Economics 4999 - Independent Study - is for individual study and research under the direction of the Director of Undergraduate Independent Research, currently Jere R. Behrman, or a Faculty Advisor approved by Professor Behrman. At a minimum, the student must write a major paper summarizing, unifying, and interpreting the results of the study, all presented in standard form with sources detailed in the references. This course is an alternative if for some reason Economics 4900 – Honors Seminar, cannot be taken. This is a one-semester, one-c.u. course. Only one Econ 4999 class may count toward the major and will satisfy a upper-level course requirement. One Econ 4999 course may be used toward the minor, but it does NOT satisfy the upper-level course requirement for the minor. Prerequisites for being considered for enrolling in Economics 4999 that should be sent to Jere Behrman <jbehrman@econ.upenn.edu> as electronic attachments with your surname and given name at the start of each file name include:

- 1) Your full name, Penn ID and e-mail address:
- 2) Summary of your course and grade experience to date:
 - 1a) Verification that have taken Economics 2100, 2200 and 2300.
 - 1b) Transcript
 - 1c) GPA overall and in economics
 - 1d) Verification of major(s)
 - 1e) List of economics courses previously taken and the faculty who taught these courses.
- 3) Explanation of why Economics 4900 cannot be taken.
- 4) Short outline of proposed topic including (a) motivation (question to be asked, hypotheses to be tested), (b) framework for analysis, (c) data to be used. (You may refer to our website in Undergraduate Program, Course Descriptions, Intermediate-Level Courses, Econ 4999-Independent Study to see the type of outline required to present to Professor Behrman and a list of some recent topics covered by students in Econ 4999.) Note: If you are applying for an Independent Study as part of the Curricular Practical Training (CPT) summer internship arrangement, you must provide to your advisor and to Professor Behrman a revised outline that incorporates what you learned during your internship about your independent study before the start of the fall semester. If you are otherwise (i.e., not CPT) applying for an Independent Study, you must provide to your advisor and to Professor Behrman a revised outline by one month after the start of the semester. Failure to comply with this requirement for a revised outline may result in a 10% course grade penalty.
- 5) Name of faculty advisor who has agreed to serve in this role (please provide email confirming this agreement): You should arrange for a faculty advisor whose expertise matches well your independent study research and/or with whom you are familiar from your previous courses or who is a member of the Economics the Undergraduate Research Advisory Committee (the membership of which for 2022-23 is: Jere Behrman (chair), Karun Adusumilli, Francesco Agostinelli, Juan Pablo Atal, Luca Bossi, Camilo Castillo, Alessandro Dovis, Anne Duchene, Kevin He, Joachim Hubmer, Xiao Lin Margaux Luflade), but possibly some other faculty member in economics or, in some cases, outside of economics who seems a good match for your interests. Any economics faculty member can agree to be your advisor, as can suitable faculty members from other departments with permission from Professor Behrman (you should confirm with Professor Behrman before you approach faculty outside of economics that they would be suitable).

If Professor Behrman approves your proposal, he will sign and send a permission form to the Economics Undergraduate Coordinator Emily Romanello econ-ugrad@sas.upenn.edu in the main Economics Office (and cc you) so she can register you for the course. If your project involves human subjects as defined by the University's Institutional Review Board (IRB), you also will have to provide proof of Human Subject Training Certification and IRB approval. Finally, the final version of your study will have to be submitted via e-mail to your faculty advisor and to Professor Behrman by five days after the last day of classes.