

INDIANA UNIVERSITY SCHOOL OF PUBLIC AND ENVIRONMENTAL AFFAIRS



Business/SPEA Building (BS) 3027
801 W. Michigan Street
Indianapolis, IN 46202
(317) 274-4656/toll free (877) 292-9321
www.spea.iupui.edu

Contents

- 451 School of Public and Environmental Affairs**
 451 Welcome from Dean Astrid E. Merget
 451 Welcome from Associate Dean Greg H. Lindsey
 451 SPEA Centers, Programs, and Services
 451 Placement and Internship Office
 452 SPEA Alumni Association
 452 Student Organizations
- 453 Undergraduate Programs**
 453 Admissions
 453 Intercampus Transfer
 453 Policies Governing the Undergraduate Program
 454 Other Policies Concerning Degree Requirements
 454 Honors and Accelerated Master's Programs
 454 International Programs
 455 Washington Leadership Program
 455 Indiana Leadership Program
- 455 Bachelor of Science Degree Programs**
- 455 Bachelor of Science in Public Affairs**
 456 Majors
 456 Management
 456 Civic Leadership
 456 Policy Studies
- 457 Bachelor of Science in Public Health/Environmental Science and Health**
- 458 Bachelor of Science in Public Health/Health Administration**
- 458 Bachelor of Science in Health Services Management**
- 459 Bachelor of Science in Criminal Justice**
- 461 Associate of Science Degree Programs**
- 461 Associate of Science in Criminal Justice**
- 462 Associate of Science in Public Affairs**
 462 Areas of Concentration
 462 Criminal Justice
 462 Emergency Services Administration
 462 Environmental Affairs
 462 Public Administration
- 463 SPEA Minors**
 463 Public and Environmental Affairs
 463 Criminal Justice General
 463 Criminal Justice Accounting
 463 Environmental Science and Health
 463 Health Systems Administration
- 463 Certificate Programs**
 464 Environmental Studies
 464 Nonprofit Management
 464 Public Affairs
 465 Public Health
 465 Public Management
 465 American Humanics Certification in Nonprofit Management
- 465 Undergraduate Course Descriptions**
- 472 Graduate Programs**
 472 Graduate Degrees, Programs, and Concentrations
- 473 Master of Public Affairs (M.P.A.)**
 474 Fields of Concentration
 474 Criminal Justice
 474 Environmental Management
 474 Nonprofit Management
 475 Policy Analysis
 475 Public Management
- 475 Master of Health Administration (M.H.A.)**
- 476 Joint Master's Degrees**
 476 Master of Health Administration–Doctor of Jurisprudence (M.H.A.–J.D.)
 477 Master of Health Administration–Master of Business Administration (M.H.A.–M.B.A.)
 478 Master of Health Administration–Master of Science in Nursing (M.H.A.–M.S.N.)
 478 Master of Public Affairs–Doctor of Jurisprudence (M.P.A.–J.D.)
 478 Master of Public Affairs–Master of Arts in Philanthropic Studies (M.P.A.–M.A.)
 479 Master of Public Affairs–Master of Science in Nursing (M.P.A.–M.S.N.)
- 480 Certificate Programs**
 480 Hazardous Materials Management
 480 Health Systems Management
 480 Nonprofit Management
 480 Planning Information Systems
 481 Public Management
- 481 Graduate Courses**
- 487 IUPUI Administrative Officers**
- 487 IUPUI Academic Advisors**
- 487 IUPUI Faculty**
- 488 SPEA Board of Visitors**

School of Public and Environmental Affairs

The School of Public and Environmental Affairs (SPEA) is a professional school dedicated to applied interdisciplinary learning combining the study of public affairs and environmental sciences. The interests of the faculty and professional staff typically fall into one or more of the following areas:

- Criminal justice
- Environmental science and policy
- Finance and economics
- Health science and administration
- Law
- Nonprofit management
- Policy and administration
- Public safety
- Urban affairs

The school's faculty, staff, and students work individually and collaboratively to solve problems that require SPEA's unique combination of in-depth knowledge in the natural, behavioral, social, and administrative sciences.

Because of its broad program base and representation on eight IU campuses, SPEA is a resource to many Indiana communities. Public and private organizations, as well as all levels of government, benefit from the knowledge and expertise of SPEA faculty, staff, and students.

Welcome from Dean Astrid E. Merget

The Indiana University School of Public and Environmental Affairs has no small agenda. Because society's most critical concerns are connected to quality of life and sustainability of all life forms, our teaching, research, and service are distinguished by immediate relevancy and benefit in the public, private, and nonprofit sectors. Founded in 1972, the school has, from its very beginning, embraced a distinctive interdisciplinary approach to the pursuit of comprehensive solutions for society's most complex challenges in our classrooms, labs, and research centers.

Our work touches citizens around the world in multiple ways on any given day. On our campuses throughout the state of Indiana, our students and faculty address an assortment of issues that help define how well citizens of the world live, how well their institutions serve and sustain, and how well their environments are protected and enhanced.

We assess the water people drink and how their governments define and assist those most in need. Members of our faculty study the safety of air and highway travel and transport and how health care and food quality can be enhanced. In our research centers, our students learn how developing

governments define principles of justice and address criminal behavior and social welfare. Today, we lead the country in helping groups and organizations in all sectors learn inventive techniques to settle disputes and approach their environmental catastrophes. And internationally, our faculty and our students help new democracies determine how tax monies are best collected and utilized for society's betterment.

I am pleased with your interest in the School of Public and Environmental Affairs and hope that your investment of time here will ultimately serve you well as you prepare for a most meaningful and rewarding professional life.

With best wishes,

Astrid E. Merget, Dean

Welcome from Associate Dean Greg H. Lindsey

I am pleased to welcome you to the School of Public and Environmental Affairs, which is a multidisciplinary division of Indiana University. We are located in downtown Indianapolis on one of the most dynamic urban campuses in the nation. Our location fosters strong relationships with public, private, and nonprofit organizations in the metro area. This allows us to offer unique opportunities, which blend academic course work with practical experience.

Our faculty has earned national distinction for innovative programs in public affairs, urban affairs, environmental science, planning, criminal justice, and health administration. It is my pleasure to announce that our graduate concentration in nonprofit management is consistently ranked among the top ten in the nation.

In addition to our academic programs, SPEA is affiliated with a variety of nationally recognized research centers. Students and faculty are developing cutting-edge research in such areas as health policy and health services, urban policy and the environment, and the intersection of government and the nonprofit sector.

We invite you to join the legacy of SPEA and challenge you to make a world of difference in your community!

Greg H. Lindsey, Associate Dean

SPEA Centers, Programs, and Services

The School of Public and Environmental Affairs encompasses public service activities that complement innovative academic programs. The school provides a wide variety of services to an equally broad range of federal, state, and local agencies.

The Executive Education Program is one of the most prestigious leadership programs in the nation. Offered through the School of Public and Environmental Affairs, the Executive Education Program works with the government, nonprofit agencies, and the private sector to prepare leaders and managers to meet today's challenges and anticipate tomorrow's opportunities.

The Executive Education Program offers graduate-level programs at four sites nationally: Washington, D.C.; Seattle, Washington; Indianapolis, Indiana, for the United States Navy; and Louisville, Kentucky, for the United States Army Corps of Engineers. Graduate programs include the Master of Public Affairs (M.P.A.), the Public Management Certificate, and the Environmental Management Certificate.

The Executive Education Program has formed a partnership with the American Association of State Highway and Transportation Officials (AASHTO) which also meets in Indianapolis. Together, they have created two institutes to challenge and educate transportation managers and leaders. The National Transportation Leadership Institute and the Graduate Leadership/Management Institute are two of the most influential programs for transportation management.

The Executive Education Program's partnership with the Indiana Health and Hospital Association (IHHA) created a 10-course management institute for health care officials in Indiana to help them lead their organizations through the continually changing health care industry.

SPEA's Executive Education Program also offers customized leadership and management programs for local and national clients.

The Center for Urban Policy and the Environment brings analyses and decision facilitation competencies to complex societal problems, especially in central Indiana. Foundations, governments, nonprofit organizations, and businesses have supported center projects. Affiliated faculty from Indiana University–Purdue University Indianapolis and other universities, professional staff of the center, and graduate assistants commonly form teams for projects. Clients who have engaged the center in recent projects include the Central Indiana Corporate Partnership, the State of Indiana, the Indianapolis–Marion County Public Library, the City of Indianapolis, the Indianapolis Neighborhood Housing Partnership, and the Catholic Diocese of Cleveland. The center is evaluating implementation of the charitable choice provisions of the welfare reform act with an award from the Ford Foundation. The Lilly Endowment has provided an award of general support to the center that is funding extensive analyses of investments by households, businesses, governments and nonprofits in central Indiana.

Center for Urban Policy and the Environment
School of Public and Environmental Affairs
342 North Senate Avenue, Third Floor
Indianapolis, IN 46204-1708

Contact: John Krauss, Director, phone: (317) 261-3000; fax: (317) 261-3050; e-mail: jkrauss@iupui.edu

Web: www.urbancenter.iupui.edu

Placement and Internship Office

SPEA's students utilize IUPUI's Career Center and the expertise of SPEA's career representative in making the transition from the university setting to the working world. Workshops, individual counseling, alumni mentoring, and an extensive library are provided. Other services include bulletins, directories,

and networking interviews with on-campus recruiters, and automated resume preparation and distribution to employers.

SPEA students also may make internship arrangements through faculty and the SPEA program directors.

In recent years, students have held internships in the following types of organizations: county government, state government, federal government, police departments, environmental consulting firms, hospitals, assisted living facilities, nursing homes, law firms, nonprofit agencies, private corporations, pharmaceutical firms, insurance companies and more.

Internship programs are designed for maximum flexibility so that many valid learning experiences can qualify as internships. Work can be full- or part-time, and paid or unpaid; however, prior approval by the student's faculty advisor is always required. After obtaining approval for an internship, a student may register for 1-6 credit hours, earning 1 credit for every 80 hours of work. All credit for an internship is awarded on an S/F (Satisfactory/Fail) basis. Credit is not granted for work experience obtained prior to approval of an internship and enrollment in the appropriate internship class.

Students on the IUPUI campus seeking career-planning assistance should contact:

Career and Employment Services Business/SPEA 2010, phone: (317) 274-2554; Web: www.career.iupui.edu

Career-planning assistance also is available on other campuses. For information, contact:

Placement and Internship Office
SPEA 200

Bloomington Campus
Phone: (812) 855-9639

Web: www.indiana.edu/~speacare

SPEA Alumni Association

SPEA maintains contact with alumni through the SPEA Alumni Association, a constituent society within the parent Indiana University Alumni Association. The SPEA Alumni Association publishes the school's newsletter, *Alumni Update*, mailed twice a year to more than 18,000 SPEA alumni located in all 50 states and 50 countries. Through this newsletter, alumni, faculty, and students are able to maintain contact. The Alumni Association raises funds for student scholarships with a summer golf outing in Indianapolis and with specialized efforts for specific programs. It sponsors the publication of an alumni directory and sponsors alumni events in several major cities. The SPEA Alumni Association is governed by an elected board of directors, which meets biannually.

Student Organizations

Alpha Phi Sigma

Alpha Phi Sigma is the national criminal justice honor society, with chapters established on the Northwest, Fort Wayne, South Bend, Kokomo, and Indianapolis campuses of Indiana University. The society recognizes scholastic excellence by students in the field of criminal justice. It was founded in 1942 and was admitted to the Association of College Honor Societies in 1980. To be eligible, undergraduate students must have earned an

overall grade point average of at least 3.0 for at least 40 credit hours of course work, and must include at least four criminal justice courses with a minimum 3.2 grade point average. To remain in good standing, students must maintain an overall grade point average of at least 3.0 and a grade point average of at least 3.2 in all criminal justice courses completed. Membership of graduate students is limited to those who have a bachelor's degree in criminal justice or who are currently doing graduate work in this field. A minimum grade point average of 3.4 is required of graduate students seeking membership in Alpha Phi Sigma.

Pi Alpha Alpha

Pi Alpha Alpha is the national honorary society for schools of public affairs and administration. The society acknowledges outstanding scholarship and contributions to these fields. It was founded in 1972 by the National Association of Schools of Public Affairs and Administration (NASPAA) to honor those whose performance in public affairs has been distinguished. The Indiana chapter of Pi Alpha Alpha is a charter chapter. Membership in Pi Alpha Alpha may be compared to membership in Phi Beta Kappa for liberal arts graduates. A person evaluating credentials in the various fields of public service should recognize the professional quality such a membership represents.

Undergraduate students are eligible for Pi Alpha Alpha membership when they are in the top 10 percent of their graduating class with a minimum grade point average of 3.5 in at least 15 credit hours of SPEA courses, when they are in the last semester of the junior year or in the senior year, and when they have earned a grade point average of at least 3.0 in all course work.

SPEA graduate students can qualify for membership by being in the top 20 percent of their M.H.A. or M.P.A. class, with a minimum overall grade point average of 3.5, a 3.7 in at least 50 percent of all required courses, and by having completed 50 percent of the required course work (i.e., 24-30 credit hours).

Alumni are eligible for membership if they meet all the requirements of student membership, even if they graduated before induction by the Indiana chapter.

Honorary membership is available to any person who has achieved distinction in public administration and who has the distinguished qualities that Pi Alpha Alpha fosters.

Phi Alpha Delta Law Fraternity, Prelaw Chapter

The prelaw chapter of Phi Alpha Delta is an organization for students who are considering law school. It is affiliated with Phi Alpha Delta Law Fraternity International, a professional service organization composed of prelaw students, law students, legal educators, attorneys, judges and government officials. Phi Alpha Delta was founded in 1902 for the purpose of promoting professional competency and achievement within the legal profession. It is also the first law fraternity to admit women. Phi Alpha Delta (PAD) is the world's largest law fraternity with almost 200 prelaw chapters, 179 law school chapters, and 94 alumni chapters in the United States, Canada, Puerto Rico, and Mexico.

Air and Waste Management Association

The purpose of the IUPUI student chapter of the Air and Waste Management Association is to provide a common ground where students from various academic disciplines can advance their understanding of environmental issues through programs that foster the exchange of ideas. The chapter seeks to provide opportunities for fellowship between students and faculty, leadership development, mentoring by professionals in the field, and service learning. Through its educational and service programs, the chapter encourages students to develop the skills and knowledge needed to be the environmental leaders of the future.

IUPUI Criminal Justice Association

The purpose of this organization is to recognize and promote high scholarship among students actively engaged in collegiate preparation for professional service in the field of criminal justice; to evaluate the ethical standards of criminal justice professions; to inspire students to develop and maintain pride in their work; and to give students a better understanding of all parts of the criminal justice system. Membership is open to all IUPUI students, alumni, and local justice practitioners.

American College of Healthcare Executives (ACHE), IU Chapter

The purpose of the student chapter of the American College of Healthcare Executives is to promote the professional, educational, and ethical development of students in health administration. The chapter helps health administration students develop personal and social skills in a manner that will enhance the attainment of effective leadership in health services organizations. ACHE sponsors guest speakers who are administrators in group practices, academic medical centers, managed care organizations, and the insurance industry.

American Humanics Student Association

American Humanics certificate program educates, prepares and certifies nonprofit professionals to strengthen and lead nonprofit organizations. The American Humanics Student Association at IUPUI provides a training ground outside of the classroom for students seeking certification through AH and students with interests in nonprofits and volunteerism. AHSA organizes service activities and fundraising events on campus and in the Indianapolis community. Open educational meetings are held once a month, featuring speakers from the Indianapolis nonprofit community. Many leadership opportunities are also available within AHSA and membership is open to both undergraduate and graduate students. Students pay a \$25 annual membership fee and fulfill academic certification requirements. More information can be found at humanics.iupui.edu/default.asp.

Dean's Student Advisory Council

The mission of the Dean's Student Advisory Council is to advise the Dean on a variety of topics related to undergraduate and graduate programs in the School of Public and Environmental Affairs (SPEA). Meetings are held monthly. Membership is open to all SPEA students.

Graduate Public Affairs Association

The purpose of the Graduate Public Affairs Association is to provide a social outlay and a collective voice for graduate students in the School of Public and Environmental Affairs public affairs graduate program.

Indiana Civil Liberties Union Student Chapter (ICLU)

The purpose of the ICLU Student Chapter is to promote discussion and awareness of civil liberties issues and to safeguard civil liberties. Membership is open to all current and former students, faculty, and staff of IUPUI, regardless of age, creed, race, color, gender, sexual orientation, disability, national origin, or status as a veteran. Members are required to become members of the Indiana Civil Liberties Union; there are no dues required to participate in the Student Chapter.

M.H.A. Student Affairs Committee

The purpose of the M.H.A. Student Affairs Committee is to provide knowledge of health care programs and career information to the student body. The committee provides a forum for information exchange between the faculty and the student body. SAC also promotes the importance of interaction between alumni, the M.H.A. cohorts, and the certificate students. SAC sponsors informal meetings with alumni, picnics, baseball games, and plays an active role in curriculum revision and course evaluation.

Student Health Administration Organization

The purpose of the Student Health Administration Organization is to help coordinate activities between the undergraduate and graduate health administration students. SHAO also promotes mentoring relationships between undergraduate and graduate health administration students and fosters community relationships within the field. Students interested in joining SHAO must be accepted into either the undergraduate or graduate health administration program in the Indiana University School of Public and Environmental Affairs in Indianapolis.

Undergraduate Programs

The School of Public and Environmental Affairs on the Indianapolis campus offers a wide range of undergraduate programs. The following is a list of bachelor and associate degrees offered through SPEA:

- Bachelor of Science in Public Affairs with majors in:
 - Management
 - Civic Leadership
 - Policy Studies
- Bachelor of Science in Public Health with majors in:
 - Health Administration
 - Environmental Science and Health
- Bachelor of Science in Health Services Management (associate degree required)
- Bachelor of Science in Criminal Justice
- Associate of Science in Criminal Justice

- Associate of Science in Public Affairs with majors in:
 - Criminal Justice
 - Emergency Services Administration
 - Environmental Affairs
 - Public Administration

Minors are available in the following areas:

- Public and Environmental Affairs
- Criminal Justice General
- Criminal Justice Accounting
- Environmental Science and Health
- Health Systems Administration

In addition, SPEA offers a number of undergraduate certificates:

- Environmental Studies
- Nonprofit Management
- Public Affairs
- Public Health
- Public Management
- American Humanics Certification in Nonprofit Management

General information concerning these programs can be obtained by visiting our Web site at www.spea.iupui.edu or from the SPEA Student Services Office:

Student Services Office
School of Public and Environmental Affairs
Business/SPEA Building 3027
Indiana University–Purdue University Indianapolis
801 W. Michigan Street
Indianapolis, IN 46202-5152
Phone: (317) 274-4656
Toll-free: (877) 292-9321
E-mail: infospea@iupui.edu
Web: www.spea.iupui.edu

Admissions

SPEA has a special program to admit freshman students simultaneously to SPEA and to the University College. To be eligible for this dual admission, applicants must meet the general university and campus requirements for admission, have a minimum combined Scholastic Aptitude Test (SAT) (or equivalent) math and verbal (critical reading) test score of 990, and be in the top quartile in their high school ranking.

Students who do not qualify for dual admission at Indianapolis or choose not to apply for freshman-level entry may be admitted to the School of Public and Environmental Affairs after they have completed 12 credit hours with a minimum cumulative grade point average of 2.0.

Intercampus Transfer

Students admitted to the School of Public and Environmental Affairs at any campus of Indiana University may transfer permanently to SPEA on another campus, provided they meet the requirements for admission and good academic standing at the desired campus. Students wanting a temporary intercampus transfer need only meet the good academic standing requirements.

Policies Governing the Undergraduate Program

The following academic policies of the School of Public and Environmental Affairs are applicable to all SPEA undergraduate programs regardless of the campus where they are offered. Additional policies at individual campuses may also apply to SPEA students.

Grading Policies SPEA follows the official grading system of Indiana University, described in the introductory section of the bulletin.

Good Academic Standing Students are in good academic standing when their semester and their cumulative grade point averages are 2.0 or above, and their grade point average in all courses included in the SPEA core and major/concentration requirements is at least 2.3. Students must be in good academic standing to graduate.

Probation Students will be placed on academic probation if their cumulative or semester grade point average is below 2.0 or their SPEA core and major/concentration GPA falls below 2.3. In order for the core and major/concentration GPA to be considered, students must have completed 12 or more credit hours in the core and major/concentration.

Critical Probation After one semester on probation, students who fail to return to good academic standing will be placed on critical probation. At the discretion of the undergraduate program director, these students could be dismissed. If a student is given the opportunity to enroll under critical probation, SPEA will establish strict conditions that must be met before that student will be allowed to register for future classes.

Dismissal Students can be dismissed if they fail to return to good academic standing after one semester on critical probation. Students also may be dismissed if, in the opinion of the undergraduate program director, they are not making satisfactory progress toward their degrees.

Readmission Dismissed students must petition their campus undergraduate program director for readmission. Dismissed students whose petitions are denied will not be allowed to register.

Acceptance of Grade Replacement SPEA students who have retaken a course (must be same department and course number) may request to have only the last grade computed in their grade point average. Courses must have been taken the fall semester of 1996 or later, and can only have been taken on the IUPUI campus. Students may replace five grades for a total of 15 credit hours.

Grade Appeals Students generally have one year to appeal a grade given by a SPEA faculty member. Resolution of the issue with the class instructor must be attempted before submitting a written appeal to the appropriate program director.

Forgiveness Policy This policy applies to former IU students pursuing a first undergraduate degree who have been away from the IU system and have not attended any other college or university, including any campus of IU, for the last five years. This policy first

became available to students returning to SPEA in the fall of 1996. Students must apply for forgiveness upon application for admission to a degree-granting unit. If the student has not yet been admitted to a degree-granting unit, the student should submit a notification of intent to petition for academic forgiveness as part of the academic advising process. If the petition is approved, the student starts with a fresh cumulative grade point index, after which all the rules of academic probation and dismissal (for SPEA) will apply. The school will evaluate the student's transcript, and all courses taken previously will remain on the permanent record. Only credit hours for courses with grades C or above, or P and S may be counted toward degree completion. After approval, the student must complete a minimum of 32 credit hours on the IUPUI campus after his or her return in order to meet the graduation residency requirement.

Student Rights and Responsibilities These provide for due process in the event of disciplinary or other actions and are explained in detail in the student handbook, *Code of Student Rights, Responsibilities, and Conduct*. In accordance with federal law, student records are confidential and are available to other persons only under specific conditions as outlined in university regulations. Students are responsible for planning their own academic programs and for meeting the requirements for their degree or certificate programs. Faculty and academic advisors are obligated only to assist students in meeting this responsibility.

Academic Integrity This is a basic principle requiring that students take credit only for ideas and efforts that are their own. Academic dishonesty violates that principle and undermines the bonds of trust and cooperation among members of the university community. Penalties and procedures that are applicable when academic misconduct or dishonesty occurs are provided in the *Code of Student Rights, Responsibilities, and Conduct*.

Sex Offenders Screening Policy for Students/Applicants Indianapolis applicants should be aware that criminal convictions may result in ineligibility for participation in certain courses/activities within the School of Public and Environmental Affairs. Questions regarding school policy on such matters should be addressed to the appropriate program director.

Other Policies Concerning Degree Requirements

Bulletin Policy Students are expected to complete the requirements for their undergraduate degree within 10 years of admission to the School of Public and Environmental Affairs. Students are allowed to continue beyond this time period only at the discretion of the undergraduate program director or campus director. If a student has not taken classes for three years or more, that student must satisfy program requirements of the School of Public and Environmental Affairs in effect at the time of reactivation. Requests for deviation from requirements listed in the bulletin must be approved in writing by the program director, whose decision is final.

Hours Requirements Students must successfully complete a minimum of 120 credit hours for most

Bachelor of Science degrees and a minimum of 60 credit hours for Associate of Science degrees. The campus at which a student completes the plurality of required course work will award the degree, provided that campus is authorized to grant the degree/major/concentration and that the student has been admitted to that campus. Students may transfer no more than 90 credit hours (60 credits from a junior college) toward a Bachelor of Science degree or 30 credit hours toward an Associate of Science degree. Class standing, based on total credit hours that count toward minimum degree requirements, is as follows: senior, 86 or more; junior, 56-85; sophomore, 26-55; freshman, fewer than 26.

Grade Point Average Requirement A minimum cumulative GPA of 2.0 is required for the B.S. and A.S. degrees. In addition, a SPEA core and major/concentration GPA of 2.3 must be maintained in order to graduate. For students seeking certificates or minors from SPEA, the minimum GPA requirement is 2.0 in all applicable course work.

Double-Counting Generally, courses taken to meet a specific degree requirement cannot be double-counted (i.e., used to satisfy any other degree requirement). An exception to this rule allows SPEA students earning a SPEA minor to double-count two minor courses.

Application for Degree All students must fill out an application for degree at the SPEA records office on their campus. This application should be completed by October 1 for a December graduation, or January 1 for a May or August graduation.

Degrees Awarded with Distinction SPEA recognizes outstanding performance by awarding bachelor's and associate degrees with three levels of distinction to students who rank in the upper 10 percent of their SPEA graduating class and have completed a minimum of 60 hours at Indiana University for a B.S. (30 hours for an A.S.). The levels of distinction are as follows: highest, 3.90 and above; high, 3.70 through 3.89; distinction, 3.50 through 3.69.

Requirements for a Second Bachelor's Degree Students must petition for approval to work toward a second bachelor's degree. If permission is granted, students are required to take 30 credit hours beyond the credits used for the first bachelor's degree and satisfy all the requirements for the second degree. Generally, SPEA encourages students to work toward a graduate degree or graduate certificate rather than a second bachelor's degree.

Available Options A student in good academic standing may choose to take a maximum of eight elective courses (two per academic year) **pass/fail** for a B.S. degree or two courses for an A.S. degree. Deadlines for exercising this option are published in the *Schedule of Classes* and are strictly enforced.

With prior approval, a student may take three courses totaling no more than 10 credit hours by **correspondence** through the IU Division of Extended Studies, Independent Study Program. Under no circumstances may a student satisfy a core or major/concentration requirement by correspondence.

With SPEA faculty approval, a student in good standing may earn a maximum of 15 credit hours of elective

credit through the SPEA **internship** program. The SPEA internship program is described in more detail elsewhere in this bulletin.

SPEA students may choose to pursue a **minor** or **certificate** from another school or department or within SPEA in an area other than their degree or major/concentration. Students interested in a minor should contact that department for additional information.

Honors and Accelerated Master's Programs

Sophomores and juniors with a cumulative grade point average of 3.5 or higher may apply for the Honors Program. The primary requirements are that a student maintain the 3.5 GPA, successfully complete designated honors courses, and write a senior thesis. Students may propose a unique course of study in consultation with the SPEA honors advisor.

The Accelerated Master's Program (A.M.P.) is a competitive program for outstanding SPEA students. Students may apply to the Master of Public Affairs (M.P.A.) or the Master of Health Administration (M.H.A.) early in their junior year.

Participation in this program allows the student to fulfill some graduate program requirements during the senior year. Graduate courses count for both graduate and undergraduate degree requirements. Before starting the graduate program, students must have satisfied all general education requirements toward their bachelor's degree. For additional information, students should contact the appropriate program director.

International Programs

SPEA offers several opportunities to study abroad for credit:

- the Rotterdam Program in the Netherlands (spring and fall)
- the Parliamentary Internship Program in Canberra, Australia (year-round).

The Rotterdam program is a one-semester program that allows students to take 15 credit hours in the general area of public affairs. The Parliamentary internship is available with or without course work and is offered each semester and during the summer (the Australian winter). In addition, IU offers many other officially approved study abroad programs that can, with the authorization of an advisor, count for SPEA credit.

All these programs are taught in English, and the IU credit obtained costs the same as it would on campus. Financial aid obtained is normally applied to these overseas experiences. Experience has taught us that studying abroad does not adversely affect a student's GPA, increase the cost of study, or delay graduation, even though many people seem to think one or all of these things will happen.

Our purpose in creating these study abroad opportunities is to provide students with a unique chance to broaden their horizons, help them prepare themselves for a world that is becoming much more international and global, and allow them to challenge themselves by facing something new. Of course, there are opportunities to travel and socialize as well as

study—and that is all part of the educational experience. More than 200 SPEA students have benefited from this opportunity. There are many programs from which to choose, and students are advised to make use of the overseas study resource center on the third floor of Franklin Hall. For further information, consult SPEA's International Program Center in SPEA 339 on the Bloomington campus.

Washington Leadership Program

The School of Public and Environmental Affairs offers the Washington Leadership Program each fall and spring semester in Washington, D.C. This program consists of two senior-level seminars (each worth 3 credit hours) and an internship (worth 5 or 6 credit hours). Students complete internships by working four days per week in an assigned congressional office, public interest group, federal agency, or nonprofit organization.

Students reside and attend classes in Washington, D.C. Tuition is based on the regular fees for Indiana University, plus any special program charges. Students in the program remain eligible for any scholarships or financial aid they would normally receive as Indiana University students. Interested students should contact the SPEA undergraduate advisor or program director.

Indiana Leadership Program

The Indiana Leadership Program is another way for students to earn 6 academic internship credits while residing in Indianapolis. This program, available each fall and spring semester, consists of an internship, seminar, and associated assignments. Students complete the internship by working 24 hours per week in a local or state government agency.

Students can maintain full-time status by taking 6 additional credit hours. Participants in this program remain eligible for the scholarships or financial aid they would normally receive as students. For more information on this program, contact SPEA Student Services at (317) 274-4656.

Bachelor of Science Degree Programs

The School of Public and Environmental Affairs (SPEA) combines the best of public affairs, criminal justice, and environmental science to develop solutions to society's complex problems such as water and air pollution, terrorist activities, escalating health care costs, and increasing crime rates. Through SPEA programs, students develop the critical thinking and problem solving skills necessary for offering solutions to these issues.

Students pursuing the **Bachelor of Science in Public Affairs** may major in either management, civic leadership, or policy studies. The B.S.P.A. provides students with an overview of the issues that engage the public and nonprofit sectors such as: (1) how organization and management differ among sectors, (2) the tools required to solve public problems and undertake leadership roles in the community, and (3) the policy processes that lead to effective decision-making. The B.S.P.A. prepares graduates to work in the public and nonprofit sectors. Many students also choose to continue their education in law, planning, public affairs, or environmental science.

Students pursuing a **Bachelor of Science in Public Health** (B.S.P.H.) degree may major in either health administration or environmental science and health. Graduates with a major in health administration may work in either the public or private sector in areas such as health facilities management, epidemiology, or health policy and planning. Graduates with a major in environmental science and health may work in either the public or private sector in areas such as air and water quality, solid and hazardous waste, workplace health and safety, pollution control, environmental planning, food safety, or epidemiology.

The Bachelor of Science in Health Systems

Management is a management preparation program for experienced allied health and nursing specialists who hold an associate degree. The program is designed for health care providers who wish to become managers of health care delivery facilities, and individuals interested in health policy and planning.

The **Bachelor of Science in Criminal Justice** gives students a broad understanding of the operations of the criminal justice system. Students learn to deal with problems of crime in a manner consistent with American democratic ideals. Graduates are well prepared to work in the criminal justice system, as well as related public and private organizations. Alumni work in a variety of positions throughout the government system including corrections, probation, policing, and state agencies. Many graduates also work for private firms in security and investigative roles.

Bachelor of Science in Public Affairs

The Bachelor of Science in Public Affairs requires 120 credit hours.

DEGREE REQUIREMENTS

The SPEA curriculum is divided into three categories: general education, electives, and major area.

General Education

Communications

Three courses for a minimum of 9 credit hours.

The following writing course:

ENG W131 Elementary Composition (3 cr.) **or** equivalent campus option (must earn a C or higher)

One of the following:

BUS X204 Business Communications (3 cr.)
ENG W231 Professional Writing Skills (3 cr.)

The following speech course:

COMM R110 Fundamentals of Speech Communication (3 cr.) **or** equivalent campus option

Social Sciences and Humanities

Six courses for a minimum of 18 credit hours.

The following three courses:

ECON E201 Introduction to Microeconomics (3 cr.)
ECON E202 Introduction to Macroeconomics (3 cr.)
POLS Y103 Introduction to American Politics (3 cr.)

One of the following courses:

ANTH A104 Culture and Society (3 cr.)
CLAS C205 Classical Mythology (3 cr.)
FLAC F200 World Cultures through Literature (3 cr.)
GEOG G110 Introduction to Human Geography (3 cr.)
HIST H105 American History I (3 cr.)
HIST H106 American History II (3 cr.)
HIST H108 Perspectives on the World to 1800 (3 cr.)
HIST H114 History of Western Civilization II (3 cr.)
REL R133 Introduction to Religions (3 cr.)
REL R212 Comparative Religion (3 cr.)

Two courses from the following Social Sciences and Humanities lists:

Social Sciences

AFRO A150 Survey of the Culture of Black Americans (3 cr.)
ANTH A104 Culture and Society (3 cr.)
COMM C180 Introduction to Interpersonal Communication (3 cr.)
ENG G104 Language Awareness (3 cr.)
FOLK F101 Introduction to Folklore (3 cr.)
GEOG G110 Introduction to Human Geography (3 cr.)
GEOG G130 World Geography (3 cr.)
HIST H117 Introduction to Historical Studies (3 cr.)
POLS Y101 Principles of Political Science (3 cr.)
POLS Y219 Introduction to International Relations (3 cr.)
PSY B104 Introduction to Psychology as a Social Science (3 cr.)
PSY B310 Life Span Development (3 cr.)
SOC R100 Introduction to Sociology (3 cr.)
SOC R121 Social Problems (3 cr.)
SPEA J101 The American Criminal Justice System (3 cr.)
WOST W105 Introduction to Women's Studies (3 cr.)

Humanities

CLAS C205 Classical Mythology (3 cr.)
CMLT C190 Introduction to Film (3 cr.)
ENG L105 Appreciation of Literature (3 cr.)
FLAC F200 World Cultures through Literature (3 cr.)
FOLK F101 Introduction to Folklore (3 cr.)
HER H100 Art Appreciation (3 cr.)
HER H101 History of Art I (3 cr.)
HER H102 History of Art II (3 cr.)
HIST H105 American History I (3 cr.)
HIST H106 American History II (3 cr.)
HIST H108 Perspectives on the World to 1800 (3 cr.)
HIST H113 History of Western Civilization I (3 cr.)
HIST H217 The Nature of History (3 cr.)

Courses may be substituted with permission of faculty advisor.

Natural Sciences

Three natural science courses of more than one credit each are required. One of the courses must have an associated laboratory of 1 or 2 credits. The courses and laboratory must total a minimum of 8 credit hours.

Courses may be chosen from the following list:

ANTH A103 Human Origins and Prehistory (3 cr.)
AST A100 The Solar System (3 cr.)
AST A105 Stars and Galaxies (3 cr.)
BIOL K101 Concepts of Biology I — Plants (5 cr.)
BIOL K103 Concepts of Biology II — Animals (5 cr.)
BIOL N100 Contemporary Biology (3 cr.)
BIOL N107 Introduction to Zoology (4 cr.)
BIOL N200 The Biology of Women (3 cr.)

BIOL N212 Human Biology (2 cr.)
 BIOL N213 Human Biology Laboratory (1 cr.)
 BIOL N214 Human Biology (2 cr.)
 BIOL N215 Human Biology Laboratory (1 cr.)
 BIOL N217 Human Physiology (5 cr.)
 BIOL N251 Introduction to Microbiology (3 cr.)
 BIOL N322 Introductory Principles of Genetics (3 cr.)
 CHEM C100 World of Chemistry (3 cr.)
 CHEM C101 Elementary Chemistry I (5 cr.)
 CHEM C102 Elementary Chemistry II (5 cr.)
 CHEM C105 Principles of Chemistry I (3 cr.)
 CHEM C106 Principles of Chemistry II (3 cr.)
 GEOG G107 Physical Systems of the Environment (3 cr.)
 GEOG G108 Physical Geography Laboratory (2 cr.)
 GEOG G303 Weather and Climate/Topical Seminar in Urban and Regional Systems (3 cr.)
 GEOG G307 Biogeography: Distribution of Life (3 cr.)
 GEOG/GEOL G185 Global Environmental Change (3 cr.)
 GEOL G107 Environmental Geology (3 cr.)
 GEOL G109 Fundamentals of Earth History (3 cr.)
 GEOL G110 Physical Geology (3 cr.)
 GEOL G115 Introduction to Oceanography (3 cr.)
 GEOL G117 Environmental Geology Laboratory (1 cr.)
 GEOL G119 Fundamentals of Earth History Laboratory (1 cr.)
 GEOL G120 Physical Geology Laboratory (1 cr.) **or**
 GEOL G206 Advanced Physical Geology Laboratory (2 cr.)
 GEOL G132 Environmental Problems (3 cr.)
 GEOL G180 Dinosaurs (3 cr.)
 PHYS 100 Physics in the Modern World (5 cr.)
 PHYS 152 Mechanics (4 cr.)
 PHYS 200 Our Physical Environment (3 cr.)
 PHYS 218 General Physics I (4 cr.)
 PHYS 219 General Physics II (4 cr.)
 PHYS 251 Heat, Electricity, and Optics (5 cr.)
 PHYS P201 General Physics I (5 cr.)
 PHYS P202 General Physics II (5 cr.)
 PSY B105 Psychology as a Biological Science (3 cr.)

Quantitative Methods

Three courses for a minimum of 9 credit hours.

One of the following computer courses:

SPEA V261 Computers in Public Affairs (3 cr.)
 BUS K201 The Computer in Business (3 cr.)
 CPT 115 Computer Information Systems Fundamentals (3 cr.) **and** CPT 140 Programming Constructs Lab (3 cr.)

CSCI N201 Programming Concepts (3 cr.)

CSCI N207 Data Analysis Using Spreadsheets (3 cr.)

One of the following mathematics courses:

MATH M118 Finite Mathematics (3 cr.)
 MATH M119 Brief Survey of Calculus I (3 cr.)
 MATH 163 Integrated Calculus and Analytic Geometry I (5 cr.)
 MATH 164 Integrated Calculus and Analytic Geometry II (5 cr.)

One of the following statistics courses:

SPEA/MATH/PSY K300 Statistical Techniques (3 cr.)
 ECON E270 Introduction to Statistical Theory in Economics and Business (3 cr.)
 PSY B305 Statistics (3 cr.)
 SOC R359 Introduction to Sociological Statistics I (3 cr.)
 STAT 301 Elementary Statistical Methods I (3 cr.)

General Electives

Additional courses beyond the general education and major requirements are needed to complete the minimum 120 hours required for the degree.

Majors

There are three majors offered on the Indianapolis campus: Management, Civic Leadership, and Policy Studies.

Management Major

15 courses.

The following course:

SPEA V170 Introduction to Public Affairs (3 cr.)

Two of the following courses:

SPEA E272 Introduction to Environmental Sciences (3 cr.)

SPEA V221 Nonprofit and Voluntary Sector (3 cr.)

SPEA V264 Urban Structure and Policy (3 cr.)

The following four courses:

SPEA V348 Management Science (3 cr.)

SPEA V366 Managing Behavior in Public

Organizations (3 cr.)

SPEA V372 Government Finance and Budgets (3 cr.)

SPEA V376 Law and Public Affairs (3 cr.)

Seven of the following courses (a minimum of one course in each of the four sections):

Section 1:

SPEA V263 Public Management (3 cr.)

SPEA V362 Nonprofit Management and Leadership (3 cr.)

Section 2:

SPEA V346 Introduction to Government Accounting and Financial Reporting (3 cr.)

or

SPEA V356 Introduction to Nonprofit Accounting and Reporting (3 cr.)

SPEA V361 Financial Management (3 cr.)

SPEA V458 Fund Development for Nonprofit

Organizations (3 cr.)

Section 3:

SPEA V368 Managing Government Operations (3 cr.)

SPEA V369 Managing Information Technology (3 cr.)

SPEA V370 Research Methods and Statistical Modeling (3 cr.)

Section 4:

SPEA V373 Human Resources Management in the Public Sector (3 cr.)

SPEA V435 Negotiation and Alternative Dispute

Resolution (3 cr.)

SPEA V443 Managing Workforce Diversity (3 cr.)

The following capstone course:

SPEA V473 Management, Leadership, and Policy (3 cr.)

Civic Leadership Major

15 courses.

Gateway—The following course:

SPEA V170 Introduction to Public Affairs (3 cr.)

The Nature of Civil Society—The following two courses:

SPEA V221 Nonprofit and Voluntary Sector (3 cr.) *or*

POLS Y378 Problems in Public Policy: Civil Society and Public Policy (3 cr.)

V376 Law and Public Policy (3 cr.)

The Political Process and Civic Engagement

The following two courses are required:

SPEA V382 Political Action and Civic Engagement (3 cr.)

SPEA V264 Urban Structure and Policy (3 cr.)

Select two of the following:

SPEA H432 Health Care Marketing (3 cr.)

SPEA V263 Public Management (3 cr.) *or*

SPEA V362 Nonprofit Management and Leadership (3 cr.)

SPEA V436 Communication for Government and Nonprofit Organizations (3 cr.)

PENDING: SPEA V438 Mass Media and Public Affairs (3 cr.)

SPEA V450 Contemporary Issues in Public Affairs: Community and the Constitution (3 cr.)

SPEA V450 Contemporary Issues in Public Affairs (3 cr.)—as approved by advisor

SPEA V472 Policy Processes in the United States (3 cr.)

Leadership and Conflict Resolution—The following two courses:

SPEA V412 Leadership and Ethics (3 cr.)

SPEA V435 Negotiation and Alternative Dispute Resolution (3 cr.)

Emphasis Area—four courses required

The four courses (12 credit hours) must be chosen in consultation with a faculty advisor. At least two of the courses must be at the 300-level or above. The emphasis area will allow the student to study a sector, policy, or skill in depth. Examples include:

Nonprofit and Community Leadership

SPEA V362 Nonprofit Management and Leadership (3 cr.)

SPEA V379 Performance Measurement and Program Evaluation (3 cr.)

SPEA V450 Contemporary Issues in Public Affairs (3 cr.)

SPEA V458 Fund Development for Nonprofits (3 cr.)

SPEA Y378 Civil Society and Public Policy (3 cr.)

Political Process and Civic Leadership

SPEA V260 Topics in Public Affairs: Political Action and Civic Engagement (3 cr.)

SPEA V260 Topics in Public Affairs: Political Organization (3 cr.)

SPEA V379 Performance Measurement and Program Evaluation (3 cr.)

SPEA V406 Public Law and the Electoral Process (3 cr.)

POLS Y301 Political Parties and Interest Groups (3 cr.)

International Affairs

SPEA V260 Topics in Public Affairs: Terrorism and Public Policy (3 cr.)

SPEA V450 Contemporary Issues in Public Affairs (3 cr.)—related topics

POLS Y219 Introduction to International Relations (3 cr.)

POLS Y360 United States Foreign Policy (3 cr.)

POLS Y375 War and International Conflict (3 cr.)

Capstone—The following course:

SPEA V473 Management, Leadership, and Policy (3 cr.)

Internship

SPEA V380 Internship in Public and Environmental Affairs Policy (3-6 cr.)

Electives

If necessary, 1 to 3 courses to bring the total to 15 courses.

Policy Studies Major

15 courses.

Gateway—The following course:

SPEA V170 Introduction to Public Affairs (3 cr.)

Policy Processes and Context—four courses

One of the following two courses:

SPEA V221 Nonprofit and Voluntary Sector (3 cr.)

SPEA V362 Nonprofit Management and Leadership (3 cr.)

One of the following two courses:

SPEA V263 Public Management (3 cr.)

SPEA V372 Government Finance and Budgets (3 cr.)

The following two courses:

POLS Y213 Introduction to Public Policy (3 cr.)

SPEA V412 Leadership and Ethics (3 cr.)

Tools for Policy Analysis and Evaluation—The following four courses:

SPEA V348 Management Science (3 cr.)

SPEA V369 Managing Information Technology (3 cr.)

SPEA V376 Law and Public Policy (3 cr.)

SPEA V379 Performance Measurement and Program Evaluation (3 cr.)

Policy Emphasis Area—A total of four courses for a minimum of 12 credit hours from the following, chosen in consultation with a faculty advisor.

Specialized competency: a policy area in depth.

Criminal Justice

SPEA J101 The American Criminal Justice System (3 cr.)

SPEA J260 Topics in Criminal Justice (3 cr.)

SPEA J301 Substantive Criminal Law (3 cr.)

SPEA J305 Juvenile Justice (3 cr.)

SPEA J439 Crime and Public Policy (3 cr.)

Environment

SPEA E162 Environment and People (3 cr.)

SPEA H316 Environmental Science and Health (3 cr.)

SPEA H416 Environmental Health Policy (3 cr.)

BIOL K341 Principals of Ecology (3 cr.)

Health

SPEA H316 Environmental Science and Health (3 cr.)

SPEA H320 Health Systems Administration (3 cr.)

SPEA H354 Health Economics (3 cr.)

SPEA H401 Strategic Planning in Health Care Organizations (3 cr.)

SPEA H416 Environmental Health Policy (3 cr.)

SPEA H420 Health Policy (3 cr.)

SPEA H474 Health Administration Seminar (3 cr.)

P: SPEA H320 and senior standing.

Urban

SPEA V260 Topics in Public Affairs (3 cr.)

SPEA V264 Urban Structure and Policy (3 cr.)

SPEA V450 Contemporary Issues in Public Affairs: Geographic Information Systems (3 cr.)

SPEA V450 Contemporary Issues in Public Affairs (3 cr.)

Nonprofit

SPEA V221 Nonprofit and Voluntary Sector (3 cr.)

SPEA V260 Topics in Public Affairs (3 cr.)

SPEA V362 Nonprofit Management and Leadership (3 cr.)

SPEA V450 Contemporary Issues in Public Affairs (3 cr.)

SPEA V458 Fund Development for Nonprofit

Organizations (3 cr.)

POLS Y378 Problems in Public Policy: Civil Society and Public Policy (3 cr.)

International Policy

POLS Y219 Introduction to International Relations (3 cr.)

ECON E303 Survey of International Economics (3 cr.)

POLS Y377 Globalization (3 cr.)

HIST D314 Soviet Social and Cultural History (3 cr.)

Capstone—The following course:

SPEA V473 Management, Leadership, and Policy (3 cr.)

Internship (3-6 credits)

SPEA V380 Internship in Public and Environmental Affairs Policy (1-6 cr.) *or*

SPEA J380 Internship in Criminal Justice (1-6 cr.)

Electives

If necessary, 1 to 3 courses to bring the total to 15 courses.

Bachelor of Science in Public Health/Environmental Science and Health

DEGREE REQUIREMENTS

Students must satisfy requirements in four main areas: general education, electives, a public health core, and one of the two concentrations.

Communications

Four courses for a minimum of 12 credit hours.

EACH of the following courses:

ENG W131 Elementary Composition I (3 cr.)

ENG W231 Professional Writing Skills (3 cr.) **OR** BUS

X204 Business Communications (3 cr.) **OR** TCM

220 Technical Report Writing (3 cr.)

COMM R110 Fundamentals of Speech Communication (3 cr.)

COMM C223 Business and Professional

Communication (3 cr.)

Social Sciences and Humanities

Four courses for a minimum of 12 credit hours.

EACH of the following courses:

ECON E201 Introduction to Microeconomics (3 cr.)

P: sophomore standing.

ECON E202 Introduction to Macroeconomics (3 cr.)

P: sophomore standing.

ONE approved course from the following subject areas:

Anthropology

Geography

Journalism

Linguistics

Philosophy

Political Science

Psychology

Sociology

ONE approved course from the following subject areas:

Afro-American Studies

Classical Studies

Communications and Theater

Comparative Literature

English

Fine Arts

Folklore

Foreign Languages and Literatures

History

Music

Philosophy

Religious Studies

Speech

Theatre and Drama

Science

Five courses for a total of 21 credit hours.

EACH of the following courses:

BIOL N100 Contemporary Biology (3 cr.)

BIOL N251 Introduction to Microbiology (3 cr.)

PHYS P201 General Physics I (5 cr.)

TWO of the following courses:

CHEM C101/C121 Elementary Chemistry I with Lab

(5 cr.) **and** CHEM C110/C115 Elementary

Chemistry II with Lab (5 cr.)

OR

CHEM C105/C125 Principles of Chemistry I with

Lab (5 cr.) **and** CHEM C106/C126 Principles of

Chemistry II with Lab (5 cr.)

Quantitative Methods

Five courses for a minimum of 14 credit hours.

TWO computer courses:

SPEA V261 Computers in Public Affairs (3 cr.)

SPEA V369 Managing Information Technology (3 cr.)

or SPEA V450/E400 Geographic Information Systems (2 cr.)

TWO of the following mathematics courses:

MATH 153 Algebra and Trigonometry I (3 cr.) **and**

MATH 154 Algebra and Trigonometry II (3 cr.)

OR

MATH 151 Algebra and Trigonometry I (5 cr.)

and MATH 163 Integrated Calculus and Analytic Geometry I (5 cr.)

ONE statistics course:

SPEA K300 Statistical Techniques (3 cr.)

ENVIRONMENTAL SCIENCE AND HEALTH MAJOR (16 courses)—45 credit hours

Policy and Management

EACH of the following courses:

Three courses for a total of 9 credit hours.

SPEA V170 Introduction to Public Affairs (3 cr.) **or**

SPEA E162 Environment and People (3 cr.)

SPEA H416 Environmental Health Policy (3 cr.)

ONE of the following courses:

SPEA H320 Health Systems Administration (3 cr.)

SPEA V263 Public Management (3 cr.)

SPEA V366 Managing Behavior in Public Organizations (3 cr.)

Foundation and Methods

Five courses totaling 17 credit hours.

EACH of the following courses:

SPEA H316 Environmental Science and Health (3 cr.)

SPEA H322 Epidemiology (3 cr.)

SPEA E326 Mathematical Methods in Environmental Science (3 cr.) P: math, statistics, and computer course (one of each)

SPEA H459 Environmental Science and Health Data Analysis (4 cr.)

SPEA H460 Techniques in Environmental Science and Health (4 cr.) P: H459.

Applications in Environmental Science and Health

Six courses totaling 18 credit hours.

EACH of the following courses:

SPEA E410 Introduction to Environmental Toxicology (3 cr.)

SPEA E431 Water Supply and Wastewater Treatment I (3 cr.)

SPEA E451 Air Pollution and Control (3 cr.)

SPEA E452 Solid and Hazardous Waste Management (3 cr.)

SPEA H428 Food Science and Sanitation (3 cr.)

SPEA H433 Industrial Hygiene (3 cr.)

Environmental Science and Health Experience

Two courses totaling a minimum of 3 credit hours.

EACH of the following courses:

SPEA H367 Environmental Science and Health Practicum (2 cr.)

SPEA V380 Internship in Public and Environmental Affairs (1-6 cr.) **or** SPEA H466 Public Health Field Experience (1 cr.) P: H465.

Bachelor of Science in Public Health/Health Administration

DEGREE REQUIREMENTS

Students must satisfy requirements in four main areas: general education, electives, a public health core, and one of the two concentrations.

Communications

Four courses for a minimum of 12 credit hours.

Each of the following courses:

ENG W131 Elementary Composition I (3 cr.)

ENG W231 Professional Writing Skills (3 cr.) **OR** BUS X204 Business Communications (3 cr.)

COMM R110 Fundamentals of Speech Communication (3 cr.)

COMM C223 Business and Professional Communication (3 cr.)

Social Sciences and Humanities

Four courses for a minimum of 12 credit hours.

EACH of the following **three** courses:

ECON E201 Introduction to Microeconomics (3 cr.) P: sophomore standing.

ECON E202 Introduction to Macroeconomics (3 cr.) P: sophomore standing.

PHIL P120 Ethics (3 cr.)

ONE approved course from the following subject areas:

Anthropology
Geography
Journalism
Political Science
Psychology
Sociology

ONE approved course from the following subject areas:

Afro-American Studies
Classical Studies
Communications and Theater
Comparative Literature
English
Fine Arts
Folklore
Foreign Languages and Literatures
History
Music
Philosophy
Religious Studies
Speech
Theatre and Drama

Science

Two courses for a total of 8 credit hours.

TWO approved courses from the basic sciences, such as biology, chemistry, or physics.

Recommended courses:

BIOL N212 Human Biology (3 cr.) and BIOL N213 Human Biology Lab (1 cr.)

BIOL N214 Human Biology (3 cr.) P: N212 and BIOL N215 Human Biology Lab (1 cr.). P or C: N213.

Quantitative Methods, Computer

Four courses for a minimum of 11-12 credit hours.

TWO computer courses:

SPEA V261 Computers in Public Affairs (3 cr.)

SPEA V369 Managing Information Technology (3 cr.) **or** SPEA V450/E400 Geographic Information Systems (2 cr.)

ONE mathematics course such as Mathematics M118, M119 or higher:

Recommended:

MATH M118 Finite Mathematics (3 cr.)

ONE statistics course:

SPEA K300 Statistical Techniques (3 cr.) P: M110 or M111. R: M118 or approved course.

HEALTH ADMINISTRATION MAJOR (17 courses) – 48 credit hours

Health and Health Care System

EACH of the following 3 courses:

SPEA H316 Environmental Science and Health (3 cr.)

SPEA H320 Health Systems Administration (3 cr.)

SPEA H322 Principles of Epidemiology (3 cr.)

Health and Public Policy

EACH of the following 3 courses:

SPEA H120 Contemporary Issues in Public Health (3 cr.) **or** SPEA V170 Introduction to Public Affairs (3 cr.)

SPEA H441 Legal Aspects of Health Care

Administration (3 cr.) **or** SPEA V376 Law and Public Policy (3 cr.)

SPEA H420 Health Policy (3 cr.)

Management Fundamentals

Three courses totaling 9 credit hours:

THREE of the following courses:

SPEA V263 Public Management (3 cr.)

SPEA V362 Nonprofit Management and Leadership (3 cr.)

SPEA V366 Management Behavior in Public Organizations (3 cr.)

SPEA V348 Management Science (3 cr.) P: SPEA K300, MATH M025, or MATH M118.

SPEA V368 Managing Government Operations (3 cr.)

SPEA V373 Personnel Management in the Public Sector (3 cr.)

Health Services Management Skills

EACH of the following courses:

SPEA H352 Health Finance and Budgeting (3 cr.)

SPEA H401 Strategic Planning for Health Care Organizations (3 cr.)

TWO of the following courses:

SPEA H353 Advanced Health Finance and Budgeting (3 cr.)

SPEA H354 Health Economics (3 cr.)

SPEA H432 Health Care Marketing (3 cr.)

SPEA V370 Research Methods and Statistical Modeling (3 cr.)

Integration of Health Services Management Theory and Practice

EACH of the following courses:

SPEA H472 Applied Health Administration (3 cr.)

SPEA H474 Health Administration Seminar (3 cr.)

Health Services Management Experience

Two courses totaling 3 credit hours

EACH of the following courses:

SPEA H365 Health Administration Practicum (2 cr.)

SPEA V380 Internship in Public and Environmental Affairs (1 cr.) **or** SPEA H466 Public Health Field Experience (1 cr.)

Bachelor of Science in Health Services Management

Students applying for the 120 credit hour B.S.H.S.M. degree must have earned an associate of arts or associate of science degree from an accredited university or college in nursing, allied health, dental hygiene, or medical technology; or an associate degree in another field with relevant work experience. Students who complete this degree are eligible to sit for the Long-Term Care Administrators Examination after they have fulfilled the Administrator-in-Training requirement.

DEGREE REQUIREMENTS

These requirements are divided into four main areas: general education, electives, a management core, and the health services concentration courses.

General Education

Communications

Three courses for a minimum of 9 credit hours.

The following writing course:

ENG W131 Elementary Composition (3 cr.) or approved option (must earn a C or better)

One of the following:

BUS X204 Business Communications (3 cr.)

ENG W231 Professional Writing Skills (3 cr.)

One of the following speech courses:

- COMM C180 Introduction to Interpersonal Communication (3 cr.)
 COMM C223 Business and Professional Communication (3 cr.)
 COMM C228 Discussion and Group Methods (3 cr.)
 COMM R110 Fundamentals of Speech Communication (3 cr.)
 COMM R227 Argumentation and Debate (3 cr.)

Arts and Humanities

One course for a minimum of 3 credit hours from any of the following subject areas.

- Afro-American Studies
 Classical Studies
 Communication and Theatre
 Comparative Literature
 English
 Fine Arts
 Folklore
 Foreign Languages and Literature
 History
 Musicology and Music History
 Philosophy
 Religious Studies
 Social Sciences

Four courses for a minimum of 12 credit hours.

The following courses:

- ECON E201 Introduction to Microeconomics (3 cr.)
 ECON E202 Introduction to Macroeconomics (3 cr.)
 POLS Y103 Introduction to American Politics (3 cr.)

One approved course from one of the following subject areas:

- Anthropology
 Geography
 Journalism
 Linguistics
 Political Science
 Psychology
 Sociology

Natural Sciences

Two courses with labs for a minimum of 6 credit hours.

The following courses:

- BIOL N212 Human Biology (2 cr.) **and** BIOL N213 Human Biology Laboratory (1 cr.)
 BIOL N214 Human Biology (2 cr.) **and** BIOL N215 Human Biology Laboratory (1 cr.)

Quantitative Methods

Three courses for a minimum of 9 credit hours.

One computer course:

- SPEA V261 Computers in Public Affairs (3 cr.)

One mathematics course such as M118, M119 or higher:

- MATH M118 Finite Mathematics (3 cr.) is recommended

One statistics course:

- SPEA K300 Statistical Techniques (3 cr.)

General Electives

Sufficient additional courses beyond the general education, core, and concentration requirements are needed to reach the minimum 120 credit hours required for the degree.

Management Core

Three of the following courses:

- SPEA V263 Public Management (3 cr.)
 SPEA V348 Management Science (3 cr.)
 SPEA V362 Nonprofit Management and Leadership (3 cr.)
 SPEA V366 Managing Behavior in Public Organizations (3 cr.)
 SPEA V368 Managing Government Operations (3 cr.)
 SPEA V373 Human Resources Management in the Public Sector (3 cr.)

Health Services Management Concentration

Requirements (10 courses):

The following six courses:

- SPEA H320 Health Systems Administration (3 cr.)
 SPEA H352 Health Finance and Budgeting (3 cr.)
 SPEA H401 Strategic Planning for Health Care Organizations (3 cr.)
 SPEA H420 Health Policy (3 cr.)
 SPEA H472 Applied Health Administration (3 cr.)
 SPEA H474 Health Administration Seminar (3 cr.)

Four of the following:

- SPEA H316 Environmental Science and Health (3 cr.)
 SPEA H322 Principles of Epidemiology (3 cr.)
 SPEA H353 Advanced Health Finance and Budgeting (3 cr.)
 SPEA H354 Health Economics (3 cr.)
 SPEA H432 Health Care Marketing (3 cr.)
 SPEA H441 Legal Aspects of Health Care Administration (3 cr.)
 SPEA V370 Research Methods and Statistical Modeling (3 cr.)
 SPEA V369 Managing Information Technology (3 cr.)
OR V450/E400 Geographic Information Systems (2 cr.)

Bachelor of Science in Criminal Justice

The Bachelor of Science in Criminal Justice requires 120 credit hours.

DEGREE REQUIREMENTS

The program includes three main areas: general education (including a foreign language and a non-foreign language component), management and policy, and criminal justice.

Communications

Three courses for a total of 9 credit hours.

Take ALL of the following:

- ENG W131 Elementary Composition (3 cr.)
 ENG W231 Professional Writing Skills (3 cr.)
 COMM R110 Fundamentals of Speech Communication (3 cr.)

Quantitative Methods

Three courses for a total of 9 credit hours.

ONE of the following computer courses:

- SPEA V261 Computer in Public Affairs (3 cr.)
 SPEA V369 Managing Information Technology (3 cr.)
 SPEA V450 Geographic Information Systems (3 cr.)

ONE of the following mathematics courses:

- MATH M118 Finite Mathematics (3 cr.)

MATH M119 Survey of Calculus I (3 cr.)

MATH 163 Integrated Calculus and Analytic Geometry I (5 cr.)

MATH 164 Integrated Calculus and Analytic Geometry II (5 cr.)

TAKE the following statistics course (or another statistics course approved by your faculty advisor):
 SPEA K300 Statistical Techniques (3 cr.) P: 110 or 111. R: M118.

Social Sciences

Four courses for a minimum of 12 credit hours.

Select four courses from the following:

- SPEA V170 Introduction to Public Affairs (3 cr.)
 ECON E201 Microeconomics (3 cr.)
 ECON E202 Macroeconomics (3 cr.)
 ANTH A104 Culture and Society (3 cr.)
 GEOG G110 Introduction to Human Geography (3 cr.)
 GEOG G130 World Geography (3 cr.)
 POLS Y101 Principles of Political Science (3 cr.)
 POLS Y103 Introduction to American Politics (3 cr.)
 POLS Y219 Introduction to International Relations (3 cr.)
 POLS Y217 Introduction to Comparative Politics (3 cr.)
 PSY B104 Introduction to Psychology as a Social Science (3 cr.)
 PSY B310 Life Span Development (3 cr.)
 PSY B380 Abnormal Psychology (3 cr.)
 SOC R100 Introduction to Sociology (3 cr.)
 SOC R121 Social Problems (3 cr.)
 SOC R461 Race and Ethnic Relations (3 cr.)
 WOST W105 Introduction to Women's Studies (3 cr.)

Humanities and Natural Sciences

(16-20 credit hours)

Students must complete one of the following two options:

OPTION ONE—FOREIGN LANGUAGE (RECOMMENDED OPTION)

Total of 16 to 18 credit hours.

Complete first-year foreign language requirements: only required for Option One.

This requirement may be satisfied in one of the following ways:

1. By completing first-year (10 credit hours) courses in a single language with passing grades;
2. By completing second- or third-year course with a grade of C or higher;
3. By taking a placement test and placing into the 200 level or higher; this waives the 100-level requirement but does not carry with it credit toward graduation.

This requirement may be met with first-year proficiency in American Sign Language.

Placement Test Students with previous experience in French, German, or Spanish should take the Foreign Language Placement Test at the Testing Center to assess their level of language preparation.

Students who have achieved elementary or intermediate proficiency in any other foreign language should confer with the Foreign Languages and Cultures department for placement in the correct level of that foreign language.

Students who complete the course into which they were placed with a grade of C or higher are eligible for special credit at a reduced fee for the appropriate lower-division course(s) that precede the course taken. Foreign language special credit counts toward graduation and toward the foreign language requirements.

117 Courses Courses numbered 117 are reserved for students who have never studied the language before. Students who have had two or more years of formal study in a language may take a course numbered 117 in that language as a refresher course before enrolling in a more advanced course, but they must recognize that their work will be graded on a Satisfactory/Fail basis. A grade of S is equivalent to a grade of C.

Non-Native Speakers Students for whom English is not a first language may be exempted from the foreign language requirement, without credit, by completion of ENG W131 and ENG W132 with the required grade of C or higher.

Students whose native language is not English may demonstrate proficiency in their native language and earn 3 to 6 hours of 298/299 special credit by successfully completing an appropriate 300-level course. They may not, however, receive credit for taking first- and second-year courses in their native language.

Humanities and Natural Sciences:

Take the following course:

HIST H105 American History I (3 cr.)

Take one of the following natural science courses (3-5 cr.):

ANTH A103 Human Origins and Prehistory (3 cr.)
 AST A100 The Solar System (3 cr.)
 AST A105 Stars and Galaxies (3 cr.)
 BIOL K101 Concepts of Biology I – Plants (5 cr.)
 BIOL K103 Concepts of Biology II – Animals (5 cr.)
 BIOL N100 Contemporary Biology (3 cr.)
 BIOL N107 Introduction to Zoology (4 cr.)
 BIOL N200 The Biology of Women (3 cr.)
 BIOL N212 Human Biology (2 cr.)
 BIOL N213 Human Biology Laboratory (1 cr.)
 BIOL N214 Human Biology (2 cr.)
 BIOL N215 Human Biology Laboratory (1 cr.)
 BIOL N217 Human Physiology (5 cr.)
 BIOL N251 Introduction to Microbiology (3 cr.)
 BIOL N322 Introductory Principles of Genetics (3 cr.)
 CHEM C100 World of Chemistry (3 cr.)
 CHEM C101 Elementary Chemistry I (5 cr.)
 CHEM C102 Elementary Chemistry II (5 cr.)
 CHEM C105 Principles of Chemistry I (3 cr.)
 CHEM C106 Principles of Chemistry II (3 cr.)
 GEOL G107 Environmental Geology (3 cr.)
 GEOL G117 Environmental Geology Laboratory (1 cr.)
 GEOL G109 Fundamentals of Earth History (3 cr.)
 GEOL G119 Fundamentals of Earth History Laboratory (1 cr.)
 GEOL G110 Physical Geology (3 cr.)
 GEOL G120 Physical Geology Laboratory (1 cr.) **or**
 GEOL G206 Advanced Physical Geology Laboratory (2 cr.)
 GEOL G115 Introduction to Oceanography (3 cr.)
 GEOL G132 Environmental Problems (3 cr.)
 GEOL G180 Dinosaurs (3 cr.)

GEOL G107 Physical Systems of the Environment (3 cr.)
 GEOL G108 Physical Geography Laboratory (2 cr.)
 GEOL G303 Weather and Climate—Tropical Seminar in Urban and Regional Systems (3 cr.)
 GEOL G307 Biogeography: Distribution of Life (3 cr.)
 GEOL/GEOL G185 Global Environmental Change (3 cr.)
 PHYS 100 Physics in the Modern World (5 cr.)
 PHYS 200 Our Physical Environment (3 cr.)
 PHYS 218 General Physics (4 cr.)
 PHYS 219 General Physics (4 cr.)
 PHYS P201 General Physics I (5 cr.)
 PHYS P202 General Physics II (5 cr.)
 PHYS 152 Mechanics (4 cr.)
 PHYS 251 Heat, Electricity, and Optics (5 cr.)
 PSY B105 Psychology as a Biological Science (3 cr.)

OPTION TWO—NO FOREIGN LANGUAGE

Totaling 19-20 credit hours.

Humanities and Natural Sciences

Take both of the following (6 cr.):

HIST H105 American History I (3 cr.)
 HIST H106 American History II (3 cr.)

Take two of the following humanities courses (6 cr.):

AFRO A150 Survey of the Culture of Black Americans (3 cr.)
 CLAS C205 Classical Mythology (3 cr.)
 CMLT C190 Introduction to Film (3 cr.)
 ENG L105 Appreciation of Literature (3 cr.)
 ENG L115 Literature for Today (3 cr.)
 COMM T130 Introduction to Theatre (3 cr.)
 COMM C190 Introduction to Film (3 cr.)
 HER H100 Art Appreciation (3 cr.)
 HER H101 History of Art I (3 cr.)
 HER H102 History of Art II (3 cr.)
 FOLK F101 Folklore (3 cr.)
 FLAC F200 World Cultures through Literature (3 cr.)
 HIST H108 Perspectives on the World to 1800 (3 cr.)
 HIST H113 History of Western Civilization I (3 cr.)
 HIST H217 The Nature of History (3 cr.)
 PHIL P110 Introduction to Philosophy (3 cr.)
 PHIL P120 Ethics (3 cr.)
 REL R133 Introduction to Religion (3 cr.)
 REL R173 American Religion (3 cr.)
 REL R180 Introduction to Christianity (3 cr.)
 REL R212 Comparative Religion (3 cr.)

Take two of the following natural science courses (one must be a course with an accompanying lab):

ANTH A103 Human Origins and Prehistory (3 cr.)
 AST A100 The Solar System (3 cr.)
 AST A105 Stars and Galaxies (3 cr.)
 BIOL K101 Concepts of Biology I – Plants (5 cr.)
 BIOL K103 Concepts of Biology II – Animals (5 cr.)
 BIOL N100 Contemporary Biology (3 cr.)
 BIOL N107 Introduction to Zoology (4 cr.)
 BIOL N200 The Biology of Women (3 cr.)
 BIOL N212 Human Biology (2 cr.)
 BIOL N213 Human Biology Laboratory (1 cr.)
 BIOL N214 Human Biology (2 cr.)
 BIOL N215 Human Biology Laboratory (1 cr.)
 BIOL N217 Human Physiology (5 cr.)
 BIOL N251 Introduction to Microbiology (3 cr.)
 BIOL N322 Introductory Principles of Genetics (3 cr.)
 CHEM C100 World of Chemistry (3 cr.)

CHEM C101 Elementary Chemistry I (5 cr.)
 CHEM C102 Elementary Chemistry II (5 cr.)
 CHEM C105 Principles of Chemistry I (3 cr.)
 CHEM C106 Principles of Chemistry II (3 cr.)
 GEOL G107 Environmental Geology (3 cr.)
 GEOL G117 Environmental Geology Laboratory (1 cr.)
 GEOL G109 Fundamentals of Earth History (3 cr.)
 GEOL G119 Fundamentals of Earth History Laboratory (1 cr.)
 GEOL G110 Physical Geology (3 cr.)
 GEOL G120 Physical Geology Laboratory (1 cr.) **or**
 GEOL G206 Advanced Physical Geology Laboratory (2 cr.)
 GEOL G115 Introduction to Oceanography (3 cr.)
 GEOL G132 Environmental Problems (3 cr.)
 GEOL G180 Dinosaurs (3 cr.)
 GEOL G107 Physical Systems of the Environment (3 cr.)
 GEOL G108 Physical Geography Laboratory (2 cr.)
 GEOL G303 Weather and Climate—Tropical Seminar in Urban and Regional Systems (3 cr.)
 GEOL G307 Biogeography: Distribution of Life (3 cr.)
 GEOL/GEOL G185 Global Environmental Change (3 cr.)
 PHYS 100 Physics in the Modern World (5 cr.)
 PHYS 200 Our Physical Environment (3 cr.)
 PHYS 218 General Physics (4 cr.)
 PHYS 219 General Physics II (4 cr.)
 PHYS P201 General Physics I (5 cr.)
 PHYS P202 General Physics II (5 cr.)
 PHYS 152 Mechanics (4 cr.)
 PHYS 251 Heat, Electricity, and Optics (5 cr.)
 PSY B105 Psychology as a Biological Science (3 cr.)

SPEA CRIMINAL JUSTICE MAJOR REQUIREMENTS

Management and Policy

Four courses totaling 12 credit hours.

Take four of the following:

V221 Nonprofit and Voluntary Sector (3 cr.)
 V263 Public Management (3 cr.)
 V264 Urban Structure and Policy (3 cr.)
 E272 Introduction to Environmental Science (3 cr.)
 V348 Management Science (3 cr.)
 V366 Managing Behavior in Public Organizations (3 cr.)
 V368 Managing Government Operations (3 cr.)
 V372 Government Finance and Budgets (3 cr.)
 V373 Human Resource Management in the Public Sector (3 cr.)
 V376 Law and Public Policy (3 cr.)
 V432 Labor Relations in the Public Sector (3 cr.)
 V458 Fund Development for Nonprofit Organizations (3 cr.)
 V472 Policy Processes in the United States (3 cr.)

Criminal Justice Concentration

Eleven courses totaling 33 credit hours.

Take the following course:

SPEA J101 The American Criminal Justice System (3 cr.)

Take three of the following:

SPEA J301 Substantive Criminal Law (3 cr.) **or** SPEA J302 Procedural Criminal Law (3 cr.) – students may take both of these courses, but only one will count toward this requirement
 SPEA J305 The Juvenile Justice System (3 cr.)
 SPEA J306 The Criminal Courts (3 cr.)

SPEA J321 American Policing (3 cr.)
SPEA J331 Corrections (3 cr.)

Take all of the following:

SPEA J201 Theoretical Foundations of Criminal Justice Policies (3 cr.)
SPEA J202 Criminal Justice Data, Methods, and Resources (3 cr.)
SPEA J439 Crime and Public Policy (3 cr.)

Four additional criminal justice courses totaling 12 credits. At least two of these totaling 6 credits must be 300- or 400-level criminal justice courses. SPEA J260 and SPEA J380 may count toward this requirement, but are limited to a maximum of three credit hours each. SPEA J380 may not be counted as one of the 300- or 400-level courses for this requirement.

GENERAL ELECTIVES

A sufficient number to total a minimum of 120 credit hours with a 2.0 (C) cumulative GPA and a minimum GPA of 2.3 (C+) in all courses taken to satisfy the Public Affairs and Policy and the Concentration area requirements.

Associate of Science Degree Programs

The School of Public and Environmental Affairs offers two associate degree programs. Courses that meet associate degree requirements generally can be applied to a subsequent baccalaureate degree program. The following are general requirements for the completion of an associate degree:

1. Students must apply for admission to the associate degree program before completing 35 credit hours of course work toward the degree. Applications are available in the student services office.
2. A minimum of 60 credit hours with a 2.0 cumulative average or higher and a 2.3 average or higher in core and concentration courses is required. All requirements for this degree must be satisfied before earning 86 credit hours.
3. A limited number of courses may be transferred from other accredited institutions or be taken through independent study.
4. Courses taken to meet specific degree requirements cannot be double-counted (i.e., used to satisfy any other degree requirement).
5. A maximum of two elective courses may be taken Pass/Fail in this degree.

Associate of Science in Criminal Justice

DEGREE REQUIREMENTS

The SPEA curriculum is divided into three categories – general education, management and policy, and a concentration area.

General Education

Communications

(Three courses for a minimum of 9 credit hours)

The following three courses:

ENG W131 Elementary Composition (3 cr.)
ENG W231 Professional Writing (3 cr.)

COMM R110 Fundamentals of Speech Communication (3 cr.)

Technical and Quantitative Skills

(One course for a minimum 3 credit hours)

Select one of the following courses:

SPEA V261 Computers in Public Affairs (3 cr.)
MATH M118 Finite Mathematics (3 cr.)

Social Sciences

(Two courses for a minimum of 6 credit hours)

Select two courses from the following:

ANTH A104 Culture and Society (3 cr.)
ECON E201 Introduction to Microeconomics (3 cr.)
ECON E202 Introduction to Macroeconomics (3 cr.)
GEOG G110 Introduction to Human Geography (3 cr.)
GEOG G130 World Geography (3 cr.)
POL S Y101 Principles of Political Science (3 cr.)
POL S Y103 Introduction to American Politics (3 cr.)
POL S Y217 Introduction to Comparative Politics (3 cr.)
POL S Y219 Introduction to International Relations (3 cr.)
PSY B104 Psychology as a Social Science (3 cr.)
PSY B310 Life Span Development (3 cr.)
PSY B380 Abnormal Psychology (3 cr.)
SOC R100 Introduction to Sociology (3 cr.)
SOC R121 Social Problems (3 cr.)
WOST W105 Introduction to Women's Studies (3 cr.)

Arts and Humanities

(Two courses for a minimum of 6 credit hours)

The following history course:

HIST H105 American History I (3 cr.)

Select one of the following courses:

Foreign Language B first-year classes, usually numbered 117, 118, or 119
AFRO A150 Survey of the Culture of Black Americans (3 cr.)
CLAS C205 Classical Mythology (3 cr.)
CMLT C190 Introduction to Film (3 cr.)
ENG L105 Appreciation of Literature (3 cr.)
ENG L115 Literature for Today (3 cr.)
COMM T130 Introduction to Theatre (3 cr.)
CMCL C190 Introduction to Media (3 cr.)
HER H100 Art Appreciation (3 cr.)
HER H101 History of Art I (3 cr.)
HER H102 History of Art II (3 cr.)
FOLK F101 Introduction to Folklore (3 cr.)
FLAC F200 World Cultures through Literature (3 cr.)
HIST H106 American History II (3 cr.)
HIST H108 Perspectives on the World to 1800 (3 cr.)
HIST H113 History of Western Civilization I (3 cr.)
HIST H217 The Nature of History (3 cr.)
PHIL P110 Introduction to Philosophy (3 cr.)
PHIL P120 Ethics (3 cr.)
REL R133 Introduction to Religion (3 cr.)
REL R173 American Religion (3 cr.)
REL R180 Introduction to Christianity (3 cr.)
REL R212 Comparative Religion (3 cr.)

Physical Sciences

(One course for a minimum 3 credit hours)

Select one course from the following:

ANTH A103 Human Origins and Prehistory (3 cr.)
AST A100 The Solar System (3 cr.)
AST A105 Stars and Galaxies (3 cr.)
BIOL K101 Concepts of Biology I B Plants (5 cr.)

BIOL K103 Concepts of Biology II B Animals (5 cr.)
BIOL N100 Contemporary Biology (3 cr.)
BIOL N107 Exploring the World of Animals (4 cr.)
BIOL N200 Biology of Women (3 cr.)
BIOL N212 Human Biology (2 cr.)
BIOL N213 Human Biology Laboratory (1 cr.)
BIOL N214 Human Biology (2 cr.)
BIOL N215 Human Biology Laboratory (1 cr.)
BIOL N217 Human Physiology (5 cr.)
BIOL N251 Introduction to Microbiology (3 cr.)
BIOL N322 Introductory Principles of Genetics (3 cr.)
CHEM C100 The World of Chemistry (3 cr.)
CHEM C101 Elementary Chemistry I (5 cr.)
CHEM C102 Elementary Chemistry II (5 cr.)
CHEM C105 Principles of Chemistry I (3 cr.)
CHEM C106 Principles of Chemistry II (3 cr.)
GEOL G107 Environmental Geology (3 cr.)
GEOL G117 Environmental Geology Laboratory (1 cr.)
GEOL G109 Fundamentals of Earth History (3 cr.)
GEOL G119 Fundamentals of Earth History Laboratory (1 cr.)
GEOL G110 Physical Geology (3 cr.)
GEOL G120 Physical Geology Laboratory (1 cr.) **or**
GEOL G206 Advanced Physical Geology Laboratory (2 cr.)
GEOL G115 Introduction to Oceanography (3 cr.)
GEOL G132 Environmental Problems (3 cr.)
GEOL G180 Dinosaurs (3 cr.)
GEOL G107 Physical Systems of the Environment (3 cr.)
GEOG G108 Physical Geography Laboratory (2 cr.)
GEOG G303 Weather and Climate (3 cr.)
GEOG G307 Biogeography: Distribution of Life (3 cr.)
GEOG/GEOL G185 Global Environmental Change (3 cr.)
PHYS P100 Physics in the Modern World (5 cr.)
PHYS P200 Our Physical Environment (3 cr.)
PHYS 218 General Physics (4 cr.)
PHYS 219 General Physics (4 cr.)
PHYS P201 General Physics I (5 cr.)
PHYS P202 General Physics II (5 cr.)
PHYS 152 Mechanics (4 cr.)
PHYS 251 Heat, Electricity, and Optics (5 cr.)
PSY B105 Psychology as a Biological Science (3 cr.)

Management and Policy

(One course for a minimum of 3 credit hours)

One of the following courses:

SPEA V170 Introduction to Public Affairs (3 cr.)
SPEA V221 Nonprofit and Voluntary Sector (3 cr.)
SPEA V263 Public Management (3 cr.)
SPEA V264 Urban Structure and Policy (3 cr.)
SPEA E272 Introduction to Environmental Science (3 cr.)

Criminal Justice Concentration

Requirements (Five courses)

The following course:

SPEA J101 The American Criminal Justice System (3 cr.)

Three of the following courses:

SPEA J201 Theoretical Foundations of Criminal Justice Policies (3 cr.)
SPEA J202 Criminal Justice Data Methods, and Resources (3 cr.)

SPEA J301 Substantive Criminal Law (3 cr.) **or**
 SPEA J302 Procedural Criminal Law (3 cr.)
 (Students may take both of these courses, but only one will count toward this requirement.)
 SPEA J305 The Juvenile Justice (3 cr.)
 SPEA J306 The Criminal Courts (3 cr.)
 SPEA J321 American Policing (3 cr.)
 SPEA J331 Corrections (3 cr.)

One additional SPEA criminal justice course for a minimum of 3 credit hours.

General Electives

Additional courses beyond the above requirements to total 60 credit hours.

Students must achieve a minimum cumulative GPA of 2.0 and a minimum GPA of 2.3 in the courses taken to fulfill the criminal justice and management and policy requirements.

Associate of Science in Public Affairs

Students must complete one of the following concentrations: Criminal Justice, Emergency Services Administration, Environmental Affairs, Public Administration, or a specialized program approved by a SPEA advisor.

DEGREE REQUIREMENTS

The SPEA curriculum is divided into four categories—general education, electives, public affairs core, and a concentration area.

General Education

Communications

Three courses for a minimum of 9 credit hours.

The following writing course:

ENG W131 Elementary Composition (3 cr.) **or**
 equivalent campus-approved option (must earn a C or higher)

One of the following advanced writing courses:

BUS X204 Business Communications (3 cr.)
 ENG W231 Professional Writing (3 cr.)

One of the following speech courses:

COMM C104 Voice and Diction (3 cr.)
 COMM C180 Introduction to Interpersonal Communication (3 cr.)
 COMM C223 Business and Professional Communication (3 cr.)
 COMM C228 Discussion and Group Methods (3 cr.)
 COMM R110 Fundamentals of Speech Communication (3 cr.)
 COMM R227 Argumentation and Debate (3 cr.)

Social Sciences

Three courses for a minimum of 9 credit hours.

The following two courses:

ECON E201 Introduction to Microeconomics (3 cr.)
or
 ECON E202 Introduction to Macroeconomics (3 cr.)
 POLS Y103 Introduction to American Politics (3 cr.)

One course from sociology or psychology.

Quantitative Methods

Two courses for a minimum of 6 credit hours.

One of the following computer science courses:

SPEA V261 Computers in Public Affairs (3 cr.)
 CPT 115 Computer Information Systems Fundamentals (3 cr.) **and** CPT 140 Programming Constructs Lab (3 cr.)

CSCI N201 Programming Concepts (3 cr.)

CSCI N207 Data Analysis Using Spreadsheets (3 cr.)

One approved mathematics course:

MATH M118 Finite Mathematics (3 cr.) **or** MATH
 M119 Brief Survey of Calculus I (3 cr.)

(Note: Environmental Affairs Concentration students **must** select a course in calculus to satisfy this requirement.)

Arts and Humanities

One course from one of the following subject areas for a minimum of 3 credit hours.

Afro-American Studies
 Classical Studies
 Communication and Theatre
 Comparative Literature
 English
 Fine Arts
 Folklore
 Foreign Languages and Literature
 History: H105 or H106 recommended
 Musicology and Music History
 Philosophy
 Religious Studies

General Electives

Additional courses beyond the general education, core, and concentration requirements are needed to complete the Associate of Science degree requirement of 60 credit hours.

Public Affairs Core

Four courses.

The following courses:

SPEA V170 Introduction to Public Affairs (3 cr.)
 SPEA V264 Urban Structure and Policy (3 cr.)

One of the following courses:

SPEA E162 Environment and People (3 cr.)
 SPEA E272 Introduction to Environmental Sciences (3 cr.)

One of the following courses:

SPEA V270 Survey of Administrative Techniques (3 cr.)
 SPEA V366 Managing Behavior in Public Organizations (3 cr.)

Areas of Concentration

Criminal Justice Concentration

This concentration provides an introduction to law enforcement, correctional administration, and criminal law and procedure.

Requirements (five courses):

The following two courses:

SPEA J101 The American Criminal Justice System (3 cr.)
 SPEA J301 Substantive Criminal Law (3 cr.)

One of the following courses:

SPEA J201 Theoretical Foundations of Criminal Justice Policies (3 cr.)
 SPEA J202 Criminal Justice Data, Methods, and Resources (3 cr.)
 SPEA J306 The Criminal Courts (3 cr.)
 SPEA J321 American Policing (3 cr.)
 SPEA J331 Corrections (3 cr.)

Two additional criminal justice courses.

Emergency Services Administration Concentration

The Emergency Services Administration Concentration provides managerial skills to emergency service personnel.

Requirements (five courses):

The following course:

SPEA V375 Emergency Services Administration (3 cr.)

Three of the following courses:

SPEA H320 Health Systems Administration (3 cr.)
 SPEA J376 Principles of Public Safety (3 cr.)
 SPEA K300 Statistical Techniques (3 cr.) **or** other approved course
 SPEA V346 Introduction to Government Accounting and Financial Reporting (3 cr.)
 SPEA V348 Management Science (3 cr.)
 SPEA V372 Government Finance and Budgets (3 cr.)
 SPEA V373 Human Resources Management in the Public Sector (3 cr.)

Students are required to complete successfully an approved administrative field experience course of at least 3 credit hours. The field experience requirement may be satisfied through an internship or special project that must have an advisor's prior approval.

Environmental Affairs Concentration

The Environmental Affairs Concentration provides an introduction to environmental problems and options for their solutions.

Requirements (seven courses):

The following course:

SPEA V365 Urban Development and Planning (3 cr.)

One chemistry or physics course (3-5 cr.)

One of the following courses:

GEOG G107 Physical Systems of the Environment (3 cr.)
 GEOL G107 Environmental Geology (3 cr.)
 GEOL G110 Geology: The Earth's Environment (3 cr.)

One of the following courses not taken as a social science requirement in the general education area:

ECON E201 Introduction to Microeconomics (3 cr.)
 ECON E202 Introduction to Macroeconomics (3 cr.)

Two of the following courses:

SPEA E431 Water Supply and Wastewater Treatment (3 cr.)
 SPEA E451 Air Pollution and Control (3 cr.)
 SPEA E452 Solid and Hazardous Waste Management (3 cr.)
 SPEA H316 Environmental Health (3 cr.)
 BIOL K341 Principles of Ecology (5 cr.)
 GEOG G315 Environmental Conservation (3 cr.)
 GEOL G300 Environmental and Urban Geology (3 cr.)
 GEOL G415 Geomorphology (3 cr.)

GEOL G416 Economic Geology (3 cr.)
 POLS Y313 Environmental Policy (3 cr.)

One of the following courses:

SPEA/MATH/PSY K300 Statistical Techniques (3 cr.)
 ECON E270 Introduction to Statistical Theory in
 Economics and Business (3 cr.)
 PSY B305 Statistics (3 cr.)
 SOC R359 Introduction to Sociological Statistics
 (3 cr.)
 STAT 301 Elementary Statistical Methods I (3 cr.)

Public Administration Concentration

The Public Administration Concentration provides an overview of the primary areas of public administration.

Requirements (four courses):

Four of the following courses:

SPEA H316 Environmental Health (3 cr.)
 SPEA V346 Introduction to Government Accounting
 and Financial Reporting (3 cr.)
 SPEA V366 Managing Behavior in Public
 Organizations (3 cr.)
 (if not taken to meet public affairs core
 requirement)
 SPEA V372 Government Finance and Budgets (3 cr.)
 SPEA V373 Human Resources Management in the
 Public Sector (3 cr.)
 SPEA V376 Law and Public Policy (3 cr.)

Special Concentration

Minimum of four courses.

A special concentration of at least four courses may be developed to meet special career needs. This concentration must be approved by a faculty advisor and program director.

SPEA Minors

Any Indiana University student enrolled in a baccalaureate program may pursue one or more of the minors offered by the School of Public and Environmental Affairs. Individuals interested in one or more of these minors should inquire in the SPEA undergraduate advising office for additional details. Students who successfully complete the requirements will have the minor conferred with their degree. SPEA's multidisciplinary faculty and curricula address environmental, health, public policy, and management issues from a variety of perspectives. A minor in SPEA can enhance career opportunities for liberal arts and other majors.

Public and Environmental Affairs Minor

Requirements (five courses):

The following course:

SPEA V170 Introduction to Public Affairs (3 cr.)

One of the following courses:

SPEA E162 Environment and People (3 cr.)
 SPEA E272 Introduction to Environmental Sciences
 (3 cr.)

Three of the following courses:

SPEA E272 Introduction to Environmental Sciences
 (3 cr.) (may be counted only once)
 SPEA E400 Topics in Environmental Studies (3 cr.)
 (may be repeated)
 SPEA V263 Public Management (3 cr.)
 SPEA V366 Managing Behavior in Public
 Organizations (3 cr.)
 SPEA V373 Human Resources Management in the
 Public Sector (3 cr.)
 SPEA V376 Law and Public Policy (3 cr.)
 SPEA V432 Labor Relations in the Public Sector (3 cr.)
 SPEA V444 Public Administrative Organization (3 cr.)
 SPEA V450 Contemporary Issues in Public Affairs
 (3 cr.) (may be repeated)
 or other courses in public or environmental
 affairs approved by a SPEA advisor

Criminal Justice General Minor

Requirements (six courses):

Required courses (two courses):

SPEA J101 The American Criminal Justice System
 (3 cr.)
 SPEA J201 Theoretical Foundations of Criminal Justice
 Policies (3 cr.)

Criminal Justice Core Courses (two courses from the following):

SPEA J202 Criminal Justice Data, Methods, and
 Resources (3 cr.)
 SPEA J301 Substantive Criminal Law (3 cr.)
 SPEA J305 Juvenile Justice (3 cr.)
 SPEA J306 The Criminal Courts (3 cr.)
 SPEA J321 American Policing (3 cr.)
 SPEA J331 Corrections (3 cr.)
 SPEA J439 Crime and Public Policy (3 cr.)

Electives (two courses, 6 credit hours minimum):

Take two other criminal justice courses ("J" prefix). These may be drawn from the courses in the above list NOT used to fulfill that requirement. At least one of these two courses must be at the 300 or 400 level. Only one of the following courses may be used to meet this requirement: J370, J380, J470, J480.

Criminal Justice Accounting Minor

This minor is available to only those students pursuing an accounting degree in the Kelley School of Business.

Requirements (five courses):

The following course:

SPEA J101 The American Criminal Justice System (3 cr.)

The following four courses:

SPEA J301 Substantive Criminal Law (3 cr.)
 SPEA J303 Evidence (3 cr.)
 SPEA J320 Criminal Investigation (3 cr.)
 SPEA J322 Introduction to Criminalistics (3 cr.)

Environmental Science and Health Minor

Requirements (five courses):

The following course:

SPEA H316 Environmental Health (3 cr.)

One of the following courses:

SPEA H416 Environmental Health Policy (3 cr.)
 POLS Y313 Environmental Policy (3 cr.)

Three of the following courses:

SPEA E326 Mathematical Methods in Environmental
 Science (3 cr.)
 SPEA E410 Introduction to Environmental Toxicology
 (3 cr.)
 SPEA E431 Water Supply and Wastewater Treatment
 (3 cr.)
 SPEA E451 Air Pollution and Control (3 cr.)
 SPEA E452 Solid and Hazardous Waste Management
 (3 cr.)
 SPEA H428 Food Science and Sanitation (3 cr.)
 SPEA H433 Industrial Hygiene and Radiological
 Health (3 cr.) or other courses in environmental
 science and health approved by a SPEA faculty
 advisor

Health Systems Administration Minor

Requirements (five courses):

The following course:

SPEA H320 Health Systems Administration (3 cr.)

Four of the following courses (12 credit hours):

SPEA H352 Health Finance and Budgeting (3 cr.)
 SPEA H353 Advanced Health Finance and Budgeting
 (3 cr.)
 SPEA H354 Health Economics (3 cr.)
 SPEA H401 Strategic Planning for Health Care
 Organizations (3 cr.)
 SPEA H420 Health Policy (3 cr.)
 SPEA H432 Health Care Marketing (3 cr.)
 SPEA H441 Legal Aspects of Health Care
 Administration (3 cr.) OR
 SPEA V376 Law and Public Policy (3 cr.)
 SPEA H455 Topics in Public Health (1-3 cr.)
 SPEA H456 Managed Care (3 cr.)
 SPEA H472 Applied Health Administration (3 cr.)
 SPEA V373 Human Resources Management in the
 Public Sector (3 cr.)
 SPEA V380 Internship in Public and Environmental
 Affairs (3 cr.)

Certificate Programs

The areas of study in which certificate programs are currently available are environmental studies, nonprofit management, public affairs, public health, public management, and American Humanics Certification in Nonprofit Management.

General Requirements

1. Students must be in good academic standing and enrolled in a baccalaureate program to be eligible

to apply for most of these stated certificates. Because the certificates in effective citizenship and American Humanities can stand alone, a student is not required to be enrolled in a baccalaureate program. Interested students must apply for a certificate before completing 15 credit hours (9 credit hours for public health) of applicable course work.

2. SPEA students cannot earn a certificate in the same area as their major concentration.
3. A grade point average of 2.0 or higher is required in all course work credited toward the certificate.

Certificate in Environmental Studies

This certificate introduces students to selected aspects of current thinking and research on the nature, causes, and solutions to environmental problems.

Certificate Requirements (10 courses):

The following five courses:

BIOL K341 Principles of Ecology (3 cr.)
 CHEM C101 Elementary Chemistry I (5 cr.) **or**
 CHEM C105 Principles of Chemistry (5 cr.)
 ECON E201 Introduction to Microeconomics (3 cr.)
 ECON E202 Introduction to Macroeconomics (3 cr.)
 SPEA V372 Government Finance and Budgets (3 cr.)

One of the following courses:

SPEA E162 Environment and People (3 cr.)
 SPEA E272 Introduction to Environmental Sciences (3 cr.)

One of the following courses:

GEOG G107 Physical Systems of the Environment (3 cr.)
 GEOL G107 Environmental Geology (3 cr.)
 GEOL G110 Geology: The Earth's Environment (3 cr.)

Three of the following courses:

SPEA E431 Water Supply and Wastewater Treatment (3 cr.)
 SPEA E451 Air Pollution and Control (3 cr.)
 SPEA E452 Solid and Hazardous Waste Management (3 cr.)
 SPEA H316 Environmental Health (3 cr.)
 SPEA K300 Statistical Techniques (3 cr.) or other approved option
 SPEA V365 Urban Development and Planning (3 cr.)
 BIOL K442 Population and Systems Ecology (3 cr.)
 CHEM C207 Introduction to Biochemistry (4 cr.)
 CHEM C310 Analytical Chemistry (3 cr.)
 CHEM C341 Organic Chemistry Lectures I (3 cr.)
 ECON E485 Social Control of Industry (3 cr.)
 GEOG G303 Weather and Climate (3 cr.)
 GEOG G304 Meteorology and Climatology (3 cr.)
 GEOG G315 Environmental Conservation (3 cr.)
 GEOL G300 Environmental and Urban Geology (3 cr.)
 GEOL G303 Geologic Mapping and Field Methods (4 cr.)
 GEOL G406 Introduction to Geochemistry (3 cr.)
 GEOL G415 Geomorphology (3 cr.)
 GEOL G451 Principles of Hydrogeology (3 cr.)
 PHYS 218 General Physics I (4 cr.)
 SOC R465 Population and Human Ecology (3 cr.)

Certificate in Nonprofit Management

The nonprofit sector is a dynamic and rapidly expanding area. The Certificate in Nonprofit Management allows students to take part in course work specifically concerned with the nonprofit sector and geared toward preparing them for careers in nonprofit organizations.

Certificate Requirements (five courses):

Courses must be selected from the following categories. Alternate courses may be substituted with the approval of the campus undergraduate program director. Courses listed with an asterisk are included in the American Humanities program. Completion of the American Humanities program at IUPUI qualifies a student for the IU Nonprofit Management Certificate.

Nonprofit Institutions (minimum of 3 credit hours):

*SPEA V221 Nonprofit and Voluntary Sector (3 cr.)
 *BUS W220 Introduction to the Nonprofit Corporation (3 cr.) (offered on the Bloomington campus)

Nonprofit Management (minimum of 6 credit hours):

The following course:

*SPEA V362 Nonprofit Management and Leadership (3 cr.)

One of the following courses:

*SPEA V356 Introduction to Nonprofit Accounting and Reporting (3 cr.)
 SPEA V401 Financial and Cost-Benefit Analysis (3 cr.)
 *SPEA V458 Fund Development for Nonprofit Organizations (3 cr.)
 *BUS A200 Foundations in Accounting (3 cr.)

Nonprofit Field (minimum of 3 credit hours):

Select one course from a special feature of a nonprofit field, service arena, or industry.

Examples include:

SPEA E162 Environment and People (3 cr.)
 SPEA H316 Environmental Health (3 cr.)
 SPEA H320 Health Systems Administration (3 cr.)
 POLS Y326 American Social Welfare Policy (3 cr.) (offered on the Bloomington campus)
 *PSY B310 Life Span Development (3 cr.)
 *SOC R335 Sociological Perspectives on the Life Course (3 cr.)

Internship (minimum of 3 credit hours):

*SPEA V380 Internship in Public and Environmental Affairs (1-6 cr.) (for non-SPEA students) **or**
 *SPEA V381 Professional Experience (1-6 cr.) (for SPEA students only)

Certificate in Public Affairs

The School of Public and Environmental Affairs offers the Certificate in Public Affairs to provide an overview of the study of public policy, governmental organization, and public management as an enhancement to the major area of study in a student's undergraduate program. The interdisciplinary program requires 27 credit hours, of which at least 15 but not more than 21 credit hours must be in SPEA courses.

Certificate Requirements (nine courses):

The following courses:

SPEA V170 Introduction to Public Affairs (3 cr.)
 SPEA V264 Urban Structure and Policy (3 cr.)

One of the following courses:

SPEA E162 Environment and People (3 cr.)
 SPEA E272 Introduction to Environmental Sciences (3 cr.)

A total of two courses from groups A, B, and C, with no more than one course from any group.

A. *Organizational Behavior*

BUS Z302 Managing and Behavior in Organizations (3 cr.)
 SPEA V270 Survey of Administrative Techniques (3 cr.)

B. *Public Administration*

SPEA V366 Managing Behavior in Public Organizations (3 cr.)

C. *Law*

SPEA J301 Substantive Criminal Law (3 cr.)
 SPEA V376 Law and Public Policy (3 cr.)
 BUS L201 Legal Environment of Business (3 cr.)
 POLS Y304 American Constitutional Law I (3 cr.)
 POLS Y305 American Constitutional Law II (3 cr.)

Choose any four of the following courses:

Public Affairs

SPEA V260 Topics in Public Affairs (approved topics) (3 cr.) (may be repeated)
 SPEA V346 Introduction to Government Accounting and Financial Reporting (3 cr.)
 SPEA V348 Management Science (3 cr.)
 SPEA V365 Urban Development and Planning (3 cr.)
 SPEA V372 Government Finance and Budgets (3 cr.)
 SPEA V373 Human Resources Management in the Public Sector (3 cr.)
 SPEA V432 Labor Relations in the Public Sector (3 cr.)
 SPEA V442 Topics in Budgeting or Cost-Benefit (3 cr.) (may be repeated)
 SPEA V444 Public Administrative Organization (3 cr.)
 SPEA V449 Policy Senior Seminar (3 cr.)
 SPEA V450 Contemporary Issues in Public Affairs (approved topics) (3 cr.) (may be repeated)
 SPEA V472 Policy Processes in the United States (3 cr.)

Criminal Justice

SPEA J101 The American Criminal Justice System (3 cr.)
 SPEA J302 Procedural Criminal Law (3 cr.)
 SPEA J322 Introduction to Criminalistics (3 cr.)
 SPEA J401 Criminal Law and Procedure (3 cr.)
 SPEA J439 Crime and Public Policy (3 cr.)

Geography

GEOG G412 Urban Transportation Analysis (3 cr.)
 GEOG G414 Regional Transport Systems (3 cr.)

Political Science

POLS Y200 Citizen and the Courts (3 cr.)
 POLS Y302 Public Bureaucracy in Modern Society (3 cr.)
 POLS Y306 State Politics in the United States (3 cr.)
 POLS Y394 Public Policy Analysis (3 cr.)

Sociology

SOC R329 Urban Sociology (3 cr.)
 SOC R345 Crime and Society (3 cr.)
 SOC R346 Control of Crime (3 cr.)
 SOC R480 Sociology and Social Policy (3 cr.)

Certificate in Public Health

The curriculum is designed to provide students with a basic understanding of environmental health issues, current health policies, and the structure of the medical care delivery system.

Certificate Requirements (six courses):

The following three courses:

- SPEA H316 Environmental Health (3 cr.)
- SPEA H320 Health Systems Administration (3 cr.)
- SPEA H322 Principles of Epidemiology (3 cr.)

Three of the following courses:

- SPEA E400 Topics in Environmental Studies (approved topics) (3 cr.) (may be repeated)
- SPEA E410 Introduction to Environmental Toxicology (3 cr.)
- SPEA E431 Water Supply and Wastewater Treatment (3 cr.)
- SPEA E451 Air Pollution and Control (3 cr.)
- SPEA E452 Solid and Hazardous Waste Management (3 cr.)
- SPEA H342 Community Health Education (3 cr.)
- SPEA H411 Long-Term Care Administration (3 cr.)
- SPEA H416 Environmental Health Policy (3 cr.)
- SPEA H423 Disease Vector Control (3 cr.) **or** BIOL K443 Medical Parasitology and Entomology (3 cr.)
- SPEA H428 Food Science and Sanitation (3 cr.)
- SPEA H433 Industrial Hygiene and Radiological Health (3 cr.)
- SPEA H441 Legal Aspects of Health Care Administration (3 cr.)
- SPEA H459 Environmental Science and Health Data Analysis (3 cr.)
- SPEA H460 Techniques in Environmental Science and Health (3 cr.)
- SPEA V450 Contemporary Issues in Public Affairs (approved topics) (3 cr.) (may be repeated)
- ECON E387 Health Economics (3 cr.)

Certificate in Public Management

The School of Public and Environmental Affairs offers the Certificate in Public Management to provide a systematic program that gives students an understanding of how to work in and with public organizations.

Certificate Requirements (seven courses):

The following course:

- SPEA V263 Public Management (3 cr.)

Six of the following courses:

- SPEA V346 Introduction to Government Accounting and Financial Reporting (3 cr.)
- SPEA V348 Management Science (3 cr.)
- SPEA V366 Managing Behavior in Public Organizations (3 cr.)
- SPEA V368 Managing Government Operations (3 cr.)
- SPEA V369 Managing Information Technology (3 cr.)
- SPEA V370 Research Methods and Statistical Modeling (3 cr.)
- SPEA V372 Government Finance and Budgets (3 cr.)

SPEA V373 Human Resources Management in the Public Sector (3 cr.)

SPEA V375 Emergency Services Administration (3 cr.)

SPEA V376 Law and Public Policy in Nonprofit Management (3 cr.)

SPEAV432 Labor Relations in the Public Sector (3 cr.)

American Humanics Certification in Nonprofit Management

Any IUPUI student is eligible to enroll in the American Humanics Certificate in Nonprofit Management. This certificate is awarded through American Humanics, Inc. and prepares college students for professional careers in the expanding job market of nonprofit youth and human services organizations. Upon completion of the program, students will be certified for possible positions of leadership with collaborating organizations such as the YMCA, American Red Cross, Big Brothers Big Sisters, Habitat for Humanity, and many other nonprofit agencies at both the local and national level. SPEA students may also simultaneously enroll in SPEA's Nonprofit Management Certificate. The American Humanics Certification program requires the demonstration of a set of knowledge and skill competencies and the completion of the 300-hour internship. Competencies are obtained through course work, professional workshops and retreats, the internship, and participation in the American Humanics Student Association. Students interested in learning more about the certificate should contact SPEA Student Services at (317) 274-4656.

Course Descriptions

Undergraduate Courses

The abbreviation "P" refers to course prerequisites and "R" to recommended prerequisite courses. Prerequisites can be waived by the instructor of the course. The number of hours of credit is indicated in parentheses following the course title. Courses are listed in four groups: environmental, public health, criminal justice, and public affairs.

Environmental Courses

E100 Environmental Topics (3 cr.) Study of selected issues in environmental affairs. Topics vary from semester to semester. May be repeated for credit.

E162 Environment and People (3 cr.) An interdisciplinary examination of the problems of population, pollution, and natural resources and their implications for society. Credit not given for both E162 and E262.

E262 Environmental Problems and Solutions (3 cr.) An integrated approach to understanding and solving environmental problems. Topics may include ecosystem restoration, surface water and groundwater contamination, air pollution, and global

environmental change. This course is intended primarily for majors in the B.S.E.S. degree program.

E272 Introduction to Environmental Sciences (3 cr.) P: one statistics course. Application of principles from life and physical sciences to the understanding and management of the environment. Emphasis will be placed on: (1) the physical and biological restraints on resource availability and use, and (2) the technological and scientific options to solving environmental problems.

E311 Introduction to Risk Assessment and Risk Communication (3 cr.) This course will cover basic human health and risk assessment procedures, as outlined by the various regulatory agencies (especially EPA) and standards setting groups. Because risk communication is an integral part of any risk management process, risk communication techniques and applications will be integrated into the course material.

E325 Computing for Environmental Scientists (1-3 cr.) P: MATH M118 or M119; K300 or equivalent; and SPEA E272. Survey of computing applications to environmental issues. Personal computing emphasized. Application of spreadsheets, graphics, simple statistics, and BASIC programming to environmental science issues. Manipulation and interpretation of real data, case studies, and projects. Many software packages used.

E326 Mathematical Methods in Environmental Science (3 cr.) P: MATH M119 or M211; CSCI C211 or BUS K201; and BUS K300. Mathematical modeling in environmental science. Expressing problems as equations. Applications and numerical evaluation of derivatives and integrals. Derivation and solution of differential equations. Use of package FORTRAN subroutines in problem solving. Statistics applied to environmental science.

E340 Environmental Economics and Finance (3 cr.) This course familiarizes students with the principles of environmental economics, finance, and cost-benefit analysis. The incentive effects of environmental policy design are assessed. Policy instruments include tradable permits, emissions taxes, deposit-refund systems, pollution prevention programs, and voluntary agreements. Project appraisal techniques are then developed and applied to specific case evaluations.

E355 Introduction to Limnology (3 cr.) Limnology is the integrated science of inland waters. Principles of physics, chemistry, geology, and biology combine to form the basis for understanding how lakes and streams function as aquatic ecosystems. The course will highlight the effects of human activity on lake and stream ecosystems.

E360 Introduction to Biological Resources (3 cr.) P: E272; one biology course. This course provides the necessary background for students interested in fisheries, wildlife, or forest management who have had little course work or experience with the taxonomy, ecology, or natural history of plants or animals.

E363 Environmental Management (3 cr.) Introductory course in environmental management. Subjects covered include current issues and trends,

total quality environment management, managing scientific and technical personnel, managing contracts and grants, nontraditional approaches to regulation, environmental conflict resolution, working with the media, risk communication, and working with communities.

E400 Topics in Environmental Studies (2-3 cr.)

P: E272. An interdisciplinary consideration of specific environmental topics. May be repeated for credit.

E410 Introduction to Environmental Toxicology (3 cr.)

P: E272 or H316; one biology course. Study of toxic mechanisms, pathology, and disease development resulting from exposure to biological and chemical agents in the environment.

E411 Introduction to Groundwater Hydrology (3 cr.)

An overview is presented of the theory and practice of groundwater movement, groundwater contamination, and aquifer testing remediation, as well as policy issues such as groundwater management. The formal lectures are supplemented by several guest speakers who are professionals working in different areas of groundwater hydrology.

E412 Risk Communication (3 cr.)

Risk communication is the means by which technical information is communicated to others (the public included), especially in the context of making decisions about environmentally related policy (such as siting of a landfill). The course emphasizes both theory (in lectures) and practical experience through developing and acting in role-play scenarios.

E418 Vector-Based Geographic Information Systems (3 cr.)

Introduction to geographic information systems using vector data structure Vector GIS capabilities and uses. Data structure and file management of spatial data. Laboratory exercises using ARC/INFO software.

E419 Applied Remote Sensing of the Environment (3 cr.)

Applications of remotely sensed data and raster geographic information systems in environmental research. Concepts of remote sensing. Image acquisition from different sensors, ranging from aerial photography to various types of satellite imagery. Image processing and analysis. Raster geographic information systems. Raster-vector integration. Concepts of spatial analysis.

E431 Water Supply and Wastewater Treatment (3 cr.)

P: E272 or H316; CHEM C101 or equivalent; MATH M119 or equivalent. Health and ecological premises for water and wastewater treatment; principles of water supply; treatment, distribution, and construction; basis for water standards and laboratory examinations; wastewater disposal methods and construction for private installations, institutions, municipalities, and industries; water quality control with respect to wastewater pollution.

E440 Wetlands: Biology and Regulation (3 cr.)

P: E272 or H316; any biology course. This course trains students to evaluate wetlands to comply with federal, state, and local regulations. It examines the principles that inspired these regulations and assesses the consequences. It seeks to relate the breadth and strength of available scientific knowledge to public policy goals.

E441 Controversies in Environmental Health (3 cr.)

A skills course in a debate format. Skills are developed by researching, preparing arguments for, and debating topics related to environmental health and health of the environment. Clear writing skills are also emphasized, as the students write up debate evaluations which are critically graded for content, form, and style.

E442 Habitat Analysis—Terrestrial (3 cr.)

This is an experiential field methods course. Students work as teams, collecting field data to test hypotheses about forest habitats. Students will learn new methods and field skills in local parks and forests, then prepare scientific reports that incorporate statistical analysis to be presented in a class symposium.

E443 Habitat Analysis—Aquatic (3 cr.)

This is an experiential field methods course. Students work in teams, collecting field data to test hypotheses about aquatic habitats. Students will learn new methods and field skills in local creeks, lakes, and wetlands; then prepare scientific reports that incorporate statistical analysis to be presented in a class symposium.

E451 Air Pollution and Control (3 cr.)

P: SPEA E272 or H316; CHEM C101 or equivalent; MATH M118, or equivalent. A survey course covering the chemistry, transport, and fate of air pollutants related to current issues of air quality, such as photochemical smog, ozone depletion, particulate matter, and indoor air quality. Topics include the types, sources, health and environmental effects, measurement, evaluation, control, regulation, and modeling of air pollution concentrations.

E452 Solid and Hazardous Waste Management (3 cr.)

P: E272 or H316. Types and sources of solid waste; collection methods; disposal techniques: sanitary landfill, incineration, composting, reclaiming, or recycling; advantages and disadvantages of each; special and hazardous waste handling; operation and management of solid and hazardous waste programs.

E455 Limnology (4 cr.)

P: college chemistry and biology or permission of instructor. Limnology is the ecology of inland lakes and streams, combining the principles of biology, chemistry, geology, and physics to understand how they function. The effects of human perturbation on aquatic systems will be highlighted in both lectures and laboratory work to aid student understanding of the concepts involved.

E456 Lake and Watershed Management (3 cr.)

P: E272 or H316; CHEM C101 or equivalent. Students will learn to apply basic limnological principles to diagnose lake and watershed problems, to understand lake response to pollution, to identify appropriate management solutions, and to predict lake response to management.

E457 Introduction to Conservation Biology (3 cr.)

Ecological principles associated with rare species and with biodiversity, laws and statutes used to conserve biodiversity, and land and species management practices. The aim is to understand scientific and political complexities of conservation biology, and to study different methods used to conserve living resources and resolve conflicts associated with conservation.

E460 Fisheries and Wildlife Management (3 cr.)

P: E272 or H316; any biology course. This course first reviews taxonomy, vertebrate biology, and population ecology, then introduces the student to a variety of conflicts concerning fisheries and wildlife. Case studies examine endangered species, overharvesting, maximum sustained yield, habitat evaluation, and recreational use.

E461 Fisheries and Wildlife Management Laboratory (3 cr.)

P: E272 or H316; one biology course; and SPEA E460 (can be concurrent). Practical experience course in which student identify fish and wildlife in the field for the purpose of evaluating the effectiveness of and making recommendations for change to existing wildlife plans.

E465 Environmental Management in the Tropics (3 cr.)

Historical examination of land use in tropical, non-Western cultures. Resource use in physical and cultural settings is explored through an interface with ecology, economics, and policy analysis. Common principles of analysis are used to help the students understand the cultural and historical dimensions of how people relate to their environment.

E466 International and Comparative Environmental Policy (3 cr.)

This course explores how stakeholders manage environmental problems that extend beyond national borders. Key questions considered include the following: How do nations resolve environmental conflict? Is environmental diplomacy in a state of crisis? How can we improve international environmental management? Historical, contemporary, and emerging institutions for international environmental protection are examined.

E470 Elements of Fluid Mechanics (3 cr.)

P: E292 or H316; MATH M119 or equivalent. Introduction to the fundamental concepts of fluid mechanics that relate to environmental science. Topics are selected from three disciplines. From hydraulics: hydrostatics, flow-through pipes, and open channels. From water surface hydrology: water balances, stream-flow measurements, and calculations. From groundwater hydrology: Darcy's Law, flow nets, and pumping tests.

E475 Techniques of Environmental Science (3 cr.)

P: E272 or H316. Principles and methods of sampling, collection, measurement, analysis, interpretation, and presentation of data concerning environmental science. Through lab demonstrations and fieldwork, students will become familiar with instrumentation and analytical methods currently used in environmental analysis. Team instruction will be used to demonstrate techniques.

E476 Environmental Law and Regulation (3 cr.)

Introductory course in environmental law and regulation. Subjects covered include command and control regulation, air quality, water quality, toxics, waste management, energy, natural resources, international environmental law, and alternative dispute resolution.

E490 Directed Field Research in Environmental Science (1-4 cr.)

Individualized laboratory or field-based research in any field of environmental science, under the direction of an advising professor. Students

are expected to write a report on their research at the end of each semester. May be used to fulfill laboratory course requirement with the permission of the appropriate science department.

E491 Honors Research in Environmental Science (1-4 cr.) Individualized laboratory or field-based honors research in any field of environmental science, under direction of an advising professor. Students are expected to write a report on their research at the end of each semester. May be used to fulfill laboratory course requirement with permission of the appropriate science department.

Public Health Courses

H120 Contemporary Health Issues (1-3 cr.) An examination of current public health, environmental health, and health service delivery issues in the U.S. Topics include the organization and costs of health systems, access to care, and the interrelationships between risk factors and health; also, environmental challenges facing our society and their impact on health.

H316 Environmental Science and Health (3 cr.) A study of human interaction with the environment and potential impacts of environmental agents on health and safety. Hazards from natural sources and human activities that contaminate our air, land, water, food, homes, neighborhoods, and workplaces are examined. Environmental control activities, including pollution control technology and policy, are also examined.

H320 Health Systems Administration (3 cr.) An overview of the U.S. health care delivery system. It examines the organization, function, and role of the system; current system problems; and alternative systems or solutions.

H322 Principles of Epidemiology (3 cr.) A basic overview of epidemiologic methodology and techniques. Both communicable and chronic disease risk factors will be discussed, along with data acquisition, analysis techniques, and current published epidemiological studies.

H342 Community Health Education (3 cr.) A study of theory and practice in the field of professional health education. The process of behavioral change is examined. Procedures for the planning, delivery, and evaluation of health education practices are considered.

H352 Health Finance and Budgeting (3 cr.) A study of the financial management of health care facilities based on generally accepted business principles. Accounting and managerial control of cash, accounts receivable, inventory control, budgeting, and cost control, as well as accounting and evaluation of short- and long-term debt will be examined.

H353 Advanced Health Finance and Budgeting (3 cr.) P: H352. This course builds upon H352. Will use a series of case studies to apply techniques and principles taught in H352.

H354 Health Economics (3 cr.) This course applies economics to the study of administrative and policy issues in the health care sector. Economic concepts are used to explain the system of health

care financing and the organization of health care delivery in the U.S. The economic evaluation of health care programs is also discussed.

H365 Health Administration Practicum (2 cr.) Supervised orientation, observation, and instruction with local- and state-level health-related agencies and facilities. Primary focus will be placed on health administration.

H367 Environmental Science and Health Practicum (2 cr.) Supervised orientation, observation, and instruction with local- and state-level health-related agencies and facilities. Primary focus will be placed on environmental science and health.

H371 Human Resources Management in Health Care Facilities (3 cr.) This course covers the function of management, which is concerned with the acquisition, development, and use of human resources in the field of health care delivery. Labor relations relating to health care delivery are also included.

H401 Strategic Planning for Health Care Organizations (3 cr.) This course examines strategic planning techniques as they apply to health care organizations. Students will develop and defend a comprehensive strategic plan for a case facility. One half of the course will be conducted in a workshop format.

H402 Hospital Administration (3 cr.) P: H320. The study of organization, structure, function, and fiscal operations within hospitals. The role of the hospital in the community, relationship to official and voluntary health agencies, coordination of hospital departments, and managerial involvement will be examined.

H411 Long-Term Care Administration (3 cr.) Nursing home regulations, legal aspects, and insurance; personnel management; medical records; diet and food service; rehabilitation; nursing services; psychiatric aspects in handling of geriatric patients; professional standards; use of volunteer groups.

H416 Environmental Health Policy (3 cr.) Study of professional requirements and duties of the environmental health functions within health agencies; consideration of applicable laws and standards in each environmental health function; environmental health program planning, evaluation, implementation, and personnel responsibilities.

H420 Health Policy (3 cr.) P: H320. This course will focus on current health policy issues within the context of the U.S. health care system. The course will familiarize students with the political environment of public policy, introduce major health care policy perspectives, and apply those analytical models to a series of health policy issues.

H423 Disease Vector Control (3 cr.) Survey of animal and insect disease vectors and economic pests of public health significance; vector and pest identification and control procedures; survey of the classification, application, and restriction of pesticides in controlling disease vectors and economic pests commonly found in the United States.

H428 Food Science and Sanitation (3 cr.) Basic concepts of food technology with emphasis on

methods and procedures in food processing to minimize contamination and to prevent food-related illness. Federal, state, and local food laws and inspection procedures will be examined.

H432 Health Care Marketing (3 cr.) A practical study of marketing in health care institutions, health service organizations, and health insurers. A basic foundation in marketing principles, new methods in marketing products and services, and inexpensive marketing techniques will be examined.

H433 Industrial Hygiene (3 cr.) Survey of the technical and regulatory aspects of protecting the health and safety of workers. Topics include basic toxicology; skin, eye, and respiratory hazards; measuring hazardous atmospheres; ventilation systems; fire and explosion hazards; emergency response; occupational hearing loss; radiation; prevention of accidents; cumulative trauma; and personal protective equipment.

H441 Legal Aspects of Health Care Administration (3 cr.) An overview of the liability and legal responsibility, as well as legal recourse, that health care facilities may exercise. This course will discuss policies and standards relating to health facility administration. Also included is a discussion of financial aspects unique to the hospital/health care facility environment, such as third-party payments and federal assistance.

H448 Public Health Education Methods (3 cr.) Usual techniques of group work with investigations of social and psychological factors that determine effectiveness in promoting public health. Laboratory time provides opportunity for competence in group work and in design and use of promotional materials.

H455 Topics in Public Health (1-3 cr.) Extensive discussion of selected topics in public health. The topic may change from semester to semester, based on resource availability and student demand. May be repeated for credit.

H456 Managed Care (3 cr.) Course examines the organizational structures of managed care as used in the health industry. The strengths and weaknesses of managed care organizations are examined as well as the performance of both public and private managed care organizations. Course also examines and discusses current issues surrounding managed care.

H459 Environmental Science and Health Data Analysis (4 cr.) Provides students with an understanding of basic principles needed to perform sampling and analysis of field and laboratory environmental data. Topics include properties of chemical and biological constituents, detection limits, calibration, quality control, precision accuracy, and statistical analysis.

H460 Techniques in Environmental Health (4 cr.) P: H459. Basic physical, chemical, and biological examinations and standards for potable water quality, wastewater treatment determinations, and stream pollution control. Basic physical, chemical, and biological (ergonomic) examinations used in industrial hygiene and air pollution control. Instruction in basic laboratory skills and techniques for performing these examinations.

H466 Public Health Field Experience (1 cr.)

P: H465. Supervised advanced training in professional and technical functions in public health; guided student activity and performance in professional public health functions. Individualized programs may be arranged to suit students' areas of concentration.

H472 Applied Health Administration (3 cr.)

P: H320. This course is a study of the complexities of multi-institutional arrangements and integrated services in the U.S. health care industry. The focus is on applying management skills, to and making comparisons of, the current driving forces among health care delivery system components.

H474 Health Administration Seminar (3 cr.)

P: H320 and senior standing. This course will examine current issues in public health and governmental and private initiatives to resolve these issues.

Criminal Justice Courses**J101 The American Criminal Justice System (3 cr.)**

Introduction to the criminal justice system of the United States and its function in contemporary society.

J201 Theoretical Foundations of Criminal Justice Policies (3 cr.)

P: J101. This course examines the impact of sociological, biological, and economic theories of crime and the practice of criminal justice. Focus is on the nature and importance of theory, context of theoretical developments, methods for the critical analysis of theoretical developments, and policy implications of the varying perspectives considered.

J202 Criminal Justice Data, Methods, and Resources (3 cr.)

P: J101. R: MATH M111 or equivalent; V261 or equivalent. Course examines basic concepts of criminal justice. Students become familiar with research techniques necessary for systematic analysis of the criminal justice system, offender behavior, crime trends, and program effectiveness. Students will learn to critically evaluate existing research. Students will become familiar with existing sources of criminal justice data and will learn to assess the quality of that data.

J222 Murder in America: Causes and Consequences (3 cr.)

An investigation of homicide in the United States. Focus on the level and nature of homicides as well as domestic homicides; serial and mass murder; race, ethnicity, and gender; drugs and alcohol; school and workplace homicides; investigation; profiling and the death penalty; and homicide prevention and intervention programs.

J260 Topics in Criminal Justice (1-3 cr.)

Study of selected issues in criminal justice. Topics vary from semester to semester. May be repeated for credit.

J301 Substantive Criminal Law (3 cr.)

P: J101. R: J201 and J202. The development, limitations, and application of substantive criminal law utilizing the case-study method.

J302 Procedural Criminal Law (3 cr.)

P: J101. Criminal law application and procedure from the initiation of police activity through the correctional process, utilizing the case-study method.

J303 Evidence (3 cr.) P: SPEA J101. The rules of law governing proof at trial of disputed issues of fact; burden of proof; presumptions and judicial notice; examination, impeachment, competency, and privileges of witnesses; hearsay rule and exceptions—all related as nearly as possible to criminal, as opposed to civil, process.

J304 Correctional Law (3 cr.) P: J101. Legal problems from conviction to release: pre-sentence investigations, sentencing, probation and parole, incarceration, loss and restoration of civil rights.

J305 Juvenile Justice (3 cr.) P: J101. This course is designed to provide an overview of the justice system's response to abused, neglected, and dependent children; juvenile misconduct; and delinquent behavior. An extensive review of the development of recent legal changes to the court, options for prevention, treatment of juvenile offenders, and possible system reforms.

J306 The Criminal Courts (3 cr.) P: J101. R: J201 and J202. An analysis of the criminal justice process from prosecution through appeal. The organization and operation of felony and misdemeanor courts are examined. Topics include prosecutorial decision-making, plea bargaining, judicial selection, and the conduct of trials, sentencing, and appeal.

J310 Introduction to Administrative Processes (3 cr.)

P: J101. Introduction to principles of management and systems theory for the administration of criminal justice agencies. Credit not given for both J310 and V270.

J320 Criminal Investigation (3 cr.)

P: J101. Theory of investigation, crime scene procedures, interviews, interrogations, surveillances, and sources of information; collection and preservation of physical evidence; investigative techniques in specific crimes.

J321 American Policing (3 cr.)

P: J101. R: J201 and J202. This course will examine the history, evolution, and organization of policing in the United States. Emphasis is placed on such major contemporary issues as the police role, discretion, use of force, corruption, accountability, and community policing.

J322 Introduction to Criminalistics (3 cr.)

P: J101. R: J301. The broad range of physical evidence developed through the investigative process, and methods of identifying and establishing validity and relevance through forensic laboratory techniques.

J331 Corrections (3 cr.)

P: J101. R: J201 and J202. This course examines the historical development of the American correctional system; the study of administration of local, state, and federal corrections programs, including jails, probation, community corrections, and prisons. Includes the study of punishment rationales, current correctional policies, and possibilities for reform.

J355 Global Criminal Justice Perspectives (3 cr.)

P: J101. An international review of select criminal justice perspectives and systems within the primary legal traditions of common, civil, Islamic, and socialist systems, as well as those that do not fit into established categories, such as Native American and African tribal justice.

J369 Private Justice: Police, Courts, and Corrections (3 cr.) P: J101. This course examines the role of private policing and security; courts and adjudication; and corrections. Includes legislative and ethical issues and the economics of criminal and juvenile justice privatization. Principles of loss prevention; protection of assets; relationship between public and private services; current issues in privatization.

J370 Seminar in Criminal Justice (3 cr.) P: J101. Selected contemporary topics in criminal justice. May be repeated for credit.

J376 Principles of Public Safety (3 cr.)

P: J101. Examination of threats to public safety and of governmental response at various levels to those threats. Treatment of such areas as transportation and highway threats; occupational safety and health; criminal threats; emergency and disaster planning; consumer protection; and fire control and suppression. Discussion of techniques to identify and measure risk, the acceptability of risk, and governmental attempts to control risk.

J380 Internship in Criminal Justice (1-6 cr.)

P: permission of instructor. Open to interested students who qualify upon approval of the faculty. Students may be placed with various criminal justice agencies for assignment to a defined task relevant to their educational interests. Tasks may involve staff work or research. Full-time participants may earn up to 6 credit hours. May be repeated for credit. Course is graded S/F (Satisfactory/Fail).

J433 Institutional Corrections (3 cr.)

P: J101. The history and development of the jail, penitentiary, prison, and reformatory. Analysis and evaluation of contemporary imprisonment.

J439 Crime and Public Policy (3 cr.)

P: Senior standing or consent of instructor. A detailed examination of the major efforts designed to control or reduce crime. A review of existing knowledge is followed by an investigation of current crime control theories, proposals, and programs.

J440 Corrections in the Community (3 cr.)

P: J101. A detailed analysis of correctional alternatives to incarceration that focus on the reintegration of the offender while remaining in the community. Because of their extensive use, considerable attention is given to probation and parole. Other topics include diversion, community residential programs, restitution, halfway houses, and home detention.

J445 Trends in Corrections (3 cr.)

P: J101. Analysis and evaluation of contemporary correctional systems. Discussion of recent research concerning the correctional institution and the various field services.

J460 Police in the Community (3 cr.)

P: SPEA J101. In-depth examination of crime as an urban policy problem, focusing on the role of police and victims in defining crime as a policy problem, and their role in seeking to reduce the incidence of crime.

J470 Seminar in Criminal Justice (3 cr.)

P: senior standing. Emphasizes current developments in legal, administrative, and operational aspects of the criminal justice system.

J480 Research in Criminal Justice (1-6 cr.) P: junior standing and consent of instructor. Individual research under guidance of faculty member.

Public Affairs Courses

K300 Statistical Techniques (3 cr.) P: MATH M014 or equivalent. R: MATH M118. An introduction to statistics. Nature of statistical data. Ordering and manipulation of data. Measures of central tendency and dispersion. Elementary probability. Concepts of statistical inference decision: estimation and hypothesis testing. Special topics discussed may include regression and correlation, analysis of variance, nonparametric methods. Credit not given for both K300 and either ECON E270/E370, SOC S250, or PSY/MATH K310.

K301 Statistics Laboratory (1 cr.) This course is an optional 1 credit hour module to accompany K300 and must be taken concurrently with K300. The course focuses on application of techniques being taught in K300. The course will allow students to obtain tutoring with specific problems. K301 sessions will be linked with K300 lectures.

V100 Current Topics in Public Affairs (1-3 cr.) Readings and discussion of current public issues and problems. May be repeated for credit.

V160 National and International Policy (3 cr.) This course will discuss current debates about United States public policy on the national and international levels. Some policy issues covered are economic, crime, security, health, and energy. Credit not given for both V160 and V170.

V161 Urban Problems and Solutions (3 cr.) An introduction to urban policy issues. Topics include political, social, and economic foundations and development of cities and foundations and development of cities and suburbs; urban planning; poverty; and other selected urban problems. Credit not given for both V161 and V264.

V170 Introduction to Public Affairs (3 cr.) Broad coverage of public affairs through critical and analytical inquiry into policy making at all levels of government. Particular emphasis on intergovernmental relations as they affect policy in the federal system. Credit not given for both V160 and V170.

V221 Nonprofit and Voluntary Sector (3 cr.) This course provides a broad overview of the United States nonprofit sector. Topics include the sector's size and scope; and its religious, historical, and theoretical underpinnings. It also examines perspectives on why people organize, donate to, and volunteer for nonprofit organizations, and looks at current challenges that the sector faces.

V241 Management Foundations and Approaches (3 cr.) This course examines core functions of management and the political socioeconomic context within which organizations operate in different sectors of employment. It is organized into five main parts: what management entails, approaches to the study of management, contextual factors, core issues, and management functions. Course concludes with a capstone exercise.

V246 Elements of Governmental and Nonprofit Financial Accounting Cycle (3 cr.) This is a course designed to prepare students for next-level courses in governmental accounting and reporting, nonprofit accounting and reporting, and health accounting and finance.

V252 Career Development (3 cr.) Career planning and placement strategies, assessment of labor market information, market surveys, and development of customized portfolios. Emphasis given to projects, papers, and independent research.

V260 Topics in Public Affairs (3 cr.) Study of selected issues in public affairs. Topics vary from semester to semester. May be repeated for credit.

V261 Computers in Public Affairs (3 cr.) An introduction to computer applications in public affairs. Topics include basic terminology, core concepts, and issues associated with managing operating systems, designing networks, and applying user information technology to public affairs problems. Issues of security and ethics in computing are also considered.

V263 Public Management (3 cr.) This course is an examination of the management process in public organizations in the United States. Special attention will be given to external influences on public managers, the effect of the intergovernmental environment and, in particular, problems of management in a democratic, limited government system.

V264 Urban Structure and Policy (3 cr.) An introduction to urban government and policy issues. Topics include urban government structure and policy making, the economic foundations and development of cities, demography of cities and suburbs, land-use planning, and other selected urban policy problems. Credit not given for both SPEA V161 and SPEA V264.

V267 American Humanics Management Institute (1 cr.) Students attending the American Humanics Management Institute (AHMI) are required to participate in orientation meetings to plan for AHMI and raise funds for the trip. AHMI is held annually in January. Permission of the American Humanics campus director is required. May be repeated for credit.

V268 American Humanics Topics (1-3 cr.) Topics covering specific American Humanics competencies reflecting the particular needs and interests of participating students and the local advisory board for the program. Topics may include risk management, fundraising, board and committee development, and nonprofit marketing. Topics vary from semester to semester. May be repeated for credit.

V270 Survey of Administrative Techniques (3 cr.) Introduction to principles of management and systems theory for the administration of public agencies. Credit not given for both V270 and J310.

V272 Terrorism and Public Policy (3 cr.) A survey of the incidence of terrorism in democratic societies, with particular emphasis on public policy responses designed to combat terrorism in cities. Overviews of ongoing conflicts with terrorist organizations in various countries are interspersed with analyses of significant terrorist events and the public policies and responses such events create.

V340 Urban Government Administration (3 cr.) Structure of local government in the United States, federalism and intergovernmental relations, policy problems faced by local officials, and the implications of these problems for local government administrators.

V346 Introduction to Government Accounting and Financial Reporting (3 cr.) P: BUS A201 or permission of instructor. An introduction to government accounting, including comparison with accounting for the private sector, intended as background for the use of financial administrators. The course deals primarily with municipal accounting. Not open to students with more than 7 credit hours of accounting.

V348 Management Science (3 cr.) P: K300, MATH M025, or MATH M118. Introduction to management science models and methods for policy analysis and public management. Methods include decision analysis, linear programming, queuing analysis, and simulation. Computer-based applications are included. Prior familiarity with computers is recommended, though not required.

V350 Introduction to Development Administration (3 cr.) Introduction to the administration of development activities in poor countries. Examines key problems, including the complexity of development, the interplay of external donors and domestic administration, and the difficulties of organizing and managing development efforts. Combines cases and textual readings, allowing the student to analyze actual programs, policies, and projects.

V352 Personal Career Planning (1 cr.) Investigation of careers, the world of work, and the career planning process. The focal point is on students and their goals. Provides assistance in developing practical, meaningful, and realistic insights into the nature of making a public career choice in today's world. Credit not awarded for both V352 and BUS X420.

V356 Introduction to Nonprofit Accounting and Reporting (3 cr.) P: BUS A201 or consent of instructor. This course covers concepts and processes of nonprofit accounting and financial reporting with exploration of differences between for profit, governmental and nonprofit systems. Examples will be drawn from health organizations, welfare agencies, charities, and educational institutions.

V361 Financial Management (3 cr.) This course introduces students to accounting, financial management techniques, and financial reporting. Topics include accounting, debit/credit sheets and balance sheets, financial indicators, fund balances, fringe benefits and pensions, and payroll management.

V362 Nonprofit Management and Leadership (3 cr.) Students in this course examine the management practices of nonprofit organizations. The course encourages students to take the perspectives of nonprofit managers, volunteers, board members, policy makers, donors, and clients. Course projects expand understanding of the nonprofit sector and develop students' management skills, analytical tools, and knowledge.

V365 Urban Development and Planning (3 cr.)
P: V264 and K300. This course identifies the major problems associated with urban development in the United States and investigates the potential of public planning strategies and tools to deal with these problems. An emphasis is placed on the application of analytical approaches to problem definition and solution.

V366 Managing Behavior in Public Organizations (3 cr.) This course provides an introduction to the management of people in public organizations. Focus is on behavioral science in management and related analytical and experiential applications.

V368 Managing Government Operations (3 cr.)
P: V348. Application of analytical techniques to operating decisions in public management sector. Cases are used extensively to illustrate the application of techniques (such as charting, capacity and demand analysis, forecasting, performance measurement, decision analysis, queuing/simulation, Markov modeling, and cost-effective analysis) to design, scheduling, inventory assignment, transportation, and replacement decisions.

V369 Managing Information Technology (3 cr.)
Analysis and application of information technology to problem solving.

V370 Research Methods and Statistical Modeling (3 cr.) P: K300 or equivalent. This course will introduce the student to the basic methods, issues, analytical techniques, and ethical considerations of evaluation research.

V371 Financing Public Affairs (3 cr.) P: V160 or V170; ECON E201, and E202. A survey of economic and political theories of market failures, public expenditure evaluation, economic stabilization, systems of redistribution, and fiscal federalism. Examples and applications to contemporary government decisions.

V372 Government Finance and Budgets (3 cr.)
Study of fiscal management in public agencies, including revenue administration, debt management, and public budgeting.

V373 Human Resources Management in the Public Sector (3 cr.) The organization and operation of public personnel management systems with emphasis on concepts and techniques of job analysis, position classification, training, affirmative action, and motivation.

V375 Emergency Services Administration (3 cr.)
An overview of management principles and functional components of EMS systems.

V376 Law and Public Policy (3 cr.) The purpose of this course is to provide a basic understanding of the origins, process, and impact of law in the making and implementing of public policy. The course's major objective is to provide students with the substantive concepts necessary to understand the judicial system and law in its various forms.

V377 Legal Process and Contemporary Issues in America (3 cr.) P: V376. An introduction to the American legal system, including the Constitution, courts system, and administrative law in federal and

state agencies. Readings and discussion center around current issues affected by the legal process.

V378 Policy Processes in the United States (3 cr.) P: senior standing. Intended as an integrative senior course, primarily for SPEA students. Course content includes analytical perspectives of the policy process, the centers of policy, and the public interest. Selected cases involving problem analysis and decision making on public issues are included, as well as discussion of current policy issues.

V379 Performance Measurement and Program Evaluation (3 cr.) This course provides an overview of program evaluation as it relates to public affairs, criminal justice, health policy, and environmental science with particular emphasis on measuring program outcomes. The course is designed for students who envision themselves working in management, policy-making, or research roles.

V380 Internship in Public and Environmental Affairs (1-6 cr.) P: permission of instructor. Open to interested students upon approval of the faculty. Students are placed with public agencies or governmental units for assignment to a defined task relevant to their educational interests in public affairs. Tasks may involve staff work or research. Full-time participants may earn up to 6 credit hours. May be repeated for credit. Course is graded S/E.

V381 Professional Experience (1-6 cr.) Students will be required to fulfill a minimum of 120 hours of relevant professional work.

V382 Political Action and Civic Engagement (3 cr.) Examines citizen efforts to effect social change, with an emphasis upon political movements and parties as mechanisms for achieving that change.

V386 Case Studies for Policy Analysis (3 cr.)
This course focuses on analyzing case studies of public policies using a variety of disciplinary perspectives, including application of the principles and concepts of intermediate microeconomic theory.

V388 American Humanics Internship (3-6 cr.)
American Humanics, Inc. requires an internship of 300 to 600 contact hours. A minimum of 3 credit hours is required. Credits will be given at the rate of 1 hour = 100 internship hours. Permission of the American Humanics campus director is required.

V390 Readings in Public and Environmental Affairs (0-3 cr.) P: permission of instructor. Independent readings and research related to a topic of special interest to the student. Written report required. May be repeated for credit.

V391 Honors Readings in Public and Environmental Affairs (1-3 cr.) P: approval of instructor and SPEA honors advisor. Restricted to students in SPEA Honors Program. May be repeated for credit.

V401 Financial and Cost-Benefit Analysis (3 cr.)
This course familiarizes students with the principles of financial analysis, cost-benefit analysis, and Kaldor/Hicks accounting. Topics include net present value calculation, net annual worth, public and private decision criteria, and market data adjustment for taxes, rents, and other market distortions.

V405 Public Law and the Legislative Process (3 cr.) This course focuses on Congress as a policy-making body in the United States public law system. It covers the constitutional framework for congressional operations as well as technical aspects of the legislative process such as bill drafting and analysis, the role of leadership, and the prerogatives of individual members.

V406 Public Law and the Electoral Process (3 cr.) The purpose of this course is to facilitate understanding of the interaction of electoral politics and policy. It covers the legal framework of the evolution of the "right" to vote, the impact of the judiciary on the structure of elections, limitations on campaign practices, and the importance of legislative districting and its control.

V407 Public Law and Government Relations (3 cr.) The purpose of this course is to build understanding of government relations work as applied to careers in the field. It covers the historical evolution of the constitutional right to petition the government with an understanding of the limitations imposed upon the process. The interaction of public and private sectors is included.

V412 Leadership and Ethics (3 cr.) This course is designed to examine the complex leadership issues and challenges facing communities and explore how citizens and government can work together to address these challenges. This includes exploration of how the problems, conflicts, and dilemmas encountered by leaders when making decisions must be considered within an ethical framework.

V421 Metropolitan Development (3 cr.)
Discussion of the process of development in metropolitan regions. Includes topics such as economic development, land use evolution, and demographic change. Consideration of relevant policy issues.

V422 Transportation Policy Analysis (3 cr.) This course examines current issues in transportation to identify the key analytic and management issues that must be considered in developing effective public policy. Particular emphasis will be placed on examining the rationale for and actual impact of existing government policies, and on analyzing the likely impacts of policy alternatives.

V432 Labor Relations in the Public Sector (3 cr.) An introductory overview of labor relations in the public sector. Course includes the development, practice, and extent of the collective bargaining process and administration of the labor agreement by state and local governments.

V435 Negotiation and Alternative Dispute Resolution (1-4 cr.) This course introduces students to the theories and techniques of alternative dispute resolution. The course covers interest-based negotiation, mediation, arbitration, fact finding, early neutral evaluation, and other techniques used in business, labor relations, environmental disputes, family relations, and international affairs.

V436 Communication for Government and Nonprofit Organizations (3 cr.) This course will develop an appreciation regarding the critical nature of communication by managers in the public and

nonprofit sector. It will introduce students to the skills critical to effective communication as professionals.

V438 Mass Media and Public Affairs (3 cr.)

Course will analyze the role of the media in the formation of public policy, including the responsibility of journalists, legal and ethical constraints, business pressures and their effects, impact of technology, and similar issues.

V441 Topics in Financial Management and Policy (3 cr.) P: V372. Various topics focusing on financial management and policy are examined in state and local settings. May be repeated for credit.

V442 Topics in Budgeting or Cost/Benefit (3 cr.) P: V372. Various topics in budgeting or cost/benefit analysis are examined. Course may be repeated for different topics.

V443 Managing Workforce Diversity (3 cr.) The composition and nature of the work force is changing. Managers must decide how to accommodate real differences among the members of their organizations. This course seeks to provide information for practitioners who hope to integrate an understanding of workforce diversity into their management style and professional behavior.

V444 Public Administrative Organization (3 cr.) A review of research findings and analysis of the operation of public agencies and their performance.

V447 Federal Budget Policy (3 cr.) Examination of the institutions and processes involved in putting together the annual federal budget, with emphasis on the role of the Appropriations and Budget Committees in Congress and on the White House and the Office of Management and Budget in the executive branch. Selected major policy areas will be considered.

V449 Policy Senior Seminar (3 cr.) P: V348. Discussion of the role of policy analysts in government. Applications of analytical tools to substantive policy areas such as transportation, community development, education, poverty, manpower, and health.

V450 Contemporary Issues in Public Affairs (1-3 cr.) Extensive analysis of selected contemporary issues in public affairs. Topics vary from semester to semester. May be repeated for credit.

V450 Contemporary Issues in Public Affairs: Individual Rights, Common Goods, and Public Policies (3 cr.) Considers the tension between individual and majoritarian rights in our constitutional system, and the effects of that tension on the formulation of public policy.

V451 Social Policy and the Aging (3 cr.) A focused examination of government and the elderly. Public policy and administration of income, health, housing, employment, and social service programs, as well as analysis of the context of aging policy.

V456 Topics in Public Law (3 cr.) Extensive analysis of selected contemporary issues in public law. Topics vary from semester to semester. May be repeated for credit.

V457 Management Science in the Public Sector (3 cr.) P: V348, CSCI C211, and K300. An intermediate treatment of management science

methods with primary application to public managerial decision support. Topics include network analysis, queuing, simulation, and others. Computer-based analysis is emphasized.

V458 Fund Development for Nonprofit Organizations (3 cr.) Course builds an understanding of the practice, philosophy, law, and theory of fundraising. Students establish an organization's value base and mission, prepare funding appeals, evaluate readiness for a campaign, assess funding sources, implement fundraising vehicles, evaluate effectiveness, and discuss stewardship of contributions.

V460 Intergovernmental Relations (3 cr.) Overview of the dynamics of multi-organizational governance in the United States. Examination of federal and other systems. Structure and operations of intergovernmental programs and the role of managers within these systems.

V461 Computer Applications in Public Affairs (3 cr.) P: BUS K201. This course is designed to provide students with the essentials of computer hardware and software needed to operate effectively in a public sector environment. The course will emphasize public sector applications using software packages or microcomputers and minicomputers.

V462 Community Development (3 cr.) The process and outcomes of local citizen-based efforts to improve social, economic, and cultural conditions. Interaction of public and nonprofit sectors in community revitalization. Experiences, cases, and problems involving both rural and urban settings.

V463 Interpersonal Relations in the Workplace (1-4 cr.) Key interpersonal skills will be modeled through a variety of media and experiences. Students will practice these skills and receive feedback. Students will be expected to participate in structured experiences designed to give them insight into their behavior and how it will affect their ability to achieve personal and professional objectives.

V465 Geographic Information Systems for Public and Environmental Affairs (3 cr.) P: V261 and V369. Students will learn the concepts, methodologies, and perspectives essential for using geographic information systems (GIS) to address critical public affairs issues. Through course projects, students will learn how to use desktop and Internet-based GIS applications, and will develop complementary skills related to designing and implementing GIS applications for public-sector organizations.

V470 Community Development Workshop (3 cr.) This course will be conducted as an undergraduate research workshop. The focus will be on community development problems, such as long-range planning, the delivery of government services, or local economic development. The research topic of the course will change each year, and will be announced the preceding semester.

V471 Urban Management Systems (3 cr.) P: V348 and senior standing. This course is designed to extend the student's skill in applying a variety of qualitative and quantitative methods to the problems of urban government planning and management.

V473 Management, Leadership, and Policy (3 cr.) This course seeks to integrate learning across the public affairs curriculum. Students will review and reflect about their learning in management, leadership, and policy. Experiential methods—service learning, projects, cases, and exercises—will be used to help students apply theory, concepts, and skills.

V475 Database Management Systems (3 cr.) P: V261, V369, or equivalent. Students learn contemporary theories and methodologies regarding design, use, and management of database systems among public-sector organizations. The course provides hands-on experience with tools such as entity-relationship diagrams, query languages, database management software; and an understanding of critical database management issues such as security, backup, and recovery.

V490 Directed Research in Public and Environmental Affairs (0-3 cr.) To be arranged with the individual instructor and approved by the chairperson of the undergraduate program. May be repeated for credit.

V491 Honors Research in Public and Environmental Affairs (1-3 cr.) P: approval of instructor and SPEA honors advisor. Restricted to students in the SPEA Honors Program. May be repeated for credit.

V499 Honors Thesis (3 cr.) Required of seniors in the Honors Program. Research and paper to be arranged with individual instructor and approved by the campus SPEA Honors Program director. May be repeated for credit.

Graduate Programs

The School of Public and Environmental Affairs offers degree programs that range from the associate degree to the Ph.D. The IUPUI campus offers two professional master's degrees for individuals interested in leadership positions in public, private and nonprofit organizations:

Master of Public Affairs (M.P.A.)

Master of Health Administration (M.H.A.)

The M.P.A. is a professional degree structured around the concepts and skills essential to management, policy, and planning activities within governmental and quasi-governmental organizations. The M.H.A. provides a broad, balanced foundation of theoretical and practical knowledge and technical skills needed to succeed in health administration and health policy and planning. Additionally, master's degrees may be pursued in combination with degrees in law, business, nursing, and philanthropy.

The School of Public and Environmental Affairs offers a variety of graduate degrees and certificate programs.

Graduate Degrees

Master of Public Affairs (M.P.A.)

Master of Health Administration (M.H.A.)

Joint Degree Programs

Master of Health Administration–Doctor of Jurisprudence (M.H.A.–J.D.)

Master of Health Administration–Master of Business Administration (M.H.A.–M.B.A.)

Master of Health Administration–Master of Science in Nursing (M.H.A.–M.S.N.)

Master of Public Affairs–Doctor of Jurisprudence (M.P.A.–J.D.)

Master of Public Affairs–Master of Arts in Philanthropic Studies (M.P.A.–M.A.)

Master of Public Affairs–Master of Science in Nursing (M.P.A.–M.S.N.)

Graduate Certificates

Certificate in Hazardous Materials Management

Certificate in Health Systems Management

Certificate in Nonprofit Management

Certificate in Planning Information

Certificate in Public Management

Degrees and Concentrations

M.P.A.

Criminal Justice

Environmental Management

Nonprofit Management

Policy Analysis

Public Management

M.H.A.

Health Administration

Contact Us:

Graduate Programs

School of Public and Environmental Affairs

Indiana University–Purdue University Indianapolis

Business/SPEA Building 3027

801 W. Michigan Street

Indianapolis, IN 46202-5152

Phone: (317) 274-4656

Toll free: (877) 292-9321

Fax: (317) 274-5153

E-mail: infospea@iupui.edu

Web: www.spea.iupui.edu

Admissions

Procedure

Application Information about graduate study, including literature and application materials, may be obtained from the School of Public and Environmental Affairs Web site (www.spea.iupui.edu).

Eligibility For most programs, applicants with bachelor's degrees in any field from an accredited institution are eligible to apply for admission to the graduate programs of the School of Public and Environmental Affairs.

Application Submission Applicants should apply to a degree or certificate program and request financial assistance as early as possible before the desired semester of enrollment. Deadlines for applying for admission and for financial assistance may vary across campuses.

Admission Each application for admission is carefully evaluated by the admissions committee for the appropriate degree. Applicants to all SPEA degree programs must do the following:

1. Submit applications to the graduate program office on the campus where the applicant intends to matriculate.
2. Submit complete official transcripts from all colleges and universities attended. Students who have taken course work on any Indiana University campus do not need to submit an Indiana University transcript.
3. Pay a nonrefundable application fee to Indiana University.
4. Submit three Application Reference Forms completed by individuals familiar with the applicant's activities and potential to succeed in graduate work. These forms are available at SPEA's Web site.
5. Read carefully the applicable sections in this bulletin for any specific program or campus admission requirements.
6. Submit proof of bachelor's degree certification from an accredited institution. Students who have not completed undergraduate course work at the time of application may be admitted based on the strength of previous work, but a final transcript attesting to the award of a bachelor's degree must be submitted before the student can enroll.

LSAT and GRE Requirements Applicants for the M.P.A.–J.D. degree may submit LSAT or GMAT (Law School Admission Test or Graduate Management Admission Test) scores in lieu of GRE (Graduate Record Examination) scores. Other degrees require the GRE. Information concerning the GRE is available from Graduate Record Examination, Educational Testing Service, P.O. Box 6000, Princeton, NJ 08541, (609) 771-7670. Information concerning the LSAT is available from Law School Admission Services, P.O. Box 2000, Newtown, PA 18940, (215) 968-1001.

Admission Status

Regular (Unconditional) Admission Status

Applicants with this status have met all admission requirements for the specific degree program and may enroll in accordance with the entry date contained in the application for admission.

Deferred Admission Following notice of regular admission, applicants may defer enrollment for a maximum of one year. Transcripts of course work completed during the deferral period must be submitted, and the admissions committee may request additional letters of recommendation. Should the additional material prove unsatisfactory, the admission may be canceled. Applicants who fail to enroll within one year may need to re-apply for admission.

Provisional Admission On some campuses, applicants may be admitted on a provisional basis if GRE or LSAT scores or prior grade point averages are below admission criteria. Provisional status is removed upon fulfillment of conditions stipulated by the respective degree program admissions committee.

Admission with Deficiencies Applicants may be admitted with deficiencies on a case-by-case basis if they lack course work in certain foundation areas such as mathematics, economics, or statistics. Campus and degree policies may vary.

Nondegree Enrollment Applicants who have a bachelor's degree and who have not been admitted to the graduate program may enroll in SPEA courses as nondegree graduate students. Procedures may vary across campuses.

If nondegree students later wish to obtain SPEA graduate degrees, they must apply for admission to the specific degree program.

Academic Regulations

The following academic regulations of the School of Public and Environmental Affairs are applicable to all graduate programs. Additional campus-specific policies also may apply.

Confidentiality of Student Records In accordance with Indiana University regulations, student records are confidential and are available to other persons only under specific conditions as outlined in university regulations.

Student Rights Rights of students are included in a handbook available on each campus. Due process is followed in the event of disciplinary or other actions.

Student Responsibility Students are responsible for planning their own academic programs and for meeting the requirements for their degree or

certificate programs. Faculty and academic advisors may assist students in meeting their responsibilities.

Applicability of Degree and Certificate

Requirements Students may choose to complete either the specific degree and certificate requirements published in the appropriate bulletin at the time of entry into the university or those in the bulletin current at the time of graduation.

Residency Requirements—Master's and Certificate Programs

The campus at which a student completes the majority of required course work will certify and award the degree or certificate, provided the campus is authorized to grant that degree or certificate. The student must have been admitted by the SPEA campus awarding the degree or certificate.

Academic Standing Students are considered to be in good standing during any semester in which their academic grade point average is at least 3.0 (B) both for their last semester's course work and for the cumulative average of all course work completed. Only courses with grades of C (2.0) or above may be counted toward degree requirements. However, grades below C are used in computing the cumulative grade point average, even if a course is repeated and a higher grade is earned.

Academic Probation Students are placed on probation following a semester in which their cumulative or semester grade point average falls below 3.0. Students on probation or admitted provisionally are required to attain an average of at least 3.0 for all work completed by the end of the next semester of full-time enrollment or its equivalent (12 credit hours). Failure to do so is cause for dismissal.

Grading System SPEA follows the official grading system of Indiana University described in the introductory section of the bulletin.

Incomplete A grade of Incomplete must be removed within the time specified by the instructor of the course; if not, the grade automatically changes to an F one calendar year after the Incomplete was given.

Withdrawals Because deadlines for withdrawal from courses may vary by campus and/or school, students should check with the current campus *Schedule of Classes* to verify deadlines and procedures.

Intercampus Transfer Students enrolled in the School of Public and Environmental Affairs at any campus of Indiana University may transfer to SPEA on another campus, provided they are in good standing.

Transfer of Credit A maximum of 9 credit hours of appropriate graduate course work with grades of B (3.0) or better (only 6 credit hours for the M.H.A. program) may be transferred from degree programs of other academic units within Indiana University or other accredited colleges and universities and applied to SPEA master's-level degree programs. The transfer must be approved by the appropriate graduate program director.

Course Waivers Requests for waiver of specific courses or requirements on the basis of previous course work are to be submitted in writing to the appropriate faculty member or program director.

Program Deviations Requests for deviation from SPEA programs or school requirements are granted only with written approval from an academic advisor and a campus or program director. Disposition by the SPEA program or campus director is final.

Minimum Credit Hours To qualify for the M.P.A. or M.Pl. degrees, students must complete a minimum of 24 of the required 48 credit hours of graduate SPEA courses at Indiana University. Credit granted to transfer students and those exercising the mid-career option does not reduce the number of courses taken in SPEA below this 24 credit hour minimum.

Credit Earned in Nondegree Status Not more than 12 hours of graduate credit completed as a nondegree student may be credited toward a SPEA graduate degree. Not more than 9 hours of SPEA graduate credit earned as a nondegree student may be credited toward SPEA certificate programs.

Academic Integrity Academic integrity requires that students take credit only for their own ideas and efforts. Misconduct, including cheating, fabrication, plagiarism, interference, or facilitating academic dishonesty, is prohibited because it undermines the bonds of trust and cooperation among members of this community and between us and those who may depend on our knowledge and integrity. Complete details are contained in the Indiana University *Code of Student Rights, Responsibilities, and Conduct*.

Academic Appeals Students may appeal academic decisions made by SPEA faculty members. Attempts to resolve such issues should be made first at the class/instructor level. If necessary, written appeals should be submitted to relevant program directors. Appeals must be submitted before the last day of classes in the semester following the point at which the events in question occurred. No appeals will be considered after one year from the end of the semester in which the credit is question was received.

Master of Public Affairs (M.P.A.)

Professional managers in the public and nonprofit sectors constantly face challenges evolving from complex people, politics, and settings. Often difficult to resolve with the standard methods learned from a traditional academic focus, these challenges require the type of creative problem-solving for which the School of Public and Environmental Affairs has earned national respect. We meld social and physical sciences from various disciplines into a graduate education that requires and prepares students to be in tune with the diverse landscape of changing ideas, culture, policies, and problems our society faces today and will continue to face in the future.

The M.P.A. is designed to develop leaders for public agencies and nonprofit organizations and allows for expertise in one of these concentrations: criminal justice, environmental management, nonprofit management, policy analysis, and public management. Each course of study requires completion of the core requirement, the concentration requirement, the experiential requirement, and sufficient electives and/or mid-career option credit to total 48 credit hours.

The core requirements of the M.P.A. degree consist of 18 credit hours of work in six courses. The experiential requirement ensures that each graduate of the M.P.A. program gains insight into the world of public service through an experience outside the classroom. Additionally, the completion of at least one concentration is required along with general electives that can be used to add breadth to a student's program; to further explore the field of concentration; or to enhance quantitative and analytical skills or administrative techniques.

Degree Requirements

(48 credit hours)

Before enrolling in the M.P.A. program, students must show proficiency in the foundation areas of computing, economics, government, mathematics, and statistics to facilitate mastery of core course material. Graduate credit is not given for work done to satisfy these undergraduate requirements.

The core requirements of the M.P.A. degree consist of 18 credit hours of work in six courses and are common to the five campuses where this degree is offered. Each student must complete the requirements of at least one concentration.

The experiential requirement ensures that each graduate of the M.P.A. program has gained insight into the world of public service by way of an experience outside the classroom. This experience may or may not involve the accumulation of credit hours toward the degree. The remaining credit hours necessary for graduation, if any, are general electives that can be used to add breadth to a student's program; to further explore a field of concentration; or to enhance skills in foreign languages, quantitative tools, or administrative techniques.

Core Requirements

(18 credit hours)

The M.P.A. core is designed to ensure that each student acquires both the prerequisite analytical skills and an understanding of policy issues and governmental processes that compose the environment within which graduates will pursue their careers.

Required Courses

SPEA V502 Public Management (3 cr.)
 SPEA V506 Statistical Analysis for Effective Decision Making (3 cr.)
 SPEA V517 Public Management Economics (3 cr.)
 SPEA V540 Law and Public Affairs (3 cr.)
 SPEA V560 Public Finance and Budgeting (3 cr.)
 SPEA V600 Capstone in Public and Environmental Affairs (3 cr.)

Extremely well-prepared applicants may petition the program director to waive one or more of the core requirements on the basis of advanced course work done elsewhere. Students may be exempted on the basis of satisfactory equivalent course work or by examination. Credit hours waived from the core add to the electives a student may use. Students requesting course waivers should contact the appropriate graduate program director for requirements and guidelines.

Concentration Requirements

(12-30 credit hours)

Concentrations give students educational experiences in a substantive area of interest. The course of study in each concentration area is determined in conjunction with an advisor. Up to 3 credit hours of the concentration may be taken in V585 Practicum in Public Affairs, if approved *in advance* by an advisor.

Concentration requirements may be waived on the same basis as core requirements. Consult an advisor about course prerequisites.

Experiential Requirements

Each M.P.A. student must obtain professionally relevant experience through one of the following options: an approved internship (0-6 credit hours); SPEA V590 Research in Public Affairs; or the Mid-Career Credit Option.

Mid-Career Credit Option

The Graduate Admissions Committee of the School of Public and Environmental Affairs may grant up to 12 credit hours toward the Master of Public Affairs (M.P.A.) degree for students who have had **significant technical, administrative, or policy-level work experience** in their backgrounds. Credit will be granted for work experience gained until the end of the semester in which the student completes 24 credit hours according to the following guidelines as adopted by the SPEA Academic Council.

1. To receive 3 credit hours, a student must have a minimum of one year's technical, administrative, or policy-level work experience with a government or private agency. Experience should be in policy planning and direction.
2. 6 credit hours will be awarded for one to four years of managerial experience in directing programs, preparing budgets, and making decisions on organizational or staff development, or for one to four years of professional experience in policy analysis or planning.
3. Those with four or more years of executive assignment may be awarded 9-12 credit hours. Applicants must have had responsibility for supervision of high-level staff, budget preparation, and organizational control of public agencies, or executive responsibility for policy analysis or planning.

Mid-Career Credit Option Application Process and Policies

Students are eligible to apply for Mid-Career credit at the time of application or during the first semester of graduate study in order to take full advantage of available credit. Applicants may appeal the initial Mid-Career credit decision by submitting a request, in writing, for reconsideration and providing additional information to the appropriate program or campus director.

Determination of Mid-Career credit is made separately from decisions about transfer of credit. Under no circumstances will the Mid-Career credit and transfer credit total more than 21 hours of the 48 required for the degree. Students receiving Mid-Career credit should carefully plan the balance of their program with an advisor.

General Elective Courses

Graduate courses, or undergraduate courses approved for graduate credit, may be used to complete the overall degree requirement of 48 credit hours.

Fields of Concentration

Concentrations give students a focused educational experience in a substantive area of interest. The concentration is selected in conjunction with a faculty advisor and the appropriate SPEA administrator. Concentrations include criminal justice, environmental management, nonprofit management, policy analysis, and public management.

Criminal Justice Concentration

(18 credit hours)

The criminal justice concentration is for those interested in the issues, methods, and skills involved in the management of criminal justice or related agencies. Students are required to take a minimum of 9 "J" credit hours for this concentration.

Required Courses (12 credit hours):

- SPEA J501 Evolution of Criminological Thought and Policy (3 cr.)
- SPEA J502 Research Methods in Criminal Justice and Public Affairs (3 cr.)
- SPEA V509 Administrative Ethics in the Public Sector (3 cr.)

One of the following:

- SPEA J666 Criminal Justice Policy and Evaluation (3 cr.)
- SPEA J682 Criminal Justice Planning and Management (3 cr.)

Electives (6 credit hours):

Two courses from one of the following groups:

Group A:

- SPEA J550 Topics in Criminal Justice (3 cr.)
- SPEA J582 Criminal Justice Systems (3 cr.)
- SPEA J587 Criminal Violation: Problems and Characteristics (3 cr.)
- SPEA J588 Law and Control in Society (3 cr.)
- SPEA V580 Readings in Public Affairs (criminal justice topics only) (3 cr.)
- SPEA V585 Practicum in Public Affairs (criminal justice topics only) (3 cr.)
- SPEA V685 Research Seminar in Public Affairs (criminal justice topics only) (3 cr.)

Group B:

- SPEA J550 Topics in Criminal Justice (3 cr.)
- Management, Organizations, and Policy*
- SPEA V504 Public Organizations (3 cr.)
- SPEA V512 Public Policy Process (3 cr.)
- SPEA V539 Management Science for Public Affairs (3 cr.)
- SPEA V547 Negotiation and Dispute Resolution for Public Affairs (3 cr.)
- SPEA V561 Public Human Resources Management (3 cr.)
- SPEA V562 Public Program Evaluation (3 cr.)
- SPEA V564 Urban Management (3 cr.)
- SPEA V566 Executive Leadership (3 cr.)
- SPEA V569 Managing Interpersonal Relations (3 cr.)
- SPEA V570 Public Sector Labor Relations (3 cr.)

Nonprofit Management

- SPEA V522 Human Resource Management in Nonprofit Organizations (3 cr.)
- SPEA V525 Management in the Nonprofit Sector (3 cr.)

Finance

- SPEA V541 Benefit-Cost Analysis of Public and Environmental Policies (3 cr.)
- SPEA V542 Governmental Financial Accounting and Reporting (3 cr.)

Information Systems

- SPEA V516 Public Management Information Systems (3 cr.)
- SPEA V518 Intergovernmental Systems Management (3 cr.)
- SPEA V519 Database Management Systems (3 cr.)
- SPEA V550 Topics in Public Affairs (non-criminal justice topics) (3 cr.)

Other courses must be approved by a faculty advisor.

Environmental Management Concentration

(21 credit hours)

Students entering this concentration should have a working knowledge of chemistry and calculus prior to admission. The minimum level of competence needed is equivalent to two semesters of undergraduate chemistry and one semester of calculus.

Required Courses (15 credit hours):

- SPEA H519 Environmental Health (3 cr.)
- SPEA E510 Environmental Regulation and Compliance (3 cr.)
- SPEA E520 Environmental Toxicology (3 cr.)
- SPEA E533 Environmental Management Systems: ISO 14001 Based (3 cr.)
- SPEA E560 Environmental Risk Analysis (3 cr.)

Two of the following (6 credit hours):

- SPEA E431 Water Supply and Wastewater Treatment (3 cr.)
 - SPEA E515 Fundamentals of Air Pollution (3 cr.) [cross-listed with E451]
 - SPEA E549 Environmental Planning (3 cr.)
 - SPEA E562 Solid and Hazardous Waste Management (3 cr.) [cross-listed with E452]
 - SPEA E555 Topics in Environmental Science: Industrial Hygiene (3 cr.)
 - SPEA P515 Physical Systems Development Infrastructure (3 cr.)
 - SPEA P525 Geographic Information Systems for Planning (2 cr.)
 - SPEA V645 Environmental Law (3 cr.)
- Other specialized courses with approval of faculty advisor

Nonprofit Management Concentration

(18 credit hours)

The nonprofit management concentration prepares persons for leadership positions in nonprofit and volunteer organizations. Students receive a professional degree structured around theories, concepts, and practices essential to the policy and management of nonprofit organizations. Students who choose careers in the third sector will be more enlightened practitioners with a clear understanding

of modern management techniques and of the philanthropic tradition in the broadest sense; that is, voluntary action for the public good.

Required Courses (6 credit hours):

SPEA V521 The Nonprofit and Voluntary Sector (3 cr.)
SPEA V525 Management in the Nonprofit Sector (3 cr.)

One of the following nonprofit theoretical courses:

SPEA V523 Civil Society and Public Policy (3 cr.)
SPEA V524 Civil Society in Comparative Perspective (3 cr.)
ECON E514 The Nonprofit Economy and Public Policy (3 cr.)
HIST H509 History of Philanthropy in the West (3 cr.)
HIST H511 History of American Philanthropy (3 cr.)
PHIL P542 Ethics and Values of Philanthropy (3 cr.)

Other courses must be approved by the faculty advisor.

Two of the following nonprofit application courses:

SPEA V522 Human Resource Management in Nonprofit Organizations (3 cr.)
SPEA V526 Financial Management for Nonprofit Organizations (3 cr.)
SPEA V550 Topics in Public Affairs: Leadership and Board Development (3 cr.)
SPEA V557 Development and Grant Administration (3 cr.)
SPEA V558 Fund Development for Nonprofit Organizations (3 cr.)
SPEA V602 Strategic Planning of Public and Nonprofit Organizations (3 cr.)

One of the following general management courses:

SPEA V504 Public Organizations (3 cr.)
SPEA V516 Public Management Information Systems (3 cr.)
SPEA V539 Management Science of Public Affairs (3 cr.)
SPEA V541 Benefit-Cost Analysis of Public and Environmental Policies (3 cr.)
SPEA V562 Public Program Evaluation (3 cr.)
SPEA V566 Executive Leadership (3 cr.)

Policy Analysis Concentration

(17-18 credit hours)

The policy analysis concentration focuses on techniques for the rigorous evaluation of public policies and public programs, emphasizing science, operations research techniques, cost-benefit analysis, and program evaluation.

Required Policy Skills Courses (8-9 credit hours):

Choose two of the following:

SPEA V539 Management Science for Public Affairs (3 cr.)
SPEA V541 Benefit-Cost Analysis of Public and Environmental Policies (3 cr.)
SPEA V562 Public Program Evaluation (3 cr.) or
SPEA J502 Research Methods in Criminal Justice and Public Affairs (3 cr.)

Choose one of the following:

SPEA V507 Data Analysis and Modeling for Public Affairs (3 cr.)
SPEA P520 Methods for Planning and Policy Analysis (3 cr.)

Required Policy Field Courses (9 credit hours)

Choose three of the following with the permission of a faculty advisor. Courses include, but are not limited to, the following:

SPEA E549 Environmental Planning (3 cr.)
SPEA H501 U.S. Health Care: Systems, Policies, and Ethical Challenges (3 cr.)
SPEA H515 Seminar in Health Policy Process Special Topics (3 cr.)
SPEA H640 Topics in Health Services Administration: Health Care Policy Planning (3 cr.)
SPEA J501 Evolution of Criminological Thought and Policy (3 cr.)
SPEA J582 Criminal Justice Systems (3 cr.)
SPEA J666 Criminal Justice Policy and Evaluation (3 cr.)
SPEA P510 Social Economic Aspects of Human Settlement (2 cr.)
SPEA P515 Physical Systems Development and Infrastructure (3 cr.)
SPEA P540 Community and Neighborhood Development Planning (3 cr.)
SPEA P550 Topics in Planning (3 cr.) (public policy topics approved by advisor)
SPEA V512 Public Policy Process (3 cr.)
SPEA V520 Environmental Policy Analysis (3 cr.)
SPEA V523 Civil Society and Public Policy (3 cr.)
SPEA V524 Civil Society in Comparative Perspective (3 cr.)
SPEA V550 Topics in Public Affairs (3 cr.) (public policy topics approved by advisor)
SPEA V580 Readings in Public Affairs (3 cr.)
SPEA V590 Research in Public Affairs (3 cr.)
SPEA V597 Land Use Planning (3 cr.)

Public Management Concentration

(18 credit hours)

The public management concentration is a structured program that enables students to develop a managerial perspective. The curriculum ensures breadth of coverage across those areas essential to a managerial career.

Required Courses (12 credit hours):

SPEA V504 Public Organizations (3 cr.)
SPEA V561 Public Human Resource Management in the Public Sector (3 cr.)
SPEA V602 Strategic Management of Public and Nonprofit Organizations (3 cr.)
SPEA V639 Managing Government Operations (3 cr.)

One of the following:

SPEA V516 Public Management Information Systems (3 cr.)
SPEA V542 Governmental Financial Accounting and Reporting (3 cr.)

One of the following:

SPEA V539 Management Science for Public Affairs (3 cr.)
SPEA V541 Benefit-Cost Analysis for Public and Environmental Policies (3 cr.)
SPEA V562 Public Program Evaluation (3 cr.)

Master of Health Administration (M.H.A.)

The graduate program in health administration is offered by the School of Public and Environmental Affairs, the country's largest school of public affairs. Recognized for its outstanding faculty, professional integration, and strong business ethics, the Indianapolis program reflects the exciting frontiers of the contemporary health care industry.

This advanced program attracts professionals and students interested in a variety of leadership opportunities in hospitals, managed care, ambulatory care, and voluntary health agencies. Opportunities also exist in consulting firms, corporate health programs, insurance, government, and other regulatory agencies. The program is fully accredited by the Accrediting Commission on Education for Health Services Administration and is a member of the Association of University Programs in Health Administration.

Approximately one-third of the students in the program have professional backgrounds; the remaining two-thirds come directly from undergraduate programs. In the classroom, this mix creates a dynamic environment of fresh perspectives and practical experience. The versatile faculty teach a rigorous interdisciplinary curriculum interwoven with current research and events. The M.H.A. program is comprised of 51 graduate semester credit hours.

A summer internship between the first and second year of study is an excellent opportunity to learn from a health industry leader. The internship offers students valuable experience in the health care field and is an excellent opportunity to blend academic preparation with hands-on experience. Positions are available throughout the United States.

As an option, students may choose an Administrative Residency, a 10-12 month paid residency that can assist in the transition from classroom to workplace through intensive exposure to a selected management career. It blends academic preparation with administrative practice. Students with little health administration experience may find the residencies beneficial. Residents are selected through competitive application processes.

A mentorship program utilizing local M.H.A. alumni and friends of the school gives students the opportunity to meet a variety of practicing health care professionals. Mentors are available in all segments of the health care field, and range from recent graduates to corporate officers and senior public officials.

Some students become involved as research assistants at the Bowen Health Research Center and the Center for Urban Policy and the Environment. These are IU's leaders in health policy and services research. The Bowen Center is a joint endeavor of the School of Medicine and the School of Public and Environmental Affairs.

Increasingly, our students are successfully competing for national administrative fellowships after graduation. Recent fellowships awarded to M.H.A.

program graduates include: Good Samaritan Health System in Nebraska, Winston Fellowship and Washington Hospital Group in Washington, D.C., Baylor Medical Center in Houston, Cleveland Clinics in Cleveland, and the American College of Healthcare Executives in Chicago. Most fellowships provide a two-year paid administrative experience and lead to permanent employment.

Admissions

In addition to the general requirements for admission to graduate study in the School of Public and Environmental Affairs, the following requirements generally must be met for admission to the Graduate Program in Health Administration:

1. Applicants must possess an undergraduate degree from an accredited institution and have a minimum overall undergraduate grade point average (GPA) of 3.0 (B) on a 4.0 scale. Applicants with a minimum GPA of 3.0 during the last half of their undergraduate education are shown preference.
2. Applicants must complete at least 3 credit hours each of undergraduate courses in introductory accounting, microeconomics, and statistics at an accredited institution with a minimum grade of C in each course. Students who have not completed these courses but who meet all other requirements may be accepted with deficiencies. These students are not usually permitted to enroll in the classes that require these courses as prerequisites until the deficiencies are removed.
3. Applicants must take the Graduate Record Examination (GRE) and achieve a composite score of at least 1,000 total in both sections. An applicant with a GRE score lower than 500 in any section may be required to participate in special academic counseling and evaluation prior to any admission decision. Additional course work may be required, and admission as a provisional student may be stipulated. Applicants who have been awarded an advanced degree may petition the admissions committee for waiver of the GRE requirement.

Mid-Career Credit Option

Students in the Master of Health Administration can receive Mid-Career credit for work experience obtained up through the semester in which they complete 24 credits toward the Master of Health Administration degree. The credits are to be awarded as follows:

3 credit hours – for a least one year of meaningful work experience in health administration.

6 credit hours – for two to four years of meaningful work experience in health administration.

9 credit hours – for four or more years of meaningful work experience in health administration.

Students may apply for the Mid-Career credit option upon application to the program or may seek the credits any time up to graduation. The admission committee will have the responsibility to evaluate each student request and determine if the work experience meets the requirements for the credit hours requests.

Degree Requirements

(51 credit hours)

A minimum of 51 credit hours, divided between required and elective courses, is required in the Master of Health Administration degree program. The M.H.A. curriculum begins with a foundation of theory and skill-building courses and makes a transition to course work that requires practical application of those skills in a variety of health care settings.

Part-time students must complete at least 6 credit hours each semester to remain in good standing. All students must complete the program's academic requirements within five calendar years of matriculation.

Required courses (45 credit hours):

- SPHA H501 U.S. Health Care: Systems, Policies, and Ethical Challenges (3 cr.)
 SPHA H502 Developing Strategic Capability in Health Care (3 cr.)
 SPHA H507 Management of Individual and Group Behavior (3 cr.)
 SPHA H508 Managing Health Care Accounting Information for Decision Making (3 cr.)
 SPHA H509 Financial Management Principles of Health Care (3 cr.)
 SPHA H510 Health Services Financial Management (3 cr.)
 SPHA H514 Health Economics (3 cr.)
 SPHA H516 Health Services Delivery and the Law (3 cr.)
 SPHA H518 Statistical Methods for Health Services (3 cr.)
 SPHA H521 Management Science for Health Services Administration (3 cr.)
 SPHA H612 Marketing Health Services Delivery (3 cr.)
 SPHA H623 Health Care Applications of Strategic Management (3 cr.)
 SPHA H628 Health Care Information Systems (3 cr.)
- One of the following courses:**
 SPHA H700 Residency (3-6 cr.) **or**
 SPHA H702 Internship in Health Services Management (3 cr.) **or**
 SPHA H735 Research in Health Administration (3-6 cr.)

Electives (9 credit hours)

Choose three of the following elective courses, or other electives approved by a faculty advisor:

- SPHA H515 Seminar in Health Policy: Special Topics (3 cr.)
 SPHA H517 Managerial Epidemiology (3 cr.)
 SPHA H606 Health Services Quality Improvement and Risk Management (3 cr.)
 SPHA H615 Health Care Outcomes and Decision Making (3 cr.)
 SPHA H626 Health Services Human Resources Management (3 cr.)
 SPHA H627 Seminar in Advanced Health Finance (3 cr.)
 SPHA H630 Readings in Health Services Administration (3 cr.)
 SPHA H650 Strategies for Career Preparation (1 cr.)
 SPEA V541 Benefit-Cost Analysis (3 cr.)

Course Waivers, Substitutions, and Challenge Examinations

Students may petition the program director to waive or make substitutions for required courses based on completion of satisfactory equivalent course work or by examination (if available). The following guidelines govern the consideration of these types of petitions.

Waivers of Required Courses The requirement for a particular course may be waived if the student furnishes evidence of equivalent graduate course work completed within a reasonable period of time from an accredited institution. It should be noted that credit is not given with a waiver—only an exemption from a particular course; another course is always substituted.

Substitutions As a general rule, the substitution of a course for one that is required in the M.H.A. curriculum is prohibited. On rare occasions, petitions for substitutions may be considered, and students who believe they would benefit from such a procedure should discuss the matter with their advisors.

Challenge Examination Students who believe they possess mastery of the subject matter stipulated in a given required course may request a challenge examination. If, in the opinion of the faculty, the student has demonstrated the requisite knowledge, academic credit for the course is authorized. The university fee structure for the cost of such an examination applies.

Joint Master's Degrees

Master of Health Administration–Doctor of Jurisprudence (M.H.A.–J.D.)

The School of Public and Environmental Affairs and the School of Law—Indianapolis have established a four-year, full-time program for the combined study of law and health administration. This course of study addresses the need for professionals who understand the legal and administrative frameworks necessary to function successfully as a health lawyer or a health services administrator.

The Master of Health Administration (M.H.A.) and the Doctor of Jurisprudence (J.D.) are awarded when the student meets the degree requirements of each school. All courses are offered on the Indianapolis campus. Successful completion of this rigorous 127 credit hour program provides the graduate sufficient depth and breadth in each discipline to be able to function effectively in the swiftly changing health field.

The delivery of health care and health services is the second largest industry in the United States, accounting for almost 14 percent of the gross national product. The importance of health care to our citizens has long been obvious.

What has become more apparent recently, however, is the growing impact of case law, statutes, and regulations on access to and availability of care; on the delivery of health care services; and, increasingly, on decisions relating to the appropriateness of individual treatment. For this reason, the Schools of Law and Public and Environmental Affairs have sought jointly to develop a strong academic curriculum to address the educational needs of health lawyers and health service administration executives as they seek to serve the public's needs.

Admissions

Applicants must apply for admission to each school and must meet the admission criteria published in each school's bulletin. Normally, applicants should apply to both the School of Law—Indianapolis and the School of Public and Environmental Affairs at the same time. However, a person enrolled in the School of Law may apply for admission to the Graduate Program in Health Administration up to the end of the second year of law study (approximately 57 credit hours). A student formally enrolled in the study of health administration may seek admission to the School of Law—Indianapolis up to the end of the first year of full-time study leading to the award of the Master of Health Administration (approximately 24 hours of graduate credit).

Academic Standing Grade point averages in the School of Law—Indianapolis and the School of Public and Environmental Affairs are computed separately. To continue in the joint program, the student must meet the academic standards in each school. A student failing in one school but meeting academic standards in the other may complete course work for the degree in the school in which the student is able to meet the academic standards. Such completion must be according to the same conditions (credit hours, internship, etc.) required of regular (noncombination) degree candidates. Students are eligible for honors in each school based on the criteria of each school.

Residency The student customarily completes the first 34 credit hours in the School of Law—Indianapolis. Thereafter, the student divides the remaining course work between the two schools, taking health administration courses and law courses concurrently. Thus, the student has a continuing educational experience in both schools.

Program Requirements

(127 credit hours)

Master of Health Administration (M.H.A.) Requirements

(45 credit hours)

Students must complete 43.5 credit hours distributed among the M.H.A. required core, electives, and a joint research paper.

Required Courses (34.5 credit hours):

- SPHA H501 U.S. Health Care: Systems, Policies, and Ethical Challenges (3 cr.)
- SPHA H502 Developing Strategic Capability (3 cr.)
- SPHA H507 Management of Individual and Group Behavior (3 cr.)

- SPHA H508 Managing Health Care Accounting Information for Decision Making (3 cr.)
- SPHA H509 Financial Management Principles of Health Care (3 cr.)
- SPHA H510 Health Services Financial Management (3 cr.)
- SPHA H514 Health Economics (3 cr.)
- SPHA H521 Management Science for Health Services Administration (3 cr.)
- SPHA H612 Marketing for Health Services Delivery (3 cr.)
- SPHA H623 Health Care Applications of Strategic Management (3 cr.)
- SPHA H628 Health Care Information Systems (3 cr.)

Elective Courses (6 credit hours)

Six credit hours of elective courses, chosen from the following:

- SPHA H517 Managerial Epidemiology (3 cr.)
- SPHA H518 Statistical Methods for Health Services (3 cr.)
- SPHA H626 Health Services Human Resources Management (3 cr.)
- SPHA H627 Seminar in Advanced Health Finance (3 cr.)
- SPHA H630 Readings in Health Services Administration (1-3 cr.)
- SPHA H650 Strategies for Career Preparation (1 cr.)
- SPEA V541 Benefit-Cost Analysis of Public and Environmental Policies (3 cr.)
- SPEA V639 Operations Management (3 cr.)

Joint Research Paper (6 credit hours)

SPEA H735 Research in Health Administration is to be completed in the last year of the combined program and jointly supervised by advisors from both schools.

Doctor of Jurisprudence (J.D.) Requirements

(82 credit hours)

Students are required to complete 82 credit hours of law courses and to satisfy all requirements for the Doctor of Jurisprudence degree.

Master of Health Administration– Master of Business Administration (M.H.A.–M.B.A.)

The combined M.H.A.–M.B.A. program enables the student to take a sequence of courses leading to the attainment of both degrees. Successful completion of this 78 credit hour program provides the graduate student with sufficient depth and breadth in each discipline to function effectively in a health care delivery system that is driven by business principles.

Admissions To participate in the joint program, students must apply and be accepted into both the School of Public and Environmental Affairs Master of Health Administration program and the Indianapolis Kelley School of Business Master of Business Administration program. To streamline the admission process, SPEA will accept the results of the GMAT exam in place of the GRE from applicants to the joint program.

Academic Standing Grade point averages for the two schools are computed separately. To continue in the joint program, the student must meet the academic standards in each school. Students failing in one school but meeting academic standards in the other school may complete work for the degree in the school in which they are able to meet the standards. Such completion must be upon the same conditions as required of regular (noncombination) degree candidates. Students are eligible for honors in each school based on the criteria of each school.

Program Advisors Once students have been accepted into this joint degree program, they should meet academic advisors to plan course sequencing. All M.B.A. core courses must be taken as intact modules. Full-time students typically take two M.H.A. and two M.B.A. courses each semester. Part-time students take either two M.H.A. or two M.B.A. courses each semester. Since M.B.A. courses must be taken as a cohort, part-time students will need to sequence all the M.B.A. courses in a block.

Program Requirements

(78 credit hours)

The following degree requirements are required of all students admitted to the program.

Master of Health Administration (M.H.A.) Requirements

(39 credit hours)

Students are required to complete 34.5 credit hours of SPEA courses and to satisfy all requirements for the joint degree.

- SPHA H501 U.S. Health Care: Systems, Policies, and Ethical Challenges (3 cr.)
- SPHA H507 Management of Individual and Group Behavior (3 cr.)
- SPHA H508 Managing Health Care Accounting Information for Decision Making (3 cr.)
- SPHA H510 Health Services Financial Management (3 cr.)
- SPHA H514 Health Economics (3 cr.)
- SPHA H516 Health Services Delivery and the Law (3 cr.)
- SPHA H518 Statistical Methods for Health Services (3 cr.)
- SPHA H623 Health Care Applications of Strategic Management (3 cr.)
- SPHA H627 Seminar in Advanced Health Finance (3 cr.)
- SPHA H702 Internship in Health Services Management (3 cr.) **or**
- SPHA H735 Research in Health Administration (3 cr.)

Master of Business Administration (M.B.A.) Requirements

(39 credit hours)

Students are required to complete 39 credit hours of business administration courses and to satisfy all requirements for the joint degree. For specific guidelines, see the Indianapolis Kelley School of Business Graduate Bulletin.

Master of Health Administration– Master of Science in Nursing (M.H.A.–M.S.N.)

The combined M.H.A.–M.S.N. program enables the student to take a sequence of courses leading to the attainment of both degrees. Successful completion of this rigorous 70.5 credit hour program provides the graduate nurse with sufficient depth and breadth in each discipline to be able to function effectively in the rapidly changing health field.

Admissions Applicants must have a bachelor's degree or its equivalent from an NLN-accredited school of nursing, meet the admission criteria of each school, and apply to both the School of Nursing (Indianapolis) and the School of Public and Environmental Affairs. If applicants are admitted to only one of the schools, they are permitted to attend that school and are required to meet the graduation requirements of that school.

Applicants must complete at least 3 credit hours each of undergraduate course work in accounting, microeconomics, and statistics with a grade of C or higher from an accredited institution.

It is preferred that the student apply to both schools simultaneously for the combined program. It is possible, however, for students already enrolled in the School of Nursing to apply for admission to the School of Public and Environmental Affairs up to the time they complete the second year of nursing study. It also is possible for a student enrolled in the School of Public and Environmental Affairs to seek admission to the School of Nursing up to the end of the first year of the M.H.A. course of study.

Academic Standing Grade point averages for the two schools are computed separately. To continue in the joint program, the student must meet the academic standards in each school. A student failing in one school but meeting academic standards in the other school may complete work for the degree in the school in which the student is able to meet the standards. Such completion must be upon the same conditions as required of regular (noncombination) degree candidates (i.e., 42 credit hours for School of Nursing and 60 credit hours for SPEA). Students are eligible for honors in each school based on the criteria of each school.

Program Advisors Students enrolled in the combined program are assigned co-advisors; one from each school. The co-advisors are responsible for reviewing each semester's progress to assure attainment of educational objectives. The co-advisors also help students resolve scheduling problems that might develop as a result of the combined program.

Program Requirements

(72-75 credit hours)

The following degree requirements are required of all students admitted to the program.

Master of Health Administration (M.H.A.) Requirements

(39 credit hours)

Students are required to complete 39 credit hours of SPHA courses and to satisfy all requirements for the joint degree.

Required Courses (34.5-37.5 credit hours)

SPHA H501 U.S. Health Care: Systems, Policies, and Ethical Challenges (3 cr.)

SPHA H502 Developing Strategic Capability (3 cr.)

SPHA H508 Managing Health Care Accounting Information for Decision Making (3 cr.)

SPHA H510 Health Services Financial Management (3 cr.)

SPHA H514 Health Economics (3 cr.)

SPHA H516 Health Services Delivery and the Law (3 cr.)

SPHA H521 Management Science for Health Services Administration (3 cr.)

SPHA H615 Healthcare Outcomes (3 cr.)

SPHA H621 Management Applications Skills I (3 cr.)

SPHA H628 Health Care Information Systems (3 cr.)

SPHA H702 Internship in Health Services Management (3 cr.)

BUS M540 Service Marketing (1.5 cr.)

Elective (3 credit hours)

An additional course approved by the program advisor.

Master of Science in Nursing (M.S.N.) Requirements

(30-33 credit hours)

Students are required to complete 21-30 credit hours of nursing courses and to satisfy all requirements for the joint degree. For specific guidelines, see the School of Nursing Graduate Bulletin.

Master of Public Affairs–Doctor of Jurisprudence (M.P.A.–J.D.)

The combined M.P.A.–J.D. program enables the student to take a sequence of courses leading to the attainment of both degrees.

Admissions The student must have a bachelor's degree from an accredited institution of higher education and must apply to both the School of Law—Indianapolis and the School of Public and Environmental Affairs. If the applicant is admitted to only one school, the applicant is permitted to attend that school and is required to meet the graduation requirements of that school. It is preferred that the student apply to both schools simultaneously for the combined program. It is possible, however, for a person already enrolled in the School of Law to apply for admission to the School of Public and Environmental Affairs up to the time that student completes the second year of law study. It is also possible for a student enrolled in the School of Public and Environmental Affairs to seek admission to the School of Law up to the end of the first year of the M.P.A. course of study.

Academic Standing Grade point averages in the School of Law—Indianapolis and the School of Public and Environmental Affairs are computed separately. To continue in the program, the student must meet the academic standards in each school. A student failing in one school but meeting academic standards in the other may complete work for the degree in the school in which the student is able to meet the academic standards. Such completion must be according to the same conditions (credit hours, residency, etc.) required of regular (noncombination) degree candidates. Students are eligible for honors in each school based on the criteria of each school.

School Residency Students in the joint program should enroll in courses through the School of Law—Indianapolis in the first year of the program and through the School of Public and Environmental Affairs in the second year of the program. In the third and fourth years, or until the program is completed, students should enroll through the school in which the majority of their credit hours reside in each enrollment period.

Program Requirements

(118 credit hours)

Master of Public Affairs (M.P.A.) Requirements

(31 credit hours)

Students are required to complete 34 credit hours of SPEA courses distributed among the M.P.A. core, a specialization, and a research paper.

Required Courses (15 credit hours):

SPEA V502 Public Management (3 cr.)

SPEA V506 Statistical Analysis for Effective Decision Making (3 cr.)

SPEA V517 Public Management Economics (3 cr.)

SPEA V560 Public Finance and Budgeting (3 cr.)

SPEA V600 Capstone in Public and Environmental Affairs (3 cr.)

Specialization (14 credit hours)

The student chooses a field of specialization and develops a program of specialization courses in consultation with the SPEA program advisor.

Research Paper (2 credit hours)

SPEA V590 Research in Public Affairs, a required research paper, is written during the final year of the program.

Doctor of Jurisprudence (J.D.) Requirements

(84 credit hours)

Students are required to complete 84 credit hours of law courses and satisfy all requirements for the degree Doctor of Jurisprudence.

Master of Public Affairs–Master of Arts in Philanthropic Studies (M.P.A.–M.A.)

The combined Master of Public Affairs with a concentration in nonprofit management and Master of Arts in Philanthropic Studies enables a student to take

a sequence of courses leading to the receipt of both degrees. This joint degree program focuses on the history, culture, and values of philanthropy as well as the managerial frameworks of public service and quasi-governmental institutions.

Admissions To participate in the joint degree program, students must apply and be accepted into both the Master of Public Affairs program and the Master of Arts in Philanthropic Studies program. Most students will apply for admission to both programs simultaneously. However, if admitted to one program first, the student should submit an application for admission to the other program before completing 24 credit hours toward the first program.

Academic Standing Grade point averages for the programs are computed separately. To continue in the program, the student must meet the academic standards in each school. A student failing in one school but meeting academic standards in the other school may complete work for the degree in the school in which the student is able to meet the standards. Such completion must be upon the same conditions as required of regular (noncombination) degree candidates. Students are eligible for honors in each school based on the criteria of each school.

Program Advisors Students enrolled in the combined programs are assigned co-advisors, one from each school. The co-advisors are responsible for reviewing each semester's progress to assure attainment of educational objectives. The co-advisors also help students resolve scheduling problems that might develop as a result of the combined program.

Program Requirements
(60 credit hours)

The following degree requirements are required of all students admitted to the program.

Master of Public Affairs (M.P.A.) Requirements
(36 credit hours)

Students are required to complete 36 credit hours of SPEA courses and to satisfy all requirements for the joint degree.

M.P.A. Core Requirements (18 credit hours):

- SPEA V502 Public Management (3 cr.)
- SPEA V506 Statistical Analysis for Effective Decision Making (3 cr.)
- SPEA V517 Public Management Economics (3 cr.)
- SPEA V540 Law and Public Affairs (3 cr.)
- SPEA V560 Public Finance and Budgeting (3 cr.)
- SPEA V600 Capstone in Public and Environmental Affairs (3 cr.)

Experiential Component (3 credit hours)

Each M.P.A. student must obtain relevant experience. This can be accomplished through an approved internship, SPEA V590 Research in Public Affairs, the SPEA mid-career credit option, or PHST P590 Internship in Philanthropic Studies. Students wishing to complete the dual degree program in the minimum credit hours should take PHST P590.

Degree Electives (3 credit hours)

One of the courses from the M.A. in Philanthropic Studies will fulfill this requirement.

Nonprofit Concentration (18 credit hours):

Both of the following:

- SPEA V521 The Nonprofit and Voluntary Sector (3 cr.)
- SPEA V525 Management in the Nonprofit Sector (3 cr.)

Nonprofit Theoretical Courses

One of the following:

- ECON E514 The Nonprofit Economy and Public Policy (3 cr.)
- HIST H509 History of Philanthropy in the West (3 cr.)
- PHIL P542 Ethics and Values of Philanthropy (3 cr.)

Nonprofit Application Courses

Two of the following:

- SPEA V522 Human Resource Management in Nonprofit Organizations (3 cr.)
- SPEA V526 Financial Management for Nonprofit Organizations (3 cr.)
- SPEA V557 Topics in Public Affairs: Proposal Development and Grant Administration (3 cr.)
- SPEA V558 Topics in Public Affairs: Fund Development for Nonprofit Organizations (3 cr.)
- SPEA V602 Strategic Management of Public and Nonprofit Organizations (3 cr.)
- PHST P535 Law of Nonprofit Organizations (3 cr.)

General Management Courses

One of the following:

- SPHA H507 Management of Individual and Group Behavior (3 cr.)
- SPEA V516 Public Management Information Systems (3 cr.)
- SPEA V539 Management Science for Public Affairs (3 cr.)
- SPEA V541 Benefit-Cost Analysis of Public and Environmental Policies (3 cr.)
- SPEA V562 Public Program Evaluations (3 cr.)
- SPEA V566 Executive Leadership (3 cr.)

Master of Arts (M.A.) in Philanthropic Studies Requirements

(24 credit hours)

Students are required to complete 24 credit hours in philanthropic degree courses and satisfy all requirements for the Master of Arts in Philanthropic Studies degree.

Master of Public Affairs–Master of Science in Nursing (M.P.A.–M.S.N.)

The combined Master of Public Affairs–Master of Science in Nursing program enables a student to take a sequence of courses leading to the receipt of both degrees.

Admissions The student must have a bachelor's degree from an accredited institution of higher education and must apply to both the School of Nursing (Indianapolis) and the School of Public and Environmental Affairs. If the applicant is admitted to only one school, the applicant is permitted to attend

that school and is required to meet the graduation requirements of that school. It is preferred that the student apply to both schools simultaneously for the combined program. It is possible, however, for a person already enrolled in the School of Nursing to apply for admission to the School of Public and Environmental Affairs up to the time that student completes the second year of nursing study. It is also possible for a student enrolled in the School of Public and Environmental Affairs to seek admission to the School of Nursing up to the end of the first year of the M.P.A. course of study.

Academic Standing Grade point averages in the School of Nursing and the School of Public and Environmental Affairs are computed separately. To continue in the joint program, the student must meet the academic standards in each school. A student failing in one school but meeting academic standards in the other may complete work for the degree in the school in which the student is able to meet the academic standards. Such completion must be on the same conditions (credit hours, residency, etc.) as required of regular (noncombination) degree candidates (i.e., 36 credit hours for nursing and 48 credit hours for SPEA). Students are eligible for honors in each school based on the criteria of each school.

Program Advisors Students enrolled in the combined program are assigned co-advisors, one each from the faculties of the School of Nursing and the School of Public and Environmental Affairs. The co-advisors are responsible for reviewing the student's progress each semester to assure attainment of educational objectives. The co-advisors also help students resolve scheduling problems that might occur as a result of the combined degree program.

Program Requirements
(61 credit hours)

The combined M.P.A.–M.S.N. program requires a minimum of 61 credit hours distributed between the Master of Public Affairs and the Master of Science in Nursing components, including a joint research paper.

Master of Public Affairs (M.P.A.) Requirements

(29 credit hours)

M.P.A. Core (18 credit hours):

- SPEA V502 Public Management (3 cr.)
- SPEA V506 Statistical Analysis for Effective Decision Making (3 cr.)
- SPEA V517 Public Management Economics (3 cr.)
- SPEA V540 Law and Public Affairs (3 cr.)
- SPEA V560 Public Finance and Budgeting (3 cr.)
- SPEA V600 Capstone in Public and Environmental Affairs (3 cr.)

Concentration (11 credit hours):

- SPEA V504 Public Organizations (3 cr.)

The remaining 8 credit hours consist of courses in a concentration chosen by the student in consultation with a SPEA advisor.

Master of Science in Nursing (M.S.N.) Requirements

(27 credit hours)

Students are required to complete 27 credit hours of nursing courses and to satisfy all requirements for the Master of Science in Nursing degree. For specific guidelines, see the School of Nursing Graduate Programs Bulletin.

Joint Research Paper (5 credit hours)

Credit for this supervised research is arranged and counts toward degree requirements in both schools. A minimum of 5 credit hours must be taken with at least 3 credit hours of research counting toward the M.S.N. degree and 2 credit hours of SPEA V590 Research in Public Affairs counting toward the M.P.A. degree. The topic must be selected no later than the end of the third year of the combined program, include elements of both disciplines, and be approved by the student's co-advisors. This paper must be completed in the last year of the combined program and jointly supervised by advisors from both schools.

Certificate Programs

Five graduate certificates are offered by the School of Public and Environmental Affairs at IUPUI: Certificate in Hazardous Materials Management; Certificate in Health Systems Management; Certificate in Nonprofit Management; Certificate in Planning Information Systems; and Certificate in Public Management. Certificate programs are flexible and adaptable to the needs of either precareer or in-service students.

Admissions

Admission Eligibility The student must have a bachelor's degree from an accredited college or university to apply. For the Certificate in Hazardous Materials Management, applicants must have completed one year of general chemistry.

Application Application forms and literature may be obtained from the same SPEA offices that offer material for the graduate degree programs. Students should apply to the SPEA admissions office on the campus where they plan to enroll.

Application Deadlines Application deadlines for the certificate programs vary by campus. For specific guidelines, check with the specific campus.

Application Fee Students must pay a nonrefundable application fee.

Program Restrictions

1. Students enrolled in a certificate program must complete it within 15 credit hours of approved SPEA course work with a minimum cumulative GPA of 3.0 (B). Failure to do so results in automatic dismissal from the certificate program.
2. Students who have completed more than three SPEA courses are not eligible for admission to a certificate program.
3. Transfer credit, course substitutions, or course waivers are not accepted for fulfilling the public management, nonprofit management, or health systems management certificate requirements. Students in the Hazardous Materials Management Certificate Program may utilize these options;

however, they must first have the approval of their campus graduate program advisors.

4. Students admitted to a SPEA graduate degree program are not eligible for admission to the certificate program or eligible for the awarding of a certificate.
5. Admission to or successful completion of a certificate program does not guarantee subsequent admission to a SPEA graduate degree program.
6. Students enrolled in a certificate program who apply to SPEA's graduate degree programs must meet all existing admission requirements.
7. Students planning to request admission to a SPEA graduate degree program after successfully completing a certificate program should refer to the application procedure presented earlier in this bulletin.

Certificate in Hazardous Materials Management

The Certificate in Hazardous Materials Management is a 15 credit hour program of study. The program provides managers and technicians in concerned organizations and agencies, public and private, with training in the management of hazardous materials. The certificate program provides an information base that managers and technicians can use to develop, implement, manage, and assess hazardous waste programs for corporate and regulatory agencies. Graduate students in other disciplines can use the program to supplement their primary fields with course work in hazardous materials management, possibly using the certificate courses as part of a doctoral or master's minor.

Requirements

(15 credit hours)

Required Courses (15 credit hours):

- SPEA E510 Environmental Regulation and Compliance (3 cr.)
 SPEA E520 Environmental Toxicology (3 cr.)
 SPEA E542 Hazardous Materials (3 cr.)
 SPEA E533 Environmental Management Systems: ISO 14001 Based (3 cr.)
 SPEA E555 Topics in Environmental Science: Industrial Hygiene (3 cr.)

Students who have significant knowledge and expertise in one of the required courses may substitute other specialty courses with the approval of the campus graduate program advisor. No more than two such substitutions are permitted.

Certificate in Health Systems Management

The Certificate in Health Systems Management is a 15 credit hour program of study. The certificate program is designed to serve administrators and physicians who are actively engaged in managerial duties; physicians and health care workers who may want to pursue managerial duties in the future; or those who want to gain greater understanding of the structure,

processes, and goals of their health care organizations and the environment in which they operate.

Requirements

(15 credit hours)

Required Courses (9 credit hours):

- SPEA H501 U.S. Health Care: Systems, Policies, and Ethical Challenges (3 cr.) **or** SPEA V545 The U. S. Health Care System (3 cr.)
 SPEA H502 Developing Strategic Capability (3 cr.)
 SPEA H503 Principles of Health Systems Management and Policy Development (3 cr.)
 SPEA H509 Financial Management Principles of Health Care (3 cr.)

Electives (6 credit hours)

The remaining courses will be determined by the faculty and the needs of the student and must be authorized by faculty.

Certificate in Nonprofit Management

The Certificate in Nonprofit Management is a 15 credit hour program of study. The certificate is designed to serve the needs of individuals who would like exposure to the nonprofit sector and nonprofit management issues but who do not wish or need to pursue a degree in nonprofit management. The certificate complements other courses of study or career experience in such areas as social work, library science, and parks and recreation. Students pursuing a nonprofit management certificate gain an understanding of how to work in and with nonprofit organizations.

Requirements

(15 credit hours)

Required Courses (9 credit hours):

- SPEA V522 Human Resource Management in Nonprofit Organizations (3 cr.)
 SPEA V525 Management in the Nonprofit Sector (3 cr.)
 SPEA V526 Financial Management for Nonprofit Organizations (3 cr.)

Electives (6 credit hours)

Two additional SPEA graduate courses are selected with the approval of the student's advisor. A sampling of current course titles includes: Nonprofit and Voluntary Sector, Ethics and Values of Philanthropy, Fund Development for Nonprofit Organizations, Public Relations in Nonprofits, and History of Philanthropy in the West.

Students interested in continuing for the Master of Public Affairs should consider selecting the electives from the nonprofit management concentration.

Certificate in Planning Information Systems

The Certificate in Planning Information Systems is a 14-15 credit hour program of graduate study. Students will have the opportunity to pursue in-depth study of the use of computers and analytical methods in planning, with an emphasis on the use of geographic information systems. Professionals currently working in planning

who wish to develop their skills will find the certificate an appropriate vehicle. Students beginning their careers in planning will also find the certificate useful for developing skills for professional practice and gaining an understanding of planning.

Requirements

(14-15 credit hours)

Required Courses (9 credit hours):

- SPEA P520 Methods in Planning and Policy Analysis (2 cr.)
 SPEA P525 Geographic Information Systems for Planning (2 cr.)
 SPEA P527 Planning Applications of Geographic Information Systems (2 cr.)
 SPEA V517 Public Management Information Systems (3 cr.)

Electives (5-6 credit hours)

In addition, students take two additional courses in planning or related field, approved by an academic advisor.

Certificate in Public Management

The Certificate in Public Management is a 15 credit hour program of study in public management. The certificate program is flexible enough to be adapted to the needs of precareer and in-service individuals. Graduate students in other disciplines can use the program to supplement their primary fields with course work in public management, possibly using the certificate courses as part or all of a doctoral or master's degree minor. Career employees of public and private-sector agencies seeking courses in public management, and especially those changing from professional or technical roles to managerial roles, find the certificate program beneficial.

Requirements

(15 credit hours)

Required courses (9 credit hours):

- SPEA V502 Public Management (3 cr.)
 SPEA V560 Public Finance and Budgeting (3 cr.)
 SPEA V561 Public Human Resources Management (3 cr.)

Electives (6 credit hours)

Two additional SPEA graduate public affairs courses.

Note: Students interested in continuing on for the Master of Public Affairs degree should consider selecting the two elective courses from the M.P.A. core; one of the courses recommended is V506 Statistical Analysis for Effective Decision Making. These courses may also be applied to the Master of Planning upon admission to the M.Pl. program.

Graduate Courses

The abbreviation "P" refers to course prerequisites, and the abbreviation "C" indicates courses that should be taken concurrently. The number of credit hours is indicated in parentheses following the course title.

Criminal Justice Courses

J501 Evolution of Criminological Thought and Policy (3 cr.) This course provides an intensive introduction to the theoretical literature on crime and delinquency. Its purpose is to develop students' ability to critically evaluate and compare theories of crime as they apply to public policy and the criminal justice system.

J502 Research Methods in Criminal Justice and Public Affairs (3 cr.) This course examines research techniques necessary for systematic analysis of the criminal justice system, offenders' behavior, crime trends, and program effectiveness. The course requires that students actively pursue such techniques as conducting interviews, coding data, and designing studies. Criminological research will be critically examined.

J550 Topics in Criminal Justice (1-3 cr.) Selected research and special topics in criminal justice such as violence; history of criminal prosecution; and alcohol, drugs, and crime.

J582 Criminal Justice Systems (3 cr.) Detailed examination of operations of police, courts, and correctional agencies. Study of management problems in system response to criminal activity. Development of understanding of relationships among system components. Examination of major policy issues in criminal justice, with emphasis on decision-making techniques.

J587 Criminal Violation: Problems and Characteristics (3 cr.) Commonalities in criminal behavior. Circumstances leading to the commission of the criminal act, subsequent perceptions of them. Family, community, and other environments affecting criminal behavior. Behavioral consequences of processes of crime control.

J588 Law and Control in Society (3 cr.) The role of law versus other forms of social control. How social change and social institutions shape the law. Social factors influencing the administration of law.

J666 Criminal Justice Policy and Evaluation (3 cr.) An empirical assessment of the foundations of contemporary and historical attempts to control or prevent crime. Major policies, programs, and strategies are reviewed and critically analyzed. Specific topics and policies will vary in this capstone seminar.

J682 Criminal Justice Planning and Management (3 cr.) Issues in criminal justice planning and management in policing, courts, and corrections are addressed. The problems faced by administrators in the implementation and development of public policies are considered.

Environmental Science Courses

The SPEA 400-level environmental science courses listed below, which are described in the undergraduate section of this bulletin, may be taken for graduate credit if specifically listed within degree requirements or approved by a graduate advisor.

E400 Topics in Environmental Studies (approved sections) (3 cr.)

E410 Introduction to Environmental Toxicology (3 cr.)

E431 Water Supply and Wastewater Treatment (3 cr.)

E440 Wetlands: Biology and Regulation (3 cr.)

E451 Air Pollution and Control (3 cr.)

E452 Solid and Hazardous Waste Management (3 cr.)

E455 Limnology (4 cr.)

E475 Techniques of Environmental Science (3 cr.)

E510 Environmental Regulation and Compliance (3 cr.) The course provides an in-depth study of federal, state, and local regulations and requirements pertaining to the management of hazardous materials.

E515 Fundamentals of Air Pollution (3 cr.) The purpose of the course is to provide the student with an understanding of the field of air pollution, including the behavior of the atmosphere and pollutants in the atmosphere, effects of air pollution, regulatory programs, engineering controls, and air quality management programs.

E520 Environmental Toxicology (3 cr.) An examination of the principles of toxicology and the toxicity resulting from environmental exposure to chemical substances.

E526 Applied Mathematics for Environmental Science (3 cr.) P: differential and integral calculus. Applications of mathematics to modeling environmental processes. Applied calculus, numerical analysis, differential equations.

E527 Applied Ecology (3 cr.) P: one introductory-level ecology course. Ecosystem concepts in natural resource management. Techniques of ecosystem analysis. Principles and practices of ecological natural resource management.

E529 Application of Geographic Information Systems (3 cr.) Conceptual and technical overview of geographic information systems (GIS). Applications in various fields of public affairs and environmental science.

E533 Environmental Management Systems: ISO 14001 Based (3 cr.) This course provides students with the knowledge and skills to establish or improve an environmental management system that is compatible with ISO (International Organizations for Standardization) 14001, an international, voluntary standard that is emerging as a best-management practice for environment.

E535 International Environmental Policy (3 cr.) This course examines the forces in society alternately promoting and impeding cooperation in the environmental realm. Our inquiry is guided by four interrelated course units: (1) international environmental law, (2) international political order, (3) the environment and global markets, and (4) sustainable development.

E536 Environmental Chemistry (3 cr.) P: one course in chemistry with lab. Gas law calculations,

stoichiometry, steady and non-steady state box models, stratospheric ozone, chemical kinetics, photochemical smog, greenhouse effect, CO₂ equilibria, chemodynamics, pesticides, and toxic metals.

E537 Environmental Chemistry Laboratory

(3 cr.) P or C: E536 or consent of instructor. Experimental work in environmental chemical analysis to demonstrate analytical methods and instrumentation used in environmental laboratories, having reference to air, water, and soil quality.

E541 Controversies in Environmental Health

(3 cr.) Research, presentation, writing, and argumentation skills will be developed using a debate format. The course focuses on topics related to environmental health and the health of the environment.

E542 Hazardous Materials (3 cr.) Topics of discussion include properties and chemistry of hazardous materials; recognition of potential hazards associated with the use, storage, and transport of these materials; emergency and spill response; health effects of hazardous materials; hazard communication and personal protection; and case studies related to the management of hazardous materials.

E546 Stream Ecology (3 cr.) P: E455. Advanced limnology course that explores patterns and processes characterizing stream ecosystems. Takes a holistic approach that includes: physical, chemical and biological stream characteristics; watershed patterns; and stream processes (trophic dynamics, colonization and dispersal, community dynamics, and responses to change). A four-hour weekly lab and group project develop necessary analytical skills.

E547 Applied Earth Science (3 cr.) Principles of the earth sciences and their applications to environmental analysis and management. Identification, quantification, and analysis of critical components of watershed systems. Interaction of human activities with the physical environment.

E548 Applied Earth Science Laboratory (3 cr.)

Principles and methods of sampling, collection, measurement, analysis, and interpretation of data concerning processes and features of the physical environment. Students will become familiar with field and laboratory equipment within the context of research projects. Emphasis is placed on practical application of basic techniques to real problems.

E549 Environmental Planning (3 cr.) Concepts and methodologies in environmental planning. The planning process. Topics may include environmental impact assessment, economic approaches to environmental decision-making, use of computer models in environmental planning, geographic information systems in environmental planning, environmental perception, and construction of environmental indices. Team projects with planning agencies.

E552 Environmental Engineering (3 cr.)

Concerned with biological, chemical, physical, and engineering knowledge essential to the achievement of environmental quality objectives. Theory and design of unit operations and processes for air, water, and land pollution abatement. Emphasis on water quality

control, industrial wastewater treatment, and solid waste management.

E555 Topics in Environmental Science (2-3 cr.)

Selected research and discussion topics in environmental science. Usually organized in a seminar format.

E560 Environmental Risk Analysis (3 cr.)

P: E538, or V506, or consent of instructor. Methods of probabilistic risk analysis applied to environmental situations. Event trees, fault trees, toxicological estimation, ecological risk analysis. Social and psychological aspects of risk. Individual and group projects assessing some real environmental risk are an important part of the course.

E562 Solid and Hazardous Waste Management

(3 cr.) The purpose is to provide students with a technical foundation in areas of solid and hazardous waste management which can be applied to the examination of policy options. Topics include characterization of the waste stream, regulations, health and environmental risks, liability issues, management technologies, and treatment and disposal options.

E579 Readings in Environmental Science

(1-3 cr.) Readings on selected topics in environmental science to be arranged with the individual instructor.

E620 Environmental Analysis Workshop (3 cr.)

Projects in environmental analysis.

E625 Research in Environmental Science

(1-12 cr.) Research on selected topics in environmental science to be arranged with the individual instructor.

Health Administration Courses

The SPEA 400-level course listed below, which is described in the undergraduate section of this bulletin, may be taken for graduate credit if specifically listed within degree requirements or approved by a graduate advisor.

H433 Industrial Hygiene and Radiological Health (3 cr.)

Health Administration Courses (SPHA)

H501 U.S. Health Care: Systems, Policies, and Ethical Challenges (3 cr.) Study of health, illness, and disease trajectories and the systemic components that mold the health care system. Ideological paradigms predicting utilization and health behaviors are addressed, as are guidelines for ethical decision-making and problem analysis. Formulation and implementation of organizational and governmental policies and their associated theoretical assumptions are addressed.

H502 Developing Strategic Capability (3 cr.)

This course explores strategic management roles in health care. Application of strategic management theories, concepts and principles; and an understanding of managerial roles in organizations are emphasized. Managerial process, management theories, leadership, organizational design, and strategic management are examined.

H507 Management of Individual and Group Behavior (3 cr.) This course provides a conceptual framework for understanding behavior in the work environment by introducing concepts concerning effective management of people in organizations. Key theories and concepts in the field of organizational behavior will be introduced. The focus of this course is at the micro level of analysis, addressing topics such as individual theories of motivation, job design, and diversity issues; management of work teams; group decision making; managing conflict; and leadership, influence, and power issues.

SPEA H508 Managing Health Care Accounting Information for Decision-Making (3 cr.)

P: undergraduate accounting. An examination of the analytical techniques used in the financial management of health care organizations, with emphasis on accounting and financial analysis, short-term asset management, and capital project analysis. Conceptual and quantitative practice is provided using cases and computer spreadsheet programs.

H509 Financial Management Principles of Health Care (3 cr.)

P: undergraduate accounting. In this course we utilize a case-based approach to study the four major issues (or parts) that encompass long-term financial management. Long-term financial management involves the allocation of a firm's financial resources with a goal of maximizing shareholder value.

H510 Health Services Financial Management

(3 cr.) P: H509. An examination of cost accounting techniques used in health care organizations, with emphasis on measuring and using cost accounting information for planning, control, and nonroutine decision making. Conceptual and quantitative practice is provided using cases and computer spreadsheet programs.

H514 Health Economics (3 cr.) P: 3 credit hours of undergraduate economics. Examines the principles and application of economic analysis in the health field and the economist's approach to health care issues. Provides insights offered by economic analysis of specific health issues and problems.

H515 Seminar in Health Policy: Special Topics

(3 cr.) P: SPHA H501, H503, or consent of instructor. Exploration of health policy topics from economic, financial, sociological, political, and psychological perspectives. Analytical paradigms are applied to organizational or macro-policy making issues that vary in response to changing environments. May be repeated once with advisor's approval.

H516 Health Services Delivery and the Law

(3 cr.) Medical-legal concepts related to hospitals and other health services organizations. Course provides an in-depth understanding of the law and the legal processes affecting the health services system. Presentation of the elements of administrative and agency processes, torts, contracts, facilities, physicians, patients, and personnel.

H517 Managerial Epidemiology (3 cr.) Examines general epidemiologic methods such as population descriptive techniques, use of health indicators and secondary health-related data sources. Includes

design, administration, and analysis of observational and experimental studies. Emphasis will be on the use of epidemiologic techniques to assess community health, determine community risk factors, and evaluate community-based programs.

H518 Statistical Methods for Health Services (3 cr.) P: 3 credit hours of undergraduate statistics. Study of the quantitative techniques commonly used to examine health-related data. Includes univariate, bivariate, and multivariate techniques. Emphasis is on using statistical techniques to make policy and administrative decisions in a health services setting. Students use standard computer software to analyze data.

H519 Environmental Health (3 cr.) This course provides a broad yet in-depth investigation of human interaction with the environment, the major elements of environmental health, and the effects which uncontrolled environmental hazards may have on people's physical, mental, and social well-being.

H521 Management Science for Health Services Administration (3 cr.) Focus is on management science methods, as applied to health sciences administration. Includes treatment of decision theory, constrained optimization, and probability simulation.

H604 Ambulatory Care and Managed Care Programs (3 cr.) P: SPHA H501, H503, or V504, or consent of instructor. Study of the organizational and managerial aspects of ambulatory health services delivery. Focus on delivery strategies and organizational models and on the operational issues of financial control, personnel, regulation, and evaluation.

H605 Multi-Institutional Systems and Arrangements (3 cr.) P: H501, H503, V504, or consent of instructor. Students will be exposed to developing innovations in health services delivery structures in both the proprietary and nonprofit sectors. Emphasis will be placed on the organization and management of multi-institutional arrangements such as sharing, mergers, management contracts, consortium, and others.

H606 Health Services Quality Improvement and Risk Management (3 cr.) P: H501, H503, and V504. Critically examines the concepts, strategies, and techniques related to the improvement of the quality of health service delivery. Addresses the increasing need to enhance productivity given the impact of external and other factors on the workplace. Principles and application of risk management concepts and techniques, including insurance, are emphasized.

H607 Public Health Organization and Management (3 cr.) The course provides a broad overview of the history of public health in the United States and an analysis of the structure and function of public health and voluntary health agencies.

H612 Marketing for Health Services Delivery (3 cr.) This course focuses on the marketing problems and strategies of health care organizations. Subjects include the nature of health care services, organizing for health service delivery, managing health services demand, tailoring customer mix, and managing supply in health care services.

H615 Health Care Outcomes and Decision Making (3 cr.) P: H501, H502, H514, and H518. Application of health outcomes measures in decision-making and evaluation in various health service settings. Includes designing and implementing evaluation plans of health and social programs. Emphasis on evaluation strategies, measurement of health outcomes, and management decision-making.

H623 Health Care Applications of Strategic Management (3 cr.) P: H501, H502, H510, and H521. This last course of the series in the capstone sequence is designed to assist students in synthesizing and summarizing all of the previous course work. Emphasis is on "real-world" case situations and requires active participation by the students. Case studies chosen reflect current management issues in health services administration.

H626 Health Services Human Resources Management (3 cr.) This course provides the knowledge and skills needed to understand the application of personnel and labor relations techniques to the health services sector, with particular emphasis on human resources management, employee benefit programs, and labor relations as applied to the health services delivery organization.

H627 Seminar in Advanced Health Finance (3 cr.) P: H509 and H510. An advanced seminar in health services management dealing with cases, problems, and contemporary health finance issues. Student presentations emphasized.

H628 Health Care Information Systems (3 cr.) A study of the terminology, technology, and application of information systems in various health care settings. Topics include the gathering, organization, storage, and retrieval of complex data banks, as well as assessment of health service data needs and considerations in developing information systems. Includes many computer-based exercises.

H630 Readings in Health Services Administration (1-3 cr.) Supervised readings in selected areas of health services management, policy, and planning. For second-year students; open to others by arrangement.

H640 Topics in Health Services Administration (1-3 cr.) Selected research and discussions emerging in health services administration. Topics, organized in a semester-by-semester seminar format, will not cover topics available in other courses.

H650 Strategies for Career Preparation (1.5 cr.) This course will provide guidance in finding a summer internship and developing the skills necessary to obtain and work in a summer internship. Skills covered include interviewing, resume development, internship design, and other work-related skills.

H700 Residency (1-6 cr.) Requires the equivalent of 6 credit hours of on-site experience under the supervision of a qualified preceptor and program faculty; students who opt for longer residencies may continue to register for this course each semester. Grading is on an S/F basis.

H702 Internship in Health Services Management (3 cr.) P: H501, H509, H514, and H650. Requires the equivalent of a minimum of 3 credit hours of on-site experience under the supervision of a qualified preceptor and program faculty. Grading is on a S/F basis.

H735 Research in Health Administration (3-6 cr.) P: all core courses or consent of instructor. Field research conducted under the direction of a faculty member. Designed for advanced students and those who have elected not to take a residency. Grading is on a S/F basis.

Planning Courses

P500 Foundations of Planning (3 cr.) Overview of planning theory and practice. Course considers planning history, normative and applied theories of planning, approaches to planning, and ethics in planning. Course presents a critical perspective on state, regional, and local planning processes, how organizational structure and group processes affect the planning process, and general approaches to conflict negotiation and resolution.

P510 Social and Economic Aspects of Human Settlement (2 cr.) Examination of the development and growth of human settlement and social and economic aspects of regional policy. Topics include location theory, land use and zoning, economic development, population and employment, social service delivery and use, and planning for diversity.

P515 Physical Systems Development and Infrastructure (3 cr.) Examination of the physical environment and its role in development, environmental problems and policies, and the man-made physical infrastructure. Topics include soils, hydrology, solid waste management, transportation, air pollution, urban ecology, and recreation.

P520 Methods for Planning and Policy Analysis (2 cr.) P: V506. Application of analytical methods in the planning process. Topics include collection of information for planning, evaluation methods, forecasting techniques, and spatial analysis methods.

P525 Geographic Information Systems for Planning (2 cr.) Introduction to the principles of geographic information systems for use in planning. Covers representation of data, sources of data, analysis with geographic information systems, and the development of systems for planning. Emphasizes the learning of the use of geographic information systems software.

P527 Planning Applications of Geographic Information Systems (2 cr.) P: P525 or consent of instructor. The development of geographic information systems applications to address problems in planning. Consideration of a range of planning applications of geographic information systems. Advanced use of geographic information systems, including network and spatial analysis and the development of custom applications using geographic information systems software.

P530 Land Use Law (3 cr.) Public and private control of land use. Legal basis for public planning and regulation, zoning, subdivision regulations, and other forms of public regulation.

P532 Site Planning and Urban Design (3 cr.)

Examination of prerequisites for site planning, including environmental, legal, and infrastructure consideration. Development of basic graphic design skills. Application to development of site plans at various scales. Introduction to urban design principles.

P540 Community and Neighborhood

Development Planning (3 cr.) Examination of the role of neighborhoods in planning; methods of neighborhood analysis; government intervention; issues in community development; planning for neighborhood and community development, including citizen participation and institutional mechanisms; and implementation.

P550 Topics in Planning (3 cr.) Selected research and discussion topics vary by semester. May be repeated for credit.

P580 Readings in Planning (1-3 cr.) P: written consent of instructor. Readings on selected topics in planning.

P585 Practicum in Planning (1-6 cr.) P: prior approval of the director of the Graduate Program in Planning. Students hold work assignments with planning agencies. Requires written evaluations by supervisor and submission of written reports by student. Grading is on an S/F basis.

P590 Research in Planning (1-3 cr.) P: written consent of instructor. Research on selected topics in planning.

P600 Portfolio Assessment (1 cr.) Capstone seminar addresses professional ethics in planning and requires assembly, evaluation, and presentation of portfolio of work completed while in Master of Planning program. Written consent of program director required. Grading is on an S/F basis.

P610 Planning Workshop (3 cr.) P: written consent of instructor. Students work as a group on a complex planning problem for a public sector client. Presentation of findings made to client.

P630 Strategic Planning (3 cr.) Strategic planning and strategic management are processes used by organizations to align their actions with their mission, goals, and objectives. This course describes the theory and practice of strategic planning and management in public and nonprofit organizations, focusing on the methods that planners and managers use to ensure such alignments.

P650 Planning Seminar (3 cr.) P: written consent of instructor. Student research and presentation on selected topics intended to integrate the educational experience. Preparation of final professional report.

Public Affairs Courses**V500 Quantitative Tools for Public Affairs**

(1-3 cr.) A modular presentation of mathematical and statistical concepts designed to prepare students for V506 Statistical Analysis for Effective Decision Making. Representative module topics include basic algebraic concepts, probability, computer use, and matrix algebra.

V502 Public Management (1-3 cr.) Analysis of concepts, methods, and procedures involved in

managing public organizations. Problems of organization, planning, decision making, performance evaluation, and management of human resources are considered. Cases are drawn from a variety of public services found at federal, state, and local levels of government.

V504 Public Organizations (1-3 cr.) This course focuses on the behavior and theory of public organizations in four areas: (1) individuals and groups in public organizations, (2) the design of public organizations, (3) organization-environment relations, and (4) interorganizational relations.

V506 Statistical Analysis for Effective Decision Making (3 cr.) Noncalculus survey of concepts in probability, estimation, and hypothesis testing. Applications of contingency table analysis and analysis of variance, regression, and other statistical techniques. Computer processing of data emphasized.

V507 Data Analysis and Modeling for Public Affairs (3 cr.) P: E538 or V506. Focus on analytical models and their use in solving problems and making decisions in the public sector. Discussion of standard approaches to modeling and estimation of parameters.

V508 Topics in Quantitative Analysis (1-3 cr.) P: consent of instructor. Study and application of selected quantitative methods of analysis. Additional topics that are not included in V506 and V507 may be presented, or more advanced examination of topics that are introduced in V506 or V507 may be presented.

V509 Administrative Ethics in the Public Sector (3 cr.) Ethical conduct in the public sector is examined. Topics covered could include personal ethical responsibility, deception, corruption, codes of ethics, policymaking, morality, politics, and whistle blowing. Case studies and media material will be used to illustrate these and other such issues affecting the workplace.

V510 Government Regulation in Market Economies (3 cr.) P: V517 or consent of instructor. An overview of government regulation and involvement in the private sector and of public policy consequences of government action in market economies. Analysis of case studies in business-government relations.

V512 Public Policy Process (1-3 cr.) An examination of the role of public affairs professionals in policy processes. Focuses on relationships with political actors in various policy areas.

V516 Public Management Information Systems (3 cr.) This course focuses on the application of information systems concepts and tools to challenges and opportunities in the public sector. Topics covered will include current trends in information systems; managerial use of information systems; hardware, software, and telecommunications; systems development processes and practices; and strategic and policy issues in information systems.

V517 Public Management Economics (3 cr.) This course focuses on applications of the principles and concepts of intermediate microeconomic theory and managerial economics to public sector management

decisions and policy analysis. The course utilizes case studies to give students opportunities to recognize the economic dimensions inherent in the public policy problems and to develop an analytical problem-solving orientation.

V518 Intergovernmental Systems Management (1-3 cr.) Discussion of theories and approaches to systems management, including responsibilities and tasks of public systems. Examination of intergovernmental relationships and intralocal governmental relationships; treatment of organizational and systems design; as well as planning, decision making, and control of public systems. Discussion of applications to services such as environment, health, and human services.

V519 Database Management Systems (3 cr.) This course provides students with an in-depth knowledge of database design and management in public organizations. The students create a conceptual, logical, and physical design of databases; build models of data required by users with modeling formalisms and computer-aided software engineering tools; and design queries using leading database software packages.

V520 Environmental Policy Analysis (3 cr.) The interrelationships among social, technical, and natural systems. Theories of growth. Causes and implications of environmental problems. Alternative policies and mechanisms for environmental control and bases for choice.

V521 The Nonprofit and Voluntary Sector (3 cr.) Same as PHST P521. The theory, size, scope, and functions of the nonprofit and voluntary sector are covered from multiple disciplinary perspectives including historical, political, economic, and social.

V522 Human Resource Management in Nonprofit Organizations (3 cr.) This course provides an overview of the human resource management areas necessary for the productive functioning of nonprofit organizations. Theories of motivation applicable to the management of staff and volunteers and personnel topics of recruitment, selection, board-staff relations, compensation, training, and development are covered.

V523 Civil Society and Public Policy (3 cr.) Exploration of interaction of public policy and nonprofit organizations, drawing on history, political theory, and social science. Includes examination of regulations and taxation. Depending on instructor's interests, course covers nonprofit role in selected policy arenas (such as environment and poverty) and industries (such as international development and health care).

V524 Civil Society in Comparative Perspective (3 cr.) An exploration of state-society relationships in a variety of regimes and time periods. Focuses on ways regimes' policies affect the existence and contribution of those nongovernmental and nonprofit organizations that stand between the individual and the state and how nonprofit organizations shape the policy agenda of a regime.

V525 Management in the Nonprofit Sector (3 cr.) P: V521 or PHST P521. An examination of nonprofit organizations and their role in society.

Management issues and public policy affecting these organizations are discussed. Primary emphasis is on U.S. organizations, but attention is given to the global nature of the sector.

V526 Financial Management for Nonprofit Organizations (3 cr.) This course emphasizes a thorough understanding of the language and key concepts of nonprofit financial management. A working knowledge of the basic analytical tools used in financial decision making for nonprofit organizations will be examined through the use of computer software.

V529 Seminar in Career and Professional Development (1 cr.) Introduction to career development in public and environmental affairs. Orientation to career development approaches and resources. Discussion and practice of professional skills and techniques. Orientation to career development opportunities. Grading is on an S/F basis.

V539 Management Science for Public Affairs (3 cr.) P: V506. Focuses on management science methods as applied to public affairs. Includes treatment of decision theory, constrained optimization, and probability simulation.

V540 Law and Public Affairs (1-3 cr.) Explanation of law in society and its influence on public sector operations. Examination of some of the central substantive areas of the study of law, including regulatory processes, administrative adjudication, the Administrative Procedures Act, ombudsmen, and citizen rights, among others.

V541 Benefit-Cost Analysis of Public and Environmental Policies (3 cr.) P: V517 or consent of instructor. A course applying benefit-cost analysis to public and environmental policies. The first part of the course develops the foundation of benefit-cost analysis. The second part of the course consists of case studies applying benefit-cost analysis to actual policy decisions.

V542 Governmental Financial Accounting and Reporting (3 cr.) P or C: V560. An introduction to the fundamentals of accounting in business, nonprofit, and public sectors. Intended only for students without previous accounting courses. Primary emphasis is on municipal entity fund accounting, including the development and use of financial statements.

V543 Health Services Management (3 cr.) A course that integrates theory and application with respect to management of health service organizations. Emphasis on the role of managers and management within formal health service organizations. Current management and organization theories are applied to an understanding of health care delivery settings.

V545 The U.S. Health Care System (3 cr.) An analysis of the delivery of health care in the United States from 1900 to the present. Major system components are defined and studied with emphasis on current health care policy. Topics include the organization of health care delivery on federal, state, and local levels, in both public and private sectors.

V546 Health Services Utilization (3 cr.) An examination of problems of access to health care and the utilization of health services. The social, political, and individual factors associated with utilization are studied, along with social change and control strategies. Special emphasis is given to power and the definition of power in the system.

V547 Negotiation and Dispute Resolution for Public Affairs (3 cr.) Students will learn the skill of interest-based negotiation through role play and simulation. Students will learn about dispute resolution techniques such as mediation, arbitration, fact finding, early neutral evaluation, ombudsmanship, and facilitation. The course covers dispute resolution in federal government and in the context of public, environmental, labor, and business disputes.

V550 Topics in Public Affairs (1-4 cr.) Selected research and discussion topics organized on a semester-by-semester basis, usually with significant student input in the course design.

V551 Topics in Comparative Public Policy (3 cr.) The role of administrative and political systems in an international setting that focuses on industrial policy as developed between collaborative governments and their links to the key countries of Asia, Europe, the Americas, and Africa will be examined in topic settings. Related readings and published research will also be used.

V554 Human Services Administration (3 cr.) Focus is on policy, management, and organization relating to a variety of human service systems. Special attention is given to the management of social programs in the environmental system.

V556 Topics in Human Services Administration (3 cr.) Readings and research on selected topics in the field of the management of human services. Topics selected for study will vary.

V557 Proposal Development and Grant Administration (3 cr.) This course provides the opportunity for each student to develop a complete proposal through participation in the entire grant application process. The integration of case studies, visual media, printed materials, and class discussions provides students with practical knowledge for writing successful proposals.

V558 Fund Development for Nonprofits (3 cr.) Important aspects of the fundraising process in nonprofit organizations are covered, including techniques and strategies for assessing potential sources of support, effective use of human resources, process management, theory to underlay practice, analysis of current practice, practice standards, and discussion of ethical problems.

V560 Public Finance and Budgeting (1-3 cr.) The fiscal role of government in a mixed economy; sources of public revenue and credit; administrative, political, and institutional aspects of the budget and the budgetary process; problems and trends in intergovernmental fiscal relations.

V561 Public Human Resources Management (3 cr.) Analysis of the structure, operations, and design of public personnel systems, including government agencies and public enterprise.

Relationships between public policy and personnel concepts, values, and operations are considered.

V562 Public Program Evaluation (1-3 cr.) Examination of how the programs of public agencies are proposed, established, operated, and evaluated. Discussion of the role and conduct of research in the program evaluation process. In addition, techniques of effective evaluation and analysis are discussed.

V563 The Planning Process (1-3 cr.) Seminar designed to familiarize students with planning ramifications of policy issues faced by governments. The focal topics selected for study will vary. Emphasis placed on identification and analysis of substantive issues, methods employed for resolution, and application of planning techniques for achieving goals.

V564 Urban Management (3 cr.) This course deals with the management of public policy in American urban government, with special attention to the relationships between structure, process, and policy. Readings and case studies will focus on urban management problems relating to leadership, planning, and operations.

V565 Environmental Conflict Resolution: Theory and Practice (3 cr.) Theories of environmental conflict resolution are examined. Students will practice through participation in a series of environmental conflict resolution simulations.

V566 Executive Leadership (3 cr.) The course offers an in-depth examination of factors that contribute to successful executive leadership practice in a wide variety of organizational settings. Topics include what leadership is, what impact leadership has, and how leaders use various approaches and powers to achieve their goals.

V567 Public Financial Administration (3 cr.) Problems of financial management in governmental units; alternative revenue sources, financial planning, and control; cash debt management; and survey of modern expenditure management, control, and planning.

V568 Management of Urban Government Services (1-3 cr.) The course deals with selected topics in urban services. The course may focus on a specific urban service or provide an overview for several urban services.

V569 Managing Interpersonal Relations (3 cr.) P: V502. This course will teach students the theory and application of individual and group human behavior. Key interpersonal skills will be modeled expertly on videotape. Students will be expected to practice these key skills and receive feedback on their performance.

V570 Public Sector Labor Relations (1-3 cr.) An introductory overview of labor relations concepts within the framework of the public sector. The development, practice, and extent of the collective bargaining process, as well as the administration of the labor agreement, will be examined for state agencies, local municipalities, and school districts.

V571 State and Local Environmental Management (3 cr.) This course examines a mix of management and policy issues. Included are civic

environmentalism, alternatives to environmental regulation, unfunded mandates, environmental justice, public relations, outsourcing, ethical challenges, and managing scientific and technical personnel.

V572 Urban Topics (3 cr.) Selected topics in urban policy and administration. The course is sometimes restricted to a special group of students in order to focus on a particular research interest.

V575 Comparative Public Management and Administration (3 cr.) Reading and discussion of case studies and comparative analyses of formal organizations, with emphasis on governmental bureaucracies, public corporations, and international organizations. Topics include bureaucratic environment and culture, technology and organizations, program evaluation, communication and decision making, and administrative structure and process.

V576 Approaches to Development (3 cr.) Examination of the application of development theory to the public sector. Topics include modernization theory, urbanization, development administration, community development, ethnicity, ideology, and national planning. Area case study project will include problems of policy implementation in developing areas.

V577 International Economic Strategies and Trade Policy (3 cr.) Examination of topics in international economics as related to problems of economic development policy. Topics include international trade, comparative economic policy, economic integration, foreign aid investment, exchange rates, and international economic organizations.

V578 Introduction to Comparative and International Affairs (3 cr.) The purposes of this course are to enlighten future public professionals about the promises and challenges posed by globalization, and to introduce and examine major concepts and case material from the world of comparative and international affairs.

V580 Readings in Public Affairs (1-3 cr.) P: written consent of instructor. Readings on selected topics in public affairs.

V581 Public Safety Law (1-3 cr.) Survey of historical development of Anglo-American law of public safety, including criminal law, civil remedies, administrative regulation of risk, and recent developments in employee and consumer safety. Emphasis on understanding legal theory and practice as basis for management decisions. Comparison of jurisprudential viewpoints and other disciplinary approaches to causation, prevention, and correction of public safety problems.

V585 Practicum in Public Affairs (1-6 cr.) Students hold work assignments with public agencies. Grading is on an S/F basis.

V586 Public Safety in the U.S. (2-3 cr.) Overview of criminal justice and public safety. Definitions of public safety and identification of major components. Functional description of major public safety

agencies. Discussion of basic issues in public safety. Management in public safety system.

V590 Research in Public Affairs (1-3 cr.) P: written consent of instructor. Research on selected topics in public affairs.

V593 Analytical Methods in Planning and Policy Analysis (3 cr.) P or C: V507. Topics relate to goal setting and forecasting. Analytical methods include time series analysis, demographic projections, economic development and employment forecasting, and land use and transportation planning analysis. Optimization methods are applied to transportation and project management.

V594 Principles of Urban and Regional Science (3 cr.) Discussion of the basic processes of change and development in regional systems, with emphasis on metropolitan regions. Includes economic, demographic, and environmental aspects of their interactions.

V595 Managerial Decision Making (1-3 cr.) P: V504 and V539. Applications of decision-making tools to substantive public management problems. A variety of managerial cases and issues are selected for intensive discussion and analysis.

V597 Land Use Planning (3 cr.) The course examines the theoretical basis and practical need for land use planning. Emphasis is placed on the institutional context in which land use planning occurs. The course provides an in-depth analysis and exercise in plan preparations.

V600 Capstone in Public and Environmental Affairs (3 cr.) Interdisciplinary course designed to expose students to the realities of the policy process through detailed analyses of case studies and projects. Course integrates science, technology, policy, and management.

V601 Workshop in Public Affairs (1-6 cr.) Projects in public affairs. The students work on a research and resource team to complete a project for a public-sector client. Faculty act as project managers and resource personnel.

V602 Strategic Management of Public and Nonprofit Organizations (3 cr.) P: V502. Concepts, cases, and problem solving associated with the structure and process of strategic management in the public sector, broadly defined to include governmental and nongovernmental organizations.

V609 Seminar in Revenue Theory and Administration (3 cr.) P or C: V560. This seminar examines the basic objectives and the political and economic aspects of tax administration. In the course of an examination of the interrelationships of tax policy, tax laws, and tax administration, the course reviews the major economic issues raised by types of taxes and user charges. The seminar also examines the fundamentals of tax legislation. Major emphasis is on state and local administration, although some federal problems will be covered.

V610 Seminar in Government Budget and Program Analysis (3 cr.) P or C: V560. Advanced study of management aspects of budgetary process. Special cases are analyzed, and budget problem-solving exercises are utilized.

V611 Design of Information Systems (3 cr.) P: V516 and V519. Students in this course will learn the concepts, skills, methodologies, techniques, tools, and perspectives essential to successfully develop information systems for the public sector. To achieve this, students will learn how to conduct systems requirements analysis, translate it to process and logical models, and design the systems.

V613 Implementation of Information Systems (3 cr.) P: V516, V519, and V611. This course is intended to build on prior courses in information systems management. The course covers advanced topics in systems implementation and evaluation. Special emphasis is placed on evaluation of alternative systems designs and their implementation in operational settings of public agencies.

V622 Seminar in Urban Economic Development (3 cr.) P: V517 or course in urban economics or instructor's consent. Reading, discussion, and research into problems of urban economic development in the United States. Case study approach used to investigate job creation, financial incentives, development corporations, and other factors that have led to successful economic development plans and projects.

V623 Seminar in Urban Management (3 cr.) P: V561, V564, and V567. This course is the required capstone course for all graduate students with a concentration in urban management. Course is combined with student's required internship. Students are assigned selected reading in current urban management issues as well as research projects and case studies on/in the communities they are serving.

V631 Health Planning (3 cr.) A workshop in analysis and use of health data in a planning context. Course deals with the planning process and planning methods with an emphasis on systems theory. Class project or plan is developed, and presented and defended in a simulated public hearing format.

V639 Managing Government Operations (3 cr.) P: V502. This is an introductory survey of operations management. Emphasis is placed on the analysis, design, and management of operation systems using models from operations management. Readings, lectures, and structured exercises are used to present the models and demonstrate their application.

V643 Natural Resource Management and Policy (3 cr.) P: V517. This course evaluates a broad range of contemporary resource policies, cases, and controversies, using bio-economic resource management models as an intuitive aid, wherever possible. Topics include fishery management, forestry policy, tropical deforestation, water management policy, nature preservation/endangered species, sustainable development, and national income accounting.

V645 Environmental Law (3 cr.) An overview of U.S. environmental law. Key environmental statutes are examined, as are court decisions interpreting those statutes. Topics include water and air pollution, hazardous waste, toxins, pesticides, and environmental impact statements.

V650 Topics in Public Personnel Management (1-3 cr.) P: V561. Readings and research on selected topics in the public personnel field. Topics may include such subjects as affirmative action, occupational health and safety, workforce forecasting and planning, and personnel approaches to position classification.

V660 Cases and Problems in Fiscal Administration (3 cr.) P or C: V560 or consent of instructor. An advanced seminar in the management aspects of public finance. Focuses on the budgetary process. Special cases are analyzed and budget problem-solving exercises are utilized.

V662 Seminar in Productivity and Program Evaluation (3 cr.) Examines the problem of rigorously determining the productivity of governmental services, including problems of defining and measuring public products, specifying public service inputs, and statistically estimating public service production functions. Concepts are given concrete application through careful investigation of attempts to measure productivity of governmental services.

V665 Seminar in Policy and Administration (3 cr.) Politics of program development and management. Translation of plans into viable, administrable programs. Marshaling support, political processes, strategies, constraints, tradeoffs, etc.

V667 Seminar in Public Capital and Debt Theory (3 cr.) P or C: V560. This seminar examines the options open to governments, especially state and local, and why they resort to debt finance. The issues raised by the alternatives are examined in detail. Among the topics are public authority debt, revenue bonds, methods of placement, lease-purchase finance, and maturity choice. In addition, management of idle cash balances will be considered.

V670 Topics in Public-Sector Labor Relations (1-3 cr.) P: V570 or consent of instructor. Selected research and discussion topics in the field of public-sector labor relations arranged on a semester-by-semester basis. Possible topics are collective bargaining in the public sector and dispute settlement in public-sector labor relations.

V675 Issues and Problems in Public-Sector Personnel and Labor Relations (3 cr.) P: V561 and V570. A capstone seminar providing a practical and integrated examination of significant current cases and problems confronting public-sector employees and employers.

V681 Seminar in Development Policy and Management (3 cr.) P: V575 and V576, or consent of instructor. The purpose of the course is to explore linkages among policy analysis, management models, programs, and outcomes in a variety of development efforts in less-developed countries. The primary focus is on empirical analysis of developing countries, with some attention to U.S. domestic ventures.

V690 Seminar in the Public Policy Process (3 cr.) An evaluation of the theoretical and empirical literature on public policy processes. The findings of policy research are evaluated. An integrative paper is required.

IUPUI Administrative Officers

ASTRID E. MERGET, Ph. D., *Dean*

GREG H. LINDSEY, Ph. D., *Associate Dean, Indianapolis Programs*

THOMAS A. DECOSTER, Ph.D., *Director, Executive Education, Indianapolis; Interim Director, Graduate Programs for Health Administration*

CHARLES KURT ZORN, Ph.D., *Associate Dean, Academic Affairs*

KAREN S. HARLOW, Ph.D., *Co-Director, Institute for the Study of Government and the Nonprofit Sector, Indianapolis*

JOHN KRAUSS, J.D., *Director, Center for Urban Policy and the Environment, Indianapolis*

INGRID RITCHIE, Ph.D., *Director, Undergraduate Programs, Indianapolis*

DEBRA MESCH, Ph.D., *Director, Graduate Programs for Planning and Public Affairs, Indianapolis*

IUPUI Academic Advisors

Office of Student Services

BS 3027

Phone: (317) 274-4656

Toll-free (877) 292-9321

Lucille Perry-Highbaugh, Undergraduate Program Advisor; e-mail: ljerry@iupui.edu

Kimberly Lane, Undergraduate Program Advisor; e-mail: ktlane@iupui.edu

IUPUI Faculty

Emeritus Faculty

BUHNER, JOHN D., Ph.D. (*Indiana University, 1963*), *Professor Emeritus of Public and Environmental Affairs; Professor Emeritus of Political Science*

JOHNSON, CARLYN E., J.D. (*Indiana University, 1963*), *Professor Emeritus of Public and Environmental Affairs*

MCHUGH, GERALD J., D.B.A. (*George Washington University, 1973*), *Associate Professor Emeritus of Public and Environmental Affairs*

MENDELSON, ROBERT I., Ph.D. (*Michigan State University, 1970*), *Associate Professor Emeritus of Public and Environmental Affairs*

PEVA, JAMES R., J.D. (*Indiana University, 1961*), *Associate Professor Emeritus of Public and Environmental Affairs*

RUTLEDGE, PHILIP J., LL.D. (*Indiana University, 1980*), *Professor Emeritus of Public and Environmental Affairs; Professor Emeritus of Political Science (IUB/IUPUI/IUN)*

Faculty

BAUMER, TERRY L., Ph.D. (*Loyola University of Chicago, 1980*), *Associate Professor of Public and Environmental Affairs*

BIELEFELD, WOLFGANG, Ph.D. (*University of Minnesota, 1990*), *Professor of Public and Environmental Affairs*

BROWN, ROBERT, Ph.D. (*University of Cincinnati, 2003*), *Assistant Professor of Public and Environmental Affairs*

CHOU, ANN, Ph.D. (*University of California Berkeley, 2002*), *Assistant Professor of Public and Environmental Affairs*

DECOSTER, THOMAS A., Ph.D. (*University of Notre Dame, 1968*), *Director, Executive Education; Professor of Public and Environmental Affairs; Interim Director, Graduate Programs for Health Administration*

GARCIA, CRYSTAL, Ph.D. (*University of California, Irvine, 1996*), *Assistant Professor of Public and Environmental Affairs*

GLEESON, MICHAEL E., Ph.D. (*Syracuse University, 1973*), *Associate Professor of Public and Environmental Affairs*

HARLOW, KAREN S., Ph.D. (*University of Texas, 1981*), *Co-Director, Institute for the Study of Government and the Nonprofit Sector, Indianapolis; Associate Professor of Public and Environmental Affairs; Associate Professor of Family Medicine (part-time)*

HOLMES, ANN M., Ph.D. (*University of British Columbia, 1993*), Associate Professor of Public and Environmental Affairs; Assistant Professor of Family Medicine (part-time); Adjunct Assistant Professor of Economics (IUN/IUPUI)

JARJOURA, G. ROGER, Ph.D. (*University of Maryland, 1990*), Associate Professor of Public and Environmental Affairs

KENNEDY, SHEILA, J.D. (*Indiana University, 1975*), Associate Professor of Public and Environmental Affairs

KIRLIN, JOHN, Ph.D. (*University of California, Los Angeles, 1969*), Professor of Public and Environmental Affairs; Senior Scholar for Center for Urban Policy and the Environment

LEHNEN, ROBERT G., Ph.D. (*University of Iowa, 1968*), Professor of Public and Environmental Affairs

LINDSEY, GREG H., Ph.D. (*Johns Hopkins University, 1992*), Associate Dean; Janet Duey-Murphy Professorship in Rural Land Policy; Professor of Public and Environmental Affairs

McSWANE, DAVID Z., H.S.D. (*Indiana University, 1980*), Associate Professor of Public and Environmental Affairs

MERGET, ASTRID E., Ph.D., Dean, School of Public and Environmental Affairs; Professor of Public and Environmental Affairs

MESCH, DEBRA J., Ph.D. (*Indiana University, 1990*), Director, Graduate Programs for Planning and Public Affairs; Associate Professor of Public and Environmental Affairs

NUNN, SAMUEL, Ph.D. (*University of Delaware, 1981*), Professor of Public and Environmental Affairs

OTTENSMANN, JOHN R., Ph.D. (*University of North Carolina, 1974*), Professor of Public and Environmental Affairs; Adjunct Associate Professor of Geography

PERRY, JAMES L., Ph.D. (*Syracuse University, 1974*), Professor of Public and Environmental Affairs

QUINET, KENNA, Ph.D. (*University of Illinois, 1992*), Associate Professor of Public and Environmental Affairs

REKHTER, NATALIA, Ph.D. (*State University of Ivanovo, 2002*), Trustee Lecturer in Public and Environmental Affairs

RITCHIE, INGRID M., Ph.D. (*University of Minnesota, 1980*), Director, Undergraduate Programs; Associate Professor of Public and Environmental Affairs

WALSTON, STEPHEN, Ph.D. (*University of Pennsylvania, 1997*), Associate Professor of Public and Environmental Affairs

SPEA Board of Visitors

PHILLIP S. ANGELL, Independent Consultant, Washington, DC

DANIEL CARMICHAEL, Retired Deputy General Counsel, Eli Lilly and Company, Indianapolis, Indiana

MELVIN CARRAWAY, Superintendent, Indiana State Police, Indianapolis, Indiana

SUNG JU CHOI, President, Sam Jin Pharmaceutical Co., LTD., Seoul, South Korea

JOHN CLARK, Former Senior Vice President of CMS and Consumers Energy Corporation and Private Investor, Bloomington, Indiana

EILEEN CLAUSSEN, President, Pew Center on Global Climate Change, Arlington, Virginia

CAROLYN M. COLEMAN, Deputy Mayor, City of Indianapolis, Indianapolis, Indiana

DANIEL DENNING, Principal Deputy Assistant Secretary of the Army, Washington, DC

JOHN HAMILTON, Former Secretary, Family and Social Services Administration, Bloomington, Indiana

JACK HARDING, President and CEO, eSilicon Corporation, Sunnyvale, California

PAUL HELMKE, Partner, Helmke, Beams, Boyer and Wagner, Fort Wayne, Indiana

ED JACOBS, Senior Vice President, Morgan Keegan & Co., Chicago, Illinois

JAMES KEENE, City Manager of Tucson, Arizona

MARK L. KERRIGAN, Senior Vice-President of Energy Systems, Science Applications International Corporation (SAIC), McClean, Virginia

NINA I. MCCLELLAND, PH.D., LLC, Consulting Services, Ann Arbor, Michigan

JOHN B. OLSEN, Management Consultant, San Francisco, California

DAVID E. REICHLER, Retired Associate Director, Oak Ridge National Laboratory, Oak Ridge, Tennessee

FRANKLIN D. SCHURZ JR., President, Schurz Communications, Inc., South Bend, Indiana

MYRA SELBY, Partner, Ice Miller, Indianapolis, Indiana

WILLIAM SHREWSBERRY, President and CEO, Shrewsberry & Associates, Indianapolis, Indiana

KENNETH G. STELLA, President, Indiana Hospital & Health Association, Indianapolis, Indiana

JAMES M. VERDIER, Senior Fellow, Mathematica Policy Research, Inc., Washington, DC

WILLIAM J. WATT, President, Watt Information Services, Inc., Indianapolis, Indiana

CHARLES WESSNER, Program Director, National Research Council, Board on Science, Technology, and Economic Policy, Washington, DC