will be equally valid for all students. The other nice thing about Posit Cloud is that it works well across all platforms (i.e., Mac, PC, iPad). **The cost is roughly $20 for the whole semester**.

Technology

If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at go.osu.edu/student-tech-access.

- **Computer:** current Mac (MacOS) or PC (Windows 10) with high-speed internet connection, webcam, and microphone
- **BuckeyePass:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

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

Grading and Evaluation

How Your Grade is Calculated

There are 1000 points to be earned in the course

SCHEDULE FOR EXAMS AND EMPIRICAL PROJECTS

Assignment	Due date	Assignment Category	Points/Weight	Assignment Type
Project 1 part 1	11:59 p.m. on Tuesday, 1/30	Projects	62.5	Independent work
Project 1 part 2	11:59 p.m. on Tuesday, 2/13	Projects	62.5	Independent work
Project 2	11:59 p.m. on Thursday, 3/7	Projects	125	Independent work
Midterm exam	9:35-10:55 a.m. on Thursday, 3/5	Exams	225	Independent work
Project 3	11:59 p.m. on Thursday, 4/4	Projects	125	Collaboration optional

THE OHIO STATE UNIVERSITY

Department of Economics

Project 4 part 1 (slides)	11:59 p.m. on Thursday, 4/18	Projects	62.5	Collaboration optional
Project 4 part 2 (analysis)	11:59 p.m. on Thursday, 4/18	Projects	62.5	Collaboration optional
Final exam	Scheduled by the registrar for Monday, April 29 at 8:00 a.m.	Exams	225	Independent Work
Participation	Will be evaluated throughout semester	Participation	50	Independent Work

Descriptions of Major Course Assignments

Projects (50% or 500 points)

Description: A key learning element of the course will be four empirical projects (each worth 12.5% of the final grade), which will give students hands-on experience in doing economics and working with data. We will teach and support the statistical software program R for these projects, but students are welcome to use other programs (e.g., SAS, SPSS, R, Python), provided that their code and work is clearly documented. The empirical projects are more substantial than traditional problem sets and will include significant coding, reading, and writing elements that will put students in the shoes of social scientists doing research. Out of classroom videos will be provided to provide the tools necessary to solve the empirical projects. Students are encouraged to work on the problem sets ahead of time and to seek out help from the instructor. The fourth project will involve a both a written component that is similar to the first three projects as well as a presentation of results to the class. The fourth project can be done as a group.

Projects submissions will typically involve a 4-6 page written response, where specific questions will be need to be answered. On each assignment the number of points each question is worth will be provided. For applicable questions, computer code and output will also need to be submitted. Datasets will be provided via Canvas unless otherwise noted on the assignment. The presentation for the fourth project will be graded based on time, clarity of presentation, accuracy of content, and if all assigned questions are answered.
Mix of Independent work and collaboration optional (see above table)

Exams (45% or 450 points)

Description: There will be two in-class exams each worth 225 points, a mid-term and a final. Exams will be taken in-person. The midterm will be during the regularly scheduled class time and the final will occur according to the university schedule. Exam questions will constitute a mixture of multiple choice and short answer questions. Exams MUST be taken during the scheduled time period. Each exam will be timed and must be completed and submitted within the time period listed above. Makeup exams will not be granted for midterms and will allowed for the final exam only for approved reasons. If you miss an exam without an accepted excuse, you will receive a zero. An accepted excuse is one that I have approved BEFORE the examination day. You must discuss any potential absences during exam dates before the day of the exam with me. If you have an accepted excuse (these must be brought to me beforehand except for sickness, injuries, accidents, etc) the points from a missed midterm exam grade will be added to your final exam. For example, if you have an approved excuse for a midterm (worth 225 points), the final exam grade will absorb the weight of this missed midterm (the final will now be worth 450 points, 225 more than normal because of the additional points from the missed midterm). In

the case of the final exam, if you have an accepted excuse, you will be allowed to take a make-up final exam. In this case, you must make arrangements with me as soon as possible to avoid receiving a zero. If you miss an exam and do not notify me beforehand you will receive a zero for the exam unless you provide documentation showing that you were unable to attend class. Documentation from a medical professional is required for absence during an exam for medical reasons. This documentation must recommend that you do not attend class. The note must specify the exam date. Again, in this case the points from the missed exam grade will be added to your final exam.

Independent Work

Participation (5% or 50 points)

Description: Participation and attendance in class is essential for your understanding of the material. While attendance of course is not explicitly graded, participation via Canvas polls, questions, and other similar activities will explicitly count towards your grade.

Independent work

Grading Scale

93–100: A	80–82.9: B-	67–69.9: D+
90–92.9: A-	77–79.9: C+	60–66.9: D
87–89.9: B+	73–76.9: C	Below 60: E
83–86.9: B	70–72.9: C-	

Tentative Course Schedule

This is a tentative schedule of the course, please refer to the CarmenCanvas course for up-to-date schedule and due dates. See below for reading list that corresponds to each reading number.

Date	Num.	Topic	Selected Methods	Reading/Graded Item Due
Part I: Inequality and Social Mobility				
1/9	1	The Geography of Upward Mobility in America	correlation, regression	Reading: #1
1/11	2	Causal Effects of Neighborhoods	Experiments	
1/16	3	Causal Effects of Neighborhoods and Characteristics of High-Mobility Areas	quasi-experiments	Reading: #2
1/18	4	Policies to Increase Upward Mobility		
1/23	5	Historical and International Evidence on the Drivers of Inequality and Mobility	cost-benefit analysis	Reading: #3
1/25	6	Historical and International Evidence on the Drivers of Inequality and Mobility- part 2		
1/30	7	Upward Mobility, Innovation, and Growth	propensity score reweighting	Reading: #4 Due: Project 1, part 1
Part II: Education				
2/6	8	Higher Education and Upward Mobility	regression discontinuity experiments	Reading #5
2/8	9	Primary Education		
2/13	10	Teachers and Charter Schools	event study designs, competitive equilibrium	Reading #6 Due: Project 1, part 2
Part III: Racial Disparities & Criminal Justice				
2/15	11	Racial Disparities in Economic Opportunity	dynamic models and steady states	Reading: #7
2/20	12	**Disney guest lecture**		Participation points for attendance
2/22	13	Improving Judicial Decisions	machine learning, implicit bias	Reading: #8
Part IV: Health				
2/27	14	Review		
2/29		**In-class midterm**		Midterm exam
3/5	15	Improving Health Outcomes	Hazard models	

THE OHIO STATE UNIVERSITY

Department of Economics

3/7	16	Improving Health Outcomes		Due: Project 2 Reading: #9
3/11-3/15		**Spring break**		
3/19	17	The Economics of Health Care and Insurance	adverse selection	Reading: #10
3/21	18	The Economics of Health Care and Insurance		
3/26	19	Environment and health	diff-in-differences, externalities, discount rates, external validity	Reading: #11
3/28	20	Environment and health		

Part V: Tax Policy

4/2	21	Tax Policy 1: Income Taxation	supply & demand, synthetic control	Reading: #12
4/4	22	Tax Policy 2: Savings and Wealth	behavioral economics	Due: Project 3

Part VI: Economic Development and Institutional Change

4/9	23	Institutions and Economic Development	Historical data analysis	Reading: #13
4/11	24	Power of persistence		

Part VII: Presentations and final

THE OHIO STATE UNIVERSITY

Department of Economics

4/16	25	In-class presentations	Due 4/15 at 11:59pm: Project 4 part 1(slides)
4/18	26	In-class presentations	Due: Project 4, part 2 (analysis)
4/29		**Final exam** at 8:00 am in Stillman Hall 235	Final Exam

Reading List

This is a tentative reading list. Please see CarmenCanvas for an up-to-date reading list where supplemental readings will also be occasionally posted. Students are responsible for reading a small number of required papers (in bold with numbers below). Please focus on understanding the main ideas, rather than technical details. We recommend starting with non-technical summaries and introductions for this purpose. The other papers will be discussed in lecture or in the empirical projects, and may be useful references in those contexts.

Part I: Equality of Opportunity

Geography of Economic Mobility

1. **Chetty, Raj, John Friedman, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter. 2018. "The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility." NBER Working Paper No. 25147. Non-technical summary.**

Chetty, Raj, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez. 2014. "Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States." *Quarterly Journal of Economics* 29 (4): 1553–1623. Non-technical summary.

Policies to Improve Upward Mobility

2. **Bergman, Peter, Raj Chetty, Stefanie DeLuca, Nathaniel Hendren, Lawrence F. Katz, and Christopher Palmer. 2019. "Creating Moves to Opportunity: Experimental Evidence on Barriers to Neighborhood Choice," NBER Working Paper No. 26164. Non-technical summary**

Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment." *American Economic Review* 106 (4): 855–902. Non-technical summary

Chetty, Raj, and Nathaniel Hendren. 2018. "The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects." *Quarterly Journal of Economics* 133(3): 1107-1162. Non-technical summary.

Dobbie, Will, and Roland G. Fryer Jr. 2011. "Are High-Quality Schools Enough to Increase Achievement among the Poor? Evidence from the Harlem Children's Zone," *American Economic Journal: Applied Economics*, 3 (3): 158-87.

Pollack, Craig E., Amanda L. Blackford, Shawn Du, Stefanie Deluca, Rachel J.L. Thornton, and Bradley Herring. 2019. "Association of Receipt of a Housing Voucher With Subsequent Hospital Utilization and Spending," *Journal of the American Medical Association* 322(21): 2115-2124.

Historical Trends

Autor, David H. 2014. "Skills, education, and the rise of earnings inequality among the 'other 99 percent.'" *Science* 344(6186): 843-85.

THE OHIO STATE UNIVERSITY   Department of Economics

Berman, Yonatan. 2019. "The Long Run Evolution of Absolute Intergenerational Mobility." Working paper.

Chetty, Raj, David Grusky, Maximilian Hell, Nathaniel Hendren, Robert Manduca, and Jimmy Narang. 2017. "The Fading American Dream: Trends in Absolute Income Mobility Since 1940." *Science* 356 (6336): 398-406. Non-technical summary

Deming, David J. 2017. "The Growing Importance of Social Skills in the Labor Market," *Quarterly Journal of Economics* (132)4: 1593–1640.

Goldin, Claudia and Lawrence Katz. 2010. *The Race Between Education and Technology* Belknap Press of Harvard University Press, Cambridge, Mass.

Hendren, Nathaniel, and Ben Sprung-Keyser. 2020. "A Unified Welfare Analysis of Government Policies," *Quarterly Journal of Economics* (Forthcoming).

Piketty, Thomas and Emmanuel Saez. 2003. "Income Inequality in the United States, 1913-1998." *Quarterly Journal of Economics* 118(1): 1-39.

Saez, Emmanuel and Gabriel Zucman. 2016. "Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data." *Quarterly Journal of Economics* 131(2): 519-578.

Using Big Data to Measure and Understand Cities

Glaeser, Edward L., Hyunjin Kim, Michael Luca. 2019. "Nowcasting the Local Economy: Using Yelp Data to Measure Economic Activity," in Big Data for 21st Century Economic Statistics, eds. Abraham, Jarmin, Moyer, and Shapiro.

3. **Glaeser, Edward L., Scott Duke Kominers, Michael Luca, Nikhil Naik, 2018. "Big Data and Big Cities: The Promises and Limitations of Improved Measures of Urban Life," Economic Inquiry 56(1): 114–137, January 2018.**

Innovation, Mobility, and Growth

Bell, Alex, Raj Chetty, Xavier Jaravel, Neviana Petkova, and John Van Reenen. 2019. "Who Becomes an Inventor in America? The Importance of Exposure to Innovation." *Quarterly Journal of Economics* 134(2): 715–783. Non-technical summary

4. **Bian, Lin, Sarah-Jane Leslie, and Andrei Cimpian. 2017. "Gender Stereotypes about Intellectual Ability Emerge Early and Influence Children's Interests." Science 391 (6323): 389–91.**

Part II: Education

Higher Education

Chetty, Raj, John N. Friedman, Emmanuel Saez, Nicholas Turner, and Danny Yagan. 2018. "Income Segregation and Intergenerational Mobility Across Colleges in the United States," *Quarterly Journal of Economics*, 2020. Non-technical summary

5. **Dynarski, Susan, C.J. Libassi, Katherine Michelmore, and Stephanie Owen. 2018. "Closing the Gap: The Effect of a Targeted, Tuition-Free Promise on College Choices of High-Achieving, Low-Income Students." NBER Working Paper No. 25349**

Ekowo, Manuela and Iris Palmer. 2016. The Promise and Peril of Predictive Analytics in Higher Education. New America Education Policy Program Report.

Hoxby, Caroline, and Sarah Turner. 2013. "Expanding College Opportunities for High-Achieving, Low Income Students." *Stanford Institute for Economic Policy Research Discussion Paper*, no. 12-014: 1–57.

Zimmerman, Seth D. 2014. "The Returns to College Admission for Academically Marginal Students." *Journal of Labor Economics* 32(4): 711-754.

Primary Education

Chetty, Raj, John N. Friedman, Nathaniel Hilger, Emmanuel Saez, Diane Whitmore Schanzenbach, and Danny Yagan. 2011. "How Does Your Kindergarten Classroom Affect Your Earnings? Evidence from Project STAR." *Quarterly Journal of Economics* 126 (4): 1593–1660. Non-technical summary

Chetty, Raj, John N. Friedman, and Jonah E Rockoff. 2014. "Measuring the Impacts of Teachers I: Evaluating Bias in Teacher Value-Added Estimates." *American Economic Review* 104 (9): 2593–2632. Non-technical summary

6, **Chetty, Raj, John N. Friedman, and Jonah E. Rockoff. 2011. "Measuring the Impacts of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood." *American Economic Review* 104 (9): 2633–79. Non-technical summary**

Fredriksson, Peter, Björn Öckert, and Hessel Oosterbeek. 2013. "Long-Term Effects of Class Size." *Quarterly Journal of Economics* 128 (1): 249–85.

Reardon, Sean. 2016. "School Segregation and Racial Academic Achievement Gaps." *Russell Sage Foundation Journal of the Social Sciences* 2 (5): 34–57.

Reardon, S. F., Ho, A. D., Shear, B. R., Fahle, E. M., Kalogrides, D., Jang, H., Chavez, B., Buontempo, J., & DiSalvo, R. (2019). Stanford Education Data Archive (Version 3.0). https://edopportunity.org/

Charter Schools

Abdulkadiroğlu, Atila, Joshua D. Angrist, Susan M. Dynarski, Thomas J. Kane, and Parag A. Pathak. 2011. "Accountability and Flexibility in Public Schools: Evidence from Boston's Charters and Pilots." *Quarterly Journal of Economics* 126 (2): 699–748.

Dobbie, Will, and Roland G. Fryer. 2011. "Are High-Quality Schools Enough to Increase Achievement among the Poor? Evidence from the Harlem Children's Zone." *American Economic Journal: Applied Economics* 3 (3): 158–87.

Part III: Racial Disparities

Racial Disparities and Segregation

Chetty, Raj, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter. 2018. "Race and Economic Opportunity in the United States: An Intergenerational Perspective." Forthcoming, *Quarterly Journal of Economics* Non-technical summary

Fryer, Roland G., and Steven Levitt. 2004. "Understanding the Black-White Test Score Gap in the First Two Years of School." *Review of Economics and Statistics* 86 (2): 447-464.

Looney, Adam and Nicolas Turner. 2017. "Work and Opportunity Before and After Incarceration." Economic Studies at The Brookings Institute Technical Report.

Pager, Devah. 2003. "The Mark of a Criminal Record." *American Journal of Sociology* 108(5): 937-975.

Discrimination and Bias

Banaji, Mahzarin and Anthony Greenwald. 2013. *Blindspot*, Delacorte Press.

Abrams, David, Marianne Bertrand, and Sendhil Mullainathan. 2012. "Do Judges Vary in Their Treatment of Race?" *Journal of Legal Studies* 41 (2): 347–83.

7. **Bertrand, Marianne, and Sendhil Mullainathan. 2004. "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." *American Economic Review* 94 (4): 991–1013.**

Eberhardt, Jennifer, Phillip Atiba Goff, Valerie J. Purdie, and Paul G. Davies. 2004. "Seeing Black: Race, Crime, and Visual Processing." *Journal of Personality and Social Psychology* 87(6): 876-893.

Edelman, Benjamin, Michael Luca, and Dan Svirsky. 2017. "Racial Discrimination in the Sharing Economy: Evidence from a Field Experiment." *American Economic Journal: Applied Economics* 9 (2): 1–22.

Glover, Dylan, Amanda Pallais, and William Pariente. 2017. "Discrimination as a Self-Fulfilling Prophecy: Evidence from French Grocery Stores." *Quarterly Journal of Economics* 132 (3): 1219-1260.

Stephens-Davidowitz, Seth. 2014. "The Cost of Racial Animus on a Black Candidate: Evidence using Google Search Data." *Journal of Public Economics* 118, 26-40.

Criminal Justice

Heller, Sara B., Anuj K. Shah, Jonathan Guryan, Jens Ludwig, Sendhil Mullainathan, Harold A. Pollack. 2020. "Thinking, Fast and Slow? Some Field Experiments to Reduce Crime and Dropout in Chicago," *Quarterly Journal of Economics*, forthcoming.

Hvistendahl, Mara. 2016. Can 'Predictive Policing' Prevent Crime Before It Happens? *Science News.*

8. Kleinberg, Jon, Himabindu Lakkaraju, Jure Leskovec, Jens Ludwig, and Sendhil Mullainathan. 2017. "Human Decisions and Machine Predictions." NBER Working Paper No. 23180.

James, Gareth, Daniela Witten, Trevor Hastie and Robert Tibshirani, "Tree-Based Methods," Chapter 8 in *An Introduction to Statistical Learning*.

Kleinberg, John, Jens Ludwig, and Sendhil Mullainathan. 2016. A Guide to Solving Social Problems with Machine Learning. *Harvard Business Review.*

Mohler, George, Martin Short, P. Jeffrey Brantingham, Frederick Schoenberg, and George Tita. 2011. "Self-Exciting Point Process Modeling of Crime." *Journal of the American Statistical Association* 106 (493): 100–108.

Spielkamp, Matthias. 2017. Inspecting Algorithms for Bias, MIT Tech Review.

Part IV: Health

Improving Health Outcomes

Allcott, Hunt, Rebecca Diamond, Jean-Pierre Dubé, Jessie Handbury, Ilya Rahkovsky, and Molly Schnell. 2019. "Food Deserts and the Causes of Nutritional Inequality," *Quarterly Journal of Economics* 134(4): 1793-1844.

Bruich, Gregory A. 2014. "The effect of SNAP benefits on household expenditures and consumption: New evidence from scanner data and the November 2013 benefit cuts." Harvard University working paper.

Chetty, Raj, Michael Stepner, Sarah Abraham, Shelby Lin, Benjamin Scuderi, Nicholas Turner, Augustin Bergeron, and David Cutler. 2016. "The Association Between Income and Life Expectancy in the United States, 2001-2014." *Journal of the American Medical Association* 315 (16): 1750–66. Non-technical summary, podcast discussion with Raj Chetty and Angus Deaton, and animated video.

Hastings, Justine and Jesse Shapiro. 2018. "How are SNAP benefits spent? Evidence from a retail panel." *American Economic Review* 108(12): 3493–3540.

Hastings, Justine, Ryan Kessler, and Jesse Shapiro. 2018. "The effect of SNAP on the composition of purchased foods: Evidence and implications." Brown University Working Paper.

9. Lazer, David, Ryan Kennedy, Gary King, and Alessandro Vespignani. 2014. "The Parable of Google Flu: Traps in Big Data Analysis." *Science* 343 (6167): 1203–5.

THE OHIO STATE UNIVERSITY   **Department of Economics**

Obermeyer, Ziad and Thomas H. Lee. 2017. "Lost in thought--the limits of the human mind and the future of medicine," *New England Journal of Medicine* 377(13): 1209-1211.

Obermeyer, Ziad, Brian Powers, Christine Vogeli, and Sendhil Mullainathan. 2019. "Dissecting racial bias in an algorithm used to manage the health of populations," *Science* 366(6464): 447-453.

The Economics of Health Care and Insurance

Baicker, Katherine, Sarah L. Taubman, Heidi L. Allen, Mira Bernstein, Jonathan H. Gruber, Joseph P. Newhouse, Eric C. Schneider, Bill J. Wright, Alan M. Zaslavsky, and Amy N. Finkelstein. 2013. "The Oregon Experiment — Effects of Medicaid on Clinical Outcomes." *New England Journal of Medicine* 368: 1713–22. Non-technical summary.

Finkelstein, Amy N., Matthew Gentzkow, and Heidi Williams. 2016. "Sources of Geographic Variation in Health Care: Evidence from Patient Migration." *Quarterly Journal of Economics* 131 (4): 1681–1726.

10. Finkelstein, Amy, Nathaniel Hendren, and Mark Shepard. 2019. "Subsidizing Health Insurance for Low-Income Adults: Evidence from Massachusetts," *American Economic Review* 109(4): 1530-1567. Non-technical summary

Taubman, Sarah L, Heidi L Allen, Bill J Wright, Katherine Baicker, and Amy N Finkelstein. 2014. "Medicaid Increases Emergency-Department Use: Evidence from Oregon's Health Insurance Experiment." *Science* 343 (6168): 263–68. Non-technical summary

Wherry, Laura, Sarah Miller, Robert Kaestner, and Bruce Meyer. 2018. "Childhood Medicaid Coverage and Later Life Health Care Utilization." *Review of Economics and Statistics* 100(2): 287-302.

Part V: Climate Change

Effects of Air and Water Pollution

Carleton, Tamma, and Solomon Hsiang. 2016. "Social and Economic Impacts of Climate." *Science* 353 (6304): 1112.

Dell, Melissa, Benjamin Jones, and Benjamin Olken. 2012. "Temperature Shocks and Economic Growth: Evidence from the Last Half Century." *American Economic Journal: Macroeconomics* 4(3): 66-95.

Giglio, Stefano, Matteo Maggiori, and Johannes Stroebel. 2015. "Very Long-Run Discount Rates." *Quarterly Journal of Economics* 130 (1): 1–53.

Isen, Adam, Maya Rossin-Slater, and W. Reed Walker. 2017. "Every Breath You Take - Every Dollar You'll Make: The Long-Term Consequences of the Clean Air Act of 1970." *Journal of Political Economy* 125(3): 848-909. Non-technical summary

11. Moore, Frances C., Nick Obradovich, Flavio Lehner, Patrick Baylis. 2019. "Rapidly Declining Remarkability of Temperature Anomalies May Obscure Public Perception of Climate Change." *Proceedings of the National Academy of Sciences,* 116(11): 4905–4910.

THE OHIO STATE UNIVERSITY

Department of Economics

Policies to Mitigate Climate Change

Allcott, Hunt, and Todd Rogers. 2014. "The Short-Run and Long-Run Effects of Behavioral Interventions: Experimental Evidence from Energy Conservation." *American Economic Review* 104(10): 3003–37.

Doyle, Joseph J., and Krislert Samphantharak. 2008. "$2.00 Gas! Studying the Effects of a Gas Tax Moratorium." *Journal of Public Economics* 92 (3-4): 869–84.

Gallagher, Kelly Sims, and Erich Muehlegger. 2011. "Giving Green to Get Green? Incentives and Consumer Adoption of Hybrid Vehicle Technology." *Journal of Environmental Economics and Management* 61 (1):1–15.

Ito, Koichiro. 2014. "Do Consumers Respond to Marginal or Average Price? Evidence from Nonlinear Electricity Pricing." *American Economic Review* 104 (2): 537–63.

Li, Shanjun, Joshua Linn, and Erich Muehlegger. 2014. "Gasoline Taxes and Consumer Behavior." *American Economic Journal: Economic Policy* 6 (4): 302–42

Schultz, P. Wesley, Jessica M. Nolan, Robert B. Cialdini, Noah J. Goldstein, and Vladas Griskevicius. 2007. "The Constructive, Destructive, and Reconstructive Power of Social Norms." *Psychological Science* 18 (5): 429–34.

Part VI: Tax Policy

Income Taxation

Alesina, Alberto, Stefanie Stantcheva, and Edoardo Teso. 2018. "Intergenerational Mobility and Preferences for Redistribution." *American Economic Review* 108(2): 521–554

Chetty, Raj, Emmanuel Saez, and John Friedman. 2013. "Using Differences in Knowledge Across Neighborhoods to Uncover the Impacts of the EITC on Earnings." *American Economic Review*, 103(7): 2683-2721.

Chetty, Raj, Adam Looney, and Kory Kroft. 2009. "Salience and Taxation: Theory and Evidence," *American Economic Review* 99(4): 1145-77.

DeBacker, Jason, Bradley T. Heim, Shanthi P. Ramnath, and Justin M. Ross. 2019. "The Impact of State Taxes on Pass-through Businesses: Evidence from the 2012 Kansas Income Tax Reform." *Journal of Public Economics* 174: 53-75.

12. Diamond, Peter and Emmanuel Saez. 2011. "The Case for a Progressive Tax: From Basic Research to Policy Recommendations." *Journal of Economic Perspectives* 25(4): 165–190.

Savings and Wealth

Chetty, Raj, John Friedman, Soren Leth-Petersen, Torben Nielsen, and Tore Olsen. 2014. "Active vs. Passive Decisions and Crowd-out in Retirement Savings Accounts: Evidence from Denmark," *Quarterly Journal of Economics* 129(3): 1141-1219. Non-technical summary

Duflo, Esther, and Emmanuel Saez. 2003. "The Role of Information and Social Interactions in Retirement Plan Decisions: Evidence from a Randomized Experiment," *Quarterly Journal of Economics* 118: 815-842.

Madrian, Brigitte and Dennis Shea. 2001. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior." *Quarterly Journal of Economics* 116(4): 1149-1187.

Part VII: Economic Development and Institutional Change

Acemoglu, Daron, and James Robinson. 2008. The Role of Institutions in Growth and Development. Commission on Growth and Development Working Paper No. 10.

Asher, Sam, Paul Novosad, and Charlie Rafkin. 2019. "Intergenerational Mobility in India: Estimates from New Methods and Administrative Data." Dartmouth Working Paper.

Banerjee, Abhijit, and Esther Duflo. 2012. *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. PublicAffairs

   13. Dell, Melissa. 2010. "The Persistent Effects of Peru's Mining Mita." *Econometrica* 78(6): 1863-1903.

Dell, Melissa, Nathan Lane, and Pablo Querubin. 2019. "The Historical State, Local Collective Action, and Economic Development in Vietnam." *Econometrica*, forthcoming.

Miguel, Edward Michael Kremer. 2004. "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities." *Econometrica* 72(1): 159-217.

Muralidharan, Karthik and Venkatesh Sundararaman. 2011. "Teacher Performance Pay: Experimental Evidence from India." *Journal of Political Economy* 119(1): 39-77.

THE OHIO STATE UNIVERSITY

Department of Economics

Course Policies

Attendance and Participation Expectations

Participation and attendance in class is essential for your understanding of the material. While attendance of course is not explicitly graded, participation via Canvas polls, in-class questions and answers, and other similar in-class activities will explicitly count towards your grade.

Academic Misconduct

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

Late Assignments and Making Up Work

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

Instructor Feedback and Response Time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call **614-688-4357(HELP)** at any time if you have a technical problem.)

- **Preferred contact method:** If you have a question, please contact me first through my Ohio State email address. I will reply to emails within **48 hours on days when class is in session at the university**. Please use your official Ohio State email address when emailing me. Please also list the course number and section in the subject line of the email (e.g., "ECON 1101: Trouble accessing video link" would be a great subject line if for some reason a link I posted on Canvas was not working). Without these last two items, I may not be able to immediately recognize your email as being associated with this class. This might result in an unanswered, or a delayed response. If for some reason, I do not reply to an email of yours, please send me a follow-up after 48 hours. It is completely ok to do this.
- **Class announcements:** I will send all important class-wide messages through the Announcements tool in CarmenCanvas. Please check your notification preferences (go.osu.edu/canvas-notifications) to ensure you receive these messages.
- **Grading:** For assignments submitted by the due date, I will try to provide grades within **ten days**. Assignments submitted after the due date may have reduced feedback and grades may take longer to be posted.]

Copying

The materials used in connection with this course, including those created by the instructor or classmates, may be subject to copyright protection and are only for the use of students

THE OHIO STATE UNIVERSITY

Department of Economics

officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Acknowledgments

I am grateful to Raj Chetty and the Opportunity Insights team to share with us many of the resources for this course. I am also grateful to André Kurmann at Drexel University for sharing their version of the course. More information about Raj Chetty's original version of the course is available at: https://opportunityinsights.org/course/. Use of all material from this website has been cleared with Raj Chetty and André Kurmann.

University Academic Policies

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

- **Accessibility**: Arrange for accommodations if you anticipate barriers to your learning based on a disability
- **Academic integrity**: Understand your rights and responsibilities related to academic integrity and review the university's processes for addressing claims of academic misconduct
- **Safe learning environment**: Know the university's commitments to an environment free from discrimination or harassment, and find resources for reporting or finding support.

Mental Health and Well-Being

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Disability Services Statement

Accommodation Policy

The university strives to maintain a healthy and accessible environment to support student learning in and out of the

classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are isolating while waiting for a COVID-19 test result, please let me know immediately. Those testing positive for COVID-19 should refer to the Safe and Healthy Buckeyes site for resources. Beyond five days of the required COVID-19 isolation period, I may rely on Student Life Disability Services to establish further reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu.

FERPA & Privacy in CarmenZoom

Video and audio recordings of class lectures will be part of the classroom activity. The video and audio recording is used for educational use/purposes and may be made available to all students presently enrolled in the course. Please note that you are not allowed to share these recordings. This is to protect your FERPA rights and those of your fellow students.

Land Acknowledgement

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

Weather or other short-term closing

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

Religious Accommodations

THE OHIO STATE UNIVERSITY

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the Office of Institutional Equity.

GE Foundation Courses

Overview

Courses that are accepted into the General Education (GE) Foundations provide introductory or foundational coverage of the subject of that category. Additionally, each course must meet a set of Expected Learning Outcomes (ELO). Courses may be accepted into more than one Foundation, but ELOs for each Foundation must be met. It may be helpful to consult your Director of Undergraduate Studies or appropriate support staff person as you develop and submit your course.

This form contains sections outlining the ELOs of each Foundation category. You can navigate between them using the Bookmarks function in Acrobat. Please enter text in the boxes to describe how your class meets the ELOs of the Foundation(s) to which it applies. Because this document will be used in the course review and approval process, you should use language that is clear and concise and that colleagues outside of your discipline will be able to follow. Please be as specific as possible, listing concrete activities, specific theories, names of scholars, titles of textbooks etc. Your answers will be evaluated in conjunction with the syllabus submitted for the course.

Accessibility

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

GE Rationale: Foundations: Race, Ethnicity, and Gender Diversity (3 credits)

Requesting a GE category for a course implies that the course fulfills **all** the expected learning outcomes (ELOs) of that GE category. To help the reviewing panel evaluate the appropriateness of your course for the Foundations: Race, Ethnicity, and Gender Diversity, please answer the following questions for each ELO.

A. Foundations
Please explain in 50-500 words why or how this course is introductory or foundational for the study of Race, Ethnicity and Gender Diversity.

B. Specific Goals of Race, Ethnicity, and Gender Diversity

GOAL 1: Successful students will engage in a systematic assessment of how historically and socially constructed categories of race, ethnicity, and gender, and possibly others, shape perceptions, individual outcomes, and broader societal, political, economic, and cultural systems.

Expected Learning Outcome 1.1: Successful students are able to describe and evaluate the social positions and representations of categories including race, gender, and ethnicity, and possibly others. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.2: Successful students are able to explain how categories including race, gender, and ethnicity continue to function within complex systems of power to impact individual lived experiences and broader societal issues. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

Expected Learning Outcome 1.3: Successful students are able to analyze how the intersection of categories including race, gender, and ethnicity combine to shape lived experiences. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.4: Successful students are able to evaluate social and ethical implications of studying race, gender, and ethnicity. Please link this ELO to the course goals and topics and indicate *specific* activities/ assignments through which it will be met. *(50-700 words)*

GOAL 2: Successful students will recognize and compare a range of lived experiences of race, gender, and ethnicity.

Expected Learning Outcome 2.1: Successful students are able to demonstrate critical self- reflection and critique of their social positions and identities. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 2.2: Successful students are able to recognize how perceptions of difference shape one's own attitudes, beliefs, or behaviors. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 2.3: Successful students are able to describe how the categories of race, gender, and ethnicity influence the lived experiences of others. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met.

GE Rationale: Foundations: Social and Behavioral Sciences (3 credits)

Requesting a GE category for a course implies that the course **all** expected learning outcomes (ELOs) of that GE category. To help the reviewing panel evaluate the appropriateness of your course for the Foundations: Social and Behavioral Sciences, please answer the following questions for each ELO.

A. Foundations
Please explain in 50-500 words why or how this course is introductory or foundational in the study of Social and Behavioral Sciences.

B. Specific Goals of Social and Behavioral Sciences

GOAL 1: Successful students will critically analyze and apply theoretical and empirical approaches within the social and behavioral sciences, including modern principles, theories, methods, and modes of inquiry.

Expected Learning Outcome 1.1: Successful students are able to explain basic facts, principles, theories and methods of social and behavioral science. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.2: Successful students are able to explain and evaluate differences, similarities, and disparities among institutions, organizations, cultures, societies, and/or individuals using social and behavioral science. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

GOAL 2: Successful students will recognize the implications of social and behavioral scientific findings and their potential impacts.

Expected Learning Outcome 2.1: Successful students are able to analyze how political, economic, individual, or social factors and values impact social structures, policies, and/or decisions. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 2.2: Successful students are able to evaluate social and ethical implications of social scientific and behavioral research. Please link this ELO to the course goals and topics and indicate *specific* activities/ assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

Expected Learning Outcome 2.3: Successful students are able to critically evaluate and responsibly use information from the social and behavioral sciences. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

GE Rationale: Foundations: Historical or Cultural Studies (3 credits)

Requesting a GE category for a course implies that the course fulfills the expected learning outcomes (ELOs) of that GE category. To help the reviewing panel evaluate the appropriateness of your course for the Foundations: Historical and Cultural Studies, please answer the following questions for each ELO. Note that for this Foundation, a course need satisfy **either** the ELOs for Historical Studies **or** the ELOs for Cultural Studies.

A. Foundations
Please explain in 50-500 words why or how this course is introductory or foundational in the study of History **or** Cultures.

B. Specific Goals of Historical *or* Cultural Studies

Historical Studies (A) Goal: Successful students will critically investigate and analyze historical ideas, events, persons, material culture and artifacts to understand how they shape society and people.

Expected Learning Outcome 1.1A: Successful students are able to identify, differentiate, and analyze primary and secondary sources related to historical events, periods, or ideas. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.2A: Successful students are able to use methods and theories of historical inquiry to describe and analyze the origin of at least one selected contemporary issue. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

Expected Learning Outcome 1.3A: Successful students are able to use historical sources and methods to construct an integrated perspective on at least one historical period, event or idea that influences human perceptions, beliefs, and behaviors. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.4A: Successful students are able to evaluate social and ethical implications in historical studies. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

Cultural Studies (B) Goal: Successful students will evaluate significant cultural phenomena and ideas to develop capacities for aesthetic and cultural response, judgment, interpretation, and evaluation.

Expected Learning Outcome 1.1B: Successful students are able to analyze and interpret selected major forms of human thought, culture, ideas or expression. Please link this ELO to the course goals and topics and identify the *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.2B: Successful students are able to describe and analyze selected cultural phenomena and ideas across time using a diverse range of primary and secondary sources and an explicit focus on different theories and methodologies. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.3B: Successful students are able to use appropriate sources and methods to construct an integrated and comparative perspective of cultural periods, events or ideas that influence human perceptions, beliefs, and behaviors. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.4B: Successful students are able to evaluate social and ethical implications in cultural studies. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met.

GE Rationale: Foundations: Writing and Information Literacy (3 credits)

Requesting a GE category for a course implies that the course fulfills **all** expected learning outcomes (ELOs) of that GE category. To help the reviewing panel evaluate the appropriateness of your course for the Foundations: Writing and Information Literacy, please answer the following questions for each ELO.

Course Subject & Number: _____

A. Foundations

Please explain in 50-500 words why or how this course is introductory or foundational in the study of Writing and Information Literacy.

B. Specific Goals of Writing and Information Literacy

GOAL 1: Successful students will demonstrate skills in effective reading, and writing, as well as oral, digital, and/or visual communication for a range of purposes, audiences, and context.

Expected Learning Outcome 1.1: Successful students are able to compose and interpret across a wide range of purposes and audiences using writing, as well as oral, visual, digital and/or other methods appropriate to the context.
Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. Explain how the course includes opportunities for feedback on writing and revision. Furthermore, please describe how you plan to insure sufficiently low instructor-student ratio to provide efficient instruction and feedback. *(50-700 words)*

Course Subject & Number: _____

Expected Learning Outcome 1.2: Successful students are able to use textual conventions, including proper attribution of ideas and/or source, as appropriate to the communication situation. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. Is an appropriate text, writing manual, or other resource about the pedagogy of effective communication being used in the course? *(50-700 words)*

Expected Learning Outcome 1.3: Successful students are able to generate ideas and informed responses incorporating diverse perspectives and information from a range of sources, as appropriate to the communication situation. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

Expected Learning Outcome 1.4: Successful students are able to evaluate social and ethical implications in writing and information literacy practices. Please link this ELO to the course goals and topics and indicate *specific* activities/ assignments through which it will be met. *(50-700 words)*

GOAL 2: Successful students will develop the knowledge, skills, and habits of mind needed for information literacy.

Expected Learning Outcome 2.1: Successful students are able to demonstrate responsible, civil, and ethical practices when accessing, using, sharing, or creating information. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 2.2: Successful students are able to locate, identify and use information through context appropriate search strategies. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 2.3: Successful students are able to employ reflective and critical strategies to evaluate and select credible and relevant information sources. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

GE Rationale: Foundations: Literary, Visual, or Performing Arts (3 credits)

Requesting a GE category for a course implies that the course fulfills **all** expected learning outcomes (ELOs) of that GE category. To help the reviewing panel evaluate the appropriateness of your course for the Foundations: Literary, Visual, and Performing Arts, please answer the following questions for each ELO.

A. Foundations

Please explain in 50-500 words why or how this course is introductory or foundational in the study of Literary, Visual, or Performing Arts.

B. Specific Goals

Goal 1: Successful students will analyze, interpret, and evaluate major forms of human thought, cultures, and expression; and demonstrate capacities for aesthetic and culturally informed understanding.

Expected Learning Outcome 1.1: Successful students are able to analyze and interpret significant works of design or visual, spatial, literary or performing arts. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

Expected Learning Outcome 1.2: Successful students are able to describe and explain how cultures identify, evaluate, shape, and value works of literature, visual and performing art, and design. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.3: Successful students are able to evaluate how artistic ideas influence and shape human beliefs and the interactions between the arts and human perceptions and behavior. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

Expected Learning Outcome 1.4: Successful students are able to evaluate social and ethical implications in literature, visual and performing arts, and design. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Goal 2: Successful students will experience the arts and reflect on that experience critically and creatively.

Expected Learning Outcome 2.1: Successful students are able to engage in informed observation and/or active participation within the visual, spatial, literary, or performing arts and design. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

Expected Learning Outcome 2.2: Successful students are able to critically reflect on and share their own experience of observing or engaging in the visual, spatial, literary, or performing arts and design.

Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

GE Rationale: Foundations: Natural Science (4 credits)

Requesting a GE category for a course implies that the course fulfills **all** expected learning outcomes (ELOs) of that GE category. To help the reviewing panel evaluate the appropriateness of your course for the Foundations: Natural Sciences, please answer the following questions for each ELO.

A. Foundations

Please explain in 50-500 words why or how this course is introductory or foundational in the study of Natural Science.

B. Specific Goals for Natural Sciences

GOAL 1: Successful students will engage in theoretical and empirical study within the natural sciences, gaining an appreciation of the modern principles, theories, methods, and modes of inquiry used generally across the natural sciences.

Expected Learning Outcome 1.1: Successful students are able to explain basic facts, principles, theories and methods of modern natural sciences; describe and analyze the process of scientific inquiry. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.2: Successful students are able to identify how key events in the development of science contribute to the ongoing and changing nature of scientific knowledge and methods. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

Expected Learning Outcome 1.3: Successful students are able to employ the processes of science through exploration, discovery, and collaboration to interact directly with the natural world when feasible, using appropriate tools, models, and analysis of data.   Please explain the 1-credit hour equivalent experiential component included in the course: e.g., traditional lab, course-based research experiences, directed observations, or simulations. Please note that students are expected to analyze data and report on outcomes as part of this experiential component. *(50-1000 words)*

GOAL 2: Successful students will discern the relationship between the theoretical and applied sciences, while appreciating the implications of scientific discoveries and the potential impacts of science and technology.

Expected Learning Outcome 2.1: Successful students are able to analyze the inter-dependence and potential impacts of scientific and technological developments. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 2.2: Successful students are able to evaluate social and ethical implications of natural scientific discoveries. Please link this ELO to the course goals and topics and indicate *specific* activities/ assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

Expected Learning Outcome 2.3: Successful students are able to critically evaluate and responsibly use information from the natural sciences. Please link this ELO to the course goals and topics and indicate *specific* activities/ assignments through which it will be met. *(50-700 words)*

GE Rationale: Foundations: Mathematical and Quantitative Reasoning (or Data Analysis) (3 credits)

Requesting a GE category for a course implies that the course fulfills **all** expected learning outcomes (ELOs) of that GE category. To help the reviewing panel evaluate the appropriateness of your course for the Foundations: Mathematical and Quantitative Reasoning (or Data Analysis), please answer the following questions for each ELO.

A. Foundations

Please explain in 50-500 words why or how this course is introductory or foundational in the study of Mathematical & Quantitative Reasoning (or Data Analysis).

B. Specific Goals for Mathematical & Quantitative Reasoning/Data Analysis

Goal: Successful students will be able to apply quantitative or logical reasoning and/or mathematical/statistical analysis methodologies to understand and solve problems and to communicate results.

Expected Learning Outcome 1.1: Successful students are able to use logical, mathematical and/or statistical concepts and methods to represent real-world situations. Please link this ELO to the course goals and topics and indicate *specific* activities/ assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.2: Successful students are able to use diverse logical, mathematical and/or statistical approaches, technologies, and tools to communicate about data symbolically, visually, numerically, and verbally.
Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.3: Successful students are able to draw appropriate inferences from data based on quantitative analysis and/or logical reasoning. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Course Subject & Number: _____

Expected Learning Outcome 1.4: Successful students are able to make and evaluate important assumptions in estimation, modeling, logical argumentation, and/or data analysis. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Expected Learning Outcome 1.5: Successful students are able to evaluate social and ethical implications in mathematical and quantitative reasoning. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. *(50-700 words)*

Concurrence Form

The Ohio State University College of Arts and Sciences Concurrence Form

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

An academic unit initiating a request should complete Section A of this form and send a copy of the form, course request, and syllabus to each of the academic units that might have related interests in the course. Units should be allowed two weeks to respond to requests for concurrence.
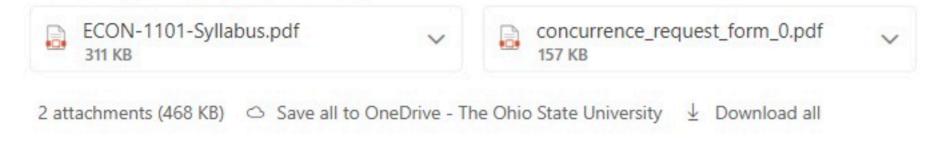
Academic units receiving this form should respond to Section B and return the form to the initiating unit. Overlap of course content and other problems should be resolved by the academic units before this form and all other accompanying documentation may be forwarded to the College of Arts and Sciences and the Office of Academic Affairs.

A. Proposal to review

Initiating Academic Unit	Course Number	Course Title

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

Academic Unit Asked to Review	Date response needed

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

Signatures

Amy Ando

1. Name   Position   Unit   Date

2. Name   Position   Unit   Date

3. Name   Position   Unit   Date

Revised 5/27/14

Ye, Lixin

To: Ando, Amy; MacEachern, Steven; Arora, Anish; Coleman, Mathew; McGraw, Scott; Williams, Kristi; Wegener, Duane; Makhija, Anil

Cc: Burnell, Sydneigh; Yang, Huanxing

Thu 8/17/2023 1:11 PM

📄 ECON-1101-Syllabus.pdf
311 KB

📄 concurrence_request_form_0.pdf
157 KB

2 attachments (468 KB) ☁ Save all to OneDrive - The Ohio State University ⬇ Download all

Dear Colleagues,

I am writing to seek your concurrences for Econ 1101: Using Big Data to Solve Economic and Social Problems, a course newly proposed by our department. Attached please find the syllabus and the concurrence request form. I would very much appreciate it if your department/college could review the proposed course and return the concurrence form before August 31.

Thanks,
Lixin

Lixin Ye
Professor and Director of Undergraduate Studies
Department of Economics
The Ohio State University
449A Arps Hall, 1945 N. High Street, Columbus, OH 43210
614-292-6883 Office/ 614-292-3906 Fax

https://www.asc.ohio-state.edu/ye.45/

Ye, Lixin
To: Lee, Yoonkyung
Cc: Zhang, Yuan; Sivakoff, David; Kaizar, Elly; Yang, Huanxing; Burnell, Sydneigh; Hollingsworth, Alex

Wed 8/30/2023 8:09 AM

Dear Yoon,

Thanks so much for the support from your department as well as your detailed comments and suggestions, which should be very helpful for our instructor in offering this new course.

Thanks too for letting us know about your plan in developing a new course on causal inference. We are certainly interested and please do keep us posted.

Best,
Lixin

From: Lee, Yoonkyung <yklee@stat.osu.edu>
Sent: Tuesday, August 29, 2023 8:44 PM
To: Ye, Lixin <ye.45@osu.edu>
Cc: Zhang, Yuan <yzhanghf@stat.osu.edu>; Sivakoff, David <dsivakoff@stat.osu.edu>; Kaizar, Elly <kaizar.1@osu.edu>
Subject: Re: Concurrence request for Econ 1101: Using Big Data to Solve Economic and Social Problems

Dear Professor Ye,

The curriculum committee in the Department of Statistics reviewed the course proposal (Econ 1101). We find the proposed course focusing on social and economic issues interesting. Although it covers some statistical topics such as regression and causal inference, it does not replicate any of our current courses. So, we support the proposed course.