

Criminology

[CRIM 6300](#) Proseminar in Criminology (3 semester credit hours) Introduction to graduate study in criminology through exposure to topics such as academic publishing, formulation of research questions, writing of literature reviews, career options in the discipline, professional ethics, data literacy, and vitae preparation. (3-0) Y

[CRIM 6301](#) Research Design I (3 semester credit hours) This course provides an overview of the research enterprise and the study of data development strategies and techniques to facilitate effective statistical analysis, using practical criminological applications. Topics generally covered include: (1) issues and techniques in social science research with emphasis on philosophy of science, theory testing, and hypothesis formulation; (2) measurement and data collection strategies, reliability and validity of measures and results, sampling, surveys; and (3) examination of qualitative versus quantitative research techniques, working with observational data, field research issues, and triangulation. (3-0) Y

[CRIM 6303](#) Etiology of Crime and Criminality (3 semester credit hours) Examines the history of criminological thought incorporating the major works of such theorists as Bentham, Beccaria, Marx, Durkheim, Lombroso, Shaw and McKay, Sutherland, Becker, and Merton. (3-0) Y

[CRIM 6308](#) Victimology (3 semester credit hours) Examines risks and consequences of crime for its victims. Issues considered include victim-offender relationships, characteristics of victims, the nature of the injuries they experience, and criminal justice procedures that involve them. (3-0) R

[CRIM 6309](#) Communities and Crime (3 semester credit hours) Examines the trends and sources of crime and social disorder across communities. The course emphasizes relationships among crime, fear of crime, neighborhood change, neighborhood responses to crime, and public policies. (3-0) R

[CRIM 6310](#) Delinquency and Juvenile Justice (3 semester credit hours) Examines youth crime, child victimization, and juvenile justice. Students learn the processes by which specific behaviors are identified as delinquent, the historical evolution of the juvenile justice, and current policies and practices. (3-0) R

[CRIM 6311](#) Crime and Justice Policy (3 semester credit hours) An introduction to crime and the efforts to control crime through public policy. (3-0) Y

[CRIM 6312](#) Legal Aspects of Justice Administration (3 semester credit hours) Examines key legal issues relevant to justice administration. Topics include contemporary issues in criminal law and procedure, civil liability, asset forfeiture, administrative discipline, constitutional rights of justice practitioners, employment conditions and standards, and sexual harassment policy. Department consent required. (3-0) Y

[CRIM 6313](#) Corrections (3 semester credit hours) Examines the history, forms, and functions of correctional philosophies, institutions, programs, and policies. Topics include the structure and

functions of prisons and jails, community corrections, intermediate sanctions, and the growth of correctional control in modern society. (3-0) R

[CRIM 6314](#) Policing (3 semester credit hours) Provides historical, social and political analysis of the roles and functions of policing in America. (3-0) R

[CRIM 6315](#) Violent Crime (3 semester credit hours) Examines the sources and patterns of violent offending across time and space. Topics include conceptions and typologies of violent crimes and offenders, victim-offender relations, and efforts to predict and control violent offending. (3-0) R

[CRIM 6317](#) Courts (3 semester credit hours) Examines the objectives, institutions and processes involved in the adjudication of offenders. Topics address the structure and function of the judicial system and principal court actors. (3-0) R

[CRIM 6323](#) Violence and Gun Control (3 semester credit hours) Examines the facts surrounding one of the most heated issues of our times: the relationship between guns, violence and gun control. The course provides a comprehensive criminological view of the topic rather than a political or legal one. Students will learn about evaluating evidence, the "stricter gun law" debate, flaws in arguments on both sides of issue, as well as tricks used by advocates to persuade people to agree with their point of view. (3-0) R

[CRIM 6332](#) ([GISC 6331](#)) GIS Applications in Criminology (3 semester credit hours) Examines spatial distributions of crime, criminals, and criminal justice interventions. Students conduct spatial analysis of point patterns and area-based data in studies of the locations of crime events and rates, offenders, police patrolling practices, judicial districts and community corrections and how they relate to physical and social characteristics of neighborhoods. (3-0) R

[CRIM 6348](#) Drugs and Crime (3 semester credit hours) This course provides students with a survey of the historical context of the legislative initiatives that have been attempted to combat the use of drugs, the relationship between drug use/abuse and crime, and the public policy problems surrounding the control of drugs. (3-0) R

[CRIM 6351](#) ([PA 6351](#)) Introduction to Homeland Security (3 semester credit hours) This course provides a comprehensive overview of the structure of Homeland Security, its origins and developing trends and challenges. Selected material from Congress, Federal Emergency Management Agency, Department of Justice, local, state, and other government and non-government agencies will be studied. Examines both historical and contemporary Homeland Defense and Security issues. (3-0) T

[CRIM 6381](#) Special Topics in Criminology (3 semester credit hours) May be repeated for credit as topics vary (9 semester credit hours maximum). Consult with an advisor to determine the appropriateness for one's degree plan and specialty areas of study. Instructor consent required. (3-0) R

[CRIM 6390](#) Administration of Justice Agencies (3 semester credit hours) This course focuses on the administrative structures, processes, and behavior in managing criminal justice agencies. The

focus is on human and financial resources, organizational theory, decision-making, productivity, measurement and enhancement, organizational design, and ethics and culture in police, courts, and correctional agencies. This course is offered in an online format only. (3-0) T

[CRIM 6395](#) Contemporary Issues in Justice Administration (3 semester credit hours) This course explores and surveys classical and recent literature in criminal justice focused on various critical issues confronting the justice system. The course studies the trends, contemporary topics, and reform movements currently prominent in the fields of policing, courts, and corrections. (3-0) T

[CRIM 6399](#) Capstone in Justice Administration (3 semester credit hours) The capstone in justice administration is the culminating experience for graduating Executive MS-JAL students. Students integrate knowledge from across the criminology and public affairs curriculum in an independent, faculty-directed, semester-long applied research project. (3-0) T

[CRIM 6V01](#) Independent Study (1-9 semester credit hours) Provides faculty supervision for student's individual study of a topic agreed upon by the student and the faculty supervisor. Student performance is assessed by instructor. Pass/Fail only. May be repeated for elective credit. Can be applied for credit additionally at the discretion of the program on a case-by-case basis. Instructor consent required. ([1-9]-0) R

[CRIM 6V92](#) Research Workshop in Applied Criminology (1-9 semester credit hours) Students join a faculty member in a group research project. May be repeated for credit (9 semester credit hours maximum). Instructor consent required. ([1-9]-0) R

[CRIM 6V96](#) Master Thesis Research (1-6 semester credit hours) Students conduct masters level research project under the supervision of faculty. May be repeated for credit (6 semester credit hours maximum). Instructor consent required. ([1-6]-0) R

[CRIM 6V97](#) Internship (1-6 semester credit hours) Provides faculty supervision for a student's internship. Internships must be related to the student's course work. Pass/Fail only. May be repeated for credit (6 semester credit hours maximum). Instructor consent required. ([1-6]-0) R

[CRIM 6V98](#) Analytical Writing Research (1-9 semester credit hours) Students perform independent research under the supervision of faculty. May be repeated for credit (9 semester credit hours maximum). Prerequisites: [EPPS 6313](#) and [EPPS 6316](#) or equivalent, plus a good working knowledge of OLS Regression and instructor consent required. ([1-9]-0) R

[CRIM 7300](#) Advances in Criminology Theory (3 semester credit hours) Examines contemporary criminological theories and the degree to which research has provided empirical support for explanations of crime and criminality. Prerequisites: [CRIM 7305](#) and [CRIM 7315](#). (3-0) Y

[CRIM 7301](#) Seminar in Criminology Research and Analysis (3 semester credit hours) Examines a variety of quantitative methods and procedures used in criminology research. Students will plan and execute an independent research project. Working topic for dissertation and dataset is preferred. Prerequisites: ([CRIM 7305](#) and [CRIM 7315](#) and [EPPS 7313](#) and [EPPS 7316](#)) or equivalents, plus a good working knowledge of OLS Regression. (3-0) Y

[CRIM 7305](#) Professional Development in Criminology (3 semester credit hours) This course covers career development for criminology doctoral students. Topics include career planning and options, curriculum vitae preparation, college/university teaching, academic publishing and writing, research and grant strategies, and professional ethics and responsibilities. (3-0) Y

[CRIM 7307](#) Measures and Correlates of Crime (3 semester credit hours) Examines the major sources of data on crime and criminals and the limitations of such data. Review patterns and trends over time in specific forms of crime; identify geographic and demographic correlates according to each data source. Prerequisite: [CRIM 7305](#). (3-0) R

[CRIM 7310](#) Advanced Quantitative Methods in Criminology (3 semester credit hours) This course is designed to be an extension to [CRIM 7301](#). Quantitative research techniques not covered in 7301 will be addressed in depth as they apply to longitudinal and multilevel criminological research. Topics may include, but are not limited to, structural equation modeling (SEM), multilevel growth curve modeling, growth mixture models, panel regression, propensity score matching, and latent class analysis. Topics may vary by semester and may be tailored to fit students' research needs. Recommended prerequisite: Students should have a firm understanding of varying regression techniques, etc., prior to enrolling. Prerequisites: [CRIM 7301](#) with a B or better and instructor consent required. (3-0) R

[CRIM 7315](#) Evidence-Based Crime Prevention (3 semester credit hours) This course explores relationships between crime policy and empirical evaluation research. Students will learn to critically analyze empirical evidence regarding specific criminal justice and crime-related policies, identify factors that influence policymaking, and describe challenges associated with evaluation research of crime-focused programs. Prerequisite: [CRIM 7305](#). (3-0) Y

[CRIM 7342](#) Qualitative Criminology (3 semester credit hours) Examines ethnography and other qualitative approaches to studying crime, criminals, and criminal justice, particularly participant observation and informant and respondent interviewing. Topics include phenomenology, case study, in-depth interviewing, ethnomethodology, conversation analysis, historical methods, gaining access, sampling, data collection and analysis, and legal and ethical concerns. (3-0) R

[CRIM 7351](#) Advanced Criminological Theory Seminar (3 semester credit hours) Course focuses on various criminological theories. Consult with an advisor to determine the appropriateness for one's degree plan and specialty areas of study. May be repeated for credit as topics vary (9 semester credit hours maximum). Prerequisites: [CRIM 6303](#) and [CRIM 7300](#) and department consent required. (3-0) R

[CRIM 7381](#) Special Topics in Criminology (3 semester credit hours) Consult with an advisor to determine the appropriateness for one's degree plan and specialty areas of study. May be repeated for credit as topics vary (9 semester credit hours maximum). (3-0) R

[CRIM 8V02](#) Qualifying Exam Preparation (1-9 semester credit hours) Provides faculty supervision for student's preparation for the PhD Qualifying Exams. Pass/Fail only. May be repeated for credit. Instructor consent required. ([1-9]-0) R

[CRIM 8V92](#) Independent Advanced Research (1-9 semester credit hours) Provides faculty supervision for student's individual study of a topic agreed upon by the student and faculty supervisor. Pass/Fail only. May be repeated for credit (9 semester credit hours maximum). Instructor consent required. ([1-9]-0) R

[CRIM 8V98](#) Internship (1-6 semester credit hours) Provides faculty supervision for a student's internship. Internships must be related to the student's course work. Pass/Fail only. May be repeated for credit (6 semester credit hours maximum). Instructor consent required. ([1-6]-0) S

[CRIM 8V99](#) Dissertation (1-9 semester credit hours) Provides faculty supervision of a student's dissertation research. Pass/Fail only. May be repeated for credit. Prerequisites: Open to PhD students only and instructor consent required. ([1-9]-0) S

Economics

[ECON 5321](#) Microeconomic Theory for Applications (3 semester credit hours) For Master of Science students only. Modern approaches to the theory of the firm, the theory of the consumer, and formal relationships among the various economic functions developed using dual approaches to the optimization of objectives such as profit maximization, utility maximization, and cost minimization. Introduction to game theory; and market analysis through classical/neoclassical and game theoretic approaches. MSAE students who intend to enter the PhD program in ECON should take [ECON 6301](#). (3-0) Y

[ECON 5322](#) Macroeconomic Theory for Applications (3 semester credit hours) For Master of Science students only. Development of modern macroeconomic theory, including national income accounts and their relation to input-output tables; classical, Keynesian, and monetarist aggregate models; behavior hypotheses of consumption, investment, and government; properties and the role of money and interest; foreign trade and investment; price rigidity, price flexibility, and employment; wage-price interaction and inflation; unemployment; and ad hoc stabilization models. MSAE students who intend to enter the PhD program in ECON should take [ECON 6302](#). (3-0) Y

[ECON 5326](#) Managerial Economics (3 semester credit hours) Managerial economics has as its focus rational business decision making. This course provides a bridge between economic theory and practice. The inherent methodological approach of the course is the application of microeconomic theory to a variety of challenging business enterprise problems in order to optimize managerial decisions. As such it covers theories of the firm, corporate governance, demand and production economics, financial economics, industrial economics and draws heavily from quantitative techniques such as regression, time series analysis, game theory and operations research. (3-0) R

[ECON 5397](#) Special Topics in Economics (3 semester credit hours) Topics vary semester to semester. May be repeated for credit (6 semester credit hours maximum). (3-0) R

[ECON 6109](#) Econometrics I Lab (1 semester credit hour) This course uses STATA both as a data analysis tool and a programming language in econometric analysis. The course parallels [ECON 6309](#), Econometrics I, in the topics covered in econometric data analysis. May be repeated for

credit. Prerequisite or Corequisite: [ECON 6309](#). (0-1) R

[ECON 6301](#) Microeconomics Theory I (3 semester credit hours) Modern approaches to the theory of the firm, the theory of the consumer, and formal relationships among the various economic functions developed using dual approaches to the optimization of objectives such as profit maximization, utility maximization, and cost minimization. Introduction to game theory; and market analysis through classical/neoclassical and game theoretic approaches. (3-0) Y

[ECON 6302](#) Macroeconomics Theory I (3 semester credit hours) This course is the first in a sequence of core graduate macroeconomic theory courses. The main aim is to introduce students to the methods of deterministic dynamic analyses in economics. The second aim is to employ those methods in understanding aggregate empirical regularities as they pertain to economic growth with standard modern macroeconomic theory. Therefore, primary course aims include a thorough discussion of non-stochastic dynamics and optimization. Next, using these methods, exogenous and endogenous growth applications that illustrate the applied general equilibrium analyses that comprise modern macroeconomic growth theory are discussed. The course concludes with an introduction to non-stochastic overlapping generations models and discusses the role of dynamic efficiency in macroeconomic theory. (3-0) Y

[ECON 6305](#) Mathematical Economics (3 semester credit hours) Mathematical tools used in advanced topics model building and in the social and economic analysis of public policy. (3-0) Y

[ECON 6306](#) Applied Econometrics (3 semester credit hours) This course investigates the consequences of relaxing the classical linear regression model assumptions and explores solutions when the assumptions do not hold. Topics include a review of the Ordinary Least Squares (OLS) basics (including the assumptions, hypothesis testing, multicollinearity, dummy variables and heteroskedasticity), model specification and selection, Generalized Least Squares (GLS), maximum likelihood estimation, binary choice models, simultaneous equation models, instrumental variables, time series and fixed and random effects models. (3-0) Y

[ECON 6309](#) Econometrics I (3 semester credit hours) An introduction to econometrics, with a development of background concepts in linear algebra and statistics. The course focuses on estimation, hypothesis testing, and prediction in the classical linear regression model. Corresponding large sample issues are considered. General testing principles, such as likelihood ratio, Wald, Lagrange multiplier, and Hausman-type tests are also discussed. Other topics include model specification and nonlinear estimation issues. Recommended prerequisites: [ECON 6311](#) or [GISC 6311](#). (3-0) Y

[ECON 6316](#) Spatial Econometrics (3 semester credit hours) The application of econometric techniques to the explicit treatment of space (geography) in social science models. Covers the specification of spatial regression models, estimation and specification testing. The emphasis is on the application of spatial econometric methods to an empirical data analysis project. Prerequisite: [ECON 6306](#) or [ECON 6309](#). (3-0) R

[ECON 6320](#) Game Theory for the Social Sciences (3 semester credit hours) Non-technical survey of game theory and its applications in the social sciences. Introduction to concepts such as dominant

strategies, Nash equilibrium, evolutionary stability, repeated games, and games with incomplete information. Applications include collective action, conflict, bargaining, the evolution of altruism and cooperation, and signaling. (3-0) R

[ECON 6331](#) Labor Economics I (3 semester credit hours) Labor economics is the branch of economics that deals with how labor markets function. Topics covered will include labor supply, retirement, wage structure, inequality in earnings, discrimination, and labor market frictions. This course is one of two courses in nonsequential course offerings in graduate labor economics. (3-0) R

[ECON 6332](#) Labor Economics II (3 semester credit hours) This course continues the study of theoretical and applied research of labor markets from Labor Economics I. Topics studied include demand for labor, wage setting institutions, wage structure, investment in human capital, and labor mobility. Labor Economics I is not a prerequisite for Labor Economics II. (3-0) R

[ECON 6335](#) Health Economics (3 semester credit hours) Economic analysis of the health care industry to explain the demand for and supply of medical care. Includes analysis of behavior of consumers, producers, and insurers; and public policies to regulate the industry and to provide services for the various segments of the population. (3-0) R

[ECON 6336](#) ([PPPE 7319](#)) Economics of Education (3 semester credit hours) This seminar examines theoretical and empirical writings relating to educational policy. The issues considered will include the link between educational achievement and earnings, the role of early childhood, assessments of head start and pre-school programs, the effectiveness of compensatory education and tutoring programs, the large and persistent achievement gap between children from minority and low-income families and those from middle-income Asian and white families, a critical examination of educational production functions, the extent and consequences of school segregation, bilingual education programs, special education programs, international comparisons of student achievement and schools, school finance and an examination of various school reform proposals. (3-0) R

[ECON 6340](#) Industrial Organization (3 semester credit hours) Market structure, firm conduct, and economic performance of business with emphasis on firms' strategic behavior in price and nonprice competition. Topics include oligopoly pricing and production decisions, strategic entry deterrence, location strategies, product differentiation, advertising, research and development, and the effects of firms' conduct on economic welfare and market structure. (3-0) T

[ECON 6343](#) Economic Regulation of Business (3 semester credit hours) Studies the rationale for, and the history and political-economic results of, government intervention in markets in the form of (1) direct regulation of prices, quantity, entry and exit, and product quality in industries (utility, communication, and transportation), and (2) indirect intervention through antitrust laws and the regulation of advertising. Government deregulation and changes in antitrust institutions also are explored. Prerequisite: [ECON 5321](#) or [ECON 6301](#) or [PA 7317](#). (3-0) T

[ECON 6344](#) Transfer Pricing (3 semester credit hours) The economics of transfer pricing of goods, services, and intellectual property traded among units (divisions or affiliated firms) of a common

parent company. Multidivisional firms and multinational enterprises use transfer pricing for coordination of divisional objectives, allocating internal resources, and maximizing after-tax profits, among other goals. Governments base firms' tax liability on transfer prices; so their taxing authorities operate to ensure transfer prices adequately reflect the value of goods and services, challenging firms' established transfer pricing if it is deemed necessary. Legal issues and methods used by private firms and government agencies for establishing transfer prices are explored. (3-0) T

[ECON 6351 \(PPPE 6364\)](#) Development Economics (3 semester credit hours) An overview of theories of national economic growth and development in the context of developing countries. This includes macroeconomic models; the role of financial development, trade, and agriculture; domestic sectoral policy; human resource development; the environment; and poverty. (3-0) R

[ECON 6352 \(PPPE 6352\)](#) World Political Economy (3 semester credit hours) An overview of the major economic, social, political, and cultural forces that influence the nature of the international economic and political environment, as well as global economic and political relations. Topics include: theories of global political economy; globalization and economic trade, economic and political transformation in Eastern Europe, China, and the former Soviet Union; democratization and development in the less developed countries; military and non-military approaches to national and international security; environmentally sustainable economic development; and the international implications of technological failure. (3-0) T

[ECON 6355](#) International Trade (3 semester credit hours) Provides a broad overview of theory and evidence concerning international trade, direct foreign investment and trade policy. Topics include scale economies, imperfect competition, and product differentiation, trade dynamics, economic growth, trade policies, and the political process. (3-0) R

[ECON 6356](#) International Finance (3 semester credit hours) Financial aspects of growth and income determination in open economies. Specific topics include financial risk in the international setting; money and exchange rate regimes; income determination and macroeconomic policy; history of international monetary arrangements, and current issues in international monetary reform. (3-0) R

[ECON 6362 \(PPPE 6353\)](#) Industry, Technology, and Science Policy (3 semester credit hours) Focuses on the bi-directional relationship between science/technology and societal conditions, with special attention to industrial and other economic factors. Topics include the role of scientists and engineers in industrial competitiveness and economic well-being; the impact of market structure on the nature and pace of technological development; appropriate technology and sustainable economic development; and the nature and policy implications of the intersection of increasingly powerful technologies with human error and criminal or terrorist behavior. (3-0) Y

[ECON 6363](#) Public Economics I (3 semester credit hours) Examines the economic role of government in a mixed economy. Surveys where markets fail. In particular, it studies externalities, public goods, club goods and related topics. Prerequisite: [ECON 5321](#) or [ECON 6301](#). (3-0) R

[ECON 6371 \(SOC 6341\)](#) Urban Economics (3 semester credit hours) Presents methods and models for understanding urban growth and development processes. Topics include analysis of urban

growth, land use patterns, transportation and local public good delivery systems. Welfare consequences of various urban policy options are explored. (3-0) R

[ECON 6372 \(PA 6342\)](#) Local Economic Development (3 semester credit hours) This class will examine the role of local governments in promoting economic development in the United States, and will analyze the economic development process. Attention will be given to economic theories of local development and practical implications of those theories. Topics include local economic development and poverty, tax incentives, infrastructure credits, firm location decisions and effects of government competition for economic activity. (3-0) T

[ECON 6380](#) Experimental Economics I (3 semester credit hours) Introduction to the methodology of laboratory experimental economics, including principles of experimental design, development of effective protocols, research with human subjects, and statistical analysis of experimental data, designing experiments to test theory, experimental measurement of preferences and attitudes, and market and institutional "wind-tunnel" design. Prerequisites: [ECON 6301](#) and [ECON 6309](#) or instructor consent required. (3-0) T

[ECON 6V00](#) Tools for Economic Research (2-3 semester credit hours) First two credit hours examines single and multivariate calculus at a level appropriate for entering PhD and MS students in economics, functional areas of business, and social sciences. Includes optimization theory and matrix algebra. Those enrolled in the optional 3rd credit hour will receive basic instruction in a statistical package (e.g., STATA). Pass/Fail only. ([2-3]-0) Y

[ECON 6V01](#) Independent Study (1-9 semester credit hours) Provides faculty supervision for student's individual study of a topic agreed upon by the student and the faculty supervisor. Pass/Fail only. May be repeated for credit (9 semester credit hours maximum). Instructor consent required. ([1-9]-0) R

[ECON 7301](#) Microeconomics Theory II (3 semester credit hours) General equilibrium theory of markets and welfare economics; discusses the problems of existence, stability, efficiency, and equity of economic equilibrium; and introduces social choice and the special problems created by public goods, externalities, and uncertainty. Recommended: [ECON 6301](#). (3-0) Y

[ECON 7302](#) Macroeconomics Theory II (3 semester credit hours) This course is the second in a sequence of core graduate (doctoral level) macroeconomic theory courses. The main aim is to introduce students to the methods of stochastic dynamic analyses in economics. The second aim is to employ those methods in understanding aggregate empirical regularities, for instance as they pertain to business cycles, with standard modern macroeconomic theory. Therefore, primary course aims include a thorough discussion of stochastic dynamics and optimization. Next, using these methods, applications that illustrate the applied general equilibrium analyses that comprise: modern macroeconomic business cycle theory, consumption, asset pricing and topics in 'behavioral' macroeconomics are discussed. Recommended: [ECON 6302](#). (3-0) Y

[ECON 7303](#) Microeconomics Theory III (3 semester credit hours) Primarily a course on the role of strategic interdependence in economics using game theory. Topics include noncooperative games, simultaneous-move games and dynamic games with applications from a wide variety of fields in

economics. (3-0) T

[ECON 7309](#) Econometrics II (3 semester credit hours) This is the second core course in the econometrics sequence of the economics PhD program. The course extends the topics covered in the first course and covers topics such as serial correlation, unit roots, cointegration, and dynamic models; panel data; simultaneous equation models, maximum likelihood and GMM estimations methods. (3-0) Y

[ECON 7311](#) Special Topics in Econometric and Spatial Analysis (3 semester credit hours) May be repeated for credit as topics vary (9 semester credit hours maximum). However, students may not take more than 3 hours of the field requirement from [ECON 7311](#). (3-0) R

[ECON 7315](#) Econometrics III (3 semester credit hours) This is the third core course in the econometrics sequence of the economics PhD program. The course extends the topics covered in the first two courses and covers topics such as Bayesian, semiparametric and nonparametric estimation approaches; discrete choice models, limited dependent variable models and duration models; and bootstrap and jackknife methods. Prerequisite: [ECON 6309](#). (3-0) Y

[ECON 7316](#) Game Theory (3 semester credit hours) Advanced treatment of topics in noncooperative game theory. May also include a brief survey of cooperative game theory. Major topics covered include correlated equilibrium, equilibrium refinements, evolutionary stability and dynamics, multi-level selection, revelation principle, strategic substitutes and complements, uniqueness and comparative statics. Prerequisite: [GISC 7310](#) or [EPPS 7316](#) or [ECON 6306](#) or instructor consent required. (3-0) R

[ECON 7321](#) Special Topics in Labor Economics (3 semester credit hours) May be repeated for credit as topics vary (9 semester credit hours maximum). However, students may not take more than 3 hours of the field requirement from [ECON 7321](#). (3-0) R

[ECON 7331](#) Special Topics in Industrial Organization (3 semester credit hours) May be repeated for credit as topics vary (9 semester credit hours maximum). However, students may not take more than 3 hours of the field requirement from [ECON 7331](#). (3-0) R

[ECON 7341](#) Special Topics in International Development (3 semester credit hours) May be repeated for credit as topics vary (9 semester credit hours maximum). However, students may not take more than 3 hours of the field requirement from [ECON 7341](#). (3-0) R

[ECON 7351](#) Special Topics in Public Economics (3 semester credit hours) May be repeated for credit as topics vary (9 semester credit hours maximum). However, students may not take more than 3 hours of the field requirement from [ECON 7351](#). (3-0) R

[ECON 7363](#) Public Economics II (3 semester credit hours) A study of positive and normative theories of taxation, the effect of taxation on behavior, behavioral public finance and related topics. Prerequisite: [ECON 6363](#). (3-0) R

[ECON 7381](#) Special Topics in Experimental and Behavioral Economics (3 semester credit hours)

May be repeated for credit as topics vary (9 semester credit hours maximum). However, students may not take more than 3 hours of the field requirement from [ECON 7381](#). (3-0) R

[ECON 7391](#) Special Topics in Economics (3 semester credit hours) May be repeated for credit as topics vary (9 semester credit hours maximum). (3-0) R

[ECON 7V01](#) Paper Seminar (3-6 semester credit hours) Students registering for this seminar work towards the completion of their literature survey requirement. Course includes oral presentations and progress reports. ([3-6]-0) R

[ECON 7V02](#) Research in Economics (3-6 semester credit hours) May be repeated for credit. Instructor consent required. ([3-6]-0) R

[ECON 7V03](#) Research Paper Seminar (3-6 semester credit hours) Students registering for this seminar work towards the completion of their research paper requirement. Oral presentations and progress reports. ([3-6]-0) T

[ECON 8V01](#) Dissertation Seminar (3-9 semester credit hours) A seminar for students preparing proposals or writing dissertations. Pass/Fail only. May be repeated for credit. Prerequisites: Successful completion of qualifying examination and instructor consent required. ([3-9]-0) R

[ECON 8V02](#) Dissertation (1-9 semester credit hours) Provides faculty supervision of a student's dissertation research. Pass/Fail only. May be repeated for credit. Instructor consent required. ([1-9]-0) Y

[ECON 8V97](#) Internship (1-9 semester credit hours) Provides faculty supervision for a student's internship. Internships must be related to the student's course work. Internships are mainly intended for terminal Master of Science in Applied Economics (MSAE) students. Pass/Fail only. May be repeated for credit (9 semester credit hours maximum). Instructor consent required. ([1-9]-0) R

Economic, Political and Policy Sciences

[EPPS 6302](#) Methods of Data Collection and Production (3 semester credit hours) Course examines interview-based and self-administered data collection methods, including mobile web and SMS interviews, and newer data sources such as social media. Concentrates on the effects of different techniques on data quality, including error from measurement, nonresponse and coverage, and assesses trade-offs between these error sources when selecting a particular mode or survey design. (3-0) Y

[EPPS 6311](#) Research Practice in the Social Sciences (3 semester credit hours) Overview course that introduces students to methods used in the different applied social science disciplines. Reviews how data are commonly produced and analyzed within each, identifies recent methodological trends and areas of application, explores career pathways for social data analytics and research graduates, and indicates directions for more advanced study. (3-0) Y

[EPPS 6313](#) Introduction to Quantitative Methods (3 semester credit hours) This introductory

graduate-level statistics course is geared to the consumption of statistical methods commonly used in social science research. Topics include creating and interpreting graphical and tabular summaries of data, descriptive statistics, basic probability theory, sampling distributions, basic hypothesis testing (t-tests, chi-square tests, and analysis of variance), estimation of population parameters, confidence intervals and correlation. An introduction to regression analysis will also be provided. Topics are supported by computer-supported data analyses. (3-0) Y

[EPPS 6316](#) Applied Regression (3 semester credit hours) This course provides a survey of the bivariate and multiple regression models estimated using Ordinary Least Squares (OLS), with an emphasis on using regression models to test social and economic hypotheses. This application-focused course presents examples drawn from economics, political science, public policy and sociology, introduces the basic concepts and interpretation of regression models, and basic methods of inference. Topics are supported by computer-supported data analyses. Prerequisite: [EPPS 6313](#) or [EPPS 7313](#). (3-0) Y

[EPPS 6320](#) Short Courses in Contemporary Social Science Research Methods (3 semester credit hours) This course is comprised of three tutorial sessions that each last two full days over the course of an academic year. Each session is an intensive survey of a different modern statistical methodology that is regularly used in the social sciences. In order to get credit, the student must attend all six days. Students will need to enroll for the course in the Fall semester. Pass/Fail only. (3-0) Y

[EPPS 6323](#) Knowledge Mining (3 semester credit hours) Introduces techniques to discover patterns and relationships in large and complex data sets, including web mining. Examines ways to explore, analyze and leverage data and transform them into useful and usable information, including decision trees, association rules, clustering, case-based methods, and data visualization. (3-0) Y

[EPPS 6324](#) Data Management for Social Science Research (3 semester credit hours) Covers the principles and practical techniques of data cleaning, data organization, quality control, and automation of research tasks. Topics covered will include data types, useful text and math functions, labeling, recoding, data documentation, merging datasets, reshaping, and programming structures such as macros, loops, and branching using Stata and R. The course will also discuss using LaTeX to automate outputting of results and graphics in publishable formats. Prerequisite: [EPPS 6313](#) or [EPPS 7313](#) or instructor consent required. (3-0) R

[EPPS 6342](#) Research Design II (3 semester credit hours) This course is the second in a two-course sequence devoted to the study of data development strategies and techniques to facilitate effective statistical analysis. Topics generally covered include: the logic of causal inquiry and inference in the Economic, Political and Policy Sciences, the elaboration paradigm and model specification, anticipating and handling threats to internal validity, hierarchies of design structure (experimental, quasi-experimental and non-experimental): linking design structure to effect estimation strategies and analyzing design elements in published literature. Students will be required to select a research topic in consultation with the instructor and prepare a written comparative design analysis. Recommended: [EPPS 6310](#) or [EPPS 6316](#) or equivalent. (3-0) Y

[EPPS 6346](#) Qualitative Research Methods (3 semester credit hours) This course provides an

overview of qualitative research in the Economic, Political and Policy Sciences. Students will investigate the assumptions underlying qualitative research approaches and critically assess the strengths and weaknesses of such approaches. Possible topics may include participant observation, ethnographic interviewing, ethnomethodology, conversation analysis, case study, and the analysis of historical documents. (3-0) T

[EPPS 6352](#) Evaluation Research Methods in the Economic, Political and Policy Sciences (3 semester credit hours) A review of research methods used in program evaluation, with an emphasis on public and nonprofit social programs. Issues to be addressed include research design, appropriate performance standards, measurement and selection of individuals, sampling, data collection, and data analysis. (3-0) Y

[EPPS 6353](#) Ethics for Professionals, Academics, and Researchers (3 semester credit hours) This course examines issues of professional, academic and research ethics. Topics include theories of ethics, ethical motives, and case study applications. (3-0) R

[EPPS 6354](#) Information Management (3 semester credit hours) Focus on design of database applications for commercial, public, and nonprofit organizations. Covers user requirement's analysis, logical database design, physical database design, database query languages, and distributed and client-server databases. Course emphasizes data definition and data manipulation languages for relational data modelling. (3-0) Y

[EPPS 6355](#) Qualitative Data Analysis (3 semester credit hours) Course focuses on analysis of qualitative data with support of Qualitative Data Analysis software (ATLAS.ti, NVivo, Provalis, etc.). Introduces alternative interpretive analytic approaches, explores their use, and guides users in applying them to data. (3-0) Y

[EPPS 6356](#) Data Visualization (3 semester credit hours) Presents technologies, techniques, and algorithms for creation of effective visualizations of social science data. Examines data wrangling, insight modeling, cognitive science, and graphical communication using SAP Lumira, Tableau, Excel Powerview and D3. (3-0) Y

[EPPS 6359](#) Social Concepts and Measurement (3 semester credit hours) In this course students will learn the fundamentals of social concepts, measurement theory, and sensitivity analysis. We will study and implement methods and technologies for measuring social concepts, including the construction of scales and typologies, latent traits, content analysis, and survey design. For the course project, students will collect and present a new measure of a social concept. This requires students to justify the need to measure the concept on theoretical grounds, to survey the literature for existing measures of the concept, to specify how their measure differs and the logic behind their operationalization, and to collect data according to their operational criteria using an appropriate data collection method. Prerequisites: ([EPPS 6313](#) and [EPPS 6316](#)) or ([EPPS 7313](#) and [EPPS 7316](#)). (3-0) T

[EPPS 6360](#) ([NATS 6360](#)) Research Methods (3 semester credit hours) There is a growing global awareness amongst the academic community that skills and competency training must now be included when preparing graduate students for the 21st century workforce needs. For Master's

and PhD students the attributes most frequently referenced sought across a broad range of employment sectors, include critical and creative thinking, analysis and synthesis of data, research methodology, ethics, scientific writing, teamwork, and creative presentation skills. The aim of the course on Research Methods is to help graduate students develop the skills necessary to succeed professionally and academically in a way that they can develop and manage their careers across a broad range of employment sectors in both academic and non-academic settings. Prerequisites: Admission to the School of Natural Sciences and Mathematics or the School of Economic, Political and Policy Sciences graduate program and the student's departmental graduate advisor consent required. (3-0) Y

[EPPS 7304](#) Cost-Benefit Analysis (3 semester credit hours) Examines methods for measuring costs and benefits of public projects and policies, and the application of cost-benefit analysis to areas such as economic development, water resources, recreation, transportation, regulation, and the environment. (3-0) R

[EPPS 7313](#) Descriptive and Inferential Statistics (3 semester credit hours) The course provides a thorough introduction to probability and statistics. Probability topics covered include random variables, expectations, and probability distributions. The heart of the course is a rigorous introduction to statistical inference: sampling theory, confidence intervals, and hypothesis tests. The final section of the course is an introduction to regression analysis, with an emphasis on interpretation of regression results, using examples from recent research. Recommended: one semester of calculus. (3-0) Y

[EPPS 7316](#) Regression and Multivariate Analysis (3 semester credit hours) This course provides a detailed examination of the multiple regression models estimated using Ordinary Least Squares (OLS), with an emphasis on using regression models to test social and economic hypotheses. Also covered are several special topics in regression analysis, including violations of OLS assumptions, the use of dummy variables, and fixed effects models. The course ends with an introduction to advanced topics in regression analysis, qualitative response models, and non-OLS approaches to estimation. Topics are supported by computer-supported data analyses using application-specific software. Prerequisite: [EPPS 7313](#). (3-0) Y

[EPPS 7318](#) Structural Equation and Multilevel (Hierarchical) Modeling (3 semester credit hours) An introduction to structural equation modeling (SEM) and multilevel modeling (MLM), sometimes called hierarchical linear or mixed modeling. SEM represents a general approach to the statistical examination of the fit of a theoretical model to empirical data. Topics include observed variable (path) analysis, latent variable models (e.g., confirmatory factor analysis), and latent variable SEM analyses. MLM represents a general approach to handling data that are nested within each other or have random components. Topics include dealing with two-level data that may be cross-sectional, such as students within classes, or longitudinal, such as repeated observations on individuals, firms or countries. Recommended prerequisite: [EPPS 7316](#) or equivalent. Prerequisite: [ECON 6306](#) or [ECON 6309](#) or [EPPS 6316](#) or instructor consent required. (3-0) R

[EPPS 7344](#) Categorical and Limited Dependent Variables (3 semester credit hours) This course examines several types of advanced regression models that are frequently used in policy analysis

and social science research. The key similarity of these models is that they involve dependent variables that violate one or more of the assumptions of the Ordinary Least Squares (OLS) regression model. The main models examined in the course are binary logit and probit, multinomial logit, ordinal probit, tobit, and the family of Poisson regression models. All these models are estimated using maximum likelihood estimation (MLE). The Heckman correction for selection is also addressed. Recommended: [EPPS 6316](#) or the equivalent. (3-0) Y

[EPPS 7368](#) Spatial Epidemiology (3 semester credit hours) Examines the conceptual and analytic tools used to understand how spatial distributions of exposure impact processes and patterns of disease. Emphasizes the special design, measurement, and analysis issues associated with spatial patterns of diseases. Contemporary diseases of public health importance are addressed, and the statistical and inferential skills are provided that can be used in understanding how spatial patterns arise and their implications for intervention. Prerequisite: [EPPS 6313](#) or equivalent. (3-0) R

[EPPS 7370](#) Time Series Analysis I (3 semester credit hours) This course considers several important topics for applied time series analyses of social science and public policy data including the specification and testing of Box-Jenkins ARIMA models and dynamic regressions. Other topics include stationarity and unit root tests, cointegration and error correction models, autoregressive conditional heterogeneity (GARCH) models and introductions to vector autoregression (VAR) and state space models. Students learn how to use modern software such as Eviews, R, RATS and Stata to do time series analyses. Recommended: [EPPS 7316](#) or equivalent. (3-0) R

[EPPS 7371](#) Time Series Analysis II (3 semester credit hours) This course introduces intermediate and advanced methods for the analysis of social science time series data. After reviewing core time series concepts such as stationarity and cointegration, the course considers topics such as vector autoregression and vector error correction models, simultaneous equation and structural time series models, regime switching models, non-Gaussian and nonlinear models, and state space representations. Both frequentist and Bayesian approaches to modeling time series processes are employed. Data analyses are implemented using widely available software packages such as R, RATS and Stata. Prerequisite: [EPPS 7370](#) or instructor consent required. (3-0) R

[EPPS 7386](#) Survey Research (3 semester credit hours) This course exposes students to the use of survey methods in social science research. Emphasis is placed on interview and questionnaire techniques and the construction and sequencing of survey questions. Attention is also devoted to sampling theory, sampling and non-sampling errors, and the use of recent advances in fieldwork to reduce measurement error in surveys. Recommended: [EPPS 6313](#) or equivalent. (3-0) R

[EPPS 7390](#) Bayesian Analysis for Social and Behavioral Sciences (3 semester credit hours) This course covers the theory and application of Bayesian statistics for economic, political, and other social science data. Students will learn how maximum likelihood and Bayesian estimation are related and how the latter is used to develop decision based inference. Topics include subjective probability, general linear models, posterior simulation methods, model specification and averaging, and sensitivity analysis. Prerequisite: [EPPS 7316](#) or equivalent. (3-0) R

[EPPS 7V81](#) Special Topics in Social Science Research Methodology (1-9 semester credit hours) May be repeated for credit as topics vary (9 semester credit hours maximum). (3-0) R

[EPPS 7V88](#) Workshop in Teaching Effectiveness (1-3 semester credit hours) Workshop will focus on preparing students for positions as teaching assistants, lecturers, and those who expect to teach as a career in the social sciences. Emphasis will be placed on videotaped student presentations and feedback, guest presentations, and student visits to EPPS faculty classes. May be repeated for credit (3 semester credit hours maximum). ([1-3]-0) R

[EPPS 8V95](#) Frontiers of Social Science Research Methods (1-3 semester credit hours) Students working on dissertations or research papers receive feedback and advice on research methods, the discussion of methods in their writing, and presentation of results. Pass/Fail only. May be repeated for credit. ([1-3]-0) R

Geospatial Information Sciences

[GISC 5310](#) ([GEOS 5310](#)) Hydrogeology (3 semester credit hours) Introduction to the principles and practice of ground- and surface- water hydrology. Study of the principles of occurrence and geologic controls of groundwater, physical flow and geochemistry of waters. Design and use of procedures for typical hydrologic investigations. (3-0) Y

[GISC 5311](#) ([GEOS 5311](#)) Applied Groundwater Modeling (3 semester credit hours) This course is designed to provide students with hands-on experience using the most commonly-applied groundwater flow and transport models (e.g. modflow/modpath, MT3D/RT3D, GMS). Practical application of the models and design of modeling studies is emphasized; modeling theory and mathematics is de-emphasized. (3-0) Y

[GISC 5319](#) ([GEOS 5319](#)) Principles of Environmental Health (3 semester credit hours) Introduction to epidemiology and biostatistics. U.S. regulatory agencies. Ethics, risk assessment and public policy. Diseases spread by food and water. Lung diseases associated with particles and fibers. Health significance of exposures to arsenic, cadmium, chromium, lead and mercury compounds and to chemical substances - solvents, PCBs, PBBs, dioxins, and dibenzofurans. Ionizing radiation. Health implications of global warming. (3-0) R

[GISC 5322](#) ([GEOS 5322](#)) GPS (Global Positioning System) Satellite Surveying Techniques (3 semester credit hours) The theory and application of satellite positioning utilizing the Global Positioning System Code and phase methodology in field observations, data processing and analysis of Differential GPS, high accuracy static and other rapid measurements, in real time and with post-processing. (3-0) Y

[GISC 5324](#) ([GEOS 5324](#)) 3D Data Capture and Ground Lidar (3 semester credit hours) The theory and applications of 3D data acquisition in the field for geosciences and non-geosciences studies. The basics and applications of field digital mapping with emphasis on RTK GPS, laser range finder, and terrestrial scanners (ground lidar). 3D digital photorealistic modeling with field photogrammetry and digital cameras. (3-0) T

[GISC 5330](#) Geospatial Applications in Earth Science (3 semester credit hours) Application of geospatial techniques in solving earth science problems. Emphasis will be placed on the use of the Global Positioning System in survey and geodetic applications, airborne and ground-based LiDAR

(Light Detection and Ranging), and digital acquisition and analysis techniques. Case histories will be considered and supplemented by hands-on exercises using a broad range of digital acquisition and analysis equipment and tools. (3-0) Y

[GISC 5395](#) Satellite Geophysics and Applications (3 semester credit hours) This course concerns both the theory and application of observing geophysical fields from space-borne platforms. The observation procedures including orbital mechanics are introduced and signal propagation, errors and uncertainties will be addressed. Concepts of current satellite missions such as radar and laser altimetry, space gravimetry and magnetometry, and synthetic aperture radar will be discussed. Applications of satellite geophysical observations in tectonics, geodynamics, ocean and ice surface monitoring, hydrology, and terrain modeling will be introduced through student projects and presentations. (3-0) Y

[GISC 6301](#) GIS Data Analysis Fundamentals (3 semester credit hours) Statistical techniques are examined with a focus on fundamental geospatial data handling techniques and algorithms as well as applied geospatial data analysis. The underlying concepts of descriptive statistics, data visualization, and exploratory methods; probability theory, study design and sampling theory; statistical inference and simulation experiments; basic correlation and regression analyses; as well as methods of pattern analysis are discussed from a Geoinformation Sciences perspective. A course in statistics (such as [EPPS 2302](#) or [EPPS 2303](#)) is strongly recommended. No prior GIS knowledge is required. (3-0) Y

[GISC 6311](#) Statistics for Geospatial Science (3 semester credit hours) The course introduces calculus-based statistical analysis and probability theory, providing background for econometrics and economic modeling of simple stochastic processes. Standard probability distributions are covered, including Bernoulli, binomial, negative binomial, hypergeometric, Poisson, normal, gamma, beta, t and F distributions. Estimation and hypothesis testing are discussed. Introductory asymptomatic theory, including the Law(s) of Large Numbers and the Central Limit Theorem, will be covered as well as real-world applications of probability theory as time permits. (2-3) R

[GISC 6317](#) GIS Programming Fundamentals (3 semester credit hours) General introduction to programming language and other techniques for modeling with GIS-related applications. Topics covered include fundamental data structures and algorithms, geospatial data manipulation and processing, and database management. Emphasis is placed on rapid GIS application development with hands-on experience. Students are expected to design and implement a project. Corequisite: [GISC 6381](#) or [GEOS 6381](#) or equivalent with instructor consent required. (3-0) Y

[GISC 6325](#) ([GEOS 5325](#)) Remote Sensing Fundamentals (3 semester credit hours) Introduction to remote sensing principles, sensor technologies, image processing techniques, and applications. Topics covered include electromagnetic radiation theories, various satellite and airborne remote sensing systems, processing of remote sensing data to solve real world problems. State-of-the-art commercial software is used for class exercises. (3-0) Y

[GISC 6331](#) ([CRIM 6332](#)) GIS Applications in Criminology (3 semester credit hours) Examines spatial distributions of crime, criminals, and criminal justice interventions. Students conduct spatial analysis of point patterns and area-based data in studies of the locations of crime events and

rates, offenders, police patrolling practices, judicial districts and community corrections and how they relate to physical and social characteristics of neighborhoods. (3-0) R

[GISC 6334](#) ([PPPE 6334](#)) Workshop in Environmental and Health GIS/Policy (3 semester credit hours) Students join a faculty member in a research project on environmental and health policy. Specific topics vary from semester to semester, but special emphasis will be on the applications of statistical and spatial analytic methods (e.g. GIS, spatial econometrics, decision analysis, etc.) to various real-life data in the environmental and health field. Class exercises will be completed using state-of-the-art statistics and GIS software. May be repeated for credit as topics vary (9 semester credit hours maximum). Prerequisite: [EPPS 6313](#) or [EPPS 7313](#) or [GISC 6301](#) or [GISC 6381](#). (3-0) Y

[GISC 6379](#) Special Topics in Geographic Information Sciences (3 semester credit hours) May be repeated for credit as topics vary (9 semester credit hours maximum). Consult with advisor to determine appropriateness of topic for degree plan. (3-0) R

[GISC 6381](#) ([GEOS 6381](#)) Geographic Information Systems Fundamentals (3 semester credit hours) Examines the fundamentals of Geographic Information Systems and their applications. It emphasizes the concepts needed to use GIS effectively for manipulating, querying, analyzing, and visualizing spatial-based data. Lab exercises, which use industry-standard GIS software packages, provide GIS experience to investigate real world problems including social, economic, and environmental issues. (3-0) Y

[GISC 6382](#) ([GEOS 6383](#)) Applied Geographic Information Systems (3 semester credit hours) Further develops hands-on skills with industry-standard GIS software for application in a wide variety of areas including urban infrastructure management, marketing and location analysis, environmental management, geologic and geophysical analysis and the Economic, Political and Policy Sciences. Prerequisite: ([GISC 6381](#) or [GEOS 6381](#)) or equivalent with instructor consent required. (3-0) Y

[GISC 6383](#) Geographic Information Systems Management and Implementation (3 semester credit hours) Management strategies for GIS are examined by presenting GIS as an integrated system of people, computer hardware, software, applications and data. Implementation is examined as a systematic process of user needs assessment, system specification, database design, application development, implementation, operation, and maintenance. Includes design of implementation plans as case studies to explore various techniques associated with each step of this process. (3-0) R

[GISC 6384](#) ([GEOS 6384](#)) Advanced Geographic Information Systems (3 semester credit hours) Treatment of more advanced GIS topics with real world applications. Topics covered include raster and vector data models, Geodatabase, map algebra, 3-D surface analysis, spatial interpolation and network analysis. Student will be acquainted with state-of-the-art software through hands-on laboratory experiences. Prerequisite: [GEOS 6381](#) or [GISC 6381](#). (3-0) Y

[GISC 6385](#) ([GEOS 6385](#)) GIS Theories, Models and Issues (3 semester credit hours) Provides an understanding of the underlying theories, mathematical and geometric tools, and their computational implementations that establish GIS capabilities to handle and analyze geo-referenced information. Associated issues (such as uncertainty, spatial analysis and spatial data

management) highlighted. Prerequisite: [GEOS 6381](#) or [GISC 6381](#) or equivalent with instructor consent required. (3-0) Y

[GISC 6387](#) ([GEOS 6387](#)) Geospatial Sciences Workshop (3 semester credit hours) Fulfills the research project requirement for one of the Geospatial Science graduate certificate programs, e.g. GIS, remote sensing and geospatial intelligence. Each participant develops a project which should include aspects of geospatial database design, manipulation, and analysis, and cartographic production. Projects may be designed in coordination with a local government, utility, business, or other entity that uses GIS in its operations and research. Note: Students should take this course with varied research topics if different certificate programs are pursued. May be repeated for credit as topics vary (9 semester credit hours maximum). Prerequisite: [GEOS 6381](#) or [GISC 6381](#). (3-0) Y

[GISC 6388](#) Advanced GIS Programming (3 semester credit hours) Provides instruction and hands-on experience in specific techniques and languages for developing application systems based on GIS concepts. Students will learn to use current generation programming language to design and implement GIS applications. Class exercises further provide experience to customize and develop advanced GIS tools. Prerequisites: ([GISC 6381](#) or [GEOS 6381](#)) and [GISC 6317](#), or instructor consent required. (3-0) Y

[GISC 6389](#) Geospatial Information Sciences Master's Research (3 semester credit hours) Requires completion, according to uniform guidelines established by the GIS program, of a GIS Master's Project proposal under the supervision of an advisor identified by the student. Students are also expected to conduct a majority of the research for the GIS Master's Project under the supervision of his/her advisor. Pass/Fail only. May be repeated in the following semester. Instructor consent required. (3-0) S

[GISC 6V01](#) Independent Study in GIS (1-9 semester credit hours) Provides faculty supervision for a student's individual study of a topic agreed upon by the student and the faculty supervisor. Pass/Fail only. May be repeated for credit. Instructor consent required. ([1-9]-0) S

[GISC 6V98](#) Master's Thesis (3-9 semester credit hours) Provides faculty supervision of a student's master's thesis research. May be repeated for credit. GIS Program Head and instructor consent required. ([3-9]-0) S

[GISC 7310](#) Advanced GIS Data Analysis (3 semester credit hours) The specification, interpretation and properties of the multiple linear regression model including spatial and aspatial regression diagnostics are examined. A detailed review of the key concepts of matrix algebra, optimization techniques and simulation experiments is given. GIS and GPS data handling procedures are discussed from a regression and linear transformation perspective. Extensions to principal component analysis, ridge regression, weighted regression, logistic and Poisson regression are provided. Practical data analysis for large Geo-referenced data sets are exercised. Prerequisite: [GISC 6301](#) or equivalent. (3-0) R

[GISC 7360](#) GIS Pattern Analysis (3 semester credit hours) Examines transformations among geospatial object classes, topological measures, edge effects, univariate and multivariate methods

for point pattern analysis, directional data, geo-statistical surface interpolations, and spatial regression models. Underlying models and data generating processes leading to spatial heterogeneity and spatially clustered/dispersed patterns are discussed and simulated. examples of local and global spatial analyses of crime, disease, real estate or environmental patterns are discussed. Prerequisites: ([GEOS 6381](#) or [GISC 6381](#)) and ([GISC 6301](#) or equivalent). (3-0) R

[GISC 7361](#) Spatial Statistics (3 semester credit hours) The application of statistical techniques to the explicit treatment of space (geography) in social science models. Covers indices of spatial autocorrelation, the specification of autoregressive models (Gaussian, Poisson, binomial/logistic), geostatistical modeling, spatial filtering, Bayesian map analysis, random effects in models, and imputation of missing geocoded data. Recommended: [GISC 7360](#). Prerequisite: [GISC 7310](#) or [EPPS 7316](#) or equivalent. (3-0) R

[GISC 7363](#) Internet Mapping and Information Processing (3 semester credit hours) Provides a conceptual overview and hands-on experiences in Internet mapping and web-based geospatial information processing with a wide range of state-of-the-art software, including both open-source and commercial packages. Topics covered include cloud computing, client/server configuration, distributed data access and display, web-based user interaction and customization. (3-0) T

[GISC 7364](#) Demographic and Epidemiological Analysis and Modeling (3 semester credit hours) Examines the demographic and epidemiological terminology, key statistical measures, data sources, models, projection methods and analysis techniques of the distribution of population and its characteristics as well as disease, mortality and fertility patterns. The underlying theoretical foundations are examined and extended into the spatial domain to understand the spatio-temporal dynamics of population characteristics and disease patterns. A solid knowledge of population and disease patterns, either on a local or global level, is essential to many disciplines engaged in planning for the public and private service sectors, public health, transportation networks, migration patterns or regional development projects. Prerequisite: [GISC 7310](#) or equivalent. (3-0) R

[GISC 7365](#) ([GEOS 5326](#)) Advanced Remote Sensing (3 semester credit hours) Examines advanced remote sensing technologies, data processing techniques and applications. The latest remote sensors are introduced. The class will discuss how remote sensing data can be processed to extract information in support of important urban and environmental decision making. The current generation, industry standard software is used for labs and applications development. Prerequisite: [GEOS 5325](#) or [GISC 6325](#). (3-0) Y

[GISC 7366](#) ([GEOS 5329](#)) Applied Remote Sensing (3 semester credit hours) Focuses on the application of one or more specialized remote sensing techniques to solve specific real world urban and environmental problems. Prerequisite: ([GISC 6325](#) or [GEOS 5325](#)) or ([GISC 7365](#) or [GEOS 5326](#)). (3-0) R

[GISC 7367](#) ([GEOS 7327](#)) Remote Sensing Workshop (3 semester credit hours) An independent project is designed and conducted by the student, after instructor approval. The project develops and demonstrates student's competence in using remote sensing techniques in a substantive application to his/her field of interest. Projects may be developed in coordination with a local

government, utility, business, or other entity, which uses remote sensing in its operations and research. A formal presentation and a project report are required. Prerequisite: [GISC 7365](#) or [GEOS 5326](#). (3-0) Y

[GISC 7387](#) GIS Research Design (3 semester credit hours) Examines issues relative to the conduct of effective and valid research in geospatial information sciences and related fields. Instructor consent required. (3-0) Y

[GISC 8320](#) Geospatial Sciences Seminar (3 semester credit hours) Examines selected topics in spatial analysis or GI Science. Pass/Fail only. May be repeated for credit as topics vary (12 semester credit hours maximum). (3-0) R

[GISC 8V27](#) Internship in GIS (1-9 semester credit hours) Provides faculty supervision for a student's internship, which must be related to GIS. Pass/Fail only. May be repeated for credit (9 semester credit hours maximum). Instructor consent required. ([1-9]-0) S

[GISC 8V29](#) Research in GIS (1-9 semester credit hours) Provides faculty supervision of research conducted by a student. Pass/Fail only. May be repeated for credit. Instructor consent required. ([1-9]-0) S

[GISC 8V99](#) Dissertation (1-9 semester credit hours) Provides faculty supervision of a student's dissertation research. Pass/Fail only. May be repeated for credit. Prerequisites: Open to PhD students only and instructor consent required. ([1-9]-0) S

International Political Economy

[IPEC 6V01](#) Independent Study (1-6 semester credit hours) Provides faculty supervision for student's individual study of a topic agreed upon by the student and the faculty supervisor. Pass/Fail only. May be repeated for credit. Instructor consent required. ([1-6]-0) S

[IPEC 6V97](#) Internship (1-6 semester credit hours) Provides faculty supervision for a student's internship. Internships must be related to the student's coursework. Pass/Fail only. May be repeated for credit. Instructor consent required. ([1-6]-0) S

Public Affairs/Administration

[PA 6300](#) Quality and Productivity Improvement in Government (3 semester credit hours) Examines the implications and challenges of improving public sector quality and productivity. Provides practical methods for improving government productivity and quality efforts. Provides tools for measuring performance and for managing performance. (3-0) R

[PA 6311](#) Public Management (3 semester credit hours) The application of ideas and techniques of public management and decision-making to examine the various roles of the general manager in public organizations. Utilizes the case method. (3-0) S

[PA 6313](#) Public Policymaking and Institutions (3 semester credit hours) Surveys the major

institutions associated with policymaking, including Congress, the Presidency, the bureaucracy, and interest groups. These institutions are studied by linking them to the decision-making theories of organizations, social choice and incrementalism. (3-0) S

[PA 6314 \(SOC 6316\)](#) Policy Analysis (3 semester credit hours) This course introduces students to policy analysis, exploring approaches and providing tools to analyze contemporary policy questions at various levels of governance. (3-0) R

[PA 6315 \(SOC 6315\)](#) Evaluating Program and Organizational Performance (3 semester credit hours) Techniques and analytical methods of assessing governmental and nonprofit program and policy success. Emphasis is placed on strategies for impact assessment, measuring efficiency, examining short-term and long-term consequences, identifying both intended and unintended impacts, and the social, political and ethical context of evaluation. (3-0) T

[PA 6316](#) Leadership in Public and Nonprofit Management (3 semester credit hours) This course will examine the major theories and practices of leadership in public and nonprofit organizations. Effective leaders from public and nonprofit organizations will speak to the class about the challenges of leading in complex environments. (3-0) R

[PA 6317](#) Intergovernmental/Intersectoral Relations and Management (3 semester credit hours) This course explores the conceptual foundations of federalism that prescribe the relationships among federal and state governments in the U.S. It considers the practice of intergovernmental administration (federal, state, local) and intersectoral management (public, private, nonprofit) including devolution, fiscal federalism, and through a review of current issues in the field. (3-0) Y

[PA 6318](#) Information Systems in Policy Environments (3 semester credit hours) Overview of the technology, role and management of computer-based information systems in policy environments. Provides the managerial foundation for effective decision-making with respect to information technology implementation in public organizations. (3-0) Y

[PA 6319](#) Topics in Public Affairs (3 semester credit hours) Topics may include areas related to environmental policy, health policy, and immigration policy and reform. May be repeated for credit as topics vary (6 semester credit hours maximum). (3-0) S

[PA 6320](#) Organizational Theory (3 semester credit hours) Focuses on bureaucracy and rationality, formal and informal structures, and the role of the environment. Organizational factors such as technology, power, information, and culture, as well as the implications of organizational theory for public policy are examined. (3-0) T

[PA 6321](#) Government Financial Management and Budgeting (3 semester credit hours) Management of government finances, including revenue collection and enforcement, cash and debt management, investments, general and special funds, controllership, financial and program audits, purchasing, financial reporting, managerial use of governmental accounting systems, GAO and professional accounting standards. (3-0) S

[PA 6322](#) Negotiations for Effective Management (3 semester credit hours) Students in this courses

will learn about negotiations, principally in the public sector, and will develop and practice skills to become more proficient negotiators and more effective managers. The course will be a combination of learning about negotiations and participating in exercises and simulated negotiations. The exercises and simulations reinforce theories about the role of negotiations in effective management and enable students to develop their own negotiation skills. (3-0) T

[PA 6324](#) Urban Planning (3 semester credit hours) This course examines local issues involving growth and development on the local level of government. Specifically, it examines land use planning, zoning, subdivision regulations, and the processes that are involved with these issues. (3-0) R

[PA 6326](#) Decision Tools for Managers (3 semester credit hours) This course introduces students to the variety of analytical and mathematical tools intended to improve management decision-making. Cognitive failures in decision-making and remedies are also explored. Tools range from systems analysis to techniques of management science. Uses available software for management science studies. (3-0) Y

[PA 6328](#) Management Process and Analysis (3 semester credit hours) This course examines rigorous methods for analyzing management processes and decision-making. Focuses on the examination, critique and design of management systems. (3-0) T

[PA 6330](#) Basics of Land Development (3 semester credit hours) Land development is the conversion of land from one use to another. This course emphasizes key concepts of land use practices utilized by local governments in the Dallas metroplex. Land use planning includes use for residential, commercial, industrial, as well as recreational, educational, social, and cultural activities. (3-0) Y

[PA 6334](#) Ethics, Culture and Public Responsibility (3 semester credit hours) This course provides a general consideration of traditions of ethical thought, the interactions between personal behavior and cultural groups/norms and the implementation of public responsibility. Topics to be considered will include tensions between personal and collective goals, the nature and limits of tolerance, and the role of institutions such as the family, government, business, churches and interest groups. (3-0) T

[PA 6335](#) ([SOC 6335](#)) Resource Development for Nonprofit Organizations (3 semester credit hours) This course examines sources of revenue for nonprofit organizations. Specific topics include fundraising, grant writing, and donor dynamics. The course is designed to prepare the student to work effectively as a member of a fundraising team - either as staff or volunteer board member. (3-0) R

[PA 6336](#) Bureaucracy and Public Policy (3 semester credit hours) This course examines federal agencies, which fall under the executive branch of government. The course reviews the roles of federal agencies in the policy-making process; the recruitment and retention of public managers and political appointees; the external and internal forces that shape the missions and operations of bureaucracies and their stakeholders; the creation and development of federal agencies; the sources and myths regarding red-tape; and the efficacy of various bureaucratic reform efforts in

the U.S. This course is historical and theoretical, as well as a practical guide for those interested in public management or public service. (3-0) R

[PA 6342 \(ECON 6372\)](#) Local Economic Development (3 semester credit hours) This class will examine the role of local governments in promoting economic development in the United States, and will analyze the economic development process. Attention will be given to economic theories of local development and practical implications of those theories. Topics include local economic development and poverty, tax incentives, infrastructure credits, firm location decisions and effects of government competition for economic activity. (3-0) T

[PA 6344](#) Local Government Management (3 semester credit hours) This course examines structure of local governments, the roles of key elected and appointed officials, and numerous issues and problems that local government managers and policymakers face. It also presents for discussion and study some of the best management practices that local government managers use in achieving effective and efficient delivery of services. There is a focus on local government management in the Dallas metro area through interaction with elected and appointed officials. (3-0) T

[PA 6345](#) Human Resources Management (3 semester credit hours) Examines theories, principles, and practices of human resources management in public organizations. Explores implications of social and administrative values as expressed in current human resource policies. (3-0) S

[PA 6348](#) Navigating the Public Service Workplace (3 semester credit hours) The governmental workplace is often a complicated work environment with numerous stakeholders. This practical course explores the challenges that public managers face at all levels of government in having successful careers. (3-0) Y

[PA 6349](#) Case Study: Policy Management in Seoul (3 semester credit hours) This course provides a unique opportunity to develop an understanding and appreciation for public policy implementation and management in an international context. Students will engage the policy formulation and change literatures to evaluate Seoul, Korea's municipal government process, procedures, and policy decisions as they pertain to a series of functional policy problems. A field trip to Seoul, Korea is required. Instructor consent required. (3-0) Y

[PA 6351 \(CRIM 6351\)](#) Introduction to Homeland Security (3 semester credit hours) This course provides a comprehensive overview of the structure of Homeland Security, its origins and developing trends and challenges. Selected material from Congress, Federal Emergency Management Agency, Department of Justice, local, state, and other government and non-government agencies will be studied. Examines both historical and contemporary Homeland Defense and Security issues. (3-0) T

[PA 6353](#) Emergency Management (3 semester credit hours) This course examines issues related to the management of emergencies including discussion of emergency preparedness, emergency mitigation, and emergency response. The course will also discuss the interplay of local, state, and federal actors in emergency response as well as the role of government, private, and nonprofit organizations in emergency response. (3-0) T

[PA 6369](#) Grant Writing and Management (3 semester credit hours) This course provides the skills and knowledge to seek, solicit, and receive grant awards from foundation and government sources to support public and nonprofit programs and projects. Also covered are the skill sets necessary to manage grants effectively to provide the greatest value to your organization and to the granting agency. (3-0) Y

[PA 6370](#) Project and Contract Management (3 semester credit hours) This course examines issues related to the management of large projects with particular attention to the management of contracts and grants to third parties. This course will discuss the justifications for contracting out public work, methods of oversight of contracts, and the steps in planning these large projects. The course will also discuss the implications of project planning for grant writing. (3-0) T

[PA 6374](#) Financial Management for Nonprofit Organizations (3 semester credit hours) This course introduces the basic concepts of third sector financial literacy. Curriculum includes financial planning and budgeting, monitoring of contracts and grants and reporting mechanisms. (3-0) R

[PA 6382](#) ([SOC 6381](#)) Nonprofit Management (3 semester credit hours) This course examines issues, strategies, and techniques related to executive leadership and management in nonprofit organizations. (3-0) R

[PA 6384](#) ([SOC 6384](#)) Seminar in Urban Policy (3 semester credit hours) This seminar surveys key urban policy challenges and opportunities faced by U.S. cities. The course will focus on critical analysis of a range of topics including the continuing viability of cities in the context of current economic and demographic dynamics, fiscal stress, governance, economic development, transportation, poverty and race/ethnicity, drugs, homelessness, federal urban policy, and survival strategies for declining cities. (3-0) R

[PA 6386](#) ([SOC 6386](#)) Diversity Management (3 semester credit hours) This course provides the skills and knowledge necessary to manage increasingly diverse workforces in the public and nonprofit sectors. A significant portion of the course will focus on diversity in the workplace, with particular attention given to discrimination, strategies for developing equitable public sector organizations, and the need for cultural competency among public administrators. (3-0) T

[PA 6387](#) Strategic Planning for Nonprofit (3 semester credit hours) This course provides an introduction to the strategic planning process for nonprofit managers or those interested in the practical aspects of nonprofit management. (3-0) T

[PA 6388](#) Readings in Public Affairs (3 semester credit hours) Individual directed reading and writing course in selected topics in public administration and public policy. May be repeated for credit (6 semester credit hours maximum). Instructor consent required. (3-0) R

[PA 6389](#) Volunteer Management (3 semester credit hours) Volunteers provide an important role for social services delivery not only in the nonprofit sector but also in government. Given the significant role of volunteers, it is critical to understand why people volunteer and how to manage these individuals in an organizational setting. In this course, students will meet the following objectives: understanding the motivation behind volunteering; understanding the role of

volunteers in American society; exploring the unique aspects of volunteer management; gaining skills for training, screening, and placing volunteers; and understanding the retention and recognition of volunteers. (3-0) T

[PA 6391](#) Nonprofit Marketing and Communication (3 semester credit hours) This course will survey the current and emerging communication tools and technologies employed by nonprofit and public sector managers. Emphasis is placed on the use and understanding of digital marketing campaigns and the web-based analytic tools for evaluating the effectiveness of digital marketing campaigns such as return on investment and incremental cost. (3-0) T

[PA 6399](#) Capstone in Public Affairs (3 semester credit hours) The capstone in public affairs is the culminating experience for graduating MPA students. Students integrate knowledge from across the MPA curriculum in a faculty-directed semester-long applied research project. This class should be taken your last semester in the program or the spring semester if you graduate in the summer. (3-0) S

[PA 6V01](#) Independent Study (1-6 semester credit hours) Students will work with a faculty member to develop an individualized course of study relevant to public affairs. Pass/Fail only. May be repeated for credit (6 semester credit hours maximum). Instructor consent required. ([1-6]-0) S

[PA 6V97](#) Internship (1-6 semester credit hours) Provides faculty supervision for a student's internship. Internships must be related to the student's coursework. Pass/Fail only. May be repeated for credit (6 semester credit hours maximum). Instructor consent required. ([1-6]-0) S

[PA 7305](#) Leadership and Change in Public and Nonprofit Organizations (3 semester credit hours) Examines the range of contemporary theories of leadership and change in public/nonprofit settings. Examines the set of actions and behaviors requisite for leading contemporary organizations and provides applied tools for enacting change and adapting models of change to varied organizational settings. (3-0) Y

[PA 7306](#) Foundations of Public Affairs (3 semester credit hours) This course offers an encompassing overview of the intellectual history of public administration, including the theories, practices, and debates fundamental to the evolution of the field from its inception to the present. (3-0) Y

[PA 7314](#) Advanced Policy Process, Implementation and Evaluation (3 semester credit hours) This advanced seminar provides in-depth introduction to central theories of the policy process, implementation and evaluation, reviews classic and contemporary literature in the field, and introduces students to key approaches to public policy research. (3-0) Y

[PA 7317](#) Economics and Public Policy (3 semester credit hours) This course draws on microeconomic theories to understand public policy analysis. Major topics include but are not limited to operation of market systems, market failure, welfare economics, public goods, and cost-benefit analysis. (3-0) Y

[PA 7320](#) Advanced Human Capital Research and Theory (3 semester credit hours) This advanced

seminar reviews the classic and contemporary literature on human resources management and related issues, presents key theories and explores key approaches to human capital research and analysis, and explores contemporary issues of human capital development in the public/nonprofit sectors. (3-0) Y

[PA 7330](#) Research Design in Public Affairs (3 semester credit hours) Includes a variety of applied research techniques aimed at enhancing analysis of intra-organizational and extra-organizational settings. Both qualitative and quantitative techniques will be explored and applied. Techniques range from ethnographic analysis of organizational and social cultures to development of survey research methods for needs assessment, environmental sensing, and marketing. Prerequisite: [EPPS 6313](#) or equivalent or instructor consent required. (3-0) Y

[PA 7350](#) Advanced Organizational Theory and Behavior (3 semester credit hours) This advanced seminar provides in-depth examination of key theories of organizational behavior and change, reviews classic and contemporary literature in the field, and introduces students to common approaches to organizational research. (3-0) Y

[PA 7360](#) Advanced Fiscal and Budgetary Policy (3 semester credit hours) This advanced seminar reviews central theories of public budgeting and finance, discusses roles of fiscal and political institutions in financial management, and provides a foundation for analyzing government budgets. The course helps students develop skills in reading and critically evaluating published and working papers in public affairs. (3-0) T

[PA 7375](#) Nonprofit Organizations: Theory and Practice (3 semester credit hours) This class explores the leading theories of nonprofit organizations. Examines the unique elements of nonprofit organizations and the academic and practical challenges produced by these distinctive elements. Examines how theory is applied to the practice of management in nonprofit organizations. (3-0) Y

[PA 7376](#) Presidential Decision Making (3 semester credit hours) This course examines how the presidency of the United States works. It investigates how a president uses his office and the executive branch that he oversees to meet what he believes are the expectations of the nation. Its readings and lectures include examination of the primary historical writing concerning the power of the president; analysis of the limits on this authority and discussion of the Supreme Court cases that have decided in specific cases what those limits are; and exploration of the structural and institutional tools the president has at his disposal to establish and implement national policy. (3-0) R

[PA 7377](#) Education Policy (3 semester credit hours) This course examines the administrative, political, economic, historical, and legal dimensions of education policy reform. Specifically, this course provides students with the tools to analyze and critique education policy design and implementation. (3-0) R

[PA 7381](#) Special Topics in Public Affairs (3 semester credit hours) Topics are rotated typically among the major fields within the program including but not limited to environmental policy, health policy, and immigration policy and reform. May be repeated for credit as topics vary (9 semester credit hours maximum). (3-0) R

[PA 7384](#) Readings in Public Affairs (3 semester credit hours) Individual directed reading and writing course in selected topics of public administration and public policy. May be repeated for credit (9 semester credit hours maximum). Department consent required. (3-0) R

[PA 7V62](#) Policy Research Workshop in Public Affairs (3-6 semester credit hours) Students join a faculty member in a group research project. MPA or doctoral students may not take more than 3 semester credit hours of their concentration requirement from policy research workshops and [PPPE 7V76](#). May be repeated for credit (12 semester credit hours maximum). Instructor consent required. ([3-6]-0) R

[PA 8330](#) Inside Washington: Policymaking from the Ground Up (3 semester credit hours) This course competitively selects a group of UT System graduate students to spend an 11-week summer program in Washington, D.C. The course is designed to complement students' experiences at their accompanying three semester credit hour internship placement. The course provides a context for and a familiarity with the dynamics that influence all activity in the government, including meeting officials from the White House, House and Senate, nonprofits, lobbying firms, think tanks, the media, and others. Students return with a participant's understanding of the workings of the remarkable machinery of the federal government. Corequisites: [PA 8331](#) and [PA 8332](#) and instructor consent required. (3-0) Y

[PA 8331](#) Archer Center Independent Study and Research (3 semester credit hours) Students pursue independent study and research while participating in the Archer Program. Instructor Consent Required. Corequisite: [PA 8330](#) and [PA 8332](#) and instructor consent required. (3-0) Y

[PA 8332](#) Archer Center Washington Internship (3 semester credit hours) Students are competitively selected to participate in an 11-week summer program in Washington, D.C. The internship experience provides students with the opportunity not only to view the activity of the government, but to participate in it as well. The internships, which are monitored by the Archer Center, integrate the student into the work of the office or agency, treating the intern like a junior staff member. Students thus participate in and come to understand the nature, the pace, the context, and the intensity of federal government policy making. The internship is complemented by a required 3-semester credit hour, academic course. Pass/Fail only. Corequisites: [PA 8330](#) and [PA 8331](#) and instructor consent required. (3-0) Y

[PA 8340](#) Dissertation Seminar in Public Affairs (3 semester credit hours) Students will explore current issues in public affairs of relevance to their area of concentration. The course will focus on the identification of a specific dissertation research topic and students are expected to develop a formal research proposal. Enrollment is only permitted for students either in their final semester of coursework or who have completed all coursework requirements. Pass/Fail only. May be repeated for credit (9 semester credit hours maximum). Graduate Program Director consent required. (3-0) S

[PA 8V01](#) Independent Study (1-6 semester credit hours) Students will work with a faculty member to develop an individualized course of study relevant to public affairs. Pass/Fail only. May be repeated for credit. Instructor consent required. ([1-6]-0) S

[PA 8V99](#) Dissertation (1-9 semester credit hours) Students will conduct original research and write a dissertation on a public affairs topic, under the direction of his or her committee. Pass/Fail only. May be repeated for credit. Prerequisites: EPPS doctoral students only and [PA 8340](#) and supervising professor consent required. ([1-9]-0) Y

Public Policy and Political Economy

[PPPE 6301](#) Political-Economic Theories (3 semester credit hours) How can long-dead Adam Smith help us explain sex-trafficking of Thai women to Japan? What insights can Karl Marx provide for explaining the Financial Crisis of 2008? What can Schumpeter teach us about today's monopolies in the Mexican Telecom Industry? This seminar provides a grand overview of the "big thinkers" in political economy - from Malthus and Ricardo, to Keynes, Freeman and Lucas Jr. as well as Olson, Gerschenkron, and Polanyi, and many more. In addition to introducing these "old" theories, their relevance to current times are explored using case studies of real world scenarios. (3-0) Y

[PPPE 6310](#) Research Design I (3 semester credit hours) This course is the first in a two-course sequence devoted to the research enterprise and the study of data development strategies and techniques to facilitate effective statistical analysis. Topics generally covered include: (1) issues and techniques in social science research with emphasis on philosophy of sciences, theory testing, and hypothesis formulation; (2) measurement and data collection strategies, reliability and validity of measures and results, sampling, surveys; and (3) examination of qualitative versus quantitative research techniques, working with observational data, field research issues, and triangulation. (3-0) Y

[PPPE 6312](#) ([SOC 6312](#)) Social-Economic Theories (3 semester credit hours) A critical analysis of early and modern social and economic theories. Select classical works of Smith, Marx, and Weber are explored, as they pertain to Western capitalist development, along with more contemporary perspectives related to the accumulation and exchange value of human, social and cultural capital. Emphasis is placed on understanding how social relations and social institutions influence economic exchanges. (3-0) T

[PPPE 6313](#) Human Organizations and Social Theory (3 semester credit hours) This is a course in empirical social theory as described in Human Organizations and Social Theory. The theory can be characterized as empirical-formal. The theory recognizes that human societies are inherently pluralistic. They are organized with several distinct kinds of cultural phenomena: language, social idea systems, technical idea systems, organizational charters, and institutions. These are used to produce organizations. Organizations produce the society's adaptation. The adaptation, if successful, preserves the cultural systems. The course reviews the methods for eliciting these cultural systems as well as the types of formal analysis needed to describe them and their uses. (3-0) T

[PPPE 6319](#) Political Economy of MNCs (3 semester credit hours) The Political Economy of Multinational Corporations will approach the rise of international firms and their behavior from a social scientific approach, utilizing research in economics, political science, and other disciplines. In addition to the historical rise of international firms, the course covers the economic theory of the

firm, MNCs as political actors, the dynamics of foreign direct investment, and the relationship of MNCs to developing countries. The aim of the course is to understand the causes and effects of the behavior of transnational corporations, particularly in regard to economic policy. (3-0) R

[PPPE 6321](#) Economics for Public Policy (3 semester credit hours) Introduces students to the use of economic methods of the analysis of public policy. The primary theoretical framework for the course is microeconomics, but the course may include macroeconomics at the discretion of the instructor. A variety of public policy topics are covered including education, employment and the labor market, taxes and redistribution, access to health care, poverty and inequality, and public assistance programs. (3-0) S

[PPPE 6329](#) Ethics, Culture, and Public Policy (3 semester credit hours) This course considers the principal schools of ethical thought in the world's major cultural traditions and their implications for law and public policy. Topics to be considered include tensions between personal and collective interests, the conflict between democratic and authoritarian theories and systems of law and government, the relation between morality and law, the way law itself differs in different cultural regions, and the ethical role of institutions such as the family, government, business, religion, and interest groups. (3-0) Y

[PPPE 6334](#) ([GISC 6334](#)) Workshop in Environmental and Health GIS/Policy (3 semester credit hours) Students join a faculty member in a research project on environmental and health policy. Specific topics vary from semester to semester, but special emphasis will be on the applications of statistical and spatial analytic methods (e.g. GIS, spatial econometrics, decision analysis, etc.) to various real-life data in the environmental and health field. Class exercises will be completed using state-of-the-art statistics and GIS software. May be repeated for credit as topics vary (9 semester credit hours maximum). Prerequisite: [EPPS 6313](#) or [EPPS 7313](#) or [GISC 6301](#) or [GISC 6381](#). (3-0) Y

[PPPE 6335](#) ([PSCI 6335](#)) Institutions and Development (3 semester credit hours) An overview of leading theories, institutional perspectives, issues and policy debates concerning urban, regional, national and global development. Topics may include economic growth, technology and innovation, shifts in industrial structure, spatially imbalanced change, and their welfare consequences. (3-0) T

[PPPE 6338](#) ([PSCI 6338](#)) Politics and Policy in China (3 semester credit hours) This course introduces the political and policy processes in China with a focus on economic reform and development. It will give comprehensive coverage of the political system in China under the Chinese Communist Party (CCP) and how policy making processes evolve from a soviet style to market reform to state-market collaborations in many policy areas. The party-state system permeates every level of the policy process from central government to local agencies. Cases include one child policy, minority policy (Uyghurs and Tibet), foreign affairs regarding Hong Kong, Macau and Taiwan, housing policy, fiscal and monetary policies, and bilateral relations with the United States. This course engages each student in reading, discussions, and formulating research ideas via collaborative projects. At end of course, students will coauthor with group members a policy-related research report specializing in one policy area. (3-0) R

[PPPE 6340](#) ([SOC 6340](#)) Domestic Social Policy (3 semester credit hours) Overview of governmental

and non-governmental programs, policies, and institutions dealing with those who cannot function self-sufficiently within the American market economy, including low-income families, the elderly, the unemployed, and people with disabilities. Analyzes how social policy in the United States reflects the political economy and culture, as well as social and demographic trends. (3-0) Y

[PPPE 6341 \(SOC 6357\)](#) Health Policy (3 semester credit hours) The history and political economy of the U.S. health care system and a review of major governmental programs to expand access to appropriate services, control rising costs, ensure the quality of care, and promote health through prevention. Analysis of current and recent proposals for reform of health care policy. (3-0) R

[PPPE 6342](#) Research Design II (3 semester credit hours) This course is the second in a two-course sequence devoted to the study of data development strategies and techniques to facilitate effective statistical analysis. Topics generally covered include: the logic of causal inquiry and inference in the social sciences, the elaboration paradigm and model specification, anticipating and handling threats to internal validity, hierarchies of design structure (experimental, quasi-experimental and non-experimental); linking design structure to effect estimation strategies and analyzing design elements in published literature. Students will be required to select a research topic in consultation with the instructor and prepare a written comparative design analysis. [PPPE 6310](#) and ([EPPS 6313](#) or [EPPS 7313](#)) are recommended. Instructor consent required. (3-0) Y

[PPPE 6343](#) Global Health Policy (3 semester credit hours) This introductory but interdisciplinary course examines contemporary issues in global health policy and practices. This course helps students understand various social, economic, political and environmental determinants of health and considers evidence that inequalities in education, income and accessibility to resources influence health status. Students will develop skills in cost-effectiveness analysis, health outcome measurement and spatial analysis, using a variety of contemporary global health case studies that focus on content areas such as maternal and child health, environmental health, infectious diseases (HIV/AIDS, malaria, diarrheal diseases, etc.) and global healthcare delivery. Emphasis is placed on issues of global health inequality at various levels, exploring the nature and extent of global inequalities in health and the possible policy responses to reducing global health disparities. (3-0) T

[PPPE 6347 \(PSCI 6347\)](#) Proseminar in Political Institutions and American Politics (3 semester credit hours) Surveys the scholarly literature on major institutions associated with policymaking in the United States, including Congress, the Presidency, the bureaucracy, and interest groups. (3-0) Y

[PPPE 6350 \(SOC 6350\)](#) Social Stratification (3 semester credit hours) This seminar will examine the major theories and lines of research on social stratification, defined as the hierarchical ranking of groups based on the unequal distribution of societal resources and positions. Focusing primarily on the U.S. class system, topics covered include: class reproduction and mobility, the educational system and policy, empirical definitions, the implications of race and gender for social class, and forms of legitimation. (3-0) Y

[PPPE 6351 \(PSCI 6351\)](#) Politics of East Asia (3 semester credit hours) This is a survey course to prepare students from multiple disciplines to comprehend, study, and connect with the Asian world. Specifically, this course focuses on China, Taiwan, Japan, Hong Kong, Macau, North Korea,

and South Korea, with emphasis on the role of the United States. It examines and compares the politics of the Asia nations in their political institutions, actors, and issues. The students will study extensively the history, political geography, political economy, development, and democratization of the countries in the region. (3-0) R

[PPPE 6352 \(ECON 6352\)](#) World Political Economy (3 semester credit hours) An overview of the major economic, social, political, and cultural forces that influence the nature of the international economic and political environment, as well as global economic and political relations. Topics include: theories of global political economy; globalization and economic trade, economic and political transformation in Eastern Europe, China, and the former Soviet Union; democratization and development in the less developed countries; military and non-military approaches to national and international security; environmentally sustainable economic development; and the international implications of technological failure. (3-0) T

[PPPE 6353 \(ECON 6362\)](#) Industry, Technology, and Science Policy (3 semester credit hours) Focuses on the bi-directional relationship between science/technology and societal conditions, with special attention to industrial and other economic factors. Topics include the role of scientists and engineers in industrial competitiveness and economic well-being; the impact of market structure on the nature and pace of technological development; appropriate technology and sustainable economic development; and the nature and policy implications of the intersection of increasingly powerful technologies with human error and criminal or terrorist behavior. (3-0) Y

[PPPE 6354](#) Theories and Issues of Development (3 semester credit hours) In approaching development, there is an important interaction between theories and issues, each to some extent defining the other. This course will review a number of prominent instances in which we see this interaction - where theory has shaped the way people defined and approached practical problems and also where pressing practical problems have sometimes demanded new theoretical developments. Specific theories and issues discussed vary. Possible theories of interest include arguments for and against slavery, mercantilism, the idea of economic "takeoff," central planning versus pluralism, and the role of democracy and human rights. Issues include labor conditions, urban living conditions, population growth and population quality, environmental pollution and sustainability, and governmental ineffectiveness and corruption. (3-0) Y

[PPPE 6355](#) Political Economy of the Middle East (3 semester credit hours) Analysis of the interplay of cultures and conflicts in the Middle East. The course will examine ancient cultures, Islam and the Ottoman Empire, the Arab-Israeli conflict, the rise of the Oil Kingdoms, the Kurds, the Gulf wars, and terrorism in the name of Islam. The course will also focus on U.S. relations with a number of Middle Eastern countries such as Saudi Arabia, Iran, Iraq, Egypt, and Israel. (3-0) R

[PPPE 6356 \(SOC 6356\)](#) Health and Illness (3 semester credit hours) A review of medical sociology and related fields, including social epidemiology and the social demography of health and illness; health and illness behavior; health institutions and professions; economic factors and trends in health care; and health policies and programs. (3-0) R

[PPPE 6357 \(PSCI 6357\)](#) Political Economy of Latin America (3 semester credit hours) Addresses historical and contemporary issues in Latin American political economy. Uses case studies and

cross-regional comparisons to assess competing explanations. Analyzes the current political and economic situation facing Latin America in its quest for economic growth and development. The emphasis is to understand the broad patterns of development and change in the region and the physical, historical, social and economic constraints which have affected development, broadly understood. (3-0) R

[PPPE 6358](#) Political Economy of South and Southeast Asia (3 semester credit hours) Political Economy of South and Southeast Asia. South Asia is the Indian peninsula. Southeast Asia is the great swath of countries from Burma and Thailand through Malaysia to Indonesia and Australia. This is a region of great cultural, political, economic, religious, and historical diversity. This course surveys the political economy of the region by selectively examining key countries and their mutual interactions. The major countries, all of which are rising military and economic powers, are Pakistan, India, Thailand, Indonesia, and Australia. Additional countries, which will be included according to interest and available material, include Sri Lanka, Nepal, Bhutan, Bangladesh, Burma, Cambodia, Vietnam, Malaysia, Singapore, Papua New Guinea, East Timor, and New Zealand. (3-0) R

[PPPE 6359](#) Political Economy of Economic Development (3 semester credit hours) Examines the interactions between markets and the state from a comparative and public policy perspective. Special emphasis will be placed on issues involving industry regulation/deregulation, antitrust/competition, innovation/industrial policy, infrastructure investment, intellectual property, social regulation, and global trade/investment. (3-0) Y

[PPPE 6361](#) ([PSCI 6361](#)) Civil Conflict (3 semester credit hours) This course examines the range of contentious politics within states and the breakdown of political order. Topics include protests, riots, terrorist campaigns, insurgencies, and civil war. Students will develop an understanding of multiple theoretical perspectives and empirical approaches to the study of civil conflict. (3-0) T

[PPPE 6362](#) ([PSCI 6362](#)) Political Development (3 semester credit hours) This course will survey different perspectives and theories of political development. Topics covered include the role of the state, democratization, political stability, civil society and environmental concerns, among others. (3-0) R

[PPPE 6363](#) ([PSCI 6363](#)) Conflict and Development (3 semester credit hours) This module will explore the nexus between violent intrastate conflict and development. It will examine some of the key conceptual frameworks advanced to understand conflict and will explore specific themes that have occupied researchers and policy practitioners in recent years. In addition to assessing the economic costs of the conflicts, this course will also examine the traditional factors that have been purported to explain the prevalence of insurgency. (3-0) R

[PPPE 6364](#) ([ECON 6351](#)) Development Economics (3 semester credit hours) An overview of theories of national economic growth and development in the context of developing countries. This includes macroeconomic models; the role of financial development, trade, and agriculture; domestic sectoral policy; human resource development; the environment; and poverty. (3-0) R

[PPPE 6365](#) The Innovation Economy (3 semester credit hours) Examines the role of innovation as the cause and consequence of economic transformation and performance in domestic and global

contexts. Focus will be on innovation as an emergent dynamic and the institutional and legal-regulatory influences that shape it. (3-0) T

[PPPE 6366](#) Law and Development (3 semester credit hours) Scholars, politicians, administrators, and the educated public in general increasingly recognize that long-term societal development must come from within a country or region. It must be "organic." Organic growth, in turn, depends on establishing an effective, responsible government, rule of law, and effective economic regulation. Moreover, this legal regime cannot be merely national; it must be international. This course reviews the experiences that lie behind this realization, the issues and organizations it involves, and the steps being taken to implement it all international and national levels. (3-0) T

[PPPE 6367](#) Environmental Economics and Policy (3 semester credit hours) The purpose of this course is to identify various local and global environmental problems and to utilize the major analytical tools to address complex environmental management issues, particularly their impact on human health. Emphasis is placed on the use of economic tools for modeling environmental problems and their policy and management solutions. Students will be exposed to principles of microeconomic fundamentals (market models, benefit-cost analysis, etc.) and the major concepts of public goods and externality theory, which are applied to a variety of traditional and contemporary cases of environmental management and policy. Students will review and discuss scholarly research articles in the area of six major environmental research topics, such as (1) indoor air quality management, (2) outdoor air quality management, (3) water quality management, (4) hazardous solid waste management, (5) pesticides and toxic chemical management, and (6) climate change and global sustainable development. (3-0) T

[PPPE 6368](#) Political Economy of Finance (3 semester credit hours) Why are some currencies the target of speculative attacks while others remain unharmed? Why was Malaysia able to deal with the East Asian financial crisis, while Korea and Thailand were not? Why did Argentina default on its debt while Brazil did not, even though it had the higher debt burden? This course provides answers to these questions by analyzing the interplay between politics and finance. The first section of the course deals with the differences in corporate governance: the configuration of the domestic financial sector differs across countries, with implications for the way stock markets and banks are operating. The second section analyzes how politics affects exchange rates and capital mobility. The third and final section of the course investigates sovereign debt and lending. This course aims to provide students with the ability to analyze a two-way relationship: how politics affects finance as well as how finance shapes politics. (3-0) T

[PPPE 6369](#) National and International Security Strategies and Policies (3 semester credit hours) With the end of the decades-long Cold War, the US has become the world's only superpower. But the problem of national and international security continue to be a dominant concern of national and international political and economic life, just as it has been for more than sixty years. Many nations continue to maintain high levels of military expenditure as a mainstay of their security policy. Yet, there has been a profound change in the nature of the threats to security since the Cold War. Some, like the threat of intentional full-scale global nuclear war, have receded. Others, like the threat posed by nuclear proliferation and the terrorism of mass destruction, have increased. From acute hot spots to longer-term questions of restructuring power and security

arrangements in a post-Cold War world, understanding the deeper issues of national and international security is critical to understanding what lies behind the headlines -- and what strategies are likely to be effective in achieving real security. Topics include: the nature and meaning of security; security and military force; terrorism, accidents and accidental war; nuclear proliferation; the international arms trade; the experience of war; the economics of security policy; social and psychological factors; and strategies for achieving security by nonmilitary means. (3-0) T

[PPPE 6370](#) Political Economy of Natural Resources (3 semester credit hours) Does oil undermine democracy? Why do natural resources have a positive effect on growth in Botswana but a negative impact in Nigeria? Is there a relationship between natural resources and (civil) war? This course explores the politics of natural resources in both industrialized and developing countries. We analyze the effect of natural resources on a variety of economic and political issues, including growth, macroeconomic stability, corruption, civil war, women's rights, and democracy. During this process, we also focus on how political institutions and economic conditions shape the effect of natural resources. This allows us to understand why natural resources may have positive effects in some instances, but a negative in others. (3-0) T

[PPPE 6371](#) Urban Development (3 semester credit hours) Explores emergence and expansion of social, political and economic forces that drive urbanization, city growth and decline, and spatial patterns of development at global, national and metropolitan scale. Focus is on understanding nature of urban development challenges around the world and on developing public and private sector interventions to address them, including those that target poverty, education, employment, shelter, transportation, land use, economic development, governance and environmental sustainability. (3-0) T

[PPPE 6372](#) Faith, Ideology, and Development (3 semester credit hours) Connections between named or unnamed religions and socioeconomic progress have been subject to considerable speculation, early on by Livy, Tacitus, Aquinas, and Machiavelli, and then by Sombart and Weber. Although assertions about links between faith and development are weaker today, suspicion remains that religion can and does influence growth through a variety of means. This course explores several of these mechanisms, including education, health, social capital formation, wealth accumulation, and public policy influence. (3-0) T

[PPPE 6373](#) Issues in Science, Technology and Society (3 semester credit hours) This course explores a number of topics related to the roles of science in society and the relationship between science, technology and society. Topics include epistemological issues having to do with the conduct of scientific research, the role of scientific objectivity and the challenges to scientific objectivity posed by politics and postmodernist influences on the scientific enterprise. The course also explores the impact of technological advances upon society in areas such as biotechnology, information technology and computing, and artificial intelligence, and nanotechnology and robotics, and what kind of policy responses, if any, to these new technologies, are appropriate. The ethical dimensions posed by the increased role of science and technology in the twenty-first century will be an important theme of the course. (3-0) T

[PPPE 6374](#) ([PSCI 6374](#)) U.S. Global Security and Public Opinion (3 semester credit hours) This

course focuses on description, explanation and assessment of the sources, distribution, dynamics and consequences of public opinion about economic, political and social security events involving the United States and other countries. Emphasis is placed on how these events and leaders choices about them, including but not limited to economic crisis, poverty, social conflict, terrorism and war, affect public opinion; on how public opinion affects choices and events; and on how survey research can advance description, explanation and assessment of these effects. (3-0) T

[PPPE 6377](#) Political Economy of Africa (3 semester credit hours) Review of political and economic change in Africa, mainly south of the Sahara, from the late nineteenth century onward. The course explores interactions between governance mechanisms and economic growth, focusing on influences of colonization, independent authoritarian and democratic rule, and experimentation with socialist and capitalist modes of development. Contemporary themes taken up include poverty reduction, migration and remittances, economic modernization and diversification, conflict, public sector debt, foreign aid, and re-colonization by emerging and other economies. (3-0) R

[PPPE 6379](#) Special Topics in Development Studies (3 semester credit hours) May be repeated as topics vary (9 semester credit hours maximum). (3-0) R

[PPPE 6391](#) The Political Economy of Technology and Innovation (3 semester credit hours) An exploration of the relationships among technological advances, markets, and societal contexts, drawing on the social sciences (especially economics and sociology), engineering, and management. The economic impacts of both established and emerging technologies on firms and industries (profit and productivity), the macroeconomy, and society (employment and earnings). Special emphasis will be devoted to how advanced technologies transform both the work of - and work in - industries throughout the economy, even as they blur the distinctions among them. (3-0) T

[PPPE 6392](#) Practice of International Development (3 semester credit hours) This course focuses on the management of international development processes, including the role of context in development, various conceptualizations of poverty, development actors and institutions, and the challenges of development interventions in difficult environments. (3-0) T

[PPPE 6V81](#) Special Topics in Political Economy (1-9 semester credit hours) May be repeated for credit as topics vary. ([1-9]-0) S

[PPPE 6V91](#) Evaluation Research (3-6 semester credit hours) Individual or group project in evaluation research performed for a public or private community organization under faculty supervision. Students will normally enroll in this course for two consecutive semesters. The first semester of enrollment will culminate in the completion of a formal evaluation research proposal; the second will end with a final research report based on conclusions of the proposed research. Pass/Fail only. May be repeated for credit (6 semester credit hours maximum). Program Coordinator consent required. ([3-6]-0) R

[PPPE 6V98](#) Masters Thesis (3-9 semester credit hours) Provides faculty supervision of a student's masters thesis research. May be repeated for credit (9 semester credit hours maximum).

Department consent required. ([3-9]-0) S

[PPPE 7313 \(PSCI 7313\)](#) Counterterrorism and Counterinsurgency (3 semester credit hours) In this discussion-based seminar, we will examine the different policy responses to terrorism and insurgency. Additionally, we will discuss issues of policing and efforts to prevent radicalization. We will explore different approaches (quantitative, qualitative, and formal) and will take advantage of literature from multiple disciplines. (3-0) R

[PPPE 7319 \(ECON 6336\)](#) Economics of Education (3 semester credit hours) This seminar examines theoretical and empirical writings relating to educational policy. The issues considered will include the link between educational achievement and earnings, the role of early childhood, assessments of head start and pre-school programs, the effectiveness of compensatory education and tutoring programs, the large and persistent achievement gap between children from minority and low-income families and those from middle-income Asian and white families, a critical examination of educational production functions, the extent and consequences of school segregation, bilingual education programs, special education programs, international comparisons of student achievement and schools, school finance and an examination of various school reform proposals. (3-0) R

[PPPE 7329](#) Special Topics in Industry and Public Policy (3 semester credit hours) May be repeated for credit as topics vary (9 semester credit hours maximum). (3-0) R

[PPPE 7359](#) Special Topics in Policy Methods (3 semester credit hours) May be repeated for credit as topics vary (9 semester credit hours maximum). (3-0) R

[PPPE 7V26](#) Policy Research Workshop in Institutions and Processes (3-9 semester credit hours) Students join a faculty member in a group research project on the political economy of public policy decisions in the context of institutional settings, such as legislatures, executive or administrative agencies, courts, or metropolitan systems. May be repeated for credit (9 semester credit hours maximum). ([3-9]-0) R

[PPPE 7V47](#) Policy Research Workshop in Health Care Policy (3-9 semester credit hours) Students join a faculty member in a group research project. May be repeated for credit (9 semester credit hours maximum). ([3-9]-0) R

[PPPE 7V62](#) Policy Research Workshop in Social Policy (3-9 semester credit hours) Students join a faculty member in a group research project. May be repeated for credit (9 semester credit hours maximum). ([3-9]-0) R

[PPPE 7V64](#) Policy Research Workshop in Poverty Research and Policy (3-9 semester credit hours) Students join a faculty member in a group research project. May be repeated for credit (9 semester credit hours maximum). ([3-9]-0) R

[PPPE 7V76](#) Policy Research Workshop in Development Studies (3-9 semester credit hours) Students join a faculty member in a group research project. Topics vary from semester to semester. However, students may substitute an individual Field Research Project for this workshop; the

project must be approved by the faculty of the School of Economic, Political and Policy Sciences. May be repeated for credit as topics vary (9 semester credit hours maximum). ([3-9]-0) R

[PPPE 7V77](#) Research Workshop in Science and Technology Policy (1-6 semester credit hours) This workshop will provide the student with an opportunity to pursue individual and small group research under the supervision of the instructor into various policy-related dimensions of contemporary scientific research and technological advances such as biotechnology, nanotechnology, artificial intelligence and other contemporary advances, and the impact of scientific and technological advances on culture, economy and political institutions. May be repeated for credit (6 semester credit hours maximum). Instructor consent required. ([1-6]-0) T

[PPPE 8398](#) Dissertation Seminar (3 semester credit hours) For students preparing proposals or writing dissertations. Pass/Fail only. May be repeated for credit. Prerequisites: Successful completion of qualifying examination and instructor consent required. (3-0) S

[PPPE 8V01](#) Independent Study (1-9 semester credit hours) Provides faculty supervision for student's individual study of a topic agreed upon by the student and the faculty supervisor. Pass/Fail only. May be repeated for credit. Instructor consent required. ([1-9]-0) R

[PPPE 8V97](#) Internship (1-9 semester credit hours) Provides faculty supervision for a student's internship. Internships must be related to the student's coursework. Pass/Fail only. May be repeated for credit. Instructor consent required. ([1-9]-0) S

[PPPE 8V99](#) Dissertation (1-9 semester credit hours) Provides faculty supervision of a student's dissertation research. Pass/Fail only. May be repeated for credit. Prerequisites: Open to PhD students only and instructor consent required. ([1-9]-0) S

Political Science

[PSCI 5381](#) Special Topics in Political Science (3 semester credit hours) Topics vary semester to semester and are designed for students in one of the Master's degree programs. May be repeated for credit (6 semester credit hours maximum). (3-0) R

[PSCI 5V83](#) Independent Study (1-9 semester credit hours) Provides faculty supervision of student's individual study of a topic that is directly relevant to the student's Master's degree program and is agreed on by the student and the faculty supervisor. Pass/Fail only. May be repeated for credit (9 semester credit hours maximum). Instructor consent required. ([1-9]-0) R

[PSCI 6300](#) Proseminar in Comparative Politics and International Relations (3 semester credit hours) Studies major theories of democracy, democratization, and globalization, relationships between democratization and globalization, and their implications for citizen politics, government performance, and regime legitimacy. (3-0) Y

[PSCI 6301](#) Constitutional Law (3 semester credit hours) This class addresses the evolution of the American Constitution. The course will examine major constitutional concepts that are important to an understanding of American government. Additionally, major interpretations of the

Constitution and the role of courts in the American legal system will be explored. (3-0) Y

[PSCI 6304](#) Internship in Constitutional Law Studies (3 semester credit hours) Students will gain practical legal experience by working as an intern in a law office, court, or in the office of a legal organization such as a district attorney's or public defender's office. (3-0) Y

[PSCI 6305](#) Workshop in Constitutional Law Studies (3 semester credit hours) Students will undertake a major research topic on a law-related matter which will develop skills in legal research and writing, quantitative research, or field research. (3-0) Y

[PSCI 6306](#) Human Rights and International Law (3 semester credit hours) This course explores international agreements and their effects on individual rights in a variety of contexts such as international conflicts, civil wars, and oppressive political regimes. (3-0) R

[PSCI 6309](#) International Political Economy (3 semester credit hours) An integration of the insights of international relations and international economics. Explores the politics of international trade and finance, or economic globalization; investigates the simultaneous pursuit of wealth and power in states and other international actors. (3-0) T

[PSCI 6311](#) Proseminar in Law and Courts (3 semester credit hours) The purpose of this graduate seminar is to survey the different areas of empirical/quantitative research in the subfield of judicial politics. The course will assess the courts as political institutions and examine the interactions between the judiciary and other institutions. We will address the core theoretical debates and assess key methodological issues concerning judicial decision-making in the U.S. context. We will also place these debates within the growing body of comparative judicial behavior literature. (3-0) Y

[PSCI 6316](#) International Organizations (3 semester credit hours) An analysis of international intergovernmental organizations such as the United Nations, the International Monetary Fund, and the European Union. Topics include their historical development, internal political processes, and consequences for the international political system. (3-0) T

[PSCI 6319](#) Proseminar in International Relations (3 semester credit hours) This course introduces graduate students to important theoretical perspectives and debates in the study of international relations. Works covered address different levels of analysis from the international system to domestic politics to individual leaders - and that span major theoretical paradigms, including Realism, Liberalism, and Constructivism. The intellectual history of the discipline is discussed as well as cutting-edge contributions (3-0) T

[PSCI 6321](#) Proseminar in Comparative Politics (3 semester credit hours) Comparative politics is the study of political institutions and processes around the world. This course examines various approaches to the study of comparative politics, including structural, cultural, economic, and institutional theories of government. Students will gain an understanding of major theoretical works in comparative politics as well as empirical applications. Substantive topics include state development, democracy and democratization, party systems, authoritarian governments, economic growth, and civil conflict. (3-0) T

[PSCI 6323](#) Public Choice (3 semester credit hours) This course covers the application of economic reasoning to non-market decision-making in situations involving collective choice. Topics include market and government failure, collective action, properties of different voting rules, design of constitutions, and the behavior of candidates, elected officials, bureaucrats, and voters. Recommended prerequisites: [PPPE 6321](#) or equivalent. (3-0) R

[PSCI 6324](#) Local and State Government and Politics (3 semester credit hours) Examines public policy institutions and processes at the local and state levels in the United States, with particular attention to developments in the Dallas-Fort Worth metroplex and the State of Texas. Addresses issues of policy convergence, divergence, and representation. (3-0) R

[PSCI 6327](#) Protest and Social Movements (3 semester credit hours) This graduate seminar examines contentious politics and social movements. Topics include violent and non-violent dissent, transnational activism, political opportunity structures, state repression, and normative change. Students will discuss major theoretical debates as well as gain an understanding of key empirical studies of protest movements. (3-0) R

[PSCI 6330](#) Campaigns and Elections (3 semester credit hours) This course surveys the state of the art research on campaigns and elections in American politics with a focus on Congressional and Presidential elections. (3-0) T

[PSCI 6331](#) Executives, Legislatures and Public Policy (3 semester credit hours) An investigation of the role played by executives and legislatures in shaping public policy in the United States. (3-0) T

[PSCI 6333](#) Political and Civic Organizations (3 semester credit hours) An institutional perspective on political parties, interest groups, and other organizations such as labor unions and nonprofit organizations that are important actors in political and civic affairs. The emphasis is on internal operations of organizations, their strategic behavior, and interactions with government, including both regulation by the state and attempts to influence public decision makers. (3-0) T

[PSCI 6335](#) ([PPPE 6335](#)) Institutions and Development (3 semester credit hours) An overview of leading theories, institutional perspectives, issues and policy debates concerning urban, regional, national and global development. Topics may include economic growth, technology and innovation, shifts in industrial structure, spatially imbalanced change, and their welfare consequences. (3-0) T

[PSCI 6337](#) Comparative Institutions (3 semester credit hours) A comparative analysis of political and economic institutions in different settings. Includes a consideration of different theoretical approaches to the comparative study and design of institutions in the United States and elsewhere. (3-0) T

[PSCI 6338](#) ([PPPE 6338](#)) Politics and Policy in China (3 semester credit hours) This course introduces the political and policy processes in China with a focus on economic reform and development. It will give comprehensive coverage of the political system in China under the Chinese Communist Party (CCP) and how policy making processes evolve from a soviet style to market reform to state-market collaborations in many policy areas. The party-state system permeates every level of the

policy process from central government to local agencies. Cases include one child policy, minority policy (Uyghurs and Tibet), foreign affairs regarding Hong Kong, Macau and Taiwan, housing policy, fiscal and monetary policies, and bilateral relations with the United States. This course engages each student in reading, discussions, and formulating research ideas via collaborative projects. At end of course, students will coauthor with group members a policy-related research report specializing in one policy area. (3-0) R

[PSCI 6339](#) Election Law and Electoral Systems (3 semester credit hours) An examination of election law in America from redistricting to ballot access to campaign finance. We also spend time looking at different electoral systems in the U.S. and around the world. (3-0) R

[PSCI 6341](#) Texas Legislative Process (3 semester credit hours) This course examines the legislative process in the Texas Legislature. Students will learn the intricacies of passing legislation by examining the constitutional rules of Texas' lawmaking and the evolution of each chamber's parliamentary rules. Students will have the opportunity to examine specific case studies to illustrate the importance of legislative process in Texas. (3-0) R

[PSCI 6342](#) Comparative Courts and Law (3 semester credit hours) The purpose of this graduate seminar is to survey the growing body of comparative research on courts, law and justice issues. The course will examine a selection of topics within this broadly defined field. The course will examine both qualitative and quantitative work. These examinations will span comparative politics, international relations, and the broader sub-field of public law. (3-0) R

[PSCI 6343](#) Law and the Policy Process (3 semester credit hours) Provides the legal perspective on public policy and emphasizes the role of the judicial system in the recent evolution of public policy in selected problem areas. (3-0) T

[PSCI 6347](#) ([PPPE 6347](#)) Proseminar in Political Institutions and American Politics (3 semester credit hours) Surveys the scholarly literature on major institutions associated with policymaking in the United States, including Congress, the Presidency, the bureaucracy, and interest groups. (3-0) Y

[PSCI 6350](#) Logic, Methodology, and Scope of Political Science (3 semester credit hours) Promotes understanding of how and why research projects are conducted, and when and why research programs cease to contribute to knowledge production. Attention also is paid to major modes of analysis in political science, the state of the discipline, and future directions in field-specific, cross-field, and cross-disciplinary research. (3-0) T

[PSCI 6351](#) ([PPPE 6351](#)) Politics of East Asia (3 semester credit hours) This is a survey course to prepare students from multiple disciplines to comprehend, study, and connect with the Asian world. Specifically, this course focuses on China, Taiwan, Japan, Hong Kong, Macau, North Korea, and South Korea, with emphasis on the role of the United States. It examines and compares the politics of the Asia nations in their political institutions, actors, and issues. The students will study extensively the history, political geography, political economy, development, and democratization of the countries in the region. (3-0) R

[PSCI 6352](#) Empirical Democratic Theory (3 semester credit hours) This course covers major issues

in normative democratic theory; seeks to understand how this theory has shaped empirical investigations in contemporary political science; and asks how the empirical realities of democracy in practice have contributed to normative theories and models of democracy. (3-0) T

[PSCI 6357](#) ([PPPE 6357](#)) Political Economy of Latin America (3 semester credit hours) Addresses historical and contemporary issues in Latin American political economy. Uses case studies and cross-regional comparisons to assess competing explanations. Analyzes the current political and economic situation facing Latin America in its quest for economic growth and development. The emphasis is to understand the broad patterns of development and change in the region and the physical, historical, social and economic constraints which have affected development, broadly understood. (3-0) R

[PSCI 6358](#) Refugee and Migration Policy (3 semester credit hours) This course will examine core policy issues related to refugees, migration, trafficking, forced migration, and internally displaced persons. The course will survey relevant political and social science literature and seek to understand these issues in the context of theories within international relations, comparative politics, and international law. (3-0) T

[PSCI 6361](#) ([PPPE 6361](#)) Civil Conflict (3 semester credit hours) This course examines the range of contentious politics within states and the breakdown of political order. Topics include protests, riots, terrorist campaigns, insurgencies, and civil war. Students will develop an understanding of multiple theoretical perspectives and empirical approaches to the study of civil conflict. (3-0) T

[PSCI 6362](#) ([PPPE 6362](#)) Political Development (3 semester credit hours) This course will survey different perspectives and theories of political development. Topics covered include the role of the state, democratization, political stability, civil society and environmental concerns, among others. (3-0) R

[PSCI 6363](#) ([PPPE 6363](#)) Conflict and Development (3 semester credit hours) This module will explore the nexus between violent intrastate conflict and development. It will examine some of the key conceptual frameworks advanced to understand conflict and will explore specific themes that have occupied researchers and policy practitioners in recent years. In addition to assessing the economic costs of the conflicts, this course will also examine the traditional factors that have been purported to explain the prevalence of insurgency. (3-0) R

[PSCI 6364](#) Public Opinion and Survey Research (3 semester credit hours) This course describes, explains and evaluates the conduct of survey research for the study of public opinion. Major topics include the guidelines, design, implementation and precision of survey projects, questions, interviews and data about the development, distributions and dynamics of public opinion, together with public attitudes, beliefs and values, about politics and society. Also considered are recent examples of how survey research on public opinion has informed governments' making of public policy. (3-0) T

[PSCI 6365](#) U.S. and International Asylum and Refugee Law (3 semester credit hours) This course explores U.S. and international law and policy related to the issues of migration, asylum and refugees. We will examine development of the international refugee regime and a variety of topics

issues related to the regime, including: the ethics of refugee protection, legal and institutional protection, problems of protection, the Cold War, post-Cold War, and post-Sept. 11th contexts, and related issues such as internally displaced persons. We will examine several related case studies. We will then move our focus to receiving states, examining policies and systems in a variety of states before moving to a more specific focus on the U.S. system, examining in detail U.S. asylum policy and the core domestic actors which implement this policy, examining the competing dominant theoretical perspectives. We will examine the growing body of systematic empirical work that addresses core questions related to asylum decision making in the U.S. and other receiving states through quantitative analysis. (3-0) Y

[PSCI 6366](#) Ethnic Politics (3 semester credit hours) This course focuses on how ethnicity and inter-ethnic relations affect political processes around the world. Key themes include the development of ethnic and national identities; political stability and conflict in multiethnic societies; prospects for democratic stability; and public policy. Students will explore both the theoretical literature on ethnic politics and core empirical works in the field. (3-0) T

[PSCI 6374](#) ([PPPE 6374](#)) U.S. Global Security and Public Opinion (3 semester credit hours) This course focuses on description, explanation and assessment of the sources, distribution, dynamics and consequences of public opinion about economic, political and social security events involving the United States and other countries. Emphasis is placed on how these events and leaders choices about them, including but not limited to economic crisis, poverty, social conflict, terrorism and war, affect public opinion; on how public opinion affects choices and events; and on how survey research can advance description, explanation and assessment of these effects. (3-0) T

[PSCI 6V42](#) Legislative Affairs Internship (1-6 semester credit hours) Students will work with the professor to identify with a relevant government office approved by the professor. Students will be asked to participate in the daily operations of that office and learn the intricacies of staffing from a first-hand perspective. May be repeated for credit (6 semester credit hours maximum). Instructor consent required. ([1-6]-0) S

[PSCI 6V97](#) Internship (1-6 semester credit hours) Provides faculty supervision for a student's internship. Internships must be related to the student's coursework. Pass/Fail only. May be repeated for credit (9 semester credit hours maximum). Instructor consent required. ([1-6]-0) R

[PSCI 7313](#) ([PPPE 7313](#)) Counterterrorism and Counterinsurgency (3 semester credit hours) In this discussion-based seminar, we will examine the different policy responses to terrorism and insurgency. Additionally, we will discuss issues of policing and efforts to prevent radicalization. We will explore different approaches (quantitative, qualitative, and formal) and will take advantage of literature from multiple disciplines. (3-0) R

[PSCI 7318](#) Conflict Management (3 semester credit hours) Examines the conditions that influence the processes and outcomes of conflict management between and within nation-states. Assesses various approaches used in conflict management research with a special emphasis on the relationship between conflict management and theories of IR. (3-0) R

[PSCI 7330](#) International Conflict (3 semester credit hours) This course examines the scientific

research on international conflict with a particular emphasis on the causes of conflict and conditions for peace. Among other factors, students will study the effects of domestic politics, regime types, interdependence, power, the environment, non-state actors, and conflict diffusion. Readings will come from every level of analysis (individual, national, dyadic, and systematic) and will be primarily quantitative. (3-0) T

[PSCI 7335](#) Theories of International Relations (3 semester credit hours) An examination of major theories of international relations. Includes coverage of the dominant realist, liberal, and constructivist approaches, as well as coverage of more specific topics, such as norms and international society, pluralist theories of foreign policy, theories of sovereignty, political psychology, bargaining and international institutions, and network theories. (3-0) T

[PSCI 7350](#) Institutions and Citizen Behavior (3 semester credit hours) Examines the major theories, concepts and models associated with relationships between public institutions and citizen behavior, particularly how such institutions as elections, interest groups, political parties and social movements mobilize behavior and how behavior, in turn, influences institutional processes and outcomes. (3-0) T

[PSCI 7372](#) Game Theory for Political Scientists (3 semester credit hours) An introduction to formal models with more than one decision-maker, this course will cover basic solution concepts in game theory. The course will pay particular attention to applications in political science, rather than the foundational models in economics. (3-0) R

[PSCI 7381](#) Special Topics in Political Science (3 semester credit hours) Topics vary semester to semester and are rotated typically among the three fields of the program. May be repeated for credit (9 semester credit hours maximum). (3-0) R

[PSCI 7V83](#) Independent Study (1-9 semester credit hours) Provides faculty supervision of student's individual study of a topic that is directly relevant to dissertation or practicum research and is agreed on by the student and the faculty supervisor. Pass/Fail only. May be repeated for credit. Instructor consent required ([1-9]-0) R

[PSCI 8381](#) Research Seminar in Political Science (3 semester credit hours) Promotes faculty-student research collaboration and students' dissertation or practicum and professional development. Pass/Fail only. May be repeated for credit. (3-0) Y

[PSCI 8V99](#) Dissertation or Practicum (1-9 semester credit hours) Provides faculty supervision of a student's dissertation research. Pass/Fail only. May be repeated for credit. Prerequisites: Open to PhD students only and instructor consent required. ([1-9]-0) S

Sociology

[SOC 5V91](#) Independent Study in Applied Sociology (1-6 semester credit hours) Provides faculty supervision for student's individual study of a topic agreed upon by the student and the faculty supervisor. May be repeated for credit. Instructor consent required. ([1-6]-0) R

[SOC 5V92](#) Internship in Applied Sociology (1-6 semester credit hours) Provides faculty supervision for a student's internship. Internships must be related to the student's course work. May be repeated for credit. Instructor consent required. ([1-6]-0) R

[SOC 6312](#) ([PPPE 6312](#)) Social-Economic Theories (3 semester credit hours) A critical analysis of early and modern social and economic theories. Select classical works of Smith, Marx, and Weber are explored, as they pertain to Western capitalist development, along with more contemporary perspectives related to the accumulation and exchange value of human, social and cultural capital. Emphasis is placed on understanding how social relations and social institutions influence economic exchanges. (3-0) T

[SOC 6315](#) ([PA 6315](#)) Evaluating Program and Organizational Performance (3 semester credit hours) Techniques and analytical methods of assessing governmental and nonprofit program and policy success. Emphasis is placed on strategies for impact assessment, measuring efficiency, examining short-term and long-term consequences, identifying both intended and unintended impacts, and the social, political and ethical context of evaluation. (3-0) T

[SOC 6316](#) ([PA 6314](#)) Policy Analysis (3 semester credit hours) This course introduces students to policy analysis, exploring approaches and providing tools to analyze contemporary policy questions at various levels of governance. (3-0) R

[SOC 6335](#) ([PA 6335](#)) Resource Development for Nonprofit Organizations (3 semester credit hours) This course examines sources of revenue for nonprofit organizations. Specific topics include fundraising, grant writing, and donor dynamics. The course is designed to prepare the student to work effectively as a member of a fundraising team - either as staff or volunteer board member. (3-0) R

[SOC 6340](#) ([PPPE 6340](#)) Domestic Social Policy (3 semester credit hours) Overview of governmental and non-governmental programs, policies, and institutions dealing with those who cannot function self-sufficiently within the American market economy, including low-income families, the elderly, the unemployed, and people with disabilities. Analyzes how social policy in the United States reflects the political economy and culture, as well as social and demographic trends. (3-0) Y

[SOC 6341](#) ([ECON 6371](#)) Urban Economics (3 semester credit hours) Presents methods and models for understanding urban growth and development processes. Topics include analysis of urban growth, land use patterns, transportation and local public good delivery systems. Welfare consequences of various urban policy options are explored. (3-0) R

[SOC 6344](#) Gender and Policy (3 semester credit hours) Explores issues of gender and public policy in the U.S. Topics include poverty, politics, and workplace and family issues. (3-0) R

[SOC 6347](#) Religion in Public Life (3 semester credit hours) This course examines the engagement of religion in public life, specifically ways in which religious institutions, their beliefs, and moral values help to shape public institutions and their policies. Attention is directed to religion and policy in the economy/workforce, government/legislation, education/science, healthcare, and other social institutions. (3-0) R

[SOC 6348](#) Immigration Policy (3 semester credit hours) This course examines immigration policy implemented in the main public institutions in the U.S. - governance (immigration law and constitutional rights), the economy (labor and the workforce), education (eligibility and financial support), and healthcare (eligibility and funding) - as policy relates to admission and citizenship, government services, regulation of immigrant labor, pursuit of education credentials, access to healthcare, and other issues. The course also examines the influence of race/ethnicity, class, gender, sexual orientation, political ideology, and religion on the shaping and implementation of immigration policy. (3-0) R

[SOC 6350](#) ([PPPE 6350](#)) Social Stratification (3 semester credit hours) This seminar will examine the major theories and lines of research on social stratification, defined as the hierarchical ranking of groups based on the unequal distribution of societal resources and positions. Focusing primarily on the U.S. class system, topics covered include: class reproduction and mobility, the educational system and policy, empirical definitions, the implications of race and gender for social class, and forms of legitimation. (3-0) Y

[SOC 6355](#) Race and Ethnic Relations (3 semester credit hours) Considers historical and contemporary constructions of race and ethnicity. Issues include the formation and maintenance of individual and group identity, racialized patterns of stratification, intergroup conflict, and the causes and consequences of public policy. (3-0) R

[SOC 6356](#) ([PPPE 6356](#)) Health and Illness (3 semester credit hours) A review of medical sociology and related fields, including social epidemiology and the social demography of health and illness; health and illness behavior; health institutions and professions; economic factors and trends in health care; and health policies and programs. (3-0) R

[SOC 6357](#) ([PPPE 6341](#)) Health Policy (3 semester credit hours) The history and political economy of the U.S. health care system and a review of major governmental programs to expand access to appropriate services, control rising costs, ensure the quality of care, and promote health through prevention. Analysis of current and recent proposals for reform of health care policy. (3-0) R

[SOC 6361](#) Education in U.S. Society (3 semester credit hours) This course will examine the institution of education, examining the ways in which schools are embedded within social, historical, and cultural contexts. Attention will also be given to the complex relationships between educational institutions and families, the communities they serve, and their role in shaping processes of socialization and stratification. (3-0) Y

[SOC 6370](#) Special Topics in Applied Sociology (3 semester credit hours) Topics may include education policy, global health, and environmental policy. May be repeated for credit as topics vary (6 semester credit hours maximum). (3-0) R

[SOC 6381](#) ([PA 6382](#)) Nonprofit Management (3 semester credit hours) This course examines issues, strategies, and techniques related to executive leadership and management in nonprofit organizations. (3-0) R

[SOC 6384](#) ([PA 6384](#)) Seminar in Urban Policy (3 semester credit hours) This seminar surveys key

urban policy challenges and opportunities faced by U.S. cities. The course will focus on critical analysis of a range of topics including the continuing viability of cities in the context of current economic and demographic dynamics, fiscal stress, governance, economic development, transportation, poverty and race/ethnicity, drugs, homelessness, federal urban policy, and survival strategies for declining cities. (3-0) R

[SOC 6386 \(PA 6386\)](#) Diversity Management (3 semester credit hours) This course provides the skills and knowledge necessary to manage increasingly diverse workforces in the public and nonprofit sectors. A significant portion of the course will focus on diversity in the workplace, with particular attention given to discrimination, strategies for developing equitable public sector organizations, and the need for cultural competency among public administrators. (3-0) T

[SOC 6V92](#) Research Workshop in Applied Sociology (3-6 semester credit hours) Students join a faculty member in a group research project. May be repeated for credit (6 semester credit hours maximum). Instructor consent required. ([3-6]-0) R

[SOC 6V98](#) Master's Thesis (3-6 semester credit hours) Provides faculty supervision of a student's master's thesis research. Completion of all, or concurrent enrollment in, major requirements. Pass/Fail only. May be repeated for credit (6 semester credit hours maximum). Program Coordinator consent required. ([3-6]-0) R