### Descriptions — Physiology of Courses

808. **Advanced Endocrinology**  
Winter. 4(3-0) Approval of department.  
Current developments on anatomy, physiology, chemistry, and regulation of the major endocrine glands; secretion and hormonal control of reproduction and lactation.

812. **Advanced Comparative Physiology**  
Fall. 4(3-4) B 5 212 or approval of department.  
A study of organ function in a wide range of groups of animals with emphasis on evolutionary relationships and physiological basis of ecology.

815. **Sensory Physiology**  
Winter of even-numbered years. 3(2-2) Not open to students with credit in 583. Approval of department.  
Physiology of sense organs for students in physiology, psychology and others.

819. **Kidney Physiology and Electrolyte Metabolism**  
Spring. 3(3-0) 502.  
Critical study of the literature on classical and contemporary aspects of renal physiology and related aspects of body fluid and electrolyte metabolism.

835. **Neurophysiology**  
Winter of odd-numbered years. 4(2-4) Approval of department.  
Functions and properties of the peripheral and central nervous systems.

836. **Physical Principles of Biological Systems**  
Winter. 3(3-0)  
Application of laws and methods of physics to measurement and description of physiological phenomena.

837. **Radiobiology**  
(450.) Fall. 3(3-0) Approval of department.  
Application of radiobiological techniques to study of biological functions. Determination of turnover rates and tissue constituents by isotope dilution. Control of radiation hazards.

859. **Analysis of Hormone Action**  
Spring. 4(4-0) ZOL 317, or approval of department. Interdepartmental with and administered by the Zoology Department.  
Discussion of recent work on the molecular and developmental aspects of hormone action in vertebrates and invertebrates. Selected topics to vary from year to year.

870. **Research Problems and Techniques in Pathologic Physiology**  
Summer. 3(3-0) 501, 502.  
Description of mechanisms of human disease states. Stimulation of research where especially needed. Development of animal models to study these disease states. Lecture demonstrations illustrate methods of producing disease models.

899. **Research**  
Fall, Winter, Spring. Summer. Variable credit. Approval of department.

900. **Seminar**  
Fall, Winter, Spring. 1(1-0) May re-enroll for a maximum of 2 credits for the Master's program and a maximum of 4 additional credits for either the Ph.D. or the diploma program.

915. **Respiratory Physiology**  
Winter. 4(3-2) 509, approval of department.

819. **Kidney Physiology and Electrolyte Metabolism**  
Spring. 3(3-0) 502.  
Critical study of the literature on classical and contemporary aspects of renal physiology and related aspects of body fluid and electrolyte metabolism.

### POLITICAL SCIENCE

**College of Social Science**

100. **American National Government**  
Fall, Winter, Spring, Summer. 4(3-0) Not open to majors. Major aspects of national government with emphasis on the policy-making process.  

101. **Comparative Politics**  
Fall, Winter, Spring. 4(3-0)  
Comparison of political systems in western and non-western nations.

102. **International Relations**  
Fall, Winter, Spring. Summer. 4(3-0)  
Contemporary world affairs surveyed. The struggle for power, the nation-state system, factors creating harmony and hostility among nations. War and peace in our time.

103. **The Imms**  
Fall, Winter, Spring. Summer. 4(3-0)  
Acquaints the student with the theories, methods and concepts of political science. Emphasis is on ideology and interests in the political process.

104. **Introduction to Political Science**  
Fall, Winter, Spring. Summer. 4(3-0)  
Acquaints the student with the theories, methods and concepts of political science. Emphasis is on ideology and interests in the political process.

105. **Methods of Political Research**  
Winter. 4(3-0) 200.  
Design and execution of research in political behavior and institutions. Major emphasis on logic underlying various types of political research, on identification of appropriate data sources and field methods.

106. **Methods of Political Research**  
Winter, Spring. 4(3-0) 290.  
Analysis of political data, with major emphasis on quantitative techniques.

107. **American State Government**  
Fall, Winter, Spring, Summer. 4(3-0)  
Major aspects of policy-making processes at the state government level. Comparison of state political systems.

108. **American Urban Government**  
Fall, Winter, Spring, Summer. 4(3-0)  
Urban political process in America. Politics of policy-making for urban functions; politics of intergovernmental relationships.

109. **Michigan Government**  
Spring. 4(3-0)  
How Michigan government is organized and conducted and how policies are made, sources of executive-legislative conflict, politics of taxation; role of the state in local affairs; balance of political forces in the state.

110. **Public Bureaucracy in the Policy Process**  
Fall, Spring. 4(3-0)  
Introduces student to following major areas of public administration: development of administration in the U.S.; theories of administrative organization; principles and methods of administrative management; executive leadership; interpersonal and intergroup relationships; levels of decision making, ethics and responsibility.

111. **Public Policy Analysis**  
Winter. 4(3-0)  
Problems and methods in perception of public problems, determination of goals, generation and evaluation of alternatives, policy choice, planning and program budgeting, political and analytical methods of policy making compared.

112. **The American Judicial Process**  
Fall, Winter, Spring, Summer. 4(3-0)  
Analysis of the structure and functions of judicial systems. Organization, administration, and politics of judicial bureaucracies. Roles of judges, juries, counsel, litigants, and interest groups in adjudication processes.

113. **Judicial Policy Making**  
Fall, Spring. 4(3-0)  
Consideration of political behavior of judges (especially Justices of Supreme Court) and their policy making. Focus on policy questions currently important, including civil liberties, national economic policy and interrelationships among governmental units.

114. **The American Legislative Process**  
(424.) Winter, Spring, 4(3-0)  
Nature of legislative process in the United States; organization and procedure of legislative bodies; direct legislation; relationship of legislative branch to other branches of government.

115. **The American Executive Process**  
Spring. 4(3-0)  
Role of the president, state governors, and municipal executives in the American system of government. Analysis and discussion of constitutional status and powers, selection, administrative responsibilities, legislative and political leadership, accountability and responsibility of chief executives.

116. **American Political Parties and Elections**  
Fall. 4(3-0)  
332. Interest Groups and Political Movements
Winter, 4(3-0)
Group theory and politics. Growth of organizations and associations to represent the interests of business, labor, agricultural, professional, veterans, and other groups. Internal politics of private associations and their impact on public policy.

333. Political Opinion and Voting Behavior
Fall, Winter, Spring, 4(3-0)
Development of political attitudes, ideology, and party affiliation; their relation to voting behavior, political participation, comparisons of mass and elite attitudes and behavior; representation of public opinion in the political system.

335. Comparative Parties and Pressure Groups
Spring, 4(3-0)
Dynamics of political party and pressure group behavior in selected political systems. Comparative analysis of organization, ideologies, membership, leadership, tactics, power and influence of parties.

336. Black Political Movements
Fall, 4(3-0)
Examines attempts of blacks to gain political access and identity in America from post civil war through black nationalism. Tracked as a case study of the politics of social movements.

337. Ethnicity, Race and Politics
Winter, 4(3-0) Junior level.
Ethnicity and race as factors in the political process and as issues of public policy.

340. Theories of Comparative Politics
Fall, Winter, Spring, 4(3-0)
Alternative methods for comparative cross-cultural analyses of political systems. Political structures, functions, cultures, stability and change. The problem of equivalence.

344. The Politics of Developing Areas
Spring, 4(3-0)
Process of political growth in emergent societies of the world; stresses of change and flux resulting from economic development in relation to the structure and dynamics of government.

345. Political Institutions and Behavior in South Asia
Winter of odd-numbered years, 4(3-0)
Political ideas and institutions in India, Pakistan, and related territories; analysis of constitutional development, political parties, legislatures, administration, planning, foreign policy and their interaction with the social system.

346. Governments of the Middle East
Spring of odd-numbered years, 4(3-0)
Peoples and cultures of Turkey, Iran, Saudi Arabia, Yemen, Israel, Jordan, Lebanon, Syria, Iraq, and Egypt.

347. African Politics
Winter of even-numbered years, 4(3-0)
Political practices and perspectives in Africa. Special attention to emerging independent nations of Sub-Saharan Africa. Analysis of socio-political change, nationalism, cultural duality, nation-building, pan-Africanism.

348. Major African Political Systems
Spring of even-numbered years, 4(3-0)
Systematic analysis of three or four specific African political systems, with countries chosen on the basis of their contemporary importance and their representatives of the general political problems of the area.

349. Politics of English Speaking Democracies
Spring, 4(3-0)
Political institutions and development of the English speaking nations. Special attention to Great Britain, Canada and the U.S., parliamentary systems, parties, pressure groups, and problems of these societies.

350. The Governments and Politics of Latin America
Winter of odd-numbered years, 4(3-0)
Survey of politics in the area; competing ideologies, types of revolutions, sources of instability, party and interest group developments, relationships between political, social, and economic structures, and relationships between the United States and Latin America.

351. Major Latin American Political Systems
Spring of odd-numbered years, 4(3-0)
Systematic analysis of three or four specific Latin American political systems, with countries chosen on the basis of their contemporary importance and representativeness of the general political problems of the area.

352. Political Institutions and Behavior in East Asia
Winter of even-numbered years, 4(3-0)
China, Japan, and Korea. Political ideas, institutions and practices in societies of East Asia. Dynamics of political organization; role of competing ideologies and systems of behavior; interaction of domestic and foreign policies.

353. Political Institutions and Behavior in Southeast Asia
Spring of even-numbered years, 4(3-0)
Philippines, Indonesia, Malaysia, Thailand, Viet Nam, Cambodia, Laos, Burma.

355. Western European Political Institutions and Behavior
Fall, 4(3-0)
Analysis of parliamentary systems of Britain and selected European societies. Basic institutions, socioeconomic conditions, recruitment of leadership, pressure groups, and party organization and tactics, voting behavior. Policy making, roles of executive, legislature and bureaucracy.

356. European Political Institutions and Behavior
Winter, 4(3-0)
Continuation of 355. Attention to European countries not previously treated. Emphasis on dynamics of political organization and behavior in these societies.

358. Soviet Political Institutions and Behavior
Fall of even-numbered years, 4(3-0)
Study of Soviet society as a political system; its origins, development, institutions, functioning, and trends. Comparisons will be made with other political systems.

359. Eastern European Governments
Winter of even-numbered years, 4(3-0)
Comparative analysis of East European socialist countries, their political cultures, institutions, problems, policies, and trends of development.

362. Theory and Practice of Foreign Policy
Fall, Spring, 4(3-0)
Systematic analysis of the dynamics of contemporary world politics. Major theories and concepts of foreign policy-making and international politics. Comparative studies of foreign policy in various states. Examination of current and recurrent problems.

363. International Law
(463.) Fall, Spring, 4(3-0)
Origins and development of international law. Legal interstate relationships in time of peace and war. Recognition of states and governments diplomatic practice, treaties, war, neutrality.

364. International Organization
(464.) Winter, 4(3-0)

365. The United States in World Affairs
Winter, Spring, 4(3-0)
Resources, policies, and role of the United States as a great power. Contemporary United States foreign policy in the key and critical areas of the world. Major factors affecting future course of American foreign policy.

367. Foreign Policies of Major Powers
Winter, 4(3-0)
Examination of the foreign policies and decision-making processes of major powers, such as the Soviet Union, China, Great Britain, France, Japan, and India. Analysis of their foreign policy goals, the role of ideology, national interest, and institutions.

370. Classics of Political Thought
(470.) Fall, 4(3-0)
Political ideas of Plato, Aristotle, Cicero, Augustine, Aquinas, and other leading political philosophers of classical Greece, Rome, and Christendom through the medieval period.

371. Classics of Political Thought
(471.) Winter, 4(3-0)
Political ideas of Machiavelli, Hobbes, Locke, Montesquieu, Rousseau, and other leading political philosophers whose works underlie such modern political ideologies as liberalism, socialism, and communism.

372. Classics of Political Thought
(472.) Spring, 4(3-0)
Political ideas of Burke, Bentham, Hegel, Mill, Marx, and other leading political and social philosophers whose works underlie such modern political ideologies as liberalism, socialism, and communism.

375. Theory and Practice of International Communism
Winter, Summer, 4(3-0)
Development of Marxism revolutionary doctrine from Marx to the present day. Critical analysis of the principal ideas and their interrelationship. Conflicts between different schools or factions within the Marxism movement.
376. **Theory and Practice of International Communism**  
Spring. 4(3-0)  
History, organization, and policies of the Communist international, its auxiliary organizations, and the parties composing it. Relationship of the aims and policies of various communist parties to the national interest and foreign policy of the U.S.R.

377. **American Political Thought**  
Fall. 4(3-0)  
Colonial times to the Civil War. Roger Williams, Thomas Jefferson, John Adams, and John C. Calhoun will be discussed in the context of major political issues.

375. **American Political Thought**  
Winter, Summer. 4(3-0)  
Civil War to present. Harry George, Edward Bellamy, Thorstein Veblen, and John Dewey will be discussed in the context of major political issues.

380. **Foundations of Modern Political Theory**  
(210.) Winter, Spring. 4(3-0)  
Major ideas in the social sciences which have been or may be utilized in development of systematic theories of political institutions and behavior.

381. **Foundations of Modern Political Theory**  
(211.) Fall, Spring. 4(3-0)  
Continuation of 380.

390. **Survey of Sub-Saharan Africa**  
For course description, see Interdisciplinary Courses.

391. **Survey of Sub-Saharan Africa**  
For course description, see Interdisciplinary Courses.

404. **Selected Aspects of State and Local Government**  
Fall, Winter, Spring, Summer. 5(3-0)  
May re-enroll for a maximum of 15 credits. Political science Seniors or approval of department.  
Covers different subjects at different times such as community decision making, metropolitan problems, and intergovernmental relations.

415. **Advanced Seminar in Policy and Bureaucracy**  
Fall, Spring. 5(3-0)  
Political science Seniors or approval of department.  
Special aspects of public administrative processes and organization, with special reference to particular policy areas and the policy process.

420. **Judicial Policy Making and Behavior**  
Fall, Winter, Spring, Summer. 5(3-0)  
Political science Seniors or approval of department.  
Analysis of policy making by judicial systems. Research theory and methods in judicial behavior. Socialization of judges, and the relationship between judicial attributes and judicial ideologies and attitudes and values.

430. **Seminar in Political Organization and Behavior**  
Fall, Winter, Spring, Summer. 5(3-0)  
May re-enroll for a maximum of 15 credits. Political science Seniors or approval of department.  
Covers different subjects at different times such as legislative behavior, electoral behavior, and public opinion.

454. **Special Topics in Comparative Politics**  
Fall. 5(3-0)  
May re-enroll for a maximum of 15 credits. Political science Seniors or approval of department.  
Comparative analysis of various topics, such as political recruitment, elites, urbanization, and totalitarian systems.

469. **Special Problems in International Politics**  
Fall, Winter, Spring, Summer. 5(3-0)  
May re-enroll for a maximum of 15 credits. Political science Seniors or approval of department.  
Analysis in depth of special problems, subjects, or areas in international politics: Sino-Soviet conflict; nationalism and international politics; alliances and international politics.

473. **Selected Aspects of Political Thought**  
Fall, Winter, Spring, Summer. 5(3-0)  
May re-enroll for a maximum of 15 credits. Political science Seniors or approval of department.  
A senior seminar which will focus on philosophical and ideological problems raised in contemporary political thought.

490. **Honors Study**  
Fall, Winter, Spring, Summer. 3 to 6 credits.  
May re-enroll for a maximum of 12 credits. Approval of department.  
Individual reading and research under the supervision of a member of the department. For superior students who wish to examine a special topic and for seniors writing honors essays in political science.

494. **Field Work in Political Science**  
Spring. 3(1-10) to 6(2-20)  
May re-enroll for a maximum of 9 credits. Approval of department.  
Supervised field work may be offered in several of the areas of departmental study, such as public administration, political organization and behavior, public law and judicial behavior, state and local government, comparative political institutions, and behavior, etc. Field work may involve internship with public agencies, participation in survey research, intensive analysis of judicial behavior, etc. Students should receive several mornings or afternoons for this work.

500. **Proseminar in Political Theory and Research Methods**  
Fall, Winter, Spring. 4(3-0)  
May re-enroll for a maximum of 12 credits. Approval of department.  
Issues arising in the pursuit of reliable knowledge about political phenomena; to the major problems in relating theory and empirical research; and to major theoretical ideas in the study of political institutions and behavior.

503. **Seminar in Industrial Relations**  
For course description, see Interdisciplinary Courses.

510. **Proseminar in Public Administration**  
Fall. 4(3-0)  
Survey of the important American literature, ideas and schools of thought and practices of this century. Contemporary and emerging problems of responsibility, planning, personnel and organizational methods in American government discussed against the background of the past fifty years' systematic study of public administration.

520. **Proseminar in Constitutional Politics**  
Winter. 4(3-0)  
Intensive analysis by the case method of Supreme Court decisions. Conventional doctrines of constitutional interpretation as they relate to constitutional history and political ideologies.

530. **Proseminar in Political Organization and Behavior**  
Spring. 4(3-0)  
Basic literature and concepts relating to political parties, political groups, legislative process, voting behavior, public opinion, and political attitudes.

537. **Psychological Aspects of Politics**  
Fall, Winter, Spring. 4(3-0)  
Interdepartmental with the Psychology Department.  
Relevance of psychological concepts, theories and methods for the study of political institutions, organizations and behavior.

538. **Interdisciplinary Seminar on Africa**  
For course description, see Interdisciplinary Courses.

540. **Proseminar in American Politics**  
Winter. 4(3-0)  
Basic literature and concepts in American politics and critical examination of approaches and methods.

550. **Proseminar in Comparative Politics**  
Winter. 4(3-0)  
May re-enroll for a maximum of 12 credits.  
Developments in comparative politics and critical examination of its methods, approaches, and purposes.

560. **Proseminar in International Relations**  
Fall, Spring. 4(3-0)  
International relations as a field of graduate study. Special attention to methods, major substantive problems, and principal bibliography.

570. **Proseminar in Political Thought**  
Fall. 4(3-0)  
Selected classics in political thought and some of the significant ways of approaching the literature. Major political concepts in the ancient and modern literature, and contemporary bibliography in political thought.

599. **Research**  
Fall, Winter, Spring, Summer.  
Variable credit. Approval of department.

901. **Problems in the Scientific Study of Politics**  
Fall of even-numbered years. 4(3-0)  
Humanistic and scientific approaches to the study of political science and their effects on the discipline today. Emphasis on the relations between normative and empirical problems and on the methods of inquiry most appropriate to political science.

903. **Research Methods in Political Science**  
Winter. 4(3-0)  
Introductory statistics or approval of department.  
Study of the design and execution of research in politics, including the use of existing data and gathering of data in the field. Special attention given to the problems of cross-cultural research.
911. Theories of Administrative Organization
Fall of odd-numbered years. 4(3-0)
Analysis of some recent contributions by the behavioral sciences to formal organization theory.

914. Comparative Public Administration
Winter of odd-numbered years. 4(3-0)
Comparative study of the administrative systems of major nations. Analysis of the manner in which these patterns have been transplanted into dependent and developing countries and of the subsequent modifications of these patterns. Social and cultural setting of administration.

921. Judicial Systems
Winter of even-numbered years. 4(3-0)
Structure and functions of judicial systems, including both American state and federal courts and those of other countries. Interrelationships between courts, administration of judicial bureaucracies (supporting administrative personnel as well as judges) and analysis of judicial decision-making processes.

922. Judicial Behavior
Fall of even-numbered years. 4(3-0)
Design and execution of research in judicial decision making. Projects include both individual and group work, and field as well as library research. Critical evaluation of reports of other research investigations with which seminar projects articulate.

923. Judicial Decision Making
Spring of even-numbered years. 4(3-0)
Comparative survey of substantive findings of the empirical social attitudes, ideologies, values, and decision-making behavior. Contributions of other social sciences to the description of decision-making processes, and to the construction of systematic theories and models.

924. Judicial Policy Making
Fall of odd-numbered years. 4(3-0)
Role of the judiciary as policy maker in legislative reapportionment, racial integration, secession in public education or other issues. Interrelationships among judges and chief executives, legislatures, administrators, political parties and interest group leaders. Connections between legal concepts and social, political, economic factors. How and why the courts have restrained and restrained policies of the federal, state, and local governments in various fields.

931. Political Groups and Movements
Fall of even-numbered years. 4(3-0)
Operation of interest groups, sociopolitical movements, cliques, and junta. Interests and ideologies underlying these groups and channelling of their demands into the political system. Basis, growth, and internal political of political groups and movements and their relation to formation of public policy and governmental institutions.

932. Legislative Process
Spring of even-numbered years. 4(3-0)
Behavior of legislative bodies in the context of the political system, including other governmental institutions. Selection and legislative roles of legislators, and legislative decision making.

933. Political Parties
Fall of odd-numbered years. 4(3-0)
Operation of political parties in the political system. Relationship between party organization, electoral system, and the recruitment and advancement of political leaders. Interaction between parties and other political groups.

934. Voting Behavior, Political Attitudes and Public Opinion
Spring of odd-numbered years. 4(3-0)
Study of the voting behavior of electorates and decision-making bodies; of political attitudes and opinions; and of the relationships among political attitudes, popular voting, and public policies.

941. Metropolitan Area Government and Politics
Fall of odd-numbered years. 4(3-0)
Core city and suburbs, issues and policies resulting from urbanization, causes and effects of suburbanization; federalism; the search for decision-making machinery in metropolitan areas.

942. Federalism and Intergovernmental Relations
Winter of odd-numbered years. 4(3-0)
How federal systems originate and are maintained; political processes involved in intergovernmental relations, cooperative federalism, trends in American federalism.

943. Community Decision Making
Winter of even-numbered years. 4(3-0)
Discussion and critique of the power structure literature; emphasis on methods of studying community elites.

951. Comparative Political Systems
Winter of odd-numbered years. 4(3-0)
May re-enroll for a maximum of 12 credits. Comparative analysis of those characteristics of human societies which affect political institutions and activity. Useful analytical methods, the identification of significant variables, the analysis of interaction patterns and the explanation of differences and similarities between political systems.

952. Political Change
Winter of even-numbered years. 4(3-0)
Comparative analysis of evolutionary and revolutionary changes of political systems, both modern and developing. Methods of analysis, causes and consequences of change, and typical developmental sequences.

953. The Politics of Selected Areas
Winter of even-numbered years. 4(3-0)
May re-enroll for a maximum of 12 credits. Approval of department. Analysis in depth, using comparative theory and method, of political systems and changes in selected administrative or cultural areas.

954. Comparative Selected Analysis of Institutions and Processes
Fall of odd-numbered years. 4(3-0)
May re-enroll for a maximum of 12 credits. Approval of department. Comparative analysis of specific institutions, or processes in different societies, e.g., comparison of legislatures, political recruitment, types of totalitarian states, political impact of urbanization in a number of different areas or countries.

961. History and Contemporary Theory of General International Relations and of World Order
Winter of even-numbered years. 4(3-0)
Examination of substantive problems of politics and public order in the world as a whole.

962. Contemporary International Organizations
Spring of odd-numbered years. 4(3-0)
Examination of the functions of international law and organizations in international politics.