PHYS 318  QUANTUM MECHANICS (4) Prerequisite: PHYS 302. Three hours lecture and one-hour problem session. This course introduces the methods of quantum theory. The Schrödinger approach is developed and is applied to the hydrogen atom, angular momentum, scattering theory, time-independent perturbation theory, and other topics.

PHYS 333  COMPUTATIONAL PHYSICS (4) Prerequisite: PHYS 302. Three hours lecture and one-hour problem session. This course develops the application of higher mathematics and the computer to the analysis and simulation of realistic physical systems. Topics covered typically include finite-difference approximations, Fourier analysis, Fourier transforms, Fast Fourier transforms, numerical integration, applications of Monte Carlo methods, solutions of differential equations, numerical solutions of Laplace's equation, and the application of matrix methods. Symbolic mathematical software is also introduced.

PHYS 397  INDEPENDENT STUDY IN PHYSICS (1-4) Prerequisites: Approval of faculty sponsor and school dean; junior or senior standing. This course provides students the opportunity to pursue individual study of topics not covered in other available courses. The area for investigation is developed in consultation with a faculty sponsor and credit is dependent on the nature of the work. May be repeated for no more than six credits.

PHYS 398  SPECIAL TOPICS IN PHYSICS (1-4) [credit depends on topic] Prerequisite: A background of work in the discipline. This course will focus on an aspect of the discipline not otherwise covered by the regularly offered courses. The topic will vary according to professor and term; consequently, more than one may be taken by a student during his/her matriculation.

PHYS 432  OPTICS (4) Prerequisite: PHYS 312. Three hours lecture and three hours laboratory. A study is made of the properties of electromagnetic waves, particularly in the visible spectrum. Wave descriptions of scattering, reflection, interference, diffraction, and polarization are developed. The course also treats aspects of geometrical optics, including lenses and lens defects.

PHYS 436  STATISTICAL THERMODYNAMICS (4) Prerequisite: PHYS 302. Three hours lecture and one-hour problem session. Microscopic analysis of the physical world is developed using statistical methods. Macroscopic thermodynamics is then developed from microscopic results. More formal ideas of classical statistical thermodynamics, including the partition function, are then studied. Quantum statistical mechanics is also introduced.

POLITICAL SCIENCE COURSES (POLI)

POLI 111-112  THE QUEST FOR JUSTICE I, II (3, 3) A sequence of readings and discussions develop the student’s grasp of the basic issues that underlie the political dynamism of Western society. Special emphasis is given to the moral and philosophical dimensions of these issues and their relationship to current political questions and the concerns of other academic disciplines. Reading, class discussions, and written assignments are drawn from classic works in politics, economics, philosophy, and literature.

POLI 207  COMPARATIVE POLITICS (3) An introduction to political cultures and systems around the world, with emphasis on political behavior, competing ideologies, government institutions, and historical roots and contemporary manifestations of societal conflicts and divisions. Issues of political development, continuity and change will be addressed throughout the course, with brief case studies used to explore the above concepts more in depth.

POLI 220  THE AMERICAN POLITICAL EXPERIENCE (3) Students will explore the American constitutional order and political system in terms of two questions: what does the American government do? What should it do? This exploration will be conducted through the critical analysis of literature, primary historical sources, significant government documents, and social science research.

POLI 221  AMERICAN POLITICAL CULTURE (3) Prerequisite: INTL 101, POLI 111, or 112. This course is a survey and critique of the meanings attributed to various aspects of the American constitutional order and the politics associated with it. Classic American literature including fiction and non-fiction, films, primary historical sources, significant government documents, and social science research are assigned to promote student debate and discussion of each aspect of the course.
POLI 253  CLASSICAL POLITICAL THOUGHT (3)  Prerequisite: INTL 101, POLI 111, or 112. This course is a study of the leading classical and medieval political thinkers including Plato, Aristotle, and Augustine with emphasis on reading and discussing their works.

POLI 254  MODERN POLITICAL THOUGHT (3)  Prerequisite: INTL 101, POLI 111, or 112. This course is a study of the leading modern political thinkers including Machiavelli, Hobbes, Locke, Rousseau, and Marx with emphasis on reading and discussing their works.

POLI 257  CAMPAIGNS, ELECTIONS, AND PROPAGANDA (3)  Prerequisite: INTL 101, POLI 111, or 112. This course reviews the place of elections in American constitutional order as the principal mode of citizen participation and of campaigns to influence those elections. Particular attention is given to contemporary reliance on paid advertising, including direct mailing and television, and questions of campaign finance and corruption. Critical attention is directed to the replacement of public policy debate by the images and rhetoric of celebrity culture.

POLI 258  STATE AND LOCAL GOVERNMENT AND POLITICS (3)  Prerequisite: INTL 101, POLI 111, or 112. An examination of the use of governmental power influences daily life in often unrecognized ways and how that power is exercised by administrators. Particular attention will be given to situations that appear to display breakdowns in policy or in its execution, and on conflicting values of democratic political practice and administrative effectiveness.

POLI 259  POWER, THE STATE, AND BUREAUCRACY (3)  Prerequisite: INTL 101, POLI 111, or 112. An examination of how the use of governmental power influences daily life in often unrecognized ways and how that power is exercised by administrators. Particular attention will be given to situations that appear to display breakdowns in policy or in its execution and on conflicting values of democratic political practice and administrative effectiveness.

POLI 260  HONOR AND TERROR POLITICS: SOUTH ASIA (3)  Prerequisite: INTL 101, POLI 111, or 112. This course is a survey of contemporary political and governmental processes and institutions of southern Asia with particular attention given to the colonial legacy, post-independence political institutions, the processes of political evolution, the role of religion in politics, and foreign policy responses to big-power rivalry in the region.

POLI 265  GROWLING TIGERS, FIERY DRAGONS: THE ASIA PACIFIC (3)  Prerequisite: INTL 101, POLI 111, or 112. This course offers a survey of the political traditions and contemporary political practice of major East Asian societies including those of China, Japan, and Korea. The primary focus is a comparison of contemporary political development, government institutions, domestic issues, and foreign policies within and among the countries of the region.

POLI 275  LATIN AMERICAN POLITICS (3)  Prerequisite: INTL 101, POLI 111, or 112. An analysis of the political systems of Latin America, this course examines political development from the colonial period to the present as well as the principal actors of the Catholic Church, the military, labor, and political parties. Study of links between politics and economic underdevelopment and the influence of the United States in the region are included. The history and future of democracy in the region are considered.

POLI 283  EUROPEAN UNION POLITICS (3)  Prerequisite: INTL 101, POLI 111, or 112. This course analyzes the governmental structures and politics in France, Germany, and other European nations. Attention is also given to European organizations such as NATO, the European Union (EU), and the reforming political systems in southern and eastern Europe. Students participate in a simulation of the European Union.

POLI 285  EUROPEAN UNION LEADERSHIP (1)  Prerequisites: POLI 283 and permission of instructor. The course offers an in-depth exploration of the functions, institutions, and decision-making procedures of the European Union. The emphasis will be on a realistic representation of members of the major institutions and bodies of the EU: the Commission, the European Council, and the Council of Ministers.

POLI 290  AMERICAN PUBLIC POLICY (3)  Prerequisite: POLI 111 or 112. This course will examine American public policy from three perspectives. First, students will explore the broad context of policy-making, including the historical, political, and economic contexts, with special emphasis placed on American federalism. Second, students will be introduced to models of the policy process, agenda setting and decision-making. Finally, students will learn about policy implementation and analysis.
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POLI 296  RUSSIA AND THE EUROPEAN NEIGHBORHOOD (3) Prerequisites: INTL 101, POLI 112 or POLI 201. The course analyzes the political cultures, governmental institutions, and political behavior in European countries that are not members of the European Union, mostly in Eastern and Southeastern Europe, especially Russia. The emphasis is on explaining contemporary developments in this rapidly evolving region against the backdrop of long-term trends and recent transitions. Russia’s growing role in the region and around the globe will be discussed.

POLI 301  DEVELOPING WORLD (3) Prerequisite: INTL 101, POLI 111, or 112. This course provides an examination of developing nations with a view toward understanding problems inherent in social, economic, and political change including the creation of nationalist sentiments, calls for democracy, improving the conditions of life, and promoting security and stability.

POLI 303  TERRORISM AND REVOLUTION (3) Prerequisite: INTL 101, POLI 111, or 112. This course is a comparative analysis of two major forms of political violence. Major revolutions of the twentieth century are the focus with particular attention to the Communist revolutions in Russia and China, the anti-colonial revolutions in Vietnam and Algeria, and the recent democratic revolutions in Eastern Europe and the former Soviet Union. Theories and explanations of terrorism are explored with attention given to the ways terrorists and the media influence each other and to various proposals for controlling terrorism.

POLI 304  INTERNATIONAL ORGANIZATION AND WORLD POLITICS (3) Prerequisite: INTL 101, POLI 111, or 112. This course examines the role of international organizations in world affairs. Study includes the United Nations, major regional political and economic organizations, and the impact of non-governmental international organizations. Current events are heavily emphasized. The course is also used to prepare students for model United Nations exercises.

POLI 306  COMPARATIVE FOREIGN POLICY (3) Prerequisite: INTL 101, POLI 111, or 112. This course investigates the development, determinants, and direction of the foreign policies of key nation-states in contemporary international relations including Russia, Germany, China, India, Japan, and the United States. The course includes simulation exercises and is used to help prepare students for participation in model United Nations activities.

POLI 311  THE AMERICAN PRESIDENCY (3) Prerequisite: INTL 101, POLI 111, or 112. This course explores the formal and informal powers of the American presidency in the American constitutional system. Students examine presidential elections; White House relationships with Congress, the public, the media, the courts, and the bureaucracy; and the practice of presidential leadership at home and abroad.

POLI 312  MONEY AND POWER: CONGRESS AND INTEREST GROUPS (3) Prerequisite: POLI 111, 112, or 220. This course will examine the constitutional foundation and historical development of Congress, with emphasis on institutional aspects of Congress, and the role of Congress in the legislative process, and electoral politics. The history of interest group politics, the effect these groups have on the legislative process, and the impact of these groups on democracy will also be treated.

POLI 321  POLITICAL SCIENCE RESEARCH METHODS (3) Prerequisite: POLI 220. This junior-level course prepares students to write their senior theses. Required of all political science majors, the course examines how disciplined political knowledge (political science) is developed and reported. Students learn to develop and test hypotheses, prepare research designs, collect data, and use statistical analysis.

POLI 325-326  CONSTITUTIONAL LAW IN THE UNITED STATES (3, 3) Prerequisite: INTL 101, POLI 111, or 112. This course sequence is a survey of constitutional interpretation by the U.S. Supreme Court using the case method. The structure and powers of the American governmental system will be treated during the first semester. The second semester is devoted to the study of individual rights.

POLI 331-332  NATIONAL MODEL UNITED NATIONS I, II (3, 2) Prerequisites: INTL 101, POLI 111, or 112, and permission of the instructor. This course provides a survey of the United Nations and of the designated UN member state assigned for representation at the National Model United Nations in New York, by preparing students in an Experiential Learning course, with researching the assigned country’s history, economics, politics and foreign policy, while learning UN policymaking procedure, negotiation, writing, debating and caucusing skills.
POLI 362  RECENT POLITICAL THOUGHT (3) Prerequisite: INTL 101, POLI 111, or 112. This course examines some of the leading political thinkers of the twentieth century in order to understand the difficulties that may stand in the way of achieving justice in the political sphere. We will examine how justice may be achieved within a liberal political order; how the demands of justice impact the family; whether justice can be confined to the political sphere, or whether it must apply also within the private; and possible limitations of liberal democratic conceptions of justice.

POLI 372  UNITED STATES FOREIGN POLICY (3) Prerequisite: INTL 101, POLI 111, or 112. This course examines the distinctive heritage of the United States in foreign affairs, the strengths and weaknesses of American foreign policy-making processes, and the means at the disposal of policymakers to carry out foreign policy in contemporary world affairs.

POLI 375  U. S. - LATIN AMERICAN RELATIONS (3) Prerequisite: INTL 101, POLI 111, or 112. An examination of relations between the countries of Latin America and the United States, this course considers the historical influence of the United States on Latin American countries’ political, social, and economic development and how these relations have changed from Latin American independence to present-day. It includes analysis of current topics such as immigration, NAFTA, and the growing Hispanic influence within the United States society and politics.

POLI 377  STUDY ABROAD (1-6) Prerequisite: INTL 101, POLI 111, or 112. The course provides students the opportunity to study political science concepts, principles, and theories in foreign settings.

POLI 397  INDEPENDENT STUDY IN POLITICAL SCIENCE (1-3) Prerequisites: Approval of faculty sponsor and school dean; junior or senior standing. This course provides students the opportunity to pursue individual study of topics not covered in other available courses. The area for investigation is developed in consultation with a faculty sponsor and credit is dependent on the nature of the work. May be repeated for no more than six credits.

POLI 398  SPECIAL TOPICS IN POLITICAL SCIENCE (1-3) [credit depends on topic] Prerequisite: A background of work in the discipline. This course will focus on an aspect of the discipline not otherwise covered by the regularly offered courses. The topic will vary according to professor and term; consequently, more than one may be taken by a student during his/her matriculation.

POLI 399  INTERNSHIP (1-6) Prerequisites: Juniors or seniors with a 2.25 minimum GPA; approval of written proposal by internship coordinator, and supervising faculty prior to registration. In a small number of cases, students may earn credit for participation in an internship with a government agency, law firm, political campaign, or nonprofit organization. Limited internship opportunities are available and must be jointly directed by a faculty sponsor and the responsible agency administrator. (See “Internships.”)

POLI 410  SENIOR THESIS SEMINAR (3) Prerequisites: POLI 220, 321, and at least two other 300-level courses. The senior seminar is designed to be a capstone course in which the student, utilizing substantive and methodological knowledge accumulated through previous course work, develops and tests a relevant political hypothesis or closely related set of hypotheses. The course culminates with the writing and presentation of a formal research paper.

PSYCHOLOGY COURSES (PSYC)

PSYC 103-104  GENERAL PSYCHOLOGY (3, 3) Corequisites: PSYC 105L-106L. Three hours lecture per semester. This course sequence provides an overview of the subfields of psychology.

PSYC 105L-106L  GENERAL PSYCHOLOGY LABORATORY (1, 1) Two hours laboratory per semester. This course serves as an introduction to the laboratory techniques of psychology.

PSYC 212  INTRODUCTION TO BEHAVIOR MODIFICATION (3) Strongly recommended: PSYC 106L. Three hours lecture. This course studies the use of principles of learning and experimental design in the modification of a wide variety of human behaviors.

PSYC 213  PSYCHOLOGY OF EXCEPTIONALITIES (3) Three hours lecture. This course is designed to impart a basic understanding of persons with disabilities. It provides pre-service teachers with