

# Economic, Political and Policy Sciences

[EPPS 1110](#) Freshman Seminar (1 semester credit hour) This course is a graduation requirement for all first time in college EPPS freshman. This course is designed to introduce incoming freshmen to the intellectual and cultural environment of the School of Economic, Political and Policy Sciences. Students will learn about EPPS majors, research opportunities, careers, and internships. The course covers introductory information applied to criminology, political science, public affairs/public administration, nonprofit management, economics, global economy, and sociology. This course is also open to all non-EPPS majors. Corequisite: [UNIV 1010](#). (1-1) Y

[EPPS 2301](#) Research Design in the Social and Policy Sciences (3 semester credit hours) Approaches adopted by the social and policy sciences to increase understanding and develop actions to improve the world. Topics include: philosophy of science, logic of inquiry, role of theory in attributing cause, articulating answerable research questions, efficient exploration of the research literature, types of research design, qualitative approaches, transforming abstract concepts into measurable indicators, producing reliable data, assessing validity of conclusions, and research ethics and politics. Students completing this course will have a good understanding of systematic inquiry and its capacity to yield useful knowledge and a solid foundation for further study of research methods. (3-0) S

[EPPS 2302](#) Methods of Quantitative Analysis in the Social and Policy Sciences (3 semester credit hours) This course introduces basic concepts and methods of statistical analysis used in different fields of social and policy science research to better understand human relationships and the impacts of government action on them. Topics include data description, using probability to assess the reasonableness of claims about the world based on sample data, exploring cause-effect interactions through regression models, and application of software to ease visualization and calculation. Students completing this course will be good consumers of statistical information and have a solid foundation for pursuing further study of quantitative analysis. NOTE: [EPPS 2302](#) or [EPPS 2303](#) is required for all School of Economic, Political and Policy Sciences majors. Credit cannot be received for both courses, [EPPS 2302](#) and [EPPS 2303](#). Prerequisite: [MATH 1314](#) or equivalent. (3-0) S

[EPPS 2303](#) Descriptive and Inferential Statistics for the Social and Policy Sciences (3 semester credit hours) Statistical procedures used to analyze relationships in the social and policy sciences. Subject matters cover: display (frequency, contingency tables); data types (continuous, categorical); measurement (central tendency, variability); probability distributions (discrete, continuous, normal); inference (hypothesis testing, sampling distributions, confidence intervals); testing differences in means, proportions, variances, frequencies, medians and ranks (z-test, t-test, power, chi-square test, ANOVA, Wilcoxon, etc.); association (correlation); explanation and prediction (regression); and software applications. Students completing this course will be knowledgeable consumers of statistical information and prepared to undertake advanced statistics courses. NOTE: [EPPS 2302](#) or [EPPS 2303](#) is required for all School of Economic, Political and Policy Sciences majors and is a prerequisite for required research methods courses in economics ([ECON 3304](#)). Credit

cannot be received for both courses, [EPPS 2302](#) and [EPPS 2303](#). Prerequisite: [MATH 1314](#) or equivalent. (3-0) S

[EPPS 2305](#) Spatial Thinking and Data Analytics (3 semester credit hours) This course explores the role that Spatial Thinking plays across a variety of subject areas in science, engineering, mathematics, arts and humanities. We will introduce rich resources of geospatial data from government agencies, social media, and semantic web. Students will be exposed to introductory methods in Spatial Data Analytics afforded by Global Positioning Systems (GPS), Remote Sensing (RS), Geographic Information Systems (GIS), Spatial Analysis, and Mapping technologies and learn how to bring spatial considerations into research and applications. The course is intended to empower students with spatial intelligence (one of the nine intelligences on Howard Gardner's Theory of Multiple Intelligences) and with experiences of applying spatial thinking and data analytics to problem solving. (Same as [GEOS 2305](#) or [GISC 2305](#)) (3-0) Y

[EPPS 3301](#) Special Topics In Economic, Political and Policy Sciences (3 semester credit hours) Explores current topics in Economic, Political and Policy Sciences. May be repeated for credit as topics vary (9 semester credit hours maximum). Instructor consent required. (3-0) R

[EPPS 3305](#) Statistical Modeling for the Social and Policy Sciences (3 semester credit hours) This course introduces multivariate modeling of statistical relationships in which outcome or response variables depend on one or more explanatory or predictor variables. It covers linear and non-linear multiple regression for continuous outcome variables, logistic regression for binary outcome variables, and multifactor analysis of variance for quantitative outcome and two or more categorical explanatory variables. Emphasis on understanding the uses and limitations of models, fitting models to data and interpreting results, assessing and diagnosing models, and using models for statistical inference. Prerequisite: [EPPS 2302](#) or [EPPS 2303](#) or equivalent. (3-0) R

[EPPS 4301](#) Public Health (3 semester credit hours) An overview of American health care policy and the political, economic, demographic, and cultural contexts within which it operates. Specific topics to be covered include the rise of scientific medicine and the evolving role of the American medical profession, health care finance and the implications of third party reimbursement systems; access to health care and the persistence of, and responses to, health disparities; the causes and consequences of health care cost trends; factors that shape the quality of health care services; the role of public health programs and of health prevention and promotion; and the nature and impact of recent health care policy reforms. (3-0) Y