

course sequence is a calculus-based survey of physics including mechanics, thermodynamics, electricity and magnetism, optics, and relativity. Three lectures per week. (Prerequisites: MATH 115 for PHYS 205; PHYS 205 for PHYS 206; MATH 205 is a corequisite for PHYS 205.) Fall, spring.

209. General Physics Laboratory I (NATURAL SCIENCE) (1). Principles of classical physics are explored and verified through experiments. Emphasis is on measurement techniques and methods of data analysis. Topics are drawn from mechanics, wave motion, sound and thermodynamics. One 3-hour laboratory per week. (Corequisite: Physics 205.) Fall.

210. General Physics Laboratory II (1). Principles of classical physics are explored and verified through experiments. Emphasis is on measurement techniques and methods of data analysis. Topics are drawn from electricity, magnetism, and optics. One 3-hour laboratory per week. (Corequisite: Physics 206.) Spring.

320. Electronics (4). An introduction to linear and digital electronics. Topics include dc and ac circuits, power supplies, transistor biasing, small signal amplifiers, classes A and B amplifiers, operational amplifiers, Boolean logic, logic circuits, flip flops, counters and registers, analog-digital and digital-analog conversions, applications. Three lectures and one 3-hour laboratory per week. (Prerequisites: Physics 206, 210.) Offered as needed.

370. Modern Physics (3). Introduction to relativity and atomic physics. Relativity: simultaneity, Lorentz transformation, velocities, momentum, and energy. Atomic physics: Bohr theory, particles and waves, Schroedinger theory, one-electron atoms, magnetic moments and spin, identical particles, and multi-electric atoms. (Prerequisites: Physics 205-206 and Mathematics 215 or 305.) Offered as needed.

380. Nuclear Radiation Physics (3). An introduction to nuclear physics with attention to nuclear instrumentation, natural radioactivity, alpha-beta-gamma decay, nuclear reactions, neutrons, fission and fusion. (Prerequisites: Physics 205, 206 and Mathematics 215 or 305.) Offered as needed.

401, 402. Mechanics (3, 3). Motions of particles and systems of particles in one, two and three dimensions; moving coordinate systems; continuous media; Lagrangian methods. (Prerequisites: Physics 205, 206 and Mathematics 305.) Offered as needed.

403, 404. Electromagnetic Theory (3, 3). Electrostatic fields in vacuum and in dielectrics, boundary value problems, magnetic fields of steady currents and magnetic materials, induced electromotance, Maxwell's equations, plane waves, reflection and refraction, guided waves and radiation. (Prerequisites: Physics 205, 206 and Mathematics 305.) Offered as needed.

405. Acoustics (3). Vibrations of strings, bars, membranes

and plates; acoustic waves, transmission, absorption and radiation; pipes and cavities, resonators and filters. (Prerequisite: Physics 205, 206 and Mathematics 305.) Offered as needed.

406. Optics (4). Lenses and mirrors: Image formation, design, aberrations, and stops, optical systems. Wave optics: Interference, diffraction, polarization, Fourier transform spectroscopy, holography. Quantum optics: atomic spectra, lasers. Three lectures and one 3-hour laboratory per week. (Prerequisites: Physics 206 and Mathematics 215 or 305.) Offered as needed.

450. Capstone: Physics Research (1-3). Experimental or theoretical research in physics. May be repeated. (Prerequisite: instructor permission.) Fall, spring.

Special and Advanced Courses

199. Exploratory Internship (1-3).

299. Experimental Course (1-3).

399. Professional Internship (1-12).

451. Independent Study (1-3). Work may be either experimental or theoretical. May be repeated. (Prerequisite: departmental permission.)

499. Advanced Experimental Course (1-3).

Political Science

Mission Statement

The mission of the Political Science Department is to prepare students with broadly applicable skills in research and analysis.

Departmental Goals

Departmental graduates should:

- 1.** Be able to ask interesting and important questions—questions whose answers will provide new insight into incompletely understood issues;
 - 2.** Be able to gather the information that will allow them to answer such questions—ideally the graduate will be the person who knows how to find or collect needed information or data when others do not;
 - 3.** Be able to analyze that information, including synthesizing old and new knowledge and knowledge from multiple disciplines—ideally the graduate will easily transcend disciplinary boundaries;
 - 4.** Be able to clearly and persuasively explain the analysis in both written and verbal formats.
- Political Science is the subject matter used to develop these skills, but their applicability should not be limited to solely, or even primarily, to the discipline.

Major Program Requirements

Bachelor of Arts in Political Science
(37 hours) and 3-4 hours cognates

Political Science Core (21 hours)

PSCI 101	American Federal Government (4)
PSCI 237	Ancient and Medieval Political Philosophy (4)
or PSCI 238	Modern Political Philosophy (4)
PSCI 210	Career Seminar (2)
PSCI 236	International Relations (4)
PSCI 295	Research Methods for Political Science (4)
PSCI 399	Professional Internship (1)
PSCI 409	Senior Research Seminar (2)

Political Science Electives (16 hours)

Cognate (3 or 4 hours)

MATH 204	Elementary Statistics (3)
or PSYC 211	Statistics for Psychology (4)

Majors are encouraged, depending on their individual backgrounds, to consider the following courses related to political science: Geology 104, Economics 201 and 202, History 101, 102, 103, 104, 105, 106, or 111, SOC 208 and at least 8 hours of modern languages.

Minor and Associate Program Requirements

The Associate's Degree and the minor in political science requires completion of 20 semester hours in the discipline, including Political Science 101; 237 or 238; and 12 hours of electives in the department.

Sophomore standing and a 100- or 200-level course or the instructor's permission are prerequisites for 300-level courses. Junior standing is required to take 400-level courses.

All prospective candidates in teacher education must seek the guidance of the department of teacher education before beginning their sophomore year. The semesters listed after course descriptions indicate when courses are expected to be offered. Schedules are subject to change; students should confirm semester offerings with the department when planning degree programs.

101. American Federal Government (SOCIAL SCIENCE) (4). The structure and function of the federal government, with emphasis on the concept of limited government, constitutional structures such as federalism and separation of powers, and consideration of how it actually functions in the contemporary world. Fall, spring.

102. State and Local Government (SOCIAL SCIENCE) (4). How state and local governments function, issues they face and how they relate to the federal government, with special emphasis on Michigan. Attendance at governmental meetings, interviews of public officials and presentations by governmental guest speakers are included. Fall.

205. Introduction to Public Policy (SOCIAL SCIENCE) (4). The public policy process is the heart of politics, where decisions are made about who gets taxed, who gets that money, and who determines what rules we have to live by. Investigates how policy is made, who the players are, and the effects of different types of policies. (Open to freshmen.) Offered Occasionally.

210. Career Seminar (2). Prepares students for the transition

from college to graduate school, law school, or the working world. Students will develop their resumes, learn to write application letters improve interviewing skills, and explore career opportunities for political science majors. Fall.

220. United States Presidency (SOCIAL SCIENCE) (4). Examines the role and function of the Presidency in the American political system. Focus areas include presidential elections, the growth of presidential power, relations between President and Congress, and the President's role in foreign affairs. Offered occasionally.

236. International Relations (SOCIAL SCIENCE) (4). Analysis of current world politics in terms of biological, psychological, institutional, technical and geographical factors. Emphasizes the United States role in major world issues. Fall.

237. Ancient and Medieval Political Philosophy (SOCIAL SCIENCE) (4). Survey of classical and medieval political philosophy. Spring.

238. Modern Political Theory and Philosophy (SOCIAL SCIENCE) (4). Survey of modern and postmodern political philosophy. Spring.

245. Environmental Politics (SOCIAL SCIENCE) (4). Considers the problems of humans' effect on the environment and political responses to it. Different approaches to environmentalism are considered, and different environmental problems analyzed. Offered occasionally.

250. United States Foreign Policy (SOCIAL SCIENCE) (4). How foreign policy is made; how and why the U.S. has been involved in recent world affairs, including trade, foreign aid, alliances, diplomacy, terrorism, wars and revolutions, and arms control. Offered occasionally.

260. Contemporary Democracies (4). Political institutions, policies, and practices of contemporary democracies throughout the world, as well as the effects of different democratic arrangements on political and economic policy and on democratic successes and failures. Offered occasionally.

295. Research Methods for Political Science (4) Introduction to the research methods used in Political Science, including causal inference, hypothesis testing, measurement, sampling, survey research, document analysis, and basic statistical analysis. Spring.

301. Special Topics in Political Science (4). May be repeated with different topic. (Prerequisites: PSCI 101, 102, 236, or 295.)

305. Political Economy (4). Examination of government's role in the economy, including consideration of the theoretical foundations of free trade, Marxism, Keynesianism and monetarism, with emphasis on Public Choice theory, rent-seeking behavior, market distorting effects of government regulation and economic analysis of politics. Students who

have taken ECON 305 may not take this course for credit. (Prerequisites: Junior standing). Fall.

315. Globalization (4). Central issues of the global political economy: global governance, international organizations such as the World Bank, International Monetary Fund and World Trade Organization, and the phenomenon of globalization and its implications. (Prerequisites: PSCI 101, 102, 236, or 295.) Offered occasionally.

328. Politics in the Third World (NON-WESTERN) (4). Politics and problems of selected third and fourth world nations of Asia, Africa and Latin America and their relations with the United States and the rest of the world. (Prerequisites: PSCI 101, 102, 236, or 295.) Offered occasionally.

330. Public Opinion, Parties and Elections (4). The nature, sources and effects of public opinion; techniques, strategies and effects of propaganda; and membership, beliefs and campaigns of political parties. Coursework will include analysis and creation of propaganda and working for political parties or candidates. (Prerequisites: PSCI 101, 102, 236, or 295.) Offered occasionally.

340. Constitutional Law (4). Select topics of Constitutional law, including civil rights and criminal law. Explores legal reasoning and the procedures of the Supreme Court. Students will engage in a Supreme Court simulation involving a current case. (Prerequisites: PSCI 101, 102, 236, or 295.) Offered occasionally.

351. European Politics (4). Examines the political institutions, culture, history and problems of selected European countries and the European Union, as well as their relations with the United States and the rest of the world. (Prerequisites: PSCI 101, 102, 236, or 295.) Offered occasionally.

355. Model Arab League (Non-Western) (4). The politics and policies of the member-states of the Arab League and the League itself. Course involves participation in the Michigan Model Arab League and other MAL events. Spring. (Prerequisites: COMM 102, and PSCI 101, 102, 236 or 295.) Spring

370. Democratization (4). Examines the processes by which authoritarian regimes become democratic, as well as current understandings of why some democratic transitions are more successful than others, by examining a number of historical and contemporary cases from around the world. (Prerequisites: PSCI 101, 102, 236, or 295.) Offered occasionally.

394. Constitutional Law I: Government Powers (4). Study of U.S. Supreme Court decisions that resolve struggles for power between the three branches of the federal government and the federal state governments. Consideration of such issues as the government's authority to regulate drugs, the president's commander-in-chief powers and the distinctions between federal and state court cases. (Prerequisites: Junior standing or permission of instructor.) Students who have taken SOCI 394 may not take this course for credit. Fall.

395. Constitutional Law II: Civil Liberties (4). Study of U.S. Supreme Court decisions that determine the extent to which individual liberties are protected under the U.S. Constitution, with special attention to the constitutional rights of the accused during criminal investigations and litigation and exploration of civil rights issues and the limits of free speech and religious expression. (Prerequisites: Junior standing or permission of instructor.) Students who have taken SOCI 395 may not take this course for credit. Spring

405. Political Behavior (4). Examines the foundations of social and political behavior, considering such issues as the evolutionary basis of cooperation, the foundations of racism and violence, the confluence of power and sex, the strategic value of deception, and what it means to behave rationally in a complex political world. (Prerequisites: PSCI 101, 102, 236, or 295.) Offered occasionally.

409. Capstone: Research Seminar (2). Culminating experience for political science majors. Students will select a research topic, review the published literature on that topic, prepare a research proposal, conduct the research, and present their findings publicly. Important writings in the discipline may be assigned. May be repeated once for credit, with permission of instructor. (Prerequisites: PSCI 295 and MATH 204 or PSYC 211 and Junior or Senior Status.) Fall.

Special and Advanced Courses

199. Exploratory Internship (1-3). Arrangements may be made for internships fulfilling individual needs and interests. The Lenawee County Pre-Law Internship offers an introductory look at the field through visits and interviews with persons at a dozen or more agencies related to the legal process. Fall, spring, summer.

222. Washington Symposium (2-3). On-campus study combined with study at the Washington Center in Washington, D.C. Topics may include the presidency, Congress, leadership for women, foreign policy, or the news media in politics. Study in Washington includes lectures by government leaders, field trips to government agencies and one-day internships in government offices. May and August.

299. Experimental Course (1-4).

399. Professional Internship (1-12). Political science interns have been placed with judges, private and prosecuting attorneys, city and county managers, police departments, probate and district courts, newspapers, social service agencies, political campaigns and state and national legislators. Fall, spring, summer.

451. Independent Study (1-4). Supervised reading, research or work in an area of special interest to the student. (Prerequisite: departmental permission.) Fall, spring, summer.

499. Advanced Experimental Course (1-4).