O'Neill Undergraduate

Welcome to the O'Neill School of Public and Environmental Affairs

O'Neill was founded as a response to the needs and problems of modern society—needs that were not being O'Neill was founded in 1972 as a response to the needs and problems of modern society—needs that were not being addressed by other more traditional schools such as business, arts and sciences, or political science. Our scope is wide, and we address issues including public finance, nonprofit management, public management, environmental management, policy analysis, health administration, criminal justice, and arts administration.

Learn more about the O'Neill School
Discover opportunities to make the most of your O'Neill experience

Overview

The O'Neill School of Public and Environmental Affairs is a multidisciplinary division of Indiana University. The school is organized as a Bloomington-Indianapolis core campus professional school, committed to teaching, research, and service. Because of our broad program base, public and private organizations, as well as all levels of government can benefit from the knowledge and expertise of O'Neill faculty, staff, and students.

Our faculty research areas

The O'Neill School of Public and Environmental Affairs offers bachelor of science degrees. These programs provide a sound general education with specialized study of public safety, public affairs, arts management, criminal justice, public health, media and public affairs, or environmental systems. The school also offers minors and certificate programs.

O'Neill Bloomington degrees and majors
O'Neill Bloomington minors and certificates

O'Neill IUPUI degrees and majors
O'Neill IUPUI minors and certificates

Accreditation

Indiana University, a member of the North Central Association (NCA), is accredited by the Higher Learning Commission: www.ncahigherlearningcommission.org; (312) 263-0456.

While every effort is made to provide accurate and current information, Indiana University reserves the right to change without notice statements in the bulletin series concerning rules, policies, fees, curricula, or other matters.

Contact Information

Bloomington Campus
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(Bloomington)
Undergraduate Program Office
Indiana University
1315 East Tenth Street
Bloomington, IN 47405-1701

(812) 855-0635

oneillup@indiana.edu

Indianapolis Campus
O'Neill School of Public and Environmental Affairs
(Indianapolis)
O'Neill Student Services and Administrative Offices
Indiana University-Purdue University Indianapolis
801 West Michigan Street, BS 3025
Indianapolis, IN 46202
(317) 274-4656 or Toll free: (877) 292-9321

oneillqa@iupui.edu

Administration
O'Neill School of Public and Environmental Affairs Administration

O'Neill School of Public and Environmental Affairs Dean's Council

Organizations & Services
Career Hub

O'Neill Alumni Association

Business/SPEA Information Commons-Library

Honor Societies

Organizations & Services
Pi Alpha Alpha at O'Neill Bloomington

For more information about honor societies at IUPUI, refer to the IUPUI Campus Bulletin

Centers & Institutes

The O'Neill School of Public and Environmental Affairs encompasses public service activities that complement innovative academic programs. The school provides a wide variety of services to a number of federal, state, and local agencies.

O'Neill School Centers and Initiatives

Admission

O'Neill Bloomington

O'Neill Indianapolis

Intercampus Transfer

Returning Education—Indianapolis

O'Neill Bloomington

Application Eligibility Admission to O'Neill Bloomington's undergraduate programs is by application. Students are eligible to apply when they have (1) completed at least 12 credit hours, (2) successfully completed the Common Ground requirement in English Composition (by earning at least the minimum grade required of IUB students to satisfy the requirement), and (3) either completed the Common Ground Mathematical Modelling requirement (by earning at least the minimum grade required of IUB students to satisfy the requirement) or completed Math-D 116 with a C or better and enrolled in Math-D 117. Students above 75 credit hours are eligible for admission, but must make an appointment with a

Pre-O'Neill advisor and have attained at least a 2.300 cumulative GPA.

Competitive Admission

Admission is a competitive process. The admissions committee will consider a student's application statement, cumulative GPA, grade trends, credit hours completed, GPA in the student's intended O'Neill major, and any other relevant information about a student's case.

No student will be admitted if their O'Neill major GPA is below the minimum standard for graduation in their intended major at the time of application. O'Neill major GPA's are calculated for any student with at least 12 credit hours completed in their intended major. Current O'Neill major GPA graduation standards are listed in the following table:

Degree	Major	Major GPA for Graduation
Bachelor of Science in Public Affairs	Management	2.300
	Public Management & Leadership	2.300
	Nonprofit Management & Leadership	2.300
	Human Resource Management	2.300
	Environmental Management	2.300
	Public Financial Management	2.300
	Policy Analysis	2.300
	Law & Public Affairs	2.700
Bachelor of Science in Healthcare Management & Policy	Healthcare Management & Policy	2.300
Bachelor of Science in Arts Management	Arts Management	2.300

Degree	Major	GPA for Admission	Major GPA for Graduation
Bachelor of Science in Environmental Science	Environmental Science	2.300	2.000

Admission to the Bachelor of Arts in Environmental and Sustainability Studies major is managed by the College of Arts and Sciences (see : https://college.indiana.edu/academics/degrees-majors/degree/environmental-sustainability-studies-ba-iu-bloomington-envsustba for application and admission information).

Direct Admission to O'Neill Bloomington

Students directly admitted into O'Neill out of high school will get a jump start on their O'Neill education and receive consideration for scholarship opportunities and for participation in the Civic Leaders Living-Learning Center. Direct admit students also have access to their O'Neill advisors as soon as they arrive on campus. This early planning will ensure that O'Neill Direct Admits are well positioned to take advantage of special opportunities, like our Washington Leadership Program, Accelerated Master's Program, and O'Neill Study Abroad programs. Students who have been accepted to IU are eligible for direct admission to O'Neill if they have indicated an interest in an O'Neill major on their application to IU and meet direct admit criteria. Additional details on direct admission are available at https://oneill.indiana.edu/undergraduate/apply/index.html.

O'Neill Indianapolis

O'Neill IUPUI prepares you to lead the organizations that make and enforce laws, keep communities livable and safe, shape smart public policy, protect the planet, and help our fellow citizens.

You will address these topics head-on in the heart of Indianapolis, a city that seeks out your knowledge, enthusiasm, and passion for public and environmental affairs.

Intercampus Transfer

Intercampus Transfer to Bloomington

Students admitted to the O'Neill School of Public and Environmental Affairs at any campus of Indiana University may transfer permanently to O'Neill 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.

Intercampus Transfer to Indianapolis

Go to the IUPUI Bulletin for information regarding undergraduate admissions, transfers, credit for police and firefighting training, and the Sex Offenders Screening Policy for Students/Applicants for O'Neill-IUPUI on the Indianapolis campus.

Returning Education—Indianapolis

Go to the IUPUI Bulletin for information regarding returning students, Indianapolis Forgiveness Policy, and requirements for a second bachelor's degree for O'Neill-IUPUI on the Indianapolis campus.

Policies & Procedures

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

Grading System

O'Neill follows the official grading system of Indiana University, which is as follows:

A+, A	=	4.000	C	=	2.000
A–	=	3.700	C-	=	1.700

B+	=	3.300	D+	=	1.300
B	=	3.000	D	=	1.000
B-	=	2.700	D-	=	0.700
C+	=	2.300	F	=	0.000

The following grades carry no points: I (Incomplete—an Incomplete will change to an F if the work is not completed within the time period specified by the instructor [an instructor can specify any period of time up to one year]), NR (No Grade Reported), P (Pass), R (Deferred), S (Satisfactory), W (Withdrawal —check the current Enrollment and Student Academic Information Bulletin for deadlines).

On the Bloomington campus, any O'Neill undergraduate student may retake a course for which he/she received a grade below an A. Students may exercise this option for no more than three courses, totaling no more than 10 credits and may use this option only once for a given course. Additional information can be found at: http://registrar.indiana.edu/policies/extended-x.shtml.

The Indianapolis campus has an expanded policy for grade replacement. A student seeking their first degree may replace up to 15 credits. Additional information about the IUPUI Grade Replacement Policy can be found on the Registrar's page.

Grade Appeals

Students in **Bloomington** seeking to make an appeal should first meet with the professor to understand and resolve the issue. If the student feels they are at an impasse they may make an appeal to the Director, Undergraduate Programs. They should fill out a grade appeal form which is available in the Undergraduate Program Office and send the form to the Director. The Director will meet individually with the student and the professor to learn about the situation and find a resolution. If no resolution is arrived at, the Director will make a final decision, informing both the student and the professor with a copy to the O'Neill Executive Associate Dean.

Students in **Indianapolis** have 90 days after the conclusion of a course to appeal a grade. Resolution of the issue with the class instructor must be attempted before submitting a written appeal to the appropriate program director. In the event the instructor for the **Indianapolis** campus cannot be contacted, the student must give a notice of intent to appeal at 90 days.

More information can be found on the O'Neill-IUPUI bulletin website at https://bulletins.iu.edu/iupui/2022-2023/schools/oneill-spea/overview/index.shtml.

Academic Standing
- Good Academic Standing
- Probation
- Critical Probation
- Dismissal
- Readmission

Good Academic Standing
Students are in good academic standing when their semester and their cumulative grade point averages are

2.000. Students must be in good academic standing to graduate.

Probation
A student will be placed on academic probation if his/her cumulative or semester grade point average is below 2.000. If a student fails to return to good academic standing at the conclusion of the probation semester, the student may be dismissed from the school.

O'Neill Indianapolis Probation Policy

Please see the information on the O'Neill-IUPUI bulletin at http://bulletin.iupui.edu/.

O'Neill Bloomington Critical Probation
A student will be placed on critical probation if his/her SPEA GPA falls below 2.30. In the Bachelor of Science in Law and Public Policy, students will be placed on critical probation if the SPEA GPA falls below a 2.70. In order for the SPEA GPA to be considered, a student must have completed 12 or more credit hours in the major and a minimum of a 2.000 cumulative GPA. If placed on critical probation SPEA will establish strict conditions that must be met before that student will be allowed to register for future classes. Students who fail to return to good standing at the conclusion of critical probation will be dismissed from the school.

O'Neill Indianapolis Critical Probation policy

Information regarding the O'Neill Indianapolis Critical Probation Policy can be found in the O'Neill-IUPUI bulletin at https://bulletins.iu.edu/iupui/2022-2023/schools/oneill-spea/policies/undergraduate.shtml

O'Neill Bloomington Dismissal
If a student does not return to good academic standing after their probation or critical probation semester, he/she may be dismissed. Under special circumstances, a O'Neill student may be dismissed if there are significant grade point average issues. Dismissed students will have their upcoming semester courses cancelled.

Information regarding O'Neill Indianapolis Dismissal Policy and Freshman Dismissal Policy can be found on the O'Neill-IUPUI bulletin at http://bulletin.iupui.edu/.

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

O'Neill Indianapolis Reinstatement policy

Please see the information on the O'Neill-IUPUI bulletin at https://bulletins.iu.edu/iupui/2022-2023/schools/oneill-spea/policies/undergraduate.shtml.

Student Rights and Responsibilities
Each student is responsible for knowing their rights and responsibilities as a member of the academic community as outlined in the Indiana University 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. Among the student's obligations is that each student is responsible for

knowing and meeting the requirements for their academic programs. Faculty and staff are available to guide and assist students, but the responsibility rests with the student. O'Neill students who engage in academic or personal misconduct are subject to O'Neill's judicial process and disciplinary actions.

O'Neill **Indianapolis** fully supports the rights and responsibilities of students as defined in the IUPUI *Code of Student Rights, Responsibilities, and Conduct*. The *Student Code* spells out the expectations for faculty and students, and it provides the framework for O'Neill's judicial process.

A student is entitled to rights in the pursuit of his or her education; freedom from discrimination and harassment; and freedom of association, expression, advocacy, and publication. A student also has the right to contribute to university governance, to receive accommodations for disabilities, and to access records and facilities. In accordance with federal law, student records are confidential and are available to other persons only under specific conditions as outlined in university regulations.

A student is responsible for upholding and following all applicable codes of conduct, including the IUPUI *Student Code* and O'Neill's policy on classroom etiquette and disorderly conduct, and for obeying all applicable policies and procedures and all local, state, and federal laws. A student is responsible for facilitating the learning process, attending class regularly, completing class assignments, and coming to class prepared. In addition, a student is responsible for planning his or her own academic program, planning class schedules, and for meeting the requirements for his or her degree or certificate programs. Faculty and academic advisors are available to assist students in meeting this responsibility. A student is responsible for maintaining and regularly monitoring his or her university accounts, including e-mail and bursar accounts. A student is responsible for using university property and facilities in the pursuit of his or her education, while being mindful of the rights of others to do the same. A student is responsible for upholding and maintaining academic and professional honesty and integrity.

More information can be found on the O'Neill-IUPUI bulletin website at https://bulletins.iu.edu/iupui/2022-2023/schools/oneill-spea/policies/undergraduate.shtm.

School Standards

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 O'Neill Student Honor Code, and the Code of Student Rights, Responsibilities, and Conduct. The policy on academic dishonesty is also published each semester in the **Bloomington** *Enrollment and Student Academic Information Handbook*. At **Indianapolis,** this is a basic principle of intellectual life that holds students responsible for taking 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, and it is not tolerated. Academic misconduct includes cheating, fabrication, plagiarism, interference, violation of course rules, and facilitating academic dishonesty. Students are responsible for knowing what behaviors and activities constitute these different forms of academic misconduct. Penalties and procedures that are applicable when academic misconduct or dishonesty occurs are described in the IUPUI *Code of Student Rights, Responsibilities, and Conduct*.

Indianapolis Statement on Civility

O'Neill , which is a professional school, expects students to conduct themselves in a courteous and civil manner in interactions with professors, staff, and fellow students. Examples of discourteous behavior during class include reading the newspaper, working crossword puzzles, using headphones to listen to music or other non-class items, using computers to surf the Web or for other non-class activities, talking or laughing with others, arriving late, and so forth. These behaviors are distracting to the instructor, to staff, and to classmates, and O'Neill faculty and staff will address these problems as they arise either in class or on an individual basis. Disorderly conduct that interferes with teaching, research, administration, or other university or university-authorized activity will not be tolerated, and it may result in disciplinary action, including possible suspension and/or expulsion from the university.

Degree Requirements

- Application for Graduation
- Bulletin Policy
- Course Opportunities
- Degrees Awarded with Distinction
- Double-Counting
- GPA Requirement
- Hours Requirements
- Requirements for a Second Bachelor's Degree
- Study Abroad Requirements
- Transfer Course Policy

Application for Graduation

All IU students must apply to graduate with their schools. IUB does not automatically award degrees once requirements are complete; students need to declare their intention by completing a graduation application.

O'Neill SPEA Bloomington students are asked to complete an online graduation application after they've registered for their final semester of coursework--final spring semester for May or July graduates, final fall semester for December graduates. May or July graduates are asked to comply with a December 1 deadline, December graduates with a May 1 deadline. The online graduation application is available each semester for a limited time. The graduation application link is available online. For questions, please contact the O'Neill SPEA Undergraduate Programs Office at 812.855.0635.

In Indianapolis, the graduation application should be completed by September 10 for December graduation, or January 10 for May or August graduation. The O'Neill graduation application is available in the O'Neill Student Canvas site or by visiting O'Neill Student Services.

Bulletin Policy

Students are expected to complete the requirements for their undergraduate degree within 10 years of admission to the O'Neill 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 the program requirements of the O'Neill 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.

Course Opportunities

A student in good academic standing may choose to take a maximum of eight elective courses (two per academic year) pass/fail for the B.S. degree. Deadlines for exercising this option are published in the *Enrollment and Student Academic Information Bulletin* and are strictly enforced.

With O'Neill SPEA faculty approval, a student in good standing may earn a maximum of 9 credit hours through the O'Neill SPEA **internship** program.

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

More information on O'Neill SPEA-IUPUI policies covering independent study, internships and minors can be found at https://bulletins.iu.edu/iupui/2022-2023/schools/oneill-spea/overview/index.shtml.

Degrees Awarded with Distinction

O'Neill recognizes outstanding performance by awarding bachelor's and associate degrees with three levels of distinction to students. The levels of distinction are as follows:

- highest: 3.900 and above
- high: 3.800 through 3.899
- distinction: 3.700 through 3.799

Double-Counting

In **Bloomington**, the following course double-count policies are for admitted O'Neill SPEA students only. Non-SPEA majors cannot double count courses with any O'Neill SPEA academic program.

- O'Neill SPEA Minors: Admitted O'Neill SPEA students earning an O'Neill SPEA minor may double count up to six (6) credit hours of minor courses with any other O'Neill SPEA academic program. Each O'Neill SPEA minor must have at least nine (9) credit hours that do not count toward any other O'Neill SPEA academic program.
- O'Neill SPEA Certificates: Admitted O'Neill SPEA students earning an O'Neill SPEA certificate may double count up to six (6) credit hours of certificate requirements with any other O'Neill SPEA academic program. The remaining O'Neill SPEA certificate credit hours cannot be applied toward any other O'Neill SPEA academic program.
- O'Neill SPEA Double Majors: Admitted O'Neill SPEA students earning two O'Neill SPEA majors within the same degree may double count up to six (6) credit hours of major courses for both majors. Since O'Neill SPEA core courses are common to both majors, only courses specific to the majors (not core courses) are subject to the double-counting limit.
- Dual Degrees: Admitted O'Neill SPEA students earning two O'Neill SPEA degrees may double count up to six (6) credit hours of core or major courses for both degrees.

For **Indianapolis** policies on double-counting, please go to O'Neill SPEA-IUPUI bulletin at https://bulletins.iu.edu/iupui/2022-2023/schools/oneill-spea/policies/undergraduate.shtml.

GPA Requirement

A minimum cumulative and semester GPA of 2.000 is required for the B.S. degrees. In addition, a O'Neill core and major/concentration GPA of 2.300 must be maintained in order to graduate. The Law and Public Policy major student must maintain a 2.700 (B-) in the core and major requirements as well as a 2.000 cumulative grade point average in all course work taken at Indiana University in order to graduate.

As joint degrees from the College of Arts and Sciences and the School of Public and Environmental Affairs, the B.S. in Environmental Science and the B.A. in Environmental and Sustainability Studies require a cumulative GPA of 2.000 (C) to graduate. All courses taken to satisfy major requirements must be completed with a C– or higher and with a cumulative GPA of 2.000 (C) for all courses taken in the major.

For **Bloomington** students seeking certificates or minors from O'Neill, the minimum GPA requirement is 2.000 in all applicable course work.

In **Bloomington** the Educational Policy minor requires a C or better in each course and a 2.000 GPA overall. The Environmental Science and Environmental and Sustainable Studies minors require a C- or better in each course.

In **Indianapolis** a minimum cumulative GPA of 2.000 is required for the B.S. degrees. For students seeking certificates from O'Neill, the minimum cumulative GPA requirement is a 2.000 or higher, and for students pursuing a minor the minimum cumulative GPA is a 2.300 or higher in all applicable course work. More information on **Indianapolis** grade polices can be found at https://bulletins.iu.edu/iupui/2022-2023/schools/oneill-spea/policies/undergraduate.shtml.

Hours Requirements

Students must successfully complete a minimum of 120 credit hours. The campus at which a student completes the plurality of 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, 90 or more; junior, 60-89; sophomore, 30-59; freshman, 0-29.

Requirements for a Second Bachelor's Degree—Bloomington and Indianapolis

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, O'Neill encourages students to work toward a graduate degree rather than a second bachelor's degree.

Study Abroad

O'Neill SPEA accepts approved non-SPEA study abroad courses as requirements for O'Neill SPEA undergraduate majors. All courses to be used towards O'Neill SPEA degree requirements must be evaluated by the O'Neill Undergraduate Programs Office.

See your advisor for more information.

- A maximum of two approved major courses (up to eight credit hours) from non-SPEA study abroad programs will be allowed in majors.
- The limit of two study abroad courses does not apply to SPEA Abroad programs and courses.
- The limit of two study abroad courses does not apply to general education or elective courses.

Policies may differ for BSES and BAESS students.

Transfer Course Policy

For the **Indianapolis** campus policies on transferring credits, please go to http://bulletin.iupui.edu/.

Programs

The Indiana University O'Neill School of Public and Environmental Affairs offers a wide range of undergraduate programs on the Bloomington campus.

Undergraduate degrees offered at O'Neill Bloomington:
- Bachelor of Science in Public Affairs (B.S.P.A.)
- Bachelor of Science in Healthcare Management and Policy (B.S.H.M.P.)
- Bachelor of Science in Arts Management (B.S.A.M.)
- Bachelor of Science in Environmental Science (B.S.E.S.)

And, through a joint program with the College of Arts and Sciences:
- Bachelor of Arts in Environmental and Sustainability Studies (B.A.E.S.S.)

Bloomington
Undergraduate Programs Office
O'Neill School of Public and Environmental Affairs
SPEA Building 240
Indiana University
1315 E. Tenth Street
Bloomington, IN 47405-2100
(812) 855-0635

oneillup@indiana.edu

https://oneill.indiana.edu/

Indianapolis
Student Services Office
O'Neill School of Public and Environmental Affairs
Business/SPEA Building 3027
Indiana University–Purdue University Indianapolis
801 W. Michigan Street
Indianapolis, IN 46202-5152
(317) 274-4656 Toll free: (877) 292-9321

infospea@iupui.edu
https://oneill.iupui.edu/

In addition to the O'Neill core school bulletin, please note that IUPUI maintains a separate bulletin which also includes O'Neill Indianapolis information. This bulletin has additional information specific to the IUPUI campus. Explore the IUPUI bulletin here: http://bulletin.iupui.edu/

Bloomington Campus

- Bachelor of Arts in Environmental and Sustainability Studies (B.A.E.S.S.)
- Bachelor of Science in Arts Management (B.S.A.M.)
- Bachelor of Science in Environmental Science (B.S.E.S.)
- Bachelor of Science in Public Affairs (B.S.P.A.)
- Bachelor of Science in Healthcare Management and Policy (B.S.H.M.P.)
- Minors
- Certificate Programs

Bachelor of Arts (B.A.) in Environmental and Sustainability Studies

Bachelor of Arts Major in Environmental and Sustainability Studies

The Bachelor of Arts in Environmental and Sustainability Studies is an interdisciplinary, liberal-arts degree designed to provide an introduction to the complex system-scale challenges of sustainability as well as the tools needed to address problems that transcend solely social or environmental domains. Students pursuing this degree can expect to integrate experience in the humanities with the natural and social sciences. The major offers the opportunity to develop skills in communication and creative expression, data collection and analysis, environmental science, and economics. Although this is designed as a stand-alone major, students are encouraged to pursue this degree program as a second major opportunity. Pursuing two majors enables students a combination of depth in a core discipline and breadth across the range of topics that are inherent in environmental and sustainability studies. Potential career areas include environmental planning and coordination, environmental education and communications, sustainability coordination or consulting in the private or public sector, green design, environmental law or public affairs, or further academic pursuits with graduate study.

The degree is co-awarded by the College of Arts and Sciences and the O'Neill School of Public and

Environmental Affairs. College of Arts and Sciences policies are enforced.

See the College of Arts and Sciences bulletin for more information about the major and concentration areas: https://bulletins.iu.edu/iub/college/2022-2023

Contact Information:
Integrated Program in the Environment
Indiana University
MSB-II Room 134
702 N. Walnut Grove Avenue
Bloomington, IN 47405-2204
(812) 855-8745

iuipe@indiana.edu
http://environment.indiana.edu/

Bachelor of Science (B.S.) in Arts Management
Bachelor of Science in Arts Management

Common Ground

See https://gened.indiana.edu/approved-courses/index.html for updated requirements and a complete list of course options.

Other Required Courses

- SPEA-K 300 Statistical Techniques **or** equivalent (3 cr.) (P: MATH M 014 **or** equivalent; R: MATH-M 118)
- ECON-E 251 Fundamentals of Economics I (3 cr.) **or** ECON-B 251 Fundamentals of Economics for Business I (3 cr.)

Oral Communication (One of the following courses)
- SPEA-V 326 Communication for Government and Nonprofit Organization (3 cr.)
- BUS-C 104 Business Presentations (3 cr.)
- BUS-C 300 Business and Professional Communication (3 cr.)

Computer Course (One of the following courses)
- SPEA-V 261 Using IT in Public Affairs (3 cr.)
- BUS-K 201 The Computer in Business (2-3 cr.)
- CSCI-A 110 Introduction to Computers & Computing (3 cr.) (P: One year high school algebra or MATH-M 014
- CSCI-A 201 Introduction to Programming I (4 cr.)
- INFO-I 101 Intro to Informatics and Computing (3 cr.)

Electives (~12 cr.)

Electives are courses that do not meet general education or major requirements and may be used to fulfill the remainder of the 120 credit hours required for this degree. *It is suggested that students seek courses relevant to their studies and aspirations in arts management, available from many schools and departments on campus, including (but not limited to) Business, Anthropology, Folklore and Ethnomusicology, Art, Architecture and Design, Education, Media, and Public Health.*

Arts Core Requirement (Eight courses for a minimum of 24 credit hours)

Students are to select an area of arts specialization consisting of a minimum of 12 credit hours in one arts specialty. The remaining credit hours can be applied to any arts areas of the students' choosing. Suggested areas of specialization include: Anthropology, Art History, Dance, Ethnomusicology, Folklore, Music, Studio Fine Art, and Theater. Other proposed areas of arts interest will be considered by the faculty. At least 12 credit hours of the 24 Arts Core required credits must be in advanced level work (300 level or higher).

Arts Management Core (12 credit hours)

The following four courses:

- SPEA-V 184 Law and Public Affairs (3 cr.) **or** SPEA-A 450 Law and the Arts (3 cr.)
- SPEA-V 186 Introduction to Public Management and Finance for Public Affairs (3 cr.)
- SPEA-V 246 Elements of Governmental and Nonprofit Financial Accounting Cycle (3 cr.) (P: SPEA-V 186)
- SPEA-V 362 Nonprofit Management and Leadership (3 cr.)

Arts Management Major (36 cr.)
The following five courses:

- SPEA-A 163 Introduction to Arts Management (3 cr.)
- SPEA-A 354 Arts Marketing Fundamentals (3 cr.)*
- SPEA-V 361 Financial Management (3 cr.) (P: SPEA-V 246 or BUS-A 201)
- SPEA-A 439 Fund Development for the Arts (3 cr.) **or** SPEA-V 458 Fund Development for Nonprofit Organizations (3 cr.)
- SPEA-A 459 Public Policy and the Arts (3 cr.) **or** SPEA-A 431 Cultural Planning and Urban Development (3 cr.)

*Iterative writing assignment course

Seven of the following courses. At least three courses must be from List 1 and at least three courses must be from list 2.

List 1:

Any SPEA-A course

List 2:

- SPEA-V 236 Managing and Leading Organizations (3 cr.)
- SPEA-V 336 Managing External Collaboration and Networks (P: SPEA-V 185) (3 cr.)
- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)
- SPEA-V 378 Federal Government Processes (3 cr.)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 409 Federal Policymaking and the Hearing Process (3 cr.)
- SPEA-V 415 Data Science in Public and Environmental Affairs (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 457 Human Resources Training and Development (3 cr.) (P: SPEA-V 373)
- SPEA-V 458 Fund Development for Nonprofit Organizations (3 cr.)

- SPEA-V 476 Compensation Strategy and Systems (3 cr.)
- SPEA-V 477 Strategic Human Resource Management (3 cr.) (P: SPEA-V 373)
- SPEA-V 478 Employment Law for Human Resource Management (3 cr.) (P: SPEA-V 184)
- SPEA-V 479 Employee Recruitment and Selection (3 cr.) (SPEA-V 373)
- SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 491 Honors Research in Public and Environmental Affairs (3 cr.)
- SPEA-V 499 Honors Thesis (3 cr.)

Experiential Requirement

- SPEA-V 252 Career Development and Planning (2 cr.) **or** exemption
- SPEA-V 381 Professional Experience (1 cr.) (P: SPEA-V 252) **or** exemption

Minimum Hours and Grade Point Averages

The B.S. in Arts Management Degree requires a minimum of 120 hours. Each student must maintain a 2.300 (C+) overall grade point average in the core and major requirements as well as a 2.000 (C) cumulative grade point average in all course work taken at Indiana University in order to graduate.

Bachelor of Science (B.S.) in Environmental Science
Bachelor of Science in Environmental Science

The Bachelor of Science in Environmental Science (B.S.E.S.) and minor in Environmental Science are degree programs offered jointly by the College of Arts and Sciences and the O'Neill School of Public and Environmental Affairs through the Integrated Program in the Environment. The interdisciplinary B.S.E.S. program considers the environment from a scientific perspective. Students preparing for professional employment or graduate study in environmental science or in one of the traditional sciences should consider this degree.

Major requirements

1. BSES Foundations: Joint Degree Requirements
 a. Foreign Language.
- Proficiency in a single foreign language at or above the second semester of the first year of college-level coursework.

 b. Critical Approaches. (3 cr.)
- Any student who is a candidate for a bachelor's degree offered by the College of Arts and Sciences is required to complete one Critical Approaches to the Arts and Sciences (CAPP) course on the Bloomington campus. Students are encouraged to take this course in their first year or no later than the first semester of their second year. For a listing of all courses that can satisfy the CAPP requirement, please consult with your academic advisor.

2. BSES Foundations: Mathematics, Statistics, and Computation
 a. Calculus. One (1) of the following:
  i. Calculus I. One (1) course from the Calculus I list.

- MATH-M 211 Calculus I (4 cr.)
- MATH-S 211 Spec CRS In Analytical Geometry & Calculus 1 (4 cr.)

  ii. Brief Survey of Calculus. Two (2) courses from the Brief Survey of Calculus list.
- MATH-M 119 Brief Survey of Calculus I (3 cr.)
- MATH-M 120 Brief Survey of Calculus II (3 cr.)

 b. Statistics. One (1) course from the Statistics list.
- SPEA-K 300 Statistical Techniques (3 cr.)
- EAS-E 314 Data Analytics for Earth Science (3 cr.)
- GEOG-G 488 Applied Spatial Statistics (3 cr.)
- STAT-S 303 Applied Statistical Methods for Life Sciences (3 cr.)
- STAT-S 350 Introduction to Statistical Inference (3 cr.)

 c. Computation. One (1) course from the Computation list.

- CSCI-A 110 Introduction to Computers and Computing (3 cr.)
- CSCI-A 321 Computing tools for Scientific Research (4 cr.)
- GEOG-G 250 Computing in the Geospatial Sciences (3 cr.)
- SPEA-V 261 Using IT in Public Affairs (3 cr.)

3. BSES Foundations: Chemistry
 a. Fundamentals of Chemistry Lecture. One (1) course from the Fundamentals of Chemistry Lecture list.
- CHEM-C 117 Fundamentals of Chemistry and Biochemistry (3 cr.)
- CHEM-H 117 Principles of Chemistry and Biochemistry I, Honors
- CHEM-J 117 Principles of Chemistry and Biochemistry I for Science Majors (3 cr.)

 b. **Fundamentals of Chemistry Lab.** One (1) course from the Fundamentals of Chemistry Lab list.
- CHEM-C 127 Fundamentals of Chemistry and Biochemistry Laboratory (2 cr.)
- CHEM-H 127 Principles of Chemistry and Biochemistry I Laboratory, Honors

 c. Organic Chemistry Lecture. One (1) course from the Organic Chemistry Lecture list.
- CHEM-C 341 Organic Chemistry I Lectures (3 cr.)
- CHEM-R 340 Survey of Organic Chemistry (3 cr.)
- CHEM-S 341 Organic Chemistry I Lectures, Honors (3 cr.)

 d. Chemistry Elective. One (1) course from the Chemistry Elective list.
- CHEM-A 314 Biological and Environmental Chemical Analysis (2 cr.)
- CHEM-C 342 Organic Chemistry II Lectures (3 cr.)
- CHEM-S 342 Organic Chemistry II Lectures, Honors (3 cr.)
- EAS-E 444 Methods in Analytical Geochemistry (3 cr.)

- SPEA-E 464 Organic Pollutants: Environmental Chemistry and Fate (3 cr.)

4. BSES Foundations: Physics. One (1) course from the BSES Foundations: Physics list.
- PHYS-P 201 General Physics I (5 cr.)
- PHYS-P 221 Physics I (5 cr.)
- PHYS-H 221 Honors Physics I (5 cr.)

5. BSES Foundations: Biology.

   a. Evolution and Diversity. One (1) course from the Evolution and Diversity list.
- BIOL-E 111 Basic Biology by Examination I (3 cr.)
- BIOL-L 111 Foundations of Biology: Diversity, Evolution, and Ecology (4 cr.)

   b. Biological Mechanisms. One (1) course from the Biological Mechanisms list.
- BIOL-E 112 Basic Biology by Examination II (3 cr.)
- BIOL-L 112 Foundations of Biology: Biological Mechanisms (4 cr.)

6. BSES Foundations.

   a. Communications. One (1) course from the BSES Foundations:
- ENG-W 231 Professional Writing Skills (3 cr.)
- ENG-W 240 Community Service Writing (3 cr.)
- ENG-W 270 Argumentative Writing (3 cr.)
- SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.)

   b. Oral Communications. One (1) of the following courses:
- COLL-P 155 Public Oral Communication (3 cr.)
- SPEA-V 326 Communication for Government and Nonprofit Organizations (3 cr.)

   c. An additional course to satisfy the College of Arts and Sciences Intensive Writing Requirement (see academic advisor for approved courses).

7. BSES Foundations: Diversity in the United States

a. One (1) of the following courses:

- ANTH-E 444 People and Protected Areas: Theories of Conservation (3 cr.)
- GEOG-G 313 Place and Politics (3 cr.)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)

8. Environmental Science Courses.
   a. Introductory Course. One (1) course from the Introductory Course list.

- EAS-E 105 Earth: Our Habitable Planet (3 cr.)
- GEOG-G 107 Physical Systems of the Environment (3 cr.)
- GEOG-G 208 Environment and Society (3 cr.)
- SPEA-E 272 Introduction to Environmental Science (3 cr.)

   b. Electives. 24 credit hours from the Electives list

- BIOL-B 300 Vascular Plants (4 cr.)
- BIOL-L 211 Molecular Biology (3 cr.)
- BIOL-L 307 Biodiversity (3 cr.)
- BIOL-L 311 Genetics (3 cr.)
- BIOL-L 318 Evolution (3 cr.)
- BIOL-L 319 Genetics Laboratory (3 cr.)
- BIOL-L 326 Biodiverse City (3 cr.)
- BIOL-L 328 Disease Ecology and Evolution (3 cr.)
- BIOL-L 350 Environmental Biology (3 cr.)
- BIOL-L 376 Biology of Birds (4 cr.)
- BIOL-L 402 Ecosystem Ecology and Global Change (3 cr.)
- BIOL-L 472 Microbial Ecology (3 cr.
- BIOL-L 473 Ecology (3 cr.)
- BIOL-L 474 Field and Laboratory Ecology (2 cr.)
- BIOL-M 250 Microbiology (3 cr.)
- BIOL-M 315 Microbiology Laboratory (2 cr.)
- BIOL-M 465 Environmental Microbiology Laboratory (3 cr.)
- BIOL-Z 373 Entomology (3 cr.)
- BIOL-Z 374 Invertebrate Zoology (3 cr.)
- BIOL-Z 375 Invertebrate Zoology Laboratory (2 cr.)
- BIOL-Z 406 Vertebrate Zoology (5 cr.)
- BIOL-Z 476 Biology of Fishes (3 cr.)
- CHEM-A 314 Biological and Environmental Chemical Analysis (2 cr.)
- CHEM-A 315 Chemical Measurements Laboratory (2 cr.)
- CHEM-A 316 Bioanalytical Chemistry Laboratory (2 cr.)
- CHEM-C 317 Equilibria and Electrochemistry (2 cr.)
- CHEM-C 318 Spectrochemistry and Separations (2 cr.)
- EAS-A 315 Climate Engineering (3 cr.)
- EAS-A 332 Atmospheric Thermodynamics (3 cr.)
- EAS-A 339 Weather Analysis and Forecasting (3 cr.)
- EAS-A 340/GEOG-G 304 Physical Meteorology and Climatology (3 cr.)
- EAS-A 347 Atmospheric Instrumentation (3 cr.)
- EAS-A 364 Dynamic Meteorology I (3 cr.)
- EAS-A 437 Advanced Meteorology and Climatology (3 cr.)
- EAS-A 474 Current and Future Trends in Extremes (3 cr.)
- EAS-A 476 Climate Change Science (3 cr.)
- EAS-E 225 Earth Materials (4 cr.)
- EAS-E 226 Earth Processes (3 cr.)
- EAS-E 227 Earth Climate and History (3 cr.)
  EAS-E 316 Mineral Resources (3 cr.)
- EAS-E 330 Human Impacts on Earth Systems: Quantifying Impacts, Designing Solutions (3 cr.)
- EAS-E 333 Sedimentary and Tectonic Processes (3 cr.)
- EAS-E 334 Principles of Sedimentology and Stratigraphy (3-4 cr.)
- EAS-E 341 Natural History of Coral Reefs (3 cr.)
- EAS-E 351 Elements of Hydrology (3 cr.)
- EAS-E 406 Introduction to Geochemistry (3 cr.)
- EAS-E 411 Invertebrate Paleontology (3 cr.)
- EAS-E 412 Vertebrate Paleontology (3 cr.)
- EAS-E 415 Principles of Geomorphology (3-4 cr.)
- EAS-E 423 Methods in Applied Geophysics (3-4 cr.)
- EAS-E 444 Methods in Analytical Geochemistry (3 cr.)
- EAS-E 451 Principles of Hydrogeology (2-4 cr.)

- EAS-E 488 Paleoclimatology: The Geological Record of Earth's Climate History (3 cr.)
- EAS-X 329 Field Methods in Environmental Geology (3 cr.)
- EAS-X 420 Regional Geology Field Trip (3 cr.)
- EAS-X 429 Field Geology in the Rocky Mountains (3 cr.)
- GEOG-G 307 Biogeography: The Distribution of Life (3 cr.)
- GEOG-G 315 Environmental Conservation (3 cr.)
- GEOG-G 336 Environmental Remote Sensing (3 cr.)
- GEOG-G 338 Geographic Information Science (3 cr.) **or** SPEA-E 418 Vector-based GIS (3 cr.)
- GEOG-G 341 Ecological Restoration: Science and Politics (3 cr.)
- GEOG-G 350 Field Methods in Physical Geography (3 cr.)
- GEOG-G 368 Water in the Midwest (3 cr.)
- GEOG-G 405 Ecological Climatology (3 cr.)
- GEOG-G 436 Advanced Remote Sensing: Digital Image Processing (3 cr.)
- GEOG-G 438 Advanced Geographic Information Science (3 cr.)
- GEOG-G 439 GIS and Environmental Analysis (3 cr.)
- GEOG-G 444 Climate Change Impacts (3 cr.)
- GEOG-G 451 Physical Hydrology (3 cr.)
- GEOG-G 452 Tree-Ring Science (3 cr.)
- GEOG-G 453 Water and Society (3 cr.)
- GEOG-G 481 Terrestrial Ecosystem Modeling (3 cr.)
- GEOG-G 485 Geospatial Programming (3 cr.)
- GEOG-G 488 Applied Spatial Statistics (3 cr.)
- GEOG-G 489 Geospatial Analysis of Big Data in Python (3 cr.)
- PHYS-P 310 Environmental Physics (3 cr.)
- SPEA-E 260 Introduction to Water Resources (3 cr.)
- SPEA-E 332 Introduction to Applied Ecology (3 cr.)
- SPEA-E 355 Introduction to Limnology ((3 cr.)
- SPEA-E 375 Techniques in Environmental Science (3 cr.)
- SPEA-E 400 Topics in Environmental Studies (1-3 cr.) (approved topics only; see academic advisor)
- SPEA-E 402 Water Quality Modeling (3 cr.)
- SPEA-E 410 Introduction to Environmental Toxicology (3 cr.) (R: any organismal biology course)
- SPEA-E 417 Fundamentals of Sustainable Agriculture (3 cr.)
- SPEA-E 422 Urban Forest Management (3 cr.)
- SPEA-E 426 Applied Math for Environmental Science (3 cr.)
- SPEA-E 429 Application of GIS (3 cr.)
- SPEA-E 431 Water Supply and Wastewater Treatment (3 cr.)
- SPEA-E 440 Wetlands Ecology and Management (4 cr.) (P: SPEA-E 272)
- SPEA-E 442 Habitat Analysis—Terrestrial (3 cr.)
- SPEA-E 443 Habitat Analysis—Aquatic (3 cr.)
- SPEA-E 444 Hazardous Materials (3 cr.)
- SPEA-E 450 Soil Science and Management (3 cr.)
- SPEA-E 451 Air Pollution and Control (3 cr.)
- SPEA-E 452 Solid and Hazardous Waste Management (3 cr.)

- SPEA-E 455 Limnology (4 cr.)
- SPEA-E 456 Lake and Watershed Management (3 cr.)
- SPEA-E 457 Introduction to Conservation Biology (3 cr.)
- SPEA-E 460 Fisheries and Wildlife Management (3 cr.)
- SPEA-E 461 Fisheries and Wildlife Management Laboratory (3 cr.)
- SPEA-E 464 Organic Pollutants: Environmental Chemistry and Fate (3 cr.)
- SPEA-E 470 Elements of Fluid Mechanics (3 cr.)
- SPEA-E 482 Overseas Topics in Environmental Science (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 413 Food Systems and Community Resilience (3 cr.)

Up to six (6) credit hours (combined total) of any of the following:

- BIOL-X 490 Individual Study (1-12 cr.)
- EAS-X 498 Undergraduate Research in Geology (1-6 cr.)
- GEOG-X 490 Undergraduate Readings and Research in Geography (1-3 cr.)
- SPEA-E 490 Directed Research in Environmental Science (1-4 cr.)

Courses used to satisfy the Foundations requirements cannot be used to satisfy any other degree requirement.

9. Field Experience*.
  a. credit minimum of 5 credits

- EAS-X 329 Field Methods in Environmental Geology (3 cr.)
- EAS-X 429 Field Geology in the Rocky Mountains (3 cr.)

  b. credit minimum of 5 credits

- EAS-X 420 Regional Geology Field Trip (3 cr.)
- GEOG-G 350 Field Methods in Physical Geography (3 cr.)
- GEOG-G 452 Tree-Ring Science (3 cr.)
- SPEA-E 375 Techniques of Environmental Science (3 cr.)
- SPEA-E 400 (approved topics only; see academic advisor) (3 cr.)
- SPEA-E 422 Urban Forest Management (3 cr.)
- SPEA-E 440 Wetlands Ecology and Management (4 cr.)
- SPEA-E 442 Habitat Analysis - Terrestrial (3 cr.)
- SPEA-E 443 Habitat Analysis - Aquatic (3 cr.)
- SPEA-E 455 Limnology (4 cr.)
- SPEA-E 482 Overseas Topics in Environmental Science (0-15 cr.) (approved topics only; see academic advisor)

*Courses used to satisfy the Field Experience requirement cannot be used to satisfy any other degree requirement. A "field experience" course includes student-conducted environmental data collection in the field, as well as analysis of that data and a presentation of it (paper, oral or poster). Courses with these characteristics that are

not listed here may be approved by the BSES Program Director.

Bachelor of Science (B.S.) in Public Affairs

Bachelor of Science in Public Affairs

The Bachelor of Science in Public Affairs requires 120 credit hours. The Bloomington campus offers eight majors: Environmental Management, Human Resource Management, Law and Public Policy, Management, Nonprofit Management and Leadership, Policy Analysis, Public Financial Management and Public Management and Leadership.

DEGREE REQUIREMENTS

Common Ground

See https://gened.indiana.edu/approved-courses/index.html for updated requirements and a complete list of course options.

Other Required Courses

Oral Communication (One of the following courses)

- SPEA-V 326 Communication for Government and Nonprofit Organizations (3 cr.)
- BUS-C 104 Business Presentations (3 cr.)
- BUS-C 300 Business and Professional Communication (3 cr.)

Computer Course (One of the following courses)

- SPEA-V 261 Using IT in Public Affairs (3 cr.)
- BUS-K 201 The Computer in Business (2-3 cr.)
- CSCI-A 110 Introduction to Computers and Computing (3 cr.) (P: One year high school algebra or MATH-M 014)
- CSCI-A 201 Introduction to Programming I (4 cr.) (P: Two years high school math or MATH-M 014)
- INFO-I 101 Intro to Informatics and Computing (3 cr.)

The following courses:

- SPEA-K 300 Statistical Techniques or equivalent (3 cr.) (P: MATH M 014 or equivalent; R: MATH-M 118)
- ECON-E 251 Fundamentals of Economics I (3 cr.) **or** ECON-B 251 Fundamentals of Economics for Business I (3 cr.)

Experiential Learning Requirements

- SPEA-V 252 Career Development and Planning (2cr) **or** exemption
- SPEA-V 381 Professional Experience (1cr) (P: SPEA-V 252) **or** exemption

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

Public Affairs Core
(Six courses)

- SPEA-E 183 Environment and People (3 cr.)
- SPEA-V 181 US Policy and Administration (3 cr.)
- SPEA-V 182 Policy-making around the World: Comparative and International Approaches (3 cr.)
- SPEA-V 184 Law and Public Affairs (3 cr.)
- SPEA-V 185 Management of Public Problems and Solutions (3 cr.)
- SPEA-V 186 Introduction to Public Budgeting and Finance for Public Affairs (3 cr.)

Environmental Management Major

Requirements (Thirteen courses)

Note: Courses may be listed in more than one area below. However, significant restrictions apply, see your academic advising report (AAR).

Students may not "double count" courses within this major.

The following six courses:

- SPEA-E 272 Introduction to Environmental Sciences (3 cr.) (R: SPEA-E 183)
- SPEA-E 332 Introduction to Applied Ecology (3 cr.)
- SPEA-E 340 Environmental Economics and Finance (3 cr.)
- SPEA-E 363 Environmental Management (3 cr.) (R: SPEA-E 183)*
- SPEA-E 476 Environmental Law and Regulation (3 cr.) **or** SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)
- SPEA-V 236 Managing and Leading Organizations (3 cr.)

*Iterative Writing Assignment Course

One of the following three courses:
- SPEA-E 311 Introduction to Risk Assessment and Risk Communication (3 cr.)
- SPEA-E 410 Introduction to Environmental Toxicology (3 cr.) (R: any organismal biology course)
- SPEA-H 316 Environmental Health Science (3 cr.)

Six of the following courses in Environment Management:

Note: These courses are grouped by topic to assist students, but students are free to take any six of them. Courses may appear in more than one list. Courses cannot count both to satisfy the courses above and the six below.

Community, Health, and Safety:
- SPEA-E 311 Introduction to Risk Assessment and Risk Communication (3 cr.)
- SPEA-E 324 Controversies in Environmental Health (3 cr.)
- SPEA-E 410 Introduction to Environmental Toxicology (3 cr.) (R: any organismal biology course)
- SPEA-E 412 Risk Communication (3 cr.)
- SPEA-E 451 Air Pollution and Control (3 cr.)
- SPEA-H 316 Environmental Health Science (3 cr.)
- SPEA-V 275 Introduction to Emergency Management (3 cr.)
- SPEA-V 365 Urban Development and Planning (3cr.) (P: SPEA-V 161)
- SPEA-V 413 Food Systems and Community Resilience (3 cr.)
- SPEA-V 425 Homeland Security: Policy and Practice (3 cr.)
- SPEA-V 437 Public Transportation
- SPEA-V 462 Community Development (3 cr.)

Lab and Field Courses:
- SPEA-E 375 Techniques of Environmental Science (3 cr.) (P: SPEA-E 272 or H 316)
- SPEA-E 440 Wetlands Ecology and Management (4 cr.) (P: SPEA-E 272)
- SPEA-E 442 Habitat Analysis—Terrestrial (3 cr.)
- SPEA-E 443 Habitat Analysis—Aquatic (3 cr.)
- SPEA-E 461 Wildlife Techniques (3 cr.) (P: SPEA-E 272 or H 316, any biology course)

Land:
- SPEA-E 417 Fundamentals of Sustainable Agriculture (3 cr.)
- SPEA-E 422 Urban Forest Management (3 cr.)
- SPEA-E 442 Habitat Analysis—Terrestrial (3 cr.)
- SPEA-E 444 Hazardous Materials (3 cr.)
- SPEA-E 450 Soil Science and Management (3 cr.)
- SPEA-E 452 Solid and Hazardous Waste Management (3 cr.)
- SPEA-E 457 Introduction to Conservation Biology (3cr.) (R: 300-level ecology course
- SPEA-V 413 Food Systems and Community Resilience (3 cr.)

Law, Ethics, and Decision-making:
- SPEA-E 401 Human Behavior and Energy Consumption (3 cr.)
- SPEA-E 476 Environmental Law and Regulation (3 cr.)
- SPEA-V 203 The Call of Public Service: History, Philosophy, Values and Outcomes (3 cr.)
- SPEA-V 412 Leadership and Ethics (3 cr.)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)

Technical Skills:
- SPEA-E 418 Vector-Based GIS (3 cr.)
- SPEA-E 429 Application of GIS (3 cr.) (P: SPEA-E 418 or permission of instructor)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 401 Financial and Cost-Benefit Analysis (3 cr.) (P: SPEA-V 202)
- SPEA-V 415 Data Science in Public and Environmental Affairs (3 cr.)
- SPEA-V 435 Negotiation and Alternative Dispute Resolution (3 cr.)
- SPEA-V 461 Cloud Computing Applications in Public Affairs (3 cr.) (P: SPEA-V 261 or SPEA-V 369 or BUS-K 201 or CSCI-A 110 or INFO-I 101)
- SPEA-V 475 Database Management Systems (3 cr.) (P: SPEA-V 261 or SPEA-V 369 or BUS-K 201 or CSCI-A 110 or INFO-I 101)
- SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.)

Water Resources:
- SPEA-E 260 Introduction to Water Resources (3 cr.)
- SPEA-E 355 Introduction to Limnology (3 cr.)
- SPEA-E 411 Introduction to Groundwater Hydrology (3 cr.)
- SPEA-E 416 Fisheries Management (3 cr.) (P: SPEA-E 332 or SPEA-E 355 or SPEA-E 455 or BIOL-L 473)
- SPEA-E 431 Water Supply and Wastewater Treatment (3 cr.) (P: SPEA-E 272)
- SPEA-E 440 Wetlands Ecology and Management (4 cr.) (P: SPEA-E 272)
- SPEA-E 443 Habitat Analysis—Aquatic (3 cr.)
- SPEA-E 455 Limnology (4 cr.) (R: college chemistry and biology or permission of instructor)
- SPEA-E 456 Lake and Watershed Management (3 cr.) (R: any college level biology or chemistry course)
- SPEA-E 457 Introduction to Conservation Biology (3 cr.) (R: 300-level ecology course)
- SPEA-E 460 Wildlife Management (3 cr.)
- SPEA-E 461 Wildlife Techniques (3 cr.) (P: SPEA-E 272 or H 316 or any biology course)

Topics Courses and O'Neill Programs:
- SPEA-E 400 Topics in Environmental Studies (1-3 cr.) *(approved topics only; consult SPEA advisor; repeatable with different topics)*
- SPEA-E 482 Overseas Topics in Environmental Science (0-15 cr.) *(approved topics only; consult SPEA advisor; repeatable with different topics)*
- SPEA-V 378 Federal Government Processes (3 cr.)
- SPEA-V 409 Federal Policymaking and the Hearing Process (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) *(approved topics only; consult SPEA advisor; repeatable with different topics)*
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) *(approved topics only; consult SPEA advisor; repeatable with different topics)*
- SPEA-V 499 Honors Thesis (3 cr.)

Human Resource Management Major Requirements (Fourteen courses)

Note: Courses may be listed in more than one area below. However, significant restrictions apply, see your academic advising report (AAR).

Students may not "double count" courses within this major.

The following four courses:

- SPEA-V 202 Contemporary Economic Issues in Public Affairs (3 cr.) (P: ECON-E 251 **or** ECON-B 251)
- SPEA-V 236 Managing and Leading Organizations (3 cr.)
- SPEA-V 246 Elements of Governmental and Nonprofit Financial Accounting Cycle (3 cr.) (P: SPEA-V 186)
- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)*

*Iterative Writing Assignment Course

The following six courses:

- SPEA-V 361 Financial Management (3 cr.) (P: SPEA-V 246 or BUS-A 201) **or** BUS-F 300 Introduction to Financial Management (3 cr.) (P: BUS-A 200, A 201 or A 202)
- SPEA-V 443 Managing Workforce Diversity (3 cr.)
- SPEA-V 476 Compensation Strategy and Systems (3 cr.) (P: SPEA-V 373)

- SPEA-V 477 Strategic Human Resource Management (3 cr.) (P: SPEA-V 373)
- SPEA-V 478 Employment Law for Human Resource Management (3 cr.) (P: SPEA-V 184)
- SPEA-V 479 Employee Recruitment and Selection (3 cr.) (P: SPEA-V 373)

Four of the following courses (at least three courses must be offered by SPEA):

- SPEA-V 203 The Call of Public Service: History, Philosophy, Values and Outcomes (3 cr.)
- SPEA-V 326 Communication for Government and Nonprofit Organizations (3 cr.)
- SPEA-V 336 Managing External Collaboration and Networks (3 cr.) (P: SPEA-V 185)
- SPEA-V 348 Management Science (3 cr.) (P: SPEA-K 300, MATH-M 025 or MATH-M 118)
- SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) (P: SPEA-K 300 or equivalent)
- SPEA-V 374 Intermediate Public Budgeting and Finance (3 cr.) (P: SPEA-V 186)
- SPEA-V 378 Federal Government Processes (3 cr.)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 404 Advanced Public Management (3 cr.) (P: SPEA-V 185)
- SPEA-V 409 Federal Policymaking and the Hearing Process (3 cr.)
- SPEA-V 412 Leadership and Ethics (3 cr.)
- SPEA-V 415 Data Science in Public and Environmental Affairs (3 cr.)
- SPEA-V 432 Labor Relations in the Public Sector (3 cr.) (P: SPEA-V 373)
- SPEA-V 435 Negotiation and Alternative Dispute Resolution (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 457 Human Resources Training and Development (3 cr.) (P: SPEA-V 373)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 499 Honors Thesis (3 cr.)
- SPH-S 201 Introduction to Industrial Hygiene (3 cr.)
- SPH-S 210 General Industry Standards (3 cr.)
- SPH-S 214 OSHA Construction Standards (3 cr.)
- SPH-S 251 Incident Investigation and Analysis (3 cr.)
- SPH-S 332 Ergonomics and Human Factors (3 cr.)
- SPH-S 345 Safety Program Management (3 cr.)
- SPH-S 415 Safety Education and Training (3 cr.)

Law and Public Policy Major

Requirements (Fourteen courses)

Note: Courses may be listed in more than one area below. However, significant restrictions apply, see your academic advising report (AAR). It is strongly recommended that students take SPEA-V 184 as the first course for this major.

Students may not "double count" courses within this major.

The following six courses:

- SPEA-V 202 Contemporary Economic Issues in Public Affairs (3 cr.) (P: ECON-E 251 or ECON-B 251)
- SPEA-V 339 Legal History and Public Policy (3 cr.) (P: SPEA-V 184)*
- SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) (P: SPEA-K 300 or equivalent) **or** SPEA V 491 Honors Research in Public and Environmental Affairs (3 cr.)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 405 Public Law and the Legislative Process (3 cr.)
- SPEA-V 435 Negotiation and Alternative Dispute Resolution (3 cr.)

*Iterative writing assignment course

Two SPEA-V 456 topics courses offered by Maurer Law School Faculty:

- SPEA-V 456 Topics in Public Law (3 cr.) (P: SPEA-V 184) (approved topics only; consult SPEA advisor; repeatable with different topics)

Six of the following courses (at least five courses must be offered by SPEA):

- SPEA-E 324 Controversies in Environmental Health (3 cr.)
- SPEA-E 476 Environmental Law and Regulation (3 cr.)
- SPEA-H 341 Legal Aspects of Health Care Administration (3 cr.) (P: SPEA-H 124)
- SPEA-V 161 Urban Problems and Solutions (3 cr.)
- SPEA-V 272 Terrorism and Public Policy (3 cr.)
- SPEA-V 275 Introduction to Emergency Management (3 cr.)
- SPEA-V 340 Urban Government Administration (3 cr.)
- SPEA-V 378 Federal Government Processes (3 cr.)
- SPEA-V 404 Advanced Public Management (3 cr.) (P: SPEA-V 185)
- SPEA-V 406 Public Law and the Electoral Process (3 cr.)
- SPEA-V 407 Advocacy, Policy Change, and Government Relations (3 cr.) (P: SPEA-V 184 or SPEA-V 203)
- SPEA-V 409 Federal Policymaking and the Hearing Process (3 cr.)
- SPEA-V 414 National Security Bureaucracy and Policy (3 cr.)
- SPEA-V 415 Data Science in Public and Environmental Affairs (3 cr.)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)
- SPEA-V 425 Homeland Security: Policy and Practice (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

- SPEA-V 454 Human Resource Management in Nonprofit Organizations (3 cr.) (R: SPEA-V 221 or SPEA-V 362)
- SPEA-V 462 Community Development (3 cr.)
- SPEA-V 477 Strategic Human Resource Management (3 cr.) (P: SPEA-V 373)
- SPEA-V 478 Employment Law for Human Resource Management (3 cr.) (P: SPEA-V 184)
- SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 499 Honors Thesis (3 cr.)
- AAAD-A 481 Racism and the Law (3 cr.)
- BUS-L 201 Legal Environment of Business (3 cr.) **or** BUS-L 203 Commercial Law I (3 cr.)
- CJUS-P 370 Criminal Law (3 cr.)
- CJUS-P 371 Criminal Procedure (3 cr.)
- CJUS-P 375 American Juvenile Justice System (3 cr.)
- CJUS-P 414 Adolescents and the Law (3 cr.)
- CLAS-C 308 Roman Law (3 cr.) (P: CLAS-C 102)
- INTL-I 340 Ethics and Decision making in International Politics (3 cr.)
- INTL-L 351 Law and Authoritarianism (3 cr.)
- SOC-S 326 Law and Society (3 cr.) (P: three credit hours of sociology or consent of instructor)
- SPH-R 414 Legal Aspects of Recreation (3 cr.)

Management Major

Requirements (Fourteen courses)

Note: Courses may be listed in more than one area below. However, significant restrictions apply, see your academic advising report (AAR).

Students may not "double count" courses within this major.

The following five Management Foundation courses:

- SPEA-V 202 Contemporary Economic Issues in Public Affairs (3 cr.) (P: ECON-E 251 or ECON-B 251)
- SPEA-V 236 Managing and Leading Organizations (3 cr.)*
- SPEA-V 246 Elements of Governmental and Nonprofit Financial Accounting Cycle (3 cr.) (P: SPEA-V 186)
- SPEA-V 361 Financial Management (3 cr.) (P: SPEA-V 246 or BUS-A 201) **or** BUS-F 300 Introduction to Financial Management (3 cr.) (P: BUS-A 200, A 201 or A 202)
- SPEA-V 369 Managing Information Technology (3 cr.) (R: SPEA-V 261 or BUS-K 201)

*Iterative writing assignment course

Two of the following Analytical courses:

- SPEA-V 348 Management Science (3 cr.) (P: SPEA-K 300, MATH-M 025 or MATH-M 118)
- SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) (P: SPEA-K 300 or Equivalent)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)

- SPEA-V 401 Financial and Cost-Benefit Analysis (3 cr.) (P: SPEA-V 202)
- SPEA-V 491 Honors Research in Public and Environmental Affairs (3 cr.)

Two of the following Human Resource Management courses:

- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)
- SPEA-V 432 Labor Relations in the Public Sector (3 cr.) (P: SPEA-V 373)
- SPEA-V 435 Negotiation and Alternative Dispute Resolution (3 cr.)
- SPEA-V 443 Managing Workforce Diversity (3 cr.)
- SPEA-V 457 Human Resources Training and Development (3 cr.) (P: SPEA-V 373)
- SPEA-V 476 Compensation Strategy and Systems (3 cr.) (P: SPEA-V 373)
- SPEA-V 477 Strategic Human Resource Management (3 cr.) (P: SPEA-V 373)
- SPEA-V 478 Employment Law for Human Resource Management (3 cr.) (P: SPEA-V 184)
- SPEA-V 479 Employee Recruitment and Selection in the Public Sector (3 cr.) (P: SPEA-V 373)

Five of the following Major courses:

Note: These courses are grouped by topic to assist students, but students are free to take any combination of them. *Courses may appear in more than one list. Courses cannot double count between Analytical, Human Resource Management, and Major courses.*

Financial Management:

- SPEA-V 346 Introduction to Government Accounting and Financial Reporting (3 cr.) (P: SPEA-V 246)
- SPEA-V 356 Introduction to Nonprofit Accounting and Reporting (3 cr.) (SPEA-V 246)
- SPEA-V 374 Intermediate Public Budgeting and Finance (3 cr.) (P: SPEA-V 186)
- SPEA-V 401 Financial and Cost-Benefit Analysis (3 cr.) (P: SPEA-V 202)
- SPEA-V 427 International Development Finance (3 cr.)
- SPEA-V 441 Topics in Financial Management and Policy (3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 442 Topics in Budgeting or Cost Benefit (3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

Managing Government Programs:
- SPEA-E 324 Controversies in Environmental Health (3 cr.)
- SPEA-E 340 Environmental Economics and Finance (3 cr.)
- SPEA-E 363 Environmental Management (3 cr.) (R: SPEA-E 183)
- SPEA-E 476 Environmental Law and Regulation (3 cr.)
- SPEA-H 124 Overview of the U.S. Healthcare System (3 cr.)
- SPEA-V 272 Terrorism and Public Policy (3 cr.)
- SPEA-V 275 Introduction to Emergency Management (3 cr.)

- SPEA-V 340 Urban Government Administration (3 cr.)
- SPEA-V 365 Urban Development and Planning (3 cr.)
- SPEA-V 404 Advanced Public Management (3 cr.) (P: SPEA-V 185)
- SPEA-V 407 Advocacy, Policy Change, and Government Relations (3 cr.) (P: SPEA-V 184 or SPEA-V 203)
- SPEA-V 414 National Security Bureaucracy and Policy (3 cr.)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)
- SPEA-V 425 Homeland Security: Policy and Practice (3 cr.)
- SPEA-V 437 Public Transportation (3 cr.)
- SPEA-V 462 Community Development (3 cr.)

Management Skills:

- SPEA-V 203 The Call of Public Service: History, Philosophy, Values and Outcomes (3 cr.)
- SPEA-V 326 Communication for Government and Nonprofit Organizations (3 cr.)
- SPEA-V 336 Managing External Collaboration and Networks (3 cr.) (P: SPEA-V 185)
- SPEA-V 348 Management Science (3 cr.) (P: SPEA-K 300, MATH-M 025 or MATH-M 118)
- SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) (P: SPEA-K 300 or Equivalent)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 389 Risk and Hazard Mitigation (3 cr.)
- SPEA-V 412 Leadership Ethics (3 cr.)
- SPEA-V 415 Data Science in Public and Environmental Affairs (3 cr.)
- SPEA-V 458 Fund Development for Nonprofit Organizations (3 cr.)
- SPEA-V 461 Cloud Computing Applications in Public Affairs (3 cr.) (P: SPEA-V 261 or SPEA-V 369 or BUS-K 201 or CSCI-A 110 or INFO-I 101)
- SPEA-V 475 Database Management Systems (3 cr.) (P: SPEA-V 261 or SPEA-V 369 or BUS-K 201 or CSCI-A 110 or INFO-I 101)
- SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.)

Topics Courses and O'Neill Programs:

- SPEA-V 378 Federal Government Processes (3 cr.)
- SPEA-V 409 Federal Policymaking and the Hearing Process (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 499 Honors Thesis (3 cr.)

Nonprofit Management and Leadership Major

Requirements (Fourteen courses)

Note: Courses may be listed in more than one area below. However, significant restrictions apply, see your academic advising report (AAR).

Students may not "double count" courses within this major.

The following six courses:

- SPEA-V 221 Nonprofit and Voluntary Sector (3 cr.)
- SPEA-V 236 Managing and Leading Organizations (3 cr.)*
- SPEA-V 246 Elements of Governmental and Nonprofit Financial Accounting Cycle (3 cr.) (P: SPEA-V 186)
- SPEA-V 336 Managing External Collaboration and Networks (3 cr.) (P: SPEA-V 185)
- SPEA-V 356 Introduction to Nonprofit Accounting & Reporting (3 cr.) (P: SPEA-V 246)
- SPEA-V 362 Nonprofit Management & Leadership (3 cr.)

*Iterative writing assignment course

Three of the following SPEA Nonprofit Issues and Practices courses:

- SPEA-V 434 NGO Management for International Development (3 cr.)
- SPEA-V 450 Nonprofit Resource Management (3 cr.)
- SPEA-V 454 Human Resource Management in Nonprofit Organizations (3 cr.) (R: SPEA-V 221 or SPEA-V 362)
- SPEA-V 458 Fund Development for Nonprofit Organizations (3 cr.)
- SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.)

Five of the following courses (no more than one non-SPEA course). Students must take at least one course from each of the three categories: (1) Equity, Equality, & Justice, (2) Organizational Contexts & Policy Areas, (3) Management & Analysis Skills. Courses may appear on more than one list and cannot double count between categories.

Equity, Equality, & Justice:

- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)
- SPEA-V 443 Managing Workforce Diversity (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- AAAD-A 408 Race, Gender, and Class (3 cr.)
- AAAD-A 420 Transforming Divided Communities and Societies (3 cr.)
- AAAD-A 481 Racism & the Law (3 cr.)
- CEUS-R 321 Gender and Women in Central Asia (3 cr.)
- GEOG-G 306 Current Issues in Globalization, Development, and Justice (3 cr.)
- GEOG-G 352 Food and Poverty in America (3 cr.)
- INTL-I 304 Bodies Under Fire: Gender/Violence/ Human Rights (3 cr.)

- PACE-C 350 Leadership, Social Movements, and Modern American Politics (3 cr.)
- POLS-Y 324 Gender and Politics (3 cr.)
- POLS-Y 329 Racial and Ethnic Politics in the United States (3 cr.)
- POLS-Y 353 The Politics of Gender and Sexuality (3 cr.)
- SOC-S 335 Race and Ethnic Relations (3 cr.)
- SOC-S 358 Social Inequalities in Health and Health Care (3 cr.)

Organizational Contexts & Policy Areas:

- SPEA-A 459 Public Policy and the Arts (3 cr.)
- SPEA-A 464 The Economics and Administration of Arts Organizations (3 cr.)
- SPEA-E 363 Environmental Management (3 cr.) (R: SPEA-E 183)
- SPEA-H 324 Health Policy (3 cr.) (P: SPEA-H 124)
- SPEA-V 378 Federal Government Processes (3 cr.)
- SPEA-V 409 Federal Policymaking and the Hearing Process (3 cr.)
- SPEA-V 413 Food Systems and Community Resilience (3 cr.)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)
- SPEA-V 425 Homeland Security: Policy and Practice (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

Management & Analysis Skills:

- SPEA-A 354 Arts Marketing Fundamentals (3 cr.)
- SPEA-A 483 Arts Entrepreneurship (3 cr.)
- SPEA-V 203 The Call of Public Service: History, Philosophy, Values and Outcomes (3 cr.)
- SPEA-V 326 Communication for Government and Nonprofit Organizations (3 cr.)
- SPEA-V 361 Financial Management (3 cr.) (P: SPEA-V 246 or BUS-A 201)
- SPEA-V 369 Managing Information Technology (3 cr.)
- SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) (P: SPEA-K300 or equivalent)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 401 Financial and Cost-Benefit Analysis (3 cr.) (P: SPEA-V 202)
- SPEA-V 412 Leadership and Ethics (3 cr.)
- SPEA-V 415 Data Science in Public and Environmental Affairs (3 cr.)
- SPEA-V 435 Negotiation and Alternative Dispute Resolution (3 cr.)
- SPEA-V 443 Managing Workforce Diversity (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 462 Community Development (3 cr.)

- SPEA-V 475 Database Management Systems (3 cr.) (SPEA-V 261 or SPEA-V 369 or BUS-K 201 or CSCI-A 110 or INFO-I 101)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 491 Honors Research in Public and Environmental Affairs (3 cr.)
- SPEA-V 499 Honors Thesis (3 cr.)

Policy Analysis Major Requirements (Fourteen courses)

Note: Courses may be listed in more than one area below. However, significant restrictions apply, see your academic advising report (AAR).

Students may not "double count" courses within this major.

The following seven courses:

- SPEA-V 202 Contemporary Economic Issues in Public Affairs (3 cr.) (P: ECON-E 251 or ECON-B 251)
- SPEA-V 348 Management Science (3 cr.)
- SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) (P: SPEA-K 300)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 386 Case Studies for Policy Analysis (3 cr.)*
- SPEA-V 401 Financial and Cost-Benefit Analysis (3 cr.) (P: SPEA-V 202)
- SPEA-V 449 Senior Policy Seminar (3 cr.)

*Iterative writing assignment course

Seven courses from the following: *Note: These courses are grouped by topic to assist students, but students are free to take any seven of them. Courses may appear in more than one list.*

Environmental Policy:

- SPEA-E 324 Controversies in Environmental Health (3 cr.)
- SPEA-E 340 Environmental Economics and Finance (3 cr.)
- SPEA-E 401 Human Behavior and Energy Consumption (3 cr.)
- SPEA-E 476 Environmental Law and Regulation (3 cr.)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)

Health Policy:
- SPEA-H 324 Health Policy (3 cr.) (P: SPEA-H 124)
- SPEA-H 354 Health Economics (3 cr.) (P: SPEA-H 124 and ECON-E 251 or ECON-B 251)
- SPEA-H 403 Pharmaceutical Industry and Public Policy (3 cr.) (P: SPEA-H 124)

Law and Ethics:

- SPEA-E 476 Environmental Law and Regulation (3 cr.)
- SPEA-V 203 The Call of Public Service: History, Philosophy, Values and Outcomes (3 cr.)

- SPEA-V 405 Public Law and the Legislative Process (3 cr.)
- SPEA-V 406 Public Law and the Electoral Process (3 cr.)
- SPEA-V 407 Advocacy, Policy Change, and Government Relations (3 cr.) (P: SPEA-V 184 or SPEA-V 203)
- SPEA-V 412 Leadership and Ethics (3 cr.)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)

Security Policy:

- SPEA-V 272 Terrorism and Public Policy (3 cr.)
- SPEA-V 275 Introduction to Emergency Management (3 cr.)
- SPEA-V 414 National Security Bureaucracy and Policy (3 cr.)
- SPEA-V 425 Homeland Security: Policy and Practice (3 cr.)

Urban and Community Policy:

- SPEA-V 161 Urban Problems and Solutions (3 cr.)
- SPEA-V 365 Urban Development and Planning (3 cr.) (P: SPEA-V 161)
- SPEA-V 421 Metropolitan Development (3 cr.)
- SPEA-V 437 Public Transportation (3 cr.)
- SPEA-V 462 Community Development (3 cr.)

Topics Courses and O'Neill Programs:

- SPEA-V 378 Policy Process in the United States (3 cr.)
- SPEA-V 409 Federal Policymaking and the Hearing Process (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 491 Honors Research in Public and Environmental Affairs (3 cr.)
- SPEA-V 499 Honors Thesis (3 cr.)

Public Financial Management Major Requirements (Thirteen courses)

Note: Courses may be listed in more than one area below. However, significant restrictions apply, see your academic advising report (AAR).

Students may not "double count" courses within this major.

List 1: The following five courses:

- SPEA-V 202 Contemporary Economic Issues in Public Affairs (3 cr.) (P: ECON-E 251 or ECON-B 251)
- SPEA-V 246 Elements of Governmental and Nonprofit Financial Accounting Cycle (3 cr.) (P: SPEA-V 186)
- SPEA-V 361 Financial Management (3 cr.) (P: SPEA-V 246 or BUS-A 201)
- SPEA-V 374 Intermediate Public Budgeting and Finance (3 cr.) (P: SPEA-V 186)*

- SPEA-V 401 Financial and Cost-Benefit Analysis (3 cr.) (P: SPEA-V 202)

*Iterative writing assignment course

List 2: At least two of the following courses (students who take all three courses only need five from list 3.

- SPEA-V 346 Introduction to Government Accounting and Financial Reporting (3 cr.) (P: SPEA-V 246)
- SPEA-V 371 Financing Public Affairs (3 cr.) (P: SPEA-V 202)
- SPEA-V 439 Debates in Public Finance (3 cr.) (P: SPEA-V 202)

List 3: Six of the following courses.

These courses are grouped by topic to assist students, but students are free to take any of them. Courses may appear in more than one list.

Public Financial Management:

- SPEA-V 346 Introduction to Government Accounting and Financial Reporting (3cr) (P: SPEA-V 246)
- SPEA-V 371 Financing Public Affairs (3cr) (P: SPEA-V 202)
- SPEA-V 439 Debates in Public Finance (3cr) (P: SPEA-V 202)

Application of Financial Management:

- SPEA-E 340 Environmental Economics and Finance (3 cr.)
- SPEA-H 350 Fundamentals of Healthcare Financial Management (3 cr.)
- SPEA-V 427 International Development Finance (3 cr.)

Policy and Public Finance:

- SPEA-H 354 Health Economics (3 cr.) (P: SPEA-H 124 or permission of instructor and ECON-E 251 or ECON-B 251)
- SPEA-V 386 Case Studies for Policies Analysis (3 cr.)
- SPEA-V 421 Metropolitan Development (3 cr.)
- SPEA-V 437 Public Transportation (3 cr.)

Skills and Decision making:

- SPEA-V 348 Management Science (3 cr.) (P: SPEA-K 300, MATH-M 025 or MATH-M 118)
- SPEA-V 356 Introduction to Nonprofit Accounting and Reporting (3 cr.) (P: SPEA-V 246)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 412 Leadership and Ethics (3 cr.)
- SPEA-V 415 Data Science for Public and Environmental Affairs (3 cr.)

Topics Courses and O'Neill Programs:
- SPEA-V 378 Federal Government Processes (3 cr.)
- SPEA-V 409 Federal Policymaking
- SPEA-V 441 Topics in Financial Management and Policy (3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 442 Topics in Budgeting or Cost-Benefit (3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 491 Honors Research in Public and Environmental Affairs (3 cr.)
- SPEA-V 499 Honors Thesis (3 cr.)

Public Management and Leadership Major Requirements (Thirteen courses)

Note: Courses may be listed in more than one area below. However, significant restrictions apply, see your academic advising report (AAR).

Students may not "double count" courses within this major.

The following eight Foundation courses:

- SPEA-V 202 Contemporary Economic Issues in Public Affairs (3 cr.) (P: ECON-E 251 or ECON-B 251)
- SPEA-V 236 Managing and Leading Organizations (3 cr.)
- SPEA-V 246 Elements of Government and Nonprofit Financial Accounting Cycle (3 cr.) (P: SPEA-V 186)
- SPEA-V 336 Managing External Collaboration and Networks (3 cr.) (P: SPEA-V 185)*
- SPEA-V 361 Financial Management (3 cr.) (P: SPEA-V 246 or BUS-A 201)
- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 404 Advanced Public Management (3 cr.) (P: SPEA-V 185)

*Iterative writing assignment course

Five of the following courses, at least two of which must be from Context and two of which must be from Skills.

Context Courses:

- SPEA-V 161 Urban Problems and Solutions (3 cr.)
- SPEA-V 203 The Call of Public Service: History, Philosophy, Values and Outcomes (3 cr.)
- SPEA-V 221 Nonprofit and Voluntary Sector (3 cr.)
- SPEA-V 275 Introduction to Emergency Management (3 cr.)
- SPEA-V 340 Urban Government Administration (3 cr.)
- SPEA-V 365 Urban Development and Planning (3 cr.) (P: SPEA-V 161)
- SPEA-V 378 Federal Government Processes (3 cr.)
- SPEA-V 409 Federal Policymaking and the Hearing Process (3 cr.)
- SPEA-V 414 National Security Bureaucracy and Policy (3 cr.)
- SPEA-V 421 Metropolitan Development (3 cr.)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 462 Community Development (3 cr.)
- SPEA-V 470 Community Development Workshop (3 cr.)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 499 Honors Thesis (3 cr.)

Two of the following Skills courses:

- SPEA-V 326 Communication for Government and Nonprofit Organizations (3 cr.)
- SPEA-V 348 Management Science (3 cr.) (P: SPEA-K 300, MATH-M 025 or MATH-M 118)
- SPEA-V 369 Managing Information Technology (3 cr.)
- SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) (P: SPEA-K 300 or equivalent)
- SPEA-V 374 Intermediate Public Budgeting and Finance (3 cr.) (P: SPEA-V 186)
- SPEA-V 401 Financial and Cost-Benefit Analysis (3 cr.) (P: SPEA-V 202)
- SPEA-V 412 Leadership and Ethics (3 cr.)
- SPEA-V 415 Data Science in Public and Environmental Affairs (3 cr.)
- SPEA-V 435 Negotiation and Alternative Dispute Resolution (3 cr.)
- SPEA-V 443 Managing Workforce Diversity (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 457 Human Resources Training and Development (3 cr.) (P: SPEA-V 373)
- SPEA-V 477 Strategic Human Resource Management (3 cr.) (P: SPEA-V 373)
- SPEA-V 481 Grant Wring for Public and Nonprofit Organizations (3 cr.)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 491 Honors Research in Public and Environmental Affairs (3 cr.)

Bachelor of Science (B.S.) in Healthcare Management and Policy

Bachelor of Science in Healthcare Management and Policy

DEGREE REQUIREMENTS

Common Ground

See https://gened.indiana.edu/approved-courses/index.html for updated requirements and a complete list of course options.

Oral Communication (One of the following courses)

- SPEA-V 326 Communication for Government and Nonprofit Organizations (3 cr.)
- BUS-C 104 Business Presentations (3 cr.)
- BUS-C 300 Business and Professional Communication (3 cr.)

Computer Course (One of the following courses)

- SPEA-V 261 Using IT in Public Affairs (3 cr.)

- BUS-K 201 The Computer in Business (3 cr.)
- CSCI-A 110 Introduction to Computers and Computing (3 cr.) (P: One year high school algebra or MATH-M 014)
- CSCI-A 201 Introduction to Programming (4 cr.) (P: Two years high school math or MATH-M 014)
- INFO-I 101 Intro to Informatics and Computing (3 cr.)

Each of the following courses:

- SPEA-K 300 Statistical Techniques (3 cr.) or equivalent (P: MATH-M 014 or equivalent; R: MATH-M 118)
- ECON-E 251 Fundamentals of Economics I (3 cr.) or ECON-B 251 Fundamentals of Economics for Business I (3 cr.)
- SPEA-V 202 Contemporary Economic Issues in Public Affairs (3 cr.) (P: ECON-E 251 or ECON-B 251)

Electives

Additional courses beyond the general education, core, and major requirements are needed to complete the minimum of 120 hours required for the degree. Please meet with your academic advisor to discuss your electives.

Healthcare Management and Policy Core (9 cr.)

The following three courses:

- SPEA-H 124 Overview of the U.S. Healthcare System (3 cr.)
- SPEA-H 322 Principles of Epidemiology (3 cr.) (P: SPEA-H 124)
- SPEA-V 181 U.S. Policy and Administration (3 cr.)

Experiential Learning Requirement (3 cr.)

Two of the following courses:

- SPEA-H 267 Career Development and Planning (2 cr.) (P: SPEA-H 124) **or** exemption (consult SPEA advisor)
- SPEA-H 466 Public Health Field Experience (1 cr.) (P: SPEA-H 124) **or** exemption (consult SPEA advisor)

Healthcare Management and Policy Major

Requirements (46 cr.)

Students may not "double count" courses within this major.

List 1: The following nine courses.

- SPEA-H 324 Health Policy (3 cr.) (P: SPEA-H 124)
- SPEA-H 341 Legal Aspects of Health Care Administration (3 cr.) (P: SPEA-H 124)
- SPEA-H 352 Healthcare Financial Management I (3 cr.) (P: SPEA-H 124) (Must be taken at Bloomington campus)
- SPEA-H 353 Healthcare Financial Management II (3 cr.) (P: SPEA-H 352)
- SPEA-H 354 Health Economics (3 cr.) (P: SPEA-H 124 and ECON-E 251 or ECON-B 251)
- SPEA-H 365 Health Services Practicum (1 cr.) (P: SPEA-H 124)
- SPEA-H 374 Health Management Ethics (3 cr.) (P: SPEA-H 124)*****

- SPEA-H 401 Strategic Planning in Health Organizations (3 cr.) (P: SPEA-H 353 or SPEA-H 350)
- SPEA-H 456 Healthcare Reimbursement (3 cr.) (P: SPEA-H 353or SPEA-H 350)

* Iterative writing assignment course

List 2: One of the following courses.

- SPEA-V 348 Management Science (3 cr.) (P: SPEA-K 300, MATH-M 025 or MATH-M 118)
- SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) (P: SPEA-K 300 or Equivalent)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 415 Data Science in Public and Environmental Affairs (3 cr.)

List 3: One of the following courses.

- SPEA-H 402 Hospital Administration (3 cr.) (P: SPEA-H 124)
- SPEA-H 403 Pharmaceutical Industry and Public Policy (3 cr.) (P: SPEA-H 124)
- SPEA-H 411 Chronic and Long-Term Care Administration (3 cr.) (P: SPEA-H 124)

List 4: Five of the following courses.

- SPEA-E 324 Controversies in Environmental Health (3 cr.)
- SPEA-H 402 Hospital Administration (3 cr.) (P: SPEA-H 124)
- SPEA-H 403 Pharmaceutical Industry & Public Policy (3 cr.) (P: SPEA-H 124)
- SPEA-H 411 Chronic and Long-Term Care Administration (3 cr.) (P: SPEA-H 124)
- SPEA-H 432 Health Care Marketing (3 cr.) (P: SPEA-H 124)
- SPEA-H 455 Topics in Public Health (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 275 Introduction to Emergency Management (3 cr.)
- SPEA-V 348 Management Science (3 cr.) (P: SPEA-K 300, MATH-M 025 or MATH-M 118)
- SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) (P: SPEA-K 300 or Equivalent)
- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)
- SPEA-V 378 Federal Government Processes (3 cr.)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 409 Federal Policymaking and the Hearing Process (3 cr.)
- SPEA-V 415 Data Science in Public and Environmental Affairs (3 cr.)
- SPEA-V 432 Labor Relations in the Public Sector (3 cr.) (P: SPEA-V 373)
- SPEA-V 450 Contemporary Issues in Public Affairs (3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

- SPEA-V 491 Honors Research in Public and Environmental Affairs (3 cr.)
- SPEA-V 499 Honors Thesis (3 cr.)

Minors

Any Indiana University student enrolled in a bachelor's program may pursue one or more of the minors offered by the O'Neill School of Public and Environmental Affairs. Individuals interested in one or more of these minors should inquire in the O'Neill undergraduate advising office (SPEA 240) for additional details. Students should check with their degree-granting unit to make sure they are eligible for the SPEA minor of their choice. O'Neill SPEA's multidisciplinary faculty and curricula address environmental, health, public policy, and management issues from a variety of perspectives. A minor in O'Neill SPEA can enhance career opportunities for liberal arts and other majors.

General Policies and Procedures

Each minor requires 15 hours (Environmental and Sustainability Studies requires 18 credit hours) of specified courses with a 2.000 grade point average, and none of the courses may be taken by correspondence. The Educational Policy minor requires students to have both a C or better in required courses and a 2.000 overall for the program. The Environmental Science and Environmental and Sustainability Studies minors require students to have a C- or better in the required courses. Admitted O'Neill students earning a O'Neill SPEA minor may double count up to six (6) credit hours of minor courses with any other O'Neill academic program. Each O'Neill minor must have at least nine (9) credit hours that do not count toward any other O'Neill academic program. Non-O'Neill SPEA majors cannot double count courses with any O'Neill academic program.

The following minor areas are available on the Bloomington campus:

Arts Management
Education Policy
Environmental and Sustainability Studies
Environmental Management
Environmental Science
Environmental Science and Health
Healthcare Management and Policy
Homeland Security
Human Resource Management
Information Systems
Law and Public Policy
Nonprofit Management and Leadership
Policy Studies
Public and Environmental Affairs
Public Finance
Public Management and Leadership
Urban Planning and Community Development
Water Resources Science, Policy, and Management

Arts Management Minor

Requirements

The following two courses:

- SPEA-A 163 Introduction to Arts Management (3 cr.)
- SPEA-A 354 Arts Marketing (3 cr.)

One of the following management courses:

- SPEA-A 450 Performing Arts Organizations (3 cr.)
- SPEA-A 400 Museum Administration (3 cr.)

Two of the following courses:

- Any SPEA-A course not taken above
- SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.)

Education Policy Minor

Jointly Administered by the School of Education and School of Public and Environmental Affairs.

Requirements

At least 9 credits must be at the 300-400 level. A grade of C or better is required in each course and a 2.000 GPA overall for the minor.

The following two courses:

- EDUC-A 308 Legal Issues for Secondary Teachers (3 cr.)
- EDUC-H 200 Introduction to Education Policy (3 cr.)

One of the following courses:

- EDUC-H 205 Introduction to Educational Thought (3 cr.)
- EDUC-H 340 Education and American Culture (3 cr.)
- LATS-L 380 Latino Education Across the Americas (3 cr.)
- SOC-S 312 Education and Society (3 cr.)

One of the following courses:

- SPEA-V 236 Managing and Leading Organizations (3 cr.)
- SPEA-V 263 Public Management (3 cr.)
- SPEA-V 336 Managing External Collaboration and Networks (3 cr.) (P: SPEA-V 185)
- SPEA-V 362 Nonprofit Management and Leadership (3 cr.)
- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)
- SPEA-V 412 Leadership and Ethics (3 cr.)
- SPEA-V 443 Managing Workforce Diversity (3 cr.)

One of the following courses:

- SPEA-V 246 Elements of Governmental and Nonprofit Financial Accounting Cycle (3 cr.) (P: SPEA-V 186)
- SPEA-V 348 Management Science (3 cr.) (P: SPEA-K 300, MATH-M 025, MATH-M 118)
- SPEA-V 361 Financial Management (3 cr.) (P: SPEA-V 246 or BUS-A 201)
- SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) (P: SPEA-K 300 or equivalent)
- SPEA-V 374 Intermediate Public Budgeting & Finance (3 cr.) (P: SPEA-V 186)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 401 Finance and Cost Benefit Analysis (3 cr.) (P: SPEA-V 202)
- SPEA-V 449 Senior Policy Seminar (3 cr.)
- Or other courses approved by the minor oversight committee

Environmental and Sustainability Studies Minor

Joint minor with SPEA and College of Arts and Sciences.

See the College of Arts and Sciences bulletin for more information about the major and concentration areas: https://bulletins.iu.edu/iub/college/2021-2022/

Environmental Management Minor

Requirements (Five courses)

The following three courses:

- SPEA-E 183 Environment and People (3 cr.)
- SPEA-E 272 Introduction to Environmental Sciences (3 cr.) (R: SPEA-E 183)
- SPEA-E 363 Environmental Management (3 cr.) (R: SPEA-E 183)

One of the following courses:

- SPEA-E 311 Introduction to Risk Assessment and Risk Communication (3 cr.)
- SPEA-E 332 Introduction to Applied Ecology (3 cr.)
- SPEA-E 340 Environmental Economics and Finance (3 cr.)
- SPEA-E 410 Introduction to Environmental Toxicology (3 cr.) (R: any organismal biology course)
- SPEA-E 476 Environmental Law and Regulation (3 cr.) **or** SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)
- SPEA-H 316 Environmental Health Science (3 cr.)

One additional course chosen from the above list or the following courses:

- SPEA-E 355 Introduction to Limnology (3 cr.)
- SPEA-E 375 Techniques of Environmental Science (3 cr.)
- SPEA-E 400 Topics in Environmental Studies (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-E 411 Introduction to Groundwater Hydrology (3 cr.)
- SPEA-E 416 Fisheries Management (3 cr.) (P: SPEA-E 332 or SPEA-E 355 or SPEA-E 455 or BIOL-L 473)
- SPEA-E 417 Fundamentals of Sustainable Agriculture (3 cr.)
- SPEA-E 422 Urban Forest Management (3 cr.)
- SPEA-E 431 Water Supply and Wastewater Treatment (3 cr.) (P: SPEA-E 272)
- SPEA-E 440 Wetlands Ecology and Management (4 cr.) (P: SPEA-E 272)
- SPEA-E 444 Hazardous Materials (3 cr.)
- SPEA E 450 Soil Science and Management (3 cr.)
- SPEA-E 451 Air Pollution and Control (3 cr.)
- SPEA-E 452 Solid and Hazardous Waste Management (3 cr.)
- SPEA-E 456 Lake and Watershed Management (3 cr.)
- SPEA-E 457 Introduction to Conservation Biology (3 cr.)
- SPEA-E 460 Wildlife Management (3 cr.)
- SPEA-E 461 Wildlife Techniques (3 cr.) (P: SPEA-E 272 or H 316 or any biology course)

- SPEA-E 482 Overseas Topics in Environmental Science (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 413 Food Systems and Community Resilience (3 cr.)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

Environmental Science Minor

Joint minor with O'Neill and College of Arts and Sciences.

Requirements (Five courses)

A GPA of at least 2.000 is required, with no course grade lower than C–. In fulfilling the below requirements, students must also meet all other College requirements for minors. It is recommended that students have taken MATH-M 119 or higher and CHEM-C 117 or higher (or equivalents).

1. Introductory Course. One (1) course from the Introductory Course list.

- GEOG-G 208 Environment and Society (3 cr.)
- SPEA-E 272 Introduction to Environmental Science (3 cr.) (R: SPEA-E 183)

2. Electives. Four (4) additional courses from the Environmental Science Electives list; at least three must be at the 300-400 level.

- BIOL-B 300 Vascular Plants (4 cr.)
- BIOL-B 371 Ecological Plant Physiology (3 cr.)
- BIOL-L 211 Molecular Biology (3 cr.)
- BIOL-L 307 Biodiversity (3 cr.)
- BIOL-L 311 Genetics (3 cr.)
- BIOL-L 318 Evolution (3 cr.)
- BIOL-L 319 Genetics Laboratory (3 cr.)
- BIOL-L 326 Biodiverse City (3 cr.)
- BIOL-L 328 Disease Ecology and Evolution (3 cr.)
- BIOL-L 350 Environmental Biology (3 cr.)
- BIOL-L 376 Biology of Birds (4 cr.)
- BIOL-L 402 Ecosystem Ecology and Global Change (3 cr.)
- BIOL-L 433 Tropical Biology (3 cr.)
- BIOL-L 472 Microbial Ecology (3 cr.
- BIOL-L 473 Ecology (3 cr.)
- BIOL-L 474 Field and Laboratory Ecology (2 cr.)
- BIOL-M 250 Microbiology (3 cr.)
- BIOL-M 315 Microbiology Laboratory (2 cr.)
- BIOL-M 465 Environmental Microbiology Laboratory (3 cr.)
- BIOL-Z 373 Entomology (3 cr.)
- BIOL-Z 374 Invertebrate Zoology (3 cr.)
- BIOL-Z 375 Invertebrate Zoology Laboratory (2 cr.)
- BIOL-Z 406 Vertebrate Zoology (5 cr.)
- BIOL-Z 476 Biology of Fishes (3 cr.)
- CHEM-A 314 Biological and Environmental Chemical Analysis (2 cr.)
- CHEM-A 315 Chemical Measurements Laboratory (2 cr.)
- CHEM-A 316 Bioanalytical Chemistry Laboratory (2 cr.)
- CHEM-C 317 Equilibria and Electrochemistry (2 cr.)

- CHEM-C 318 Spectrochemistry and Separations (2 cr.)
- EAS-A 339 Weather Analysis and Forecasting (3 cr.)
- EAS-A 340/GEOG-G 304 Physical Meteorology and Climatology (3 cr.)
- EAS-A 347 Atmospheric Instrumentation (3 cr.)
- EAS-A 364 Dynamic Meteorology I (3 cr.)
- EAS-A 437 Advanced Meteorology and Climatology (3 cr.)
- EAS-A 476 Climate Change Science (3 cr.)
- EAS-E 225 Earth Materials (3 cr.)
- EAS-E 226 Earth Processes (3 cr.)
- EAS-E 227 Earth Climate and History (3 cr.)
- EAS-E 316 Mineral Resources (3 cr.)
- EAS-E 333 Sedimentary and Tectonic Processes (3 cr.)
- EAS-E 334 Principles of Sedimentology and Stratigraphy (3-4 cr.)
- EAS-E 341 Natural History of Coral Reefs (3 cr.)
- EAS-E 351 Elements of Hydrology (3 cr.)
- EAS-E 406 Introduction to Geochemistry (3 cr.)
- EAS-E 411 Invertebrate Paleontology (3 cr.)
- EAS-E 412 Vertebrate Paleontology (3 cr.)
- EAS-E 415 Principles of Geomorphology (3-4 cr.)
- EAS-E 423 Methods in Applied Geophysics (3-4 cr.)
- EAS-E 435 Glacial and Quaternary Geology (3 cr.)
- EAS-E 444 Methods in Analytical Geochemistry (1-2cr.)
- EAS-E 451 Principles of Hydrogeology (2-4 cr.)
- EAS-X 420 Regional Geology Field Trip (3 cr.)
- GEOG-G 307 Biogeography: The Distribution of Life (3 cr.)
- GEOG-G 336 Environmental Remote Sensing (3 cr.)
- GEOG-G 338 Geographic Information Science (3 cr.) or SPEA-E 418 Vector-based GIS (3 cr.)
- GEOG-G 341 Ecological Restoration: Science and Politics (3 cr.)
- GEOG-G 350 Field Methods in Physical Geography (3 cr.)
- GEOG-G 405 Ecological Climatology (3 cr.)
- GEOG-G 436 Advanced Remote Sensing: Digital Image Processing (3 cr.)
- GEOG-G 438 Advanced Geographic Information Science (3 cr.)
- GEOG-G 439 GIS and Environmental Analysis
- GEOG-G 444 Climate Change Impacts (3 cr.)
- GEOG-G 451 Water Resources (3 cr.)
- GEOG-G 452 Tree-Ring Science (3 cr.)
- GEOG-G 488 Applied Spatial Statistics (3 cr.)
- GEOG-G 489 Geospatial Analysis of Big Data in Python (3 cr.)
- SPEA-E 260 Introduction to Water Resources (3 cr.)
- SPEA-E 332 Introduction to Applied Ecology (3 cr.)
- SPEA-E 355 Introduction to Limnology ((3 cr.)
- SPEA-E 375 Techniques in Environmental Science (3 cr.)
- SPEA-E 400 Topics in Environmental Studies (1-3 cr.) (approved topics only; see academic advisor)
- SPEA-E 402 Water Quality Monitoring (3 cr.)
- SPEA-E 410 Introduction to Environmental Toxicology (3 cr.) (R: any organismal biology course)

- SPEA-E 417 Fundamentals of Sustainable Agriculture (3 cr.)
- SPEA-E 426 Applied Math for Environmental Science (3 cr.)
- SPEA-E 429 Application of GIS (3 cr.) (P: SPEA-E 418)
- SPEA-E 431 Water Supply and Wastewater Treatment (3 cr.)
- SPEA-E 440 Wetlands Ecology and Management (4 cr.) (P: SPEA-E 272)
- SPEA-E 442 Habitat Analysis—Terrestrial (3 cr.)
- SPEA-E 443 Habitat Analysis—Aquatic (3 cr.)
- SPEA-E 444 Hazardous Materials (3 cr.)
- SPEA-E 450 Soil Science and Management (3 cr.)
- SPEA-E 451 Air Pollution and Control (3 cr.)
- SPEA-E 455 Limnology (4 cr.)
- SPEA-E 456 Lake and Watershed Management (3 cr.)
- SPEA-E 457 Introduction to Conservation Biology (3 cr.)
- SPEA-E 460 Fisheries and Wildlife Management (3 cr.)
- SPEA-E 461 Fisheries and Wildlife Management Laboratory (3 cr.)
- SPEA-E 464 Organic Pollutants: Environmental Chemistry and Fate (3 cr.)
- SPEA-E 470 Elements of Fluid Mechanics (3 cr.)

Up to six (6) credit hours (combined total) of any of the following:

- BIOL-X 490 Individual Study (1-12 cr.)
- EAS-X 498 Undergraduate Research in Geology (1-6 cr.)
- GEOG-X 490 Undergraduate Readings and Research in Geography (1-3 cr.)
- SPEA-E 490 Directed Research in Environmental Science (1-4 cr.)

Or other courses approved by the BSES program director.

Environmental Science and Health Minor

Requirements (Five courses)

The following three courses:

- SPEA-E 183 Environment and People (3 cr.)
- SPEA-E 272 Introduction to Environmental Sciences (3 cr.) (R: SPEA-E 183)
- SPEA-H 316 Environmental Health Science (3 cr.)

Two of the following courses:

- SPEA-E 311 Introduction to Risk Assessment and Risk Communication (3 cr.)
- SPEA-E 324 Controversies in Environmental Health (3 cr.)
- SPEA-E 375 Techniques of Environmental Science (3 cr.)
- SPEA-E 400 Topics in Environmental Studies (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-E 410 Introduction to Environmental Toxicology (3 cr.) (R: any organismal biology course)
- SPEA-E 412 Risk Communication (3 cr.)

- SPEA-E 431 Water Supply and Wastewater Treatment (3 cr.)
- SPEA-E 444 Hazardous Materials
- SPEA-E 451 Air Pollution and Control (3 cr.)
- SPEA-E 452 Solid and Hazardous Waste Management (3 cr.)
- SPEA-E 482 Overseas Topics in Environmental Science (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-H 455 Topics in Public Health (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

Healthcare Management and Policy Minor

Requirements (Five courses)

The following three courses:

- SPEA-H 124 Overview of the U.S. Healthcare System (3 cr.)
- SPEA-H 324 Health Policy (3 cr.) (P: SPEA-H 124)
- SPEA-H 350 Fundamentals of Healthcare Financial Management (3 cr.) (P: SPEA-H 124 or permission of instructor)

One of the following courses:

- SPEA-H 322 Principles of Epidemiology (3 cr.)
- SPEA-H 341 Legal Aspects of Health Care Administration (3 cr.) (P: SPEA-H 124)
- SPEA-H 354 Health Economics (3 cr.) (P: SPEA-H 124 and ECON-E 251 **or** ECON-B 251)
- SPEA-H 374 Health Management Ethics (3 cr.) (P: SPEA-H 124)
- SPEA-H 401 Strategic Planning in Health Organizations (3 cr.) (P: SPEA-H 353 or SPEA-H 350)
- SPEA-H 402 Hospital Administration (3 cr.) (P: SPEA-H 124)
- SPEA-H 403 Pharmaceutical Industry and Public Policy (3 cr.) (P: SPEA-H 124)
- SPEA-H 411 Chronic and Long-Term Care Administration (3 cr.) (P: SPEA-H 124)
- SPEA-H 432 Health Care Marketing (3 cr.) (P: SPEA-H 124)
- SPEA-H 455 Topics in Public Health (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-H 456 Healthcare Reimbursement (3 cr.) (P: SPEA-H 353 or SPEA-H 350)

One of the following courses:

- Any course not selected from the list above (3 cr.)
- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)
- BUS-J 375 Strategic Management (3 cr.)
- BUS-P 300 (or P304 Honors) Operations Management (3 cr.)
- ECON-E 321 Intermediate Microeconomics (3 cr.)
- BIOT-T 312 Societal Issues in Biotechnology (3 cr.)
- SOC-S 358 Social Issues in Health and Medicine (3 cr.)

- STAT-S 303 Applied Statistical Methods for the Life Sciences (3 cr.)
- SPH-B 403 Public Health Program Planning (3 cr.)

Homeland Security Minor

Requirements (Five courses)

The following three courses:

- SPEA-V 275 Introduction to Emergency Management (3 cr.)
- SPEA-V 412 Leadership and Ethics (3 cr.)
- SPEA-V 425 Homeland Security Policy and Practice (3 cr.)

Two of the following courses (6 cr.). At least one of these two must be a SPEA course. These courses are separated into pathways to assist students in selecting courses, but students are free to choose any two courses.

PATH 1 –Security and Infrastructure Emphasis

- SPEA-E 311 Introduction to Risk Assessment and Risk Communication (3 cr.)
- SPEA-E 400 Topics in Environmental Studies (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 272 Terrorism and Public Policy (3 cr.)
- SPEA-V 414 National Security Bureaucracy and Policy (3 cr.)
- SPEA-V 437 Public Transportation (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 456 Topics in Law Policy (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics
- SPEA-V 482 Overseas Topics in Public Affairs (1-6 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics; no more than 3 credit hours of overseas study may be applied to this minor)
- ILS-Z 221 Intelligence Analytics (3 cr.)
- INFO-I 230 Analytical Foundations of Security (3 cr.) (P: INFO-I 101)
- POLS-Y 311 Democracy & National Security (3 cr.)
- CJUS-P 307 Policing Democracies (3 cr.)

PATH 2 –Disaster Management Emphasis

- SPEA-E 311 Introduction to Risk Assessment and Risk Communication (3 cr.)
- SPEA-E 400 Topics in Environmental Studies (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-E 412 Risk Communications (3 cr.)
- SPEA-E 418 Vector-based GIS (3 cr.)
- SPEA-V 389 Risk and Hazard Mitigation (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- INFO-I 426 Informatics in Disasters and Emergency Response (3 cr.)

Human Resource Management Minor
Requirements (Five courses)

The following three courses:

- SPEA-V 236 Managing and Leading Organizations (3 cr.)
- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)
- SPEA-V 477 Strategic Human Resource Management (3 cr.) (P: SPEA-V 373)

Two of the following courses:

- SPEA-V 432 Labor Relations in the Public Sector (3 cr.)
- SPEA-V 435 Negotiation and Alternative Dispute Resolution (3 cr.)
- SPEA-V 443 Managing Workforce Diversity (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 457 Human Resources Training and Development (3 cr.) (P: SPEA-V 373)
- SPEA-V 476 Compensation Strategy and Systems (3 cr.) (P: SPEA-V 373)
- SPEA-V 478 Employment Law for Human Resource Management (3 cr.) (P: SPEA-V 184)
- SPEA-V 479 Employee Recruitment and Selection in the Public Sector (3 cr.) (P: SPEA-V 373)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

Information Systems Minor

Requirements (five courses)

The following three courses:

- SPEA-V 261 Using IT in Public Affairs (3 cr.) **or** BUS-K 201 The Computer in Business (3 cr.) **or** CSCI-A 110 Introduction to Computers and Computing (3 cr.) (P: One year high school algebra or MATH-M 014) **or** CSCI-A 201 Introduction to Programming I (4 cr.) (P: Two years high school math or MATH-M 014) **or** INFO-I 101 Introduction to Informatics and Computing (3 cr.)
- SPEA-V 369 Managing Information Technology (3 cr.)
- SPEA-V 475 Database Management Systems (3 cr.) (P: SPEA-V 261 or SPEA-V 369 or BUS-K 201 or CSCI-A 110 or INFO-I 110)

Six credits of the following courses:

- SPEA-E 400 Intro to Coding for Environment and Policy (1 cr.)
- SPEA-E 400 Python Programming for Env and Policy (1 cr.)
- SPEA-E 400 Using R for Env and Policy (1 cr.)
- SPEA-E 400 Topics in Env Studies (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-E 418 Vector-Based GIS (3 cr.)
- SPEA-V 348 Management Science (3 cr.)
- SPEA-V 415 Data Science in Public and Environmental Affairs (3 cr.)
- SPEA-V 450 Human Resources Information Systems (3 cr.)

- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 461 Cloud Computing Applications in Public Affairs (3 cr.) (P: SPEA-V 261 or SPEA-V 369 or BUS-K A 201 or CSCI-A 110 or INFO-I 110)
- SPEA-V 475 Database Management Systems (3 cr.) (SPEA-V 261 or SPEA-V 369 or BUS-K 201 or CSCI-A 110 or INFO-I 101)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

Law and Public Policy Minor

Requirements (Five courses)

The following two courses:

- SPEA-V 184 Law and Public Affairs (3 cr.)
- SPEA-V 339 Legal History and Public Policy (3 cr.) (P: SPEA-V 184)

Three of the following courses, two of which must include SPEA courses:

- SPEA-E 476 Environmental Law and Regulation (3 cr.)
- SPEA-H 341 Legal Aspects of Health Care Administration (3 cr.) (P: SPEA-H 124)
- SPEA-V 340 Urban Government Administration (3 cr.)
- SPEA-V 405 Public Law and the Legislative Process (3 cr.)
- SPEA-V 406 Public Law and the Electoral Process (3 cr.)
- SPEA-V 407 Advocacy, Policy Change, and Government Relations (3 cr.) (P: SPEA-V 184 or SPEA-V 203)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)
- SPEA-V 425 Homeland Security: Policy and Practice (3 cr.)
- SPEA-V 435 Negotiation and Alternative Dispute Resolution (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 478 Employment Law for Human Resource Management (3 cr.) (P: SPEA-V 184)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- BUS-L 201 Legal Environment of Business (3 cr.)
- MSCH-J 300 Communications Law (3 cr.)
- POLS-Y 317 Voting Elections and Public Opinion (3 cr.)
- POLS-Y 318 American Presidency (3 cr.)
- SOC-S 326 Law and Society (3 cr.)

Nonprofit Management and Leadership Minor

Requirements (Five courses)

One of the following courses:

- SPEA-V 161 Urban Problems and Solutions (3 cr.)
- SPEA-V 181 U.S. Policy & Administration (3 cr.)

- SPEA-V 182 Policy-making around the World: Comparative and International Approaches (3 cr.)
- SPEA-V 185 Management of Public Problems and Solutions (3 cr.)

The following two courses:

- SPEA-V 221 Nonprofit and Voluntary Sector (3 cr.)
- SPEA-V 362 Nonprofit Management and Leadership (3 cr.)

Two of the following courses:

- SPEA-V 336 Managing External Collaboration and Networks (3 cr.) (P: SPEA-V 185)
- SPEA-V 356 Introduction to Nonprofit Accounting and Reporting (3 cr.) (P: SPEA-V 246)
- SPEA-V 434 NGO Management for International Development (3 cr.)
- SPEA-V 450 Nonprofit Resource Management (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 454 Human Resource Management in Nonprofit Organizations (3 cr.) (R: SPEA-V 221 or SPEA-V 362)
- SPEA-V 458 Fund Development for Nonprofits (3 cr.)
- SPEA-V 462 Community Development (3 cr.)
- SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

Policy Studies Minor

Requirements (Five courses)

One of the following courses:

SPEA-V 181 US Policy & Administration (3 cr.)
SPEA-V 182 Policy-making around the World: Comparative and International Approaches (3 cr.)
SPEA-V 184 Law & Public Affairs (3 cr.)

Four of the following courses:

SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) (P: SPEA-K 300 or equivalent)
SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
SPEA-V 386 Case Studies for Policy Analysis (3 cr.)
SPEA-V 401 Financial and Cost-Benefit Analysis (3 cr.) (P: SPEA-V 202)
SPEA-V 414 National Security Bureaucracy and Policy (3 cr.)
SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)
SPEA-V 425 Homeland Security: Policy and Practice (3 cr.)
SPEA-V 449 Senior Policy Seminar (3 cr.)
SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

Public and Environmental Affairs Minor

This minor is for non-O'Neill students only.

Requirements (Five courses)

One of the following courses:

- SPEA-V 181 US Policy & Administration (3 cr.)
- SPEA-V 182 Policy-making around the World: Comparative and International Approaches (3 cr.)

The following course:
- SPEA-E 183 Environment and People (3 cr.)

Three of the following courses:

Any three SPEA courses, at least two of which must be at the 3-400 level. (Please consult your school's policy on upper-level courses. College of Arts and Sciences students are required to take three upper-level courses). Students may refer to O'Neill majors or other minors to look for courses grouped by field of study.

Public Financial Management Minor

Requirements (Five courses)

The following four courses:

- SPEA-V 186 Introduction to Public Budgeting and Finance for Public Affairs
- SPEA-V 246 Elements of Governmental and Nonprofit Financial Accounting Cycle (3 cr.) (P: SPEA-V 186)
- SPEA-V 361 Financial Management (3 cr.) (P: SPEA-V 246 or BUS-A 201)
- SPEA-V 374 Intermediate Public Budgeting and Finance (3 cr.) (P: SPEA-V 186)

One of the following courses:

- SPEA-V 346 Introduction to Government Accounting and Financial Reporting (3 cr.) (P: SPEA-V 246)
- SPEA-V 371 Financing Public Affairs (3 cr.) (P: SPEA-V 202)
- SPEA-V 401 Financial and Cost-Benefit Analysis (3 cr.) (P: SPEA-V 202)required for major
- SPEA-V 439 Debates in Public Finance (3 cr.) (P: SPEA-V 202)

Public Management and Leadership Minor

Requirements (Five courses)

The following three courses:

- SPEA-V 181 US Policy & Administration (3 cr.)
- SPEA-V 185 Management of Public Problems and Solutions (3 cr.)
- SPEA-V 404 Advanced Public Management (3 cr.) (P: SPEA-V 185)

Two of the following courses:
- SPEA-V 184 Law and Public Affairs (3 cr.)
- SPEA-V 236 Managing and Leading Organizations (3 cr.)
- SPEA-V 336 Managing External Collaboration and Networks (3 cr.) (P: SPEA-V 185)
- SPEA-V 340 Urban Government Administration (3 cr.)

- SPEA-V 361 Financial Management (3 cr.) (P: SPEA-V 246 or BUS-A 201)
- SPEA-V 369 Managing Information Technology (3 cr.)
- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)
- SPEA-V 374 Intermediate Public Budgeting & Finance (3 cr.) (P: SPEA-V 186)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 432 Labor Relations in the Public Sector (3 cr.) (P: SPEA-V 373)
- SPEA-V 435 Negotiation and Alternative Dispute Resolution (3 cr.)
- SPEA-V 443 Managing Workforce Diversity (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 475 Database Management Systems (3 cr.) (P: SPEA-V 261 or SPEA-V 369 or BUS-K A 201 or CSCI-A 110 or INFO-I 101)
- SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

Urban Planning and Community Development Minor

Requirements (Five courses)

Each of the following courses:

- SPEA-V 161 Urban Problems and Solutions (3 cr.)
- SPEA-V 365 Urban Development and Planning (3 cr.) (P: SPEA-V 161)
- SPEA-V 462 Community Development (3 cr.)

Two of the following courses:

- GEOG-G 314 Urban Geography (3 cr.)
- SPEA-E 418 Vector-based GIS (3 cr.)
- SPEA-V 275 Introduction to Emergency Management (3 cr.)
- SPEA-V 340 Urban Government Administration (3 cr.)
- SPEA-V 412 Leadership and Ethics (3 cr.)
- SPEA-V 421 Metropolitan Development (3 cr.)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)
- SPEA-V 437 Public Transportation (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 470 Community Development Workshop (3 cr.)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

Water Resources Science, Policy, and Management Minor

Requirements

Take one of the following core courses:
- EAS-E 118 Sustainability: Water Resources (3 cr.)

- GEOG-G 259 or GEOG G-347 Water Security and Sustainability (3 cr.)
- SPEA-E 260 Introduction to Water Resources (3 cr.)

Take at least 3 credits from each of the categories below:

Category 1: Physical hydrology & the water cycle (at least 3 credits)
- EAS-A 340/GEOG-G 304 Physical Meterology and Climatology (3 cr.)
- EAS-A 466 Hydrometeorology (3 cr.)
- EAS-E 451 Principles of Hydrogeology (3 cr.)
- GEOG-G 451 Physical Hydrology (3 cr.)
- GEOG-G 467 Ecohydrology (3 cr.)
- EAS-X 429 Field Geology in the Rocky Mountains (3 cr.)

Category 2: Water and ecosystems (at least 3 credits)
- SPEA-E 355 Introduction to Limnology* (3 cr.)
- SPEA-E 440 Wetland Ecology and Management (4 cr.)
- SPEA-E 443 Habitat Analysis – Aquatic (3 cr.)
- SPEA-E 455 Limnology* (4 cr.)

* students can only get credit for one of SPEA-E 355 **or** SPEA-E 455 toward the minor

Category 3: Water and human systems (at least 3 credits)
- GEOG-G 341 Ecological Restoration: Science, Politics, and Ethics (3 cr.)
- GEOG-G 368 Water in the Midwest (3 cr.)
- GEOG-G 453 Water and Society (3 cr.)
- GEOG-G 461 Human Dimensions of Global Environmental Change (3 cr.)
- SPEA-E 456 Lake and Watershed Management (3 cr.)
- SPH-O 305 Integrated Resource Management (3 cr.)

Complete three additional credits (to meet the total requirement of 15 credit hours, 3 additional credit hours are required. These 3 credits can be satisfied by taking any of the courses from the core or Categories 1-3 above. Additionally, the following courses that may be used toward the total credit requirement to provide breadth or depth of understanding in the area of Water Resources Science, Policy, and Management):

- EAS-A 476 Climate Change Science (3 cr.)
- EAS-E 415 Principles of Geomorphology (3 cr.)
- EAS-X 329 Field Environmental Science (3 cr.)
- BUS-L 302 Sustainability Law & Policy (3 cr.)
- GEOG-G 336 Environmental Remote Sensing (3 cr.)
- GEOG-G 350 Field Methods in Physical Geography (3 cr.)
- GEOG-G 439 GIS and Environmental Analysis (3 cr.)
- GEOG-G 444 Climate Change Impacts (3 cr.)
- PHYS-P 310 Environmental Physics (3 cr.)
- SPEA-E 340 Environmental Economics and Finance (3 cr.)
- SPEA-E 363 Environmental Management (3 cr.)
- SPEA-E 375 Techniques of Environmental Science (3 cr.)
- SPEA-E 402 Water Quality Modeling (3 cr.)
- SPEA-E 412 Risk Communication (3 cr.)

- SPEA-E 431 Water Supply and Wastewater Treatment (3 cr.) (P: SPEA-E 272)
- SPEA-E 460 Fisheries and Wildlife Management (3 cr.)
- SPEA-E 470 Elements of Fluid Mechanics (3 cr.)
- SPEA-E 476 Environmental Law and Regulation (3 cr.)
- SPH-O 244 Natural History (3 cr.)
- SPH-O 310 Ecosystem Management (3 cr.)
- SPH-O 343/CLLC-L 300 Fundamentals of Sustainable Agriculture (3 cr.)
- SPH-V 214 Environmental Regulations and Code Compliance (3 cr.)
- SPH-V 443 Environmental Sampling and Analysis (3 cr.)

Additional requirements:

- At least 9 credit hours in the minor must be completed at the 300–400 level.
- At least 9 credit hours must be completed on the Bloomington campus.
- Any course in which the student earns a grade below C– may not be used to fulfill a minor requirement.
- The grade point average of all courses taken in the minor must be equal or greater to 2.000.
- Substitutions for core and category 1-3 courses for extenuating circumstances may be made with approval of the program director

Certificate Programs

The following certificates are available on the BL campus.

Applied Research and Inquiry
Arts Administration
Healthcare Management and Policy
Nonprofit Management and Leadership
Public and Environmental Affairs
Public Management and Leadership
Urban Studies

General Requirements

1. Students in good academic standing and enrolled in bachelor's programs at Indiana University are eligible to apply for a certificate at the SPEA Undergraduate Program and Academic Advising Office (SPEA 240). Interested students must apply for a certificate before completing 15 credit hours of applicable course work.
2. Admitted SPEA students earning a SPEA certificate may double count up to six (6) credit hours of certificate requirements with any other SPEA academic program. The remaining SPEA certificate credit hours cannot be applied toward any other SPEA academic program. Non-SPEA majors cannot double count courses with any SPEA academic program.
3. SPEA students cannot earn a certificate in the same area as their major.
4. A grade point average of 2.000 or higher is required in all course work credited toward the certificate.

Certificate in Applied Research and Inquiry

The Certificate in Applied Research and Inquiry introduces students to traditions of social inquiry. Students will explore the relationship between knowledge and action, between critical thinking and social engagement. They will examine the concepts, connections and tensions between competing policy choices and gain an understanding of the contradictions inherent in notions of justice, citizenship and equality.

Students applying for the Certificate in Applied Research and Inquiry must have completed 26 undergraduate credit hours and have achieved a cumulative GPA of 3.500 or above. To receive the certificate, students must earn a GPA of 3.500 in courses that count toward the Certificate.

Certificate Requirements

(18 credit hours: at least 9 credits must be SPEA courses)

Traditions of Inquiry Requirement - choose two of the following courses:

- POLS-Y 379 Ethics and Public Policy (3 cr.)
- POLS-Y 382 Modern Political Thought (3 cr.)
- SOC-S 210 The Economy, Organization, and Work (3 cr.)
- SOC-S 312 Education and Society (3 cr.)
- SOC-S 326 Law and Society (3 cr.)
- SOC-S 335 Race and Ethnic Relations (3 cr.)
- SOC-S 338 Gender Roles (3 cr.)
- SOC-S 340 Social Theory (3 cr.)
- SOC-S 346 Topics in Cross-Cultural Sociology (3 cr.)
- SOC-S 360 Topics in Social Policy (3 cr.)
- SOC-S 365 Social Foundations of Behavior: Applications for Health Settings (3 cr.)
- SOC-S 410 Topics in Social Organization (3 cr.)
- SOC-S 431 Topics in Social Psychology (3 cr.)
- SPEA-V 450 Traditions of Inquiry: International Relations Theory and Policy Choices (3 cr.)

Note: When appropriate, additional sections of SPEA V450 Contemporary Issues in Public Affairs may count toward the Traditions of Inquiry requirement. (3 cr.)

Research and Design Requirements - choose one of the following courses:
- SOC-S 370 Research Methods in Sociology (3 cr.) **and** SOC-S 371 Social Statistics (3 cr.)
- SPEA-V 491 Honors Research in Public and Environmental Affairs (3 cr.)

Research Methods Requirements - Choose one of the following courses:

- POLS-Y 395 Quantitative Political Analysis (3 cr.)
- POLS-Y 405 Models and Theories of Political Decision Making (3 cr.) (P: POLS-Y 200 or higher level)
- SOC-S 371 Social Statistics (3 cr.)
- SPEA-V 370 Research Methods and Statistical Modeling (3 cr.)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 386 Case Studies for Policy Analysis (3 cr.)
- SPEA-V 450 Research Methods for Applied Research (3 cr.)

Thesis Requirement - Choose one of the following courses:

- POLS-Y 499 Senior Thesis (3 cr.) (available only to Political Science majors)
- SOC-S 498 Honors Thesis Seminar I (3 cr.) **and** SOC-S 499 Honors Thesis Seminar II (3 cr.) (P: SOC-S 370 **and** SOC-S 498)
- SPEA-V 499 Honors Thesis (3 cr.) (P: SPEA-V 491)

Internship and Study Abroad Requirement - Choose three credits of the following courses:

- SPEA-V 380 Internship in Public and Environmental Affairs (0-6 cr.)
- SPEA-V 381 Professional Experience (1-6 cr.)
- SPEA-V, E, or A 482 Overseas Topics in Public Affairs (0-15 cr.) (repeatable with different topics)
- Any overseas study course approved by IU

Certificate in Arts Administration

Certificate Requirements
(21 credit hours)

The following two courses:

- SPEA-A 163 Introduction to Arts Management (3 cr.)
- SPEA-A 354 Arts Marketing Fundamentals (3 cr.)

One of the following management courses:
- SPEA-A 450 Performing Arts Organizations (3 cr.)
- SPEA-A 400 Museum Administration (3 cr.)

Four of the following courses:
- Any SPEA-A course not taken above
- BUS-L 250 Law and the Arts (3 cr.) **or** SPEA-A 450 Law and the Arts (3 cr.)
- SPEA-V 481 Grant Writing (3 cr.)

Certificate in Nonprofit Management and Leadership

Are you interested in helping charitable organizations provide needed services? Or helping professional groups run effectively? The Certificate in Nonprofit Management provides coursework specifically geared toward preparing you for working in or with nonprofit organizations. The certificate coursework also will prepare students to take the Nonprofit Leadership Alliance exam and become a certified nonprofit professional (see an O'Neill Advisor for information about the Nonprofit Leadership Alliance).

Certificate Requirements (21 credits)

Six courses plus a 3 credit internship

One of the following courses:

- SPEA-E 183 Environment and People (3 cr.)
- SPEA-H 124 Overview of the U.S. Healthcare System (3 cr.)
- SPEA-V 161 Urban Problems and Solutions (3 cr.)
- SPEA-V 181 U.S. Policy & Administration (3 cr.)
- SPEA-V 182 Policy-making around the World: Comparative and International Approaches (3 cr.)
- SPEA-V 185 Management of Public Problems and Solutions (3 cr.)

The following two courses:
- SPEA-V 221 Nonprofit and Voluntary Sector (3 cr.)
- SPEA-V 362 Nonprofit Management and Leadership (3 cr.)

Two of the following courses:

- SPEA-V 236 Managing and Leading Organizations (3 cr.)
- SPEA-V 246 Elements of Governmental and Nonprofit Financial Accounting Cycle (3 cr.) (P: SPEA-V 186)
- SPEA-V 336 Managing External Collaboration and Networks (3 cr.) (P: SPEA-V 185)
- SPEA-V 356 Introduction to Nonprofit Accounting and Reporting (3 cr.) (P: SPEA-V 246)
- SPEA-V 434 NGO Management for International Development (3 cr.)
- SPEA-V 450 Nonprofit Resource Management(3 cr.)
- SPEA-V 454 Human Resource Management in Nonprofit Organizations (3 cr.) (R: SPEA-V 221 or SPEA-V 362)
- SPEA-V 458 Fund Development for Nonprofits (3 cr.)
- SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.)

One of the following courses from a nonprofit field, service area, or industry:

- SPEA-A 459 Public Policy and the Arts (3 cr.)
- SPEA-A 464 The Economics and Administration of Arts Organizations (3 cr.)
- SPEA-E 363 Environmental Management (3 cr.) (R: SPEA-E 183)
- SPEA-H 324 Health Policy (3 cr.) (P: SPEA-H 124)
- SPEA-V 413 Food Systems and Community Resilience (3 cr.)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.)
- SPEA-V 425 Homeland Security: Policy and Practice (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 462 Community Development (3 cr.)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

3 credit hours of Internship in a nonprofit organization:

- SPEA-V 380 Internship in Public and Environmental Affairs for non-O'Neill students **or** SPEA-V 381 Professional Experience for O'Neill students. Please contact the O'Neill Career Hub regarding internship requirements.

Certificate in Public and Environmental Affairs
This certificate is for non-O'Neill students only.

Certificate Requirements
(Eight courses)

The following course:

- SPEA-E 183 Environment and People (3 cr.)

One of the following policy courses:

- SPEA-V 181 US Policy & Administration (3 cr.)
- SPEA-V 182 Policy-making around the World: Comparative and International Approaches (3 cr.)

One of the following management courses:

- SPEA-V 236 Managing and Leading Organizations (3 cr.)
- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)

One of the following law courses:

• SPEA-V 184 Law and Public Affairs (3 cr.)
• BUS-L 201 Legal Environment of Business (3 cr.)
• POLS-Y 211 Introduction to Law (3 cr.)
• SOC-S 326 Law and Society (3 cr.) (P: three credit hours of sociology or consent of instructor)

Any four SPEA courses at the 3-400 level. Students may refer to O'Neill majors or minors to look for courses grouped by field of study.

Certificate in Healthcare Management and Policy

Certificate Requirements
(Seven courses)

The following three courses:

- SPEA-H 124 Overview of the U.S. Healthcare System (3 cr.)
- SPEA-H 324 Health Policy (3 cr.) (P: SPEA-H 124)
- SPEA-H 350 Fundamentals of Healthcare Financial Management (3 cr.) (P: SPEA-H 124 or permission of instructor)

Three of the following courses:

- SPEA-H 322 Principles of Epidemiology (3 cr.) (P: SPEA-H 124)
- SPEA-H 341 Legal Aspects of Health Care Administration (3 cr.) (SPEA-H 124 or permission of instructor)
- SPEA-H 401 Strategic Planning in Health Organizations (3 cr.) (P: SPEA-H 353 or SPEA-H 350)
- SPEA-H 402 Hospital Administration (3 cr.) (P: SPEA-H 124 or permission of instructor)
- SPEA-H 411 Chronic and Long-Term Care Administration (3 cr.) (P: SPEA-H 124 or permission of instructor)
- SPEA-H 432 Healthcare Marketing (3 cr.)
- SPEA-H 455 Topics in Public Health (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-H 456 Health Care Reimbursement (3 cr.) (P: SPEA-H 353 or SPEA-H 350)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

One of the following courses:

- Any course not selected from the list above (3 cr.)
- BIOT-T 312 Societal Issues in Biotechnology (3 cr.)
- BUS-J 375 Strategic Management (3 cr.)
- BUS-P 300 (or P304 Honors) Operations Management (3 cr.)
- ECON-E 321 Intermediate Microeconomics (3 cr.)
- SOC-S 358 Social Issues in Health and Medicine (3 cr.)
- SPEA-H 342 Community Health Education (3 cr.)

- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)
- SPH-B 403 Public Health Program Planning (3 cr.)
- STAT-S 303 Applied Statistical Methods for the Life Sciences (3 cr.)

Certificate in Public Management and Leadership

Certificate Requirements
(Seven courses)

The following courses:

- SPEA-V 181 US Policy & Administration (3 cr.)
- SPEA-V 185 Management of Public Problems and Solutions (3 cr.)
- SPEA-V 236 Managing and Leading Organizations (3 cr.)
- SPEA-V 336 Managing External Collaboration and Networks (3 cr.) (P: SPEA-V 185)
- SPEA-V 379 Performance Measurement and Program Evaluation (3 cr.)
- SPEA-V 404 Advanced Public Management (3 cr.) (P: SPEA-V 185)

One of the following courses:

- SPEA-V 184 Law and Public Affairs (3 cr.)
- SPEA-V 361 Financial Management (3 cr.) (P: SPEA-V 246 or BUS-A 201)
- SPEA-V 369 Managing Information Technology (3 cr.)
- SPEA-V 373 Human Resource Management in the Public Sector (3 cr.)
- SPEA-V 374 Intermediate Public Budgeting and Finance (3 cr.) (P: SPEA-V 186)
- SPEA-V 432 Labor Relations in the Public Sector (3 cr.) (P: SPEA-V 373)
- SPEA-V 435 Negotiation and Alternative Dispute Resolution (3 cr.)
- SPEA-V 443 Managing Workforce Diversity (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 475 Database Management Systems (3 cr.) (P: SPEA-V 261, SPEA-V 369, or equivalent)
- SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.)

Certificate in Urban Studies

Certificate Requirements
(Eight courses)

The following five courses:

- SPEA-V 161 Urban Problems and Solutions (3 cr.)
- SPEA-V 186 Intro to Public Budgeting and Finance in Public Affairs (3 cr.)
- SPEA-V 365 Urban Development and Planning (3 cr.) (P: SPEA-V 161)
- SPEA-V 340 Urban Government Administration (3 cr.)
- SPEA-V 462 Community Development (3 cr.)

Three of the following courses:

- GEOG-G 314 Urban Geography (3 cr.)

- SPEA-E 418 VECTOR-BASED GIS (3 cr.)
- SPEA-V 275 Introduction to Emergency Management (3 cr.)
- SPEA-V 374 Intermediate Public Budgeting & Finance (3 cr.) (P: SPEA-V 186)
- SPEA-V 412 Leadership and Ethics (3 cr.)
- SPEA-V 421 Metropolitan Development (3 cr.)
- SPEA-V 424 Environmental Law, Justice, and Politics (3 cr)
- SPEA-V 437 Public Transportation (3 cr.)
- SPEA-V 450 Contemporary Issues in Public Affairs (1-3 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)
- SPEA-V 470 Community Development Workshop (3 cr.)
- SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) (approved topics only; consult SPEA advisor; repeatable with different topics)

Special Programs

- Accelerated Master's Program
- Honors Program
- Indiana Law Enforcement and Indianapolis Fire Department Academy Credits
- Indiana Leadership Program
- Overseas Education
- Washington Leadership Program

Honors Program

On the **Bloomington** campus, students can apply to join the Honors Program once they have been admitted to O'Neill, completed 30 or more credit hours, and meet any requirements of the Honors Program Director. In order to graduate with the diploma notation "With Public and Environmental Affairs Honors," O'Neill students must fulfill one of two possible options:

Option one:

- Complete the honors onboarding program
- Maintain a sufficient level of engagement in honors co-curricular programming as defined and assessed by the Honors Program Director
- Complete the honors research methods and design course
- Complete the honors thesis course
- Maintain both a SPEA and a cumulative GPA of 3.500 or above

Option two:

- Successfully earn the Certificate in Applied Research and Inquiry
- Submit and present an honors thesis
- Maintain both a SPEA and a cumulative GPA of 3.500 or above

On the **Indianapolis** campus, information regarding the IUPUI Honors College can be found on the O'Neill IUPUI website at https://oneill.iupui.edu/academics/honors-program/index.html. Benefits of this program include advanced coursework, opportunities for community service, interaction with like- minded students, participation in honors events and the IUPUI Honor Societies, eligibility for residence in the IUPUI Honors House, opportunities for research with faculty, and funding to support academic-related research and travel.

Accelerated Master's Program

On the **Bloomington** campus, the Accelerated Master's Program (AMP) allows exceptional undergraduate SPEA students to earn both their undergraduate degree and a Master of Public Affairs (MPA) or Master of Science in Environmental Science (MSES) within an accelerated time frame (generally five years).

Participation in this program may allow the student to fulfill some graduate program requirements during their senior or fourth year. Depending upon the path chosen, some graduate courses may count for both graduate and undergraduate degree requirements. For additional information, including major specific requirements, students should meet with their undergraduate academic advisor.

Students wishing to participate in the AMP must meet these minimum requirements:

- Have a minimum undergraduate cumulative GPA of 3.500 for the MPA or 3.000 for the MSES.
- Earn at least 96 credit hours in the undergraduate degree before AMP start, including specified courses in the major (see undergraduate advising for major specific requirements).
- Complete the undergraduate internship prior to AMP start, and if a SPEA honors student, complete the honors thesis requirement.
- Satisfy **all** undergraduate general education, minors, and/or certificate requirements before AMP start.
- Complete an academic advising planning session and statement of academic intent prior to the beginning of junior or third year (at least one year prior to intended AMP start).

On the **Indianapolis** campus 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 Science in Criminal Justice and Public Safety (M.S.C.J.P.S.) programs early in their junior year.

Information on the Accelerated Master's Program can be found on the SPEA-IUPUI bulletin at http://bulletin.iupui.edu/.

Overseas Education

All O'Neill SPEA Abroad programs give students the opportunity to earn credit hours from overseas study combined with travel to important foreign locations where O'Neill SPEA instructors collaborate with faculty from partner institutions to offer special programs taught in English. In addition, O'Neill SPEA Abroad programs include supplementary introductions to the culture and history of each foreign location with special classes, lectures, and excursions that go beyond the credit earning requirements of the formal classroom. Course topics and credit vary by program, but credit is generally given for SPEA-V 482, SPEA-E 482, SPEA-A 482, and other topics courses included as part of a O'Neill SPEA major. Subjects include public and nonprofit management, public policy and policy analysis, comparative and international administration, and environmental science. For more

information about O'Neill SPEA overseas education programs, see www.spea- abroad.info/

The O'Neill SPEA commitment to overseas study is currently supported by a special scholarship program. Please note that O'Neill SPEA Overseas Education Scholarships are available only to O'Neill SPEA majors and that scholarship availability is re-evaluated on an annual basis.

Washington Leadership Program

IU's O'Neill School of Public and Environmental Affairs proudly offers the Washington Leadership Program each fall semester in Washington, D.C. The Washington Leadership Program is a unique opportunity for talented undergraduate students to receive in-depth exposure to key policy makers and government officials in our nation's capital.

Select Sophomores, Juniors and Seniors from all majors on the Bloomington campus and O'Neill SPEA majors at other IU campuses are eligible to apply. This program consists of two senior-level seminars (each worth 3 credit hours) and an internship (worth 6 credit hours). Students complete internships by working four days per week in an assigned congressional or senate office, trade association, or federal agency, or in a health, environmental, or nonprofit organization.

Interested students should visit the O'Neill website at https://oneill.indiana.edu/undergraduate/academic-enrichment/wlp/index.html for more information and or contact us at wlp@indiana.edu for additional information.

Indiana Leadership Program

The Indiana Leadership Program is a competitive program. Interested students should contact their academic advisor or program director.

Indiana Law Enforcement and Indianapolis Fire Department Academy Credits

Information on receiving credit for training can be found on the O'Neill IUPUI bulletin at https://bulletins.iu.edu/iupui/2022-2023/schools/oneill-spea/admission/index.shtml

Indianapolis Campus

- Bachelor of Science in Public Affairs (B.S.P.A.)
- Bachelor of Science in Criminal Justice (B.S.C.J.)
- Minorss and Certificate Programs

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 five groups: arts management, criminal justice, environmental, healthcare management and policy, and public affairs.

Arts Management

SPEA-A 163 Introduction to Arts Management (3 cr.) This course is for students considering a career in the arts or interested in arts management fundamentals. Topics include public policy in the arts, the economic structure of arts markets, and issues that arts administrators face as a bridge between arts organizations and audiences.

SPEA-S 163 Honors—Art Worlds: Management, Markets, and Policy (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-A 163; however, honors students will complete advanced coursework.

SPEA-A 236 Music Industry I (3 cr.) The purpose of this class is to gain a historical overview on the development of the music industry from its beginnings to current issues. Special focus will be on the development of legal issues and the recording industry.

SPEA-A 241 Community Engagement in the Arts (3 cr.) Students will get to know arts organizations and music business entities in the area in order to gain awareness about the role of the arts in a community as a cultural, social, as well as economic force. Class instruction includes lectures, guest speakers, field trips, and practical experiences.

SPEA-A 336 Music Industry II (3 cr.) P: SPEA-A 236 or approval of instructor. The purpose of this class is to build on the historical overview of the music industry from its beginnings to current issues in Music Industry I and explore current issues and music careers. Special focus will be on creating a plan for personal goals and development.

SPEA-A 354 Arts Marketing Fundamentals (3 cr.) This course introduces students to the essentials of arts marketing: how nonprofit organizations and consumers behave and what strategies marketers can use to successfully operate in today's environment. Course will examine such topics as the marketing process for product-centered cultural enterprises, collection and use of marketing information, target marketing and position.

SPEA-S 354 Honors-Arts Marketing Fundamentals (3 cr.) Course covers same material as SPEA-A 354; honors students will complete advanced coursework.

SPEA-A 400 Museum Management and Administration (3 cr.) P: SPEA-A 163. The class will investigate museums to include their history; present day roles and their cultural contributions; public policy; economics and their markets; organizational structures and day-to-day operations; performance assessments; and discussions regarding the future of the museum.

SPEA-A 405 Programming in the Performing Arts (3 cr.) This course examines how programming relates to marketing and public relations; the role of programming in the public and professional identity of artists and arts organizations; the external factors that condition program choice; and how programming affects relationships with society and the arts community on local, national and international levels.

SPEA-A 410 Artists, Galleries and Collectors (1.5 cr.) This course provides a framework for understanding the interactions of artists, galleries and collectors within the broader Art World. The course also covers the history of the visual arts market as a financial entity, placing it in the context of contemporary culture.

SPEA-A 411 Auditorium Management (1.5 cr.)
This course offers an overview of the management of performing arts venues, with an emphasis on nonprofit venues. Topics include crowd management, backstage, communication, box office, fund development, regulations, unions, contracts and pricing.

SPEA-A 412 Creative Thinking Strategies for Arts Management (1.5 cr.) This course provides a framework for understanding the interactions of artists, galleries and collectors within the broader Art World. The course also covers the history of the visual arts market as a financial entity, placing it in the context of contemporary culture.

SPEA-A 418 Theatre and Dance Management (1.5 cr.)
Theatre and Dance Management provides an introduction to real-world problems of managing an arts organization. Students will discuss the unique organizational issues facing performing arts companies and, through detailed analysis and creative thinking, come up with innovative solutions to problems ranging from budgeting to marketing to artistic programming.

SPEA-A 422 IT Applications for the Arts (3 cr.) Teaches Arts Administration professionals how to use computer applications to create printed, web based and multimedia materials to promote effective communications. Provides instruction and practical hands-on experience in design theory, page layout, usability, accessibility, digital photo editing, graphics, and desktop and web publishing to create promotional and informational materials.

SPEA-A 426 Art and Social Change (3 cr.) Art and Social Change traces the development of art practice as a vehicle for social change from the Civil Rights movement to the present day and asks students to envision a community cultural development project of their own. Augusto Boal's innovative community building techniques are used throughout the class.

SPEA-A 431 Cultural Planning and Urban Development (3 cr.) An introduction to research and practice concerning the intersection of the arts and urban development. Students will gain an understanding of how scholars view the arts and culture in the context of urban development and how local governments and cultural leaders currently use the arts in urban development initiatives.

SPEA-A 439 Fund Development for the Arts (3 cr.)
This course will provide an introduction and overview to the theory and practice of development and fundraising, with a special focus on the arts. Topics include annual fund, corporate and foundation relations, major gifts, planned giving, prospect research, working with boards, stewardship and more.

SPEA-A 450 Contemporary Topics in Arts Administration (1-3 cr.) Extensive analysis of selected contemporary topics in Arts Administration. Topics vary from semester to semester. May be repeated for credit; topics must differ.

SPEA-A 459 Public Policy and the Arts (3 cr.) This course considers the principal aspects of cultural policy in the US and elsewhere. Topics include arts education, the ends and means of government funding for the arts, multiculturalism, freedom of expression, copyright, other legal rights of artists, international trade in cultural goods, and international treaties on cultural diversity.

SPEA-A 464 The Economics and Administration of Artistic Organizations (3 cr.) This course analyzes the unique challenges facing arts organizations in the public, nonprofit, and for- profit sectors. Among other topics, the course deals with the multiple and often-conflicting goals faced by arts organizations, consumer demand and price setting, experimentation and innovation, and setting the rules for decision-making and oversight.

SPEA-A 482 Overseas Topics in Arts Management (0-15 cr.) SPEA Abroad Program: study of selected topics in arts management. Topics vary from semester to semester. May be repeated for credit.

SPEA-A 483 Arts Entrepreneurship (3 cr.) The goal of the course is to study principles of arts entrepreneurship through a practice-based approach based on the jam session model for group creativity. Student will develop their entrepreneurial and improvisational capacities, study the Babson Business Canvas through case studies and entrepreneurship literature, and develop a feasibility plan.

SPEA-A 499 Honors Thesis (3 cr.) Required of SPEA Honors Program students. Research and paper to be arranged with individual instructor and approved by the Director of Undergraduate Programs.

Environmental

SPEA-E 100 Environmental Topics (1-3 cr.) Study of selected issues in environmental affairs. Topics vary from semester to semester. May be repeated for credit.

SPEA-S 162 Honors—Environment and People (3 cr.)
Requires consent of SPEA Honors advisor. Course covers same content as SPEA-E 162; however, honors students will complete advanced coursework.

SPEA-E 183 Environment and People (3 cr.)
Environment and People is an introductory course that examines how humans interact with their environment. This course covers multiple topics, centered-around human-environment dimensions of environmental change. The overarching objective is to develop an understanding of our impact on the planet and possible solutions to environmental degradation. Credit not given for both SPEA-E 162 and E 183.

SPEA-E 260 Introduction to Water Resources (3 cr.)
This course provides an introduction to the science and management of water resources. Topics include hydrology and the water cycle; a survey of aquatic ecosystems, biota and processes; and an examination of the types and consequences of water pollution and impairment of water resources.

SPEA-E 262 Environmental Problems and Solutions (3 cr.) P: One semester of college-level chemistry. 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.

SPEA-E 272 Introduction to Environmental Sciences (3 cr.)

R: SPEA-E 183 (Bloomington only). 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.

SPEA-S 272 Honors—Introduction to Environmental Sciences (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-E 272; however, honors students will complete advanced coursework.

SPEA-E 311 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 standard 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.

SPEA-S 311 Honors—Introduction to Risk Assessment and Risk Communication (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-E 311; however, honors students will complete advanced coursework.

SPEA-E 316 Insects and the Environment (3 cr.) This course introduces insects in the context of their ecological importance, their effects on humans, and the environmental/economic impacts of pest management. The course is taught in five modules: Entomology, Insect Pests, Pest Management and Risk Reduction, Policies of Pest Management and Bio-diversity, and Pollution Prevention and Benefit-Cost Analysis.

SPEA-E 324 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.

SPEA-E 325 Computing for Environmental Scientists (1-3 cr.) P: (no P required for Bloomington); MATH-M 118 or M 119; K 300 or equivalent; SPEA-E 272. 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.

SPEA-E 332 Introduction to Applied Ecology (3 cr.) This course provides an introduction to applied ecology for non-science majors.

SPEA-S 332 Honors—Introduction to Applied Ecology (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-E 332; however, honors students will complete advanced coursework.

SPEA-E 340 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 tradeable permits, emissions taxes, deposit-refund systems, pollution-prevention programs, and voluntary agreements. Project appraisal techniques are then developed and applied to specific case evaluations.

SPEA-S 340 Environmental Economics and Finance (3 cr.) Course covers same material as SPEA-E 340; honors students will complete advanced coursework.

SPEA-E 355 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.

SPEA-S 355 Honors-Introduction to Limnology (3 cr.) Course covers same material as SPEA-E 355; honors students will complete advanced coursework.

SPEA-E 363 Environmental Management (3 cr.) R: SPEA-E 183 (Bloomington only). 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.

SPEA-S 363 Honors—Environmental Management (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-E 363; however, honors students will complete advanced coursework.

SPEA-E 375 Techniques of Environmental Science (3 cr.) P: SPEA-E 272 or H 316. Principles and methods of sampling, collection, measurement, analysis, interpretation, and presentation of data concerning environmental science. Through lab demonstrations and field work, students will become familiar with instrumentation and analytical methods currently used in environmental analysis. Team instruction will be used to demonstrate techniques.

SPEA-S 375 Honors-Techniques of Environmental Science (3 cr.) P: SPEA-E 272 or H 316. Course covers same material as SPEA-E 375; honors students will complete advanced coursework

SPEA-E 400 Topics in Environmental Studies (1-3 cr.) P: (no P required for Bloomington) SPEA-E 272. An interdisciplinary consideration of specific environmental topics. May be repeated for credit.

SPEA-E 401 Human Behavior and Energy Consumption (3 cr.) We face many barriers that prevent us from conserving energy and other natural resources. This course is aimed at decreasing energy use independent of top down regulations. Students will understand the nature of energy, the importance of human behavior, and how to create, and evaluate behavioral change.

SPEA-E 402 Water Quality Modeling (3 cr.) College level chemistry, college level physics or calculus, or permission of instructor. This course teaches students to construct and apply water-quality models of aquatic

systems, with primary focus on streams, lakes, and estuaries. Students learn to combine physical, chemical, and biological processes into models, and use their models to forecast water quality as a function of changing pollutant loading and management goals.

SPEA-E 410 Introduction to Environmental Toxicology (3 cr.) R: any organismal biology course. Study of toxic mechanisms, pathology, and disease development resulting from exposure to biological and chemical agents in the environment.

SPEA-E 411 Introduction to Groundwater Hydrology (3 cr.) An overview is presented of the theory and practice of groundwater movement, groundwater contamination, and aquifer testing and 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.

SPEA-E 412 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.

SPEA-E 416 Fisheries Management (3 cr.) P: SPEA-E 332 or SPEA-E 355 or SPEA-E 455 or BIOL-L 473 Teaches the processes for managing fisheries in a variety of environments. Covers basics of fish biology, ecology, and management, with an emphasis on public involvement. Students will explore quantitative fisheries methods, including population dynamics and management strategy evaluation, and presentation of scientific information in written and spoken form.

SPEA-E 417 Fundamentals of Sustainable Agriculture (3 cr.) This course will present the fundamentals of specialty crop and animal sustainable agriculture based on an ecological-agriculture framework. Students will learn about and applyecological, social, and economic concepts in evaluating for farm sustainability. The course includes both "in-class" and field lab experiences.

SPEA-E 418 Vector-Based GIS (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.

SPEA-E 419 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.

SPEA-E 421 PCBs, Dioxins and Flame Retardants (2 cr.) History of toxic chemical environmental disasters: mercury and lead; Love Canal and hazardous waste; polychlorinated biphenyls in Bloomington and New York; dioxins (in Agent Orange, Missouri and Italy); toxic torts; flame retardants (in Michigan and in babies, cats, dogs and eagles); persistent pesticides (environmental trends and in farm-raised salmon); Deepwater Horizon oil spill.

SPEA-E 422 Urban Forest Management (3 cr.) Originally an outgrowth of arboriculture, urban forestry now encompasses the broader concepts of managing the trees, forests and other natural resources of cities for ecological, economic, and social benefits. Lectures, discussions, and field projects will be supplemented by outside speakers. IUB and Bloomington will be the field laboratory.

SPEA-S 422 Honors—Urban Forest Management (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-E 422; however, honors students will complete advanced coursework.

SPEA-E 423 Environmental Health Science Technology: Managing Water and Wastes (3 cr.) P: SPEA-H 316; MATH 153. Technology approach to preventing the transmission of disease among humans through water and wastes. Course focuses on drinking water treatment and distribution, water quality and pollution, wastewater treatment, storm water management, municipal solid waste, and hazardous waste management.

SPEA-E 426 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.

SPEA-E 429 Application of GIS (3 cr.) P: SPEA-E 418 or permission of instructor Conceptual and technical overview of geographic information systems (GIS). Applications in various fields of public affairs and environmental science.

SPEA-E 431 Water Supply and Wastewater Treatment (3 cr.) P: SPEA-E 272 (Bloomington only) 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.

SPEA-E 440 Wetlands Ecology and Management (4 cr.) P: SPEA-E 272 This course focuses on structural and functional characteristics of wetlands, their importance as a natural resource and value to society. Topics include characteristics used to identify and classify wetlands, adaptations for living in wetlands, community structure and ecosystem processes, functions and values. Management of wetlands includes jurisdictional delineation and hydrogeomorphic assessment.

SPEA-S 440 Honors—Wetlands: Biology and Regulation (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-E 440; however, honors students will complete advanced coursework.

SPEA-E 442 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.

SPEA-E 443 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.

SPEA-E 444 Hazardous Materials (3 cr.) This course is designed to provide a general overview of hazardous materials management including history; regulations; basic chemistry; hazardous properties of chemical, biological, and radioactive substances; hazard classifications; hazard controls; personal protection; safe storage; handling; transportation; plus an introduction to hazardous waste; environmental sampling and remediation.

SPEA-E 450 Soil Science and Management (3 cr.) Students will gain a general background in traditional topics in soil science, such as soil formation, classification, nutrient cycling, and soil ecology. They will then apply this foundation to critical management problems and concepts, such as agricultural production, soil erosion, nutrient pollution, and soil health.

SPEA-E 451 Air Pollution and Control (3 cr.) P: (no P required for Bloomington); SPEA-E 272 or H 316; CHEM-C 101 or equivalent; MATH-M 118 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.

SPEA-E 452 Solid and Hazardous Waste Management (3 cr.) P: (no P required for Bloomington); SPEA-E 272 or H 316. 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.

SPEA-S 452 Honors—Solid and Hazardous Waste Management (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-E 452; however, honors students will complete advanced coursework.

SPEA-E 455 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.

SPEA-E 456 Lake and Watershed Management (3 cr.) P: any college level biology or chemistry course. 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.

SPEA-E 457 Introduction to Conservation Biology (3 cr.) P: a 300-level ecology course. 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.

SPEA-S 457 Honors—Introduction to Conservation Biology (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-E 457; however, honors students will complete advanced coursework.

SPEA-E 459 Field Techniques in Ecology (3 cr.) P: one semester of statistics. Course provides an introduction to field research on ecology. Field labs teach techniques associated with geographic and map work, population estimation, habitat measurement in a variety of settings, and soil sampling. Indoor work covers descriptive, univariate, and bivariate statistical techniques, data display, and report writing.

SPEA-E 460 Wildlife Management (3 cr.) P: SPEA-E 332 or BIOL-L 473. Application of ecological and sociological principles of management of wild animals; wildlife agencies and their function in wildlife management; economic, social, biological, and other values of wildlife; and the interaction between people and wild species and places.

SPEA-E 461 Wildlife Techniques (3 cr.) P: SPEA-E 272 or SPEA-H 316 or any biology course.
Study and practice of techniques for wildlife management and research using class labs and field trips. Topics include identification, marking, capture and handling, passive monitoring, population estimation, human dimensions, and responding to disease outbreaks. Further it explores the benefit of incorporating local knowledge into management.

SPEA-E 464 Organic Pollutants: Environmental Chemistry and Fate (3 cr.) P: SPEA-E 536 or permission of the instructor. This course provides students with both a quantitative and intuitive understanding of the relationship between chemical structure, environmental properties, and the behavior of organic contaminants in the environment, particularly aquatic environments. Physical/ chemical properties of organic chemicals, fate determining processes, and modeling concepts will be examined in detail.

SPEA-E 465 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.

SPEA-E 466 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.

SPEA-E 470 Elements of Fluid Mechanics (3 cr.) 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.

SPEA-E 476 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.

SPEA-E 482 Overseas Topics in Environmental Science (0-15 cr.) SPEA Abroad Program: study of selected topics in environmental science. Topics vary from semester to semester. May be repeated for credit.

SPEA-E 490 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.

SPEA-E 491 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.

SPEA-E 499 Honors Thesis (3 cr.) Required of SPEA Honors Program students. Research and paper to be arranged with individual instructor and approved by the Director of Undergraduate Programs.

SPEA-E 417 Fundamentals of Sustainable Agriculture (3 cr.) This course will present the fundamentals of specialty crop and animal sustainable agriculture based on an ecological-agriculture framework. Students will learn about and applyecological, social, and economic concepts in evaluating for farm sustainability. The course includes both "in-class" and field lab experiences.

Healthcare Management and Policy

SPEA-H 124 Overview of the U.S. Healthcare System (3 cr.) Bloomington only. 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.

SPEA-S 124 Honors—Overview of the U.S. Healthcare System (3 cr.) Requires consent of SPEA Honors advisor.

Course covers same content as SPEA-H 124; however, honors students will complete advanced coursework.

SPEA-H 126 Introduction to Careers in Health Administration (1 cr.) Introduces students to different careers and opportunities in the field of health care administration.

SPEA-H 267 Career Development and Planning (1-3 cr.) P: SPEA-H 124. (BSPH and BSHMP Bloomington students only.) Course highlights include: identification of work values and personality preference, career research assignments, networking assignments designed to prepare students for contact with employers, in-depth tutorial and feedback concerning how to craft a marketable resume and cover letter, and development of an overall career development plan.

SPEA-H 316 Environmental Health Science (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.

SPEA-S 316 Honors—Environmental Health Science (3 cr.) P: SPEA-H 124 or SPEA-S 124 Requires consent of SPEA Honors advisor. Course covers same content as SPEA--H 316; however, honors students will complete advanced coursework.

SPEA-H 321 Healthcare Policy in the 21st Century: An Inside View (3 cr.) An Introduction to health policy in the United States for IU in DC students, including how health policy is made, implemented, and reformed. Students will engage in discussion, analysis and critique of various health policies and are expected to bring insights from their internships into the classroom discussions.

SPEA-H 322 Principles of Epidemiology (3 cr.) P: SPEA-H 124. 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.

SPEA-H 324 Health Policy (3 cr.) P: SPEA-H 124. 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.

SPEA-S 324 Honors—Health Policy (3 cr.) Course covers same material as SPEA-H 324; honors students will complete advanced coursework.

SPEA-H 341 Legal Aspects of Health Care Administration (3 cr.) P: SPEA-H 124. An overview of the liability and legal responsibility, as well as legal recourse, that healthcare facilities may exercise. This course will discuss policies and standards elating to health facility administration. Also included is a discussion of financial aspects unique to the hospital/ healthcare facility environment, such as third-party payments and federal assistance.

SPEA-S 341 Honors—Legal Aspects of Health Care Administration (3 cr.) P: SPEA-H 124. Requires consent of SPEA Honors advisor. Course covers same content as SPEA-H 341; however, honors students will complete advanced coursework.

SPEA-H 342 Community Health Education (3 cr.) P: SPEA-H 124 or permission of instructor. 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.

SPEA-H 350 Fundamentals of Healthcare Financial Management (3 cr.) P: SPEA-H 124. Presents a broad overview of healthcare finance, focusing on tasks that are essential to the operational management of healthcare services, including estimating costs and profits, planning and budgeting, analyzing new equipment purchases, using metrics to monitor operations, and working with financial statements.

SPEA-H 352 Healthcare Financial Management I (3 cr.) P: SPEA-H 124. First of a two-course sequence on the financial management of health care organizations; introduces financial environment of providers and concepts of financial accounting critical to decision-making. Topics include financial statement analysis (specific emphasis on unique features of health care financial statements), accounting and managerial control of cash, accounts receivable, inventory, and budgeting.

SPEA-H 353 Healthcare Financial Management II (3 cr.) P: SPEA-H 352. Course focus is financial management of health care organizations; assessing critical decision-making concepts in managerial accounting and finance. Topics include evaluation of capital investments, financing sources, managerial accounting including cost behavior, profit analysis, and incremental analysis, reimbursement under various third-party payer environments, cost allocation and government reporting.

SPEA-S 353 Honors—Advanced Health Finance and Budgeting (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-H 353; however, honors students will complete advanced coursework.

SPEA-H 354 Health Economics (3 cr.) P: SPEA-H 124 and ECON-E 251 or ECON-B 251. Health economics studies the behavior of individuals, private and public employers, health care providers, and the government in decisions made within the health sphere. It applies microeconomics tools (including data analysis) to understand personal health behaviors, health care markets, health insurance systems, and health policies.

SPEA-H 365 Health Services Practicum (1-3 cr.) P: SPEA-H 124. The Health Services Practicum will consist of a personal career-planning component coupled with weekly field visits to health care agencies in central Indiana. Students must perform satisfactorily in both parts of the practicum to receive a passing grade.

SPEA-H 374 Health Management Ethics (3 cr.) P: SPEA-H 124. This course examines health care ethical decision making challenges from the managerial perspective and explores broader policy issues associated with ethical problems in health care institutions. It provides an overview of general theories of ethical challenges in everyday managerial activities.

SPEA-S 374 Honors—Health Management Ethics (3 cr.) P: SPEA-H 124. Requires consent of SPEA Honors advisor. Course covers same content as SPEA-H 374 ; however, honors students will complete advanced coursework.

SPEA-H 401 Strategic Planning in Health Organizations (3 cr.) P: SPEA-H 353 or SPEA-H 350. 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.

SPEA-H 402 Hospital Administration (3 cr.) P: SPEA-H 124. 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.

SPEA-H 403 Pharmaceutical Industry and Public Policy (3 cr.) P: SPEA-H 124. This course provides an overview of the pharmaceutical industry, its stakeholders and the key policy issues facing this industry. The course will focus on firms that operate in the traditional chemical pharmaceutical industry, biotechnology and medical devices. The course perspective is global, with an emphasis on the U.S. as the largest and most profitable market.

SPEA-H 411 Chronic and Long-Term Care Administration (3 cr.) P: SPEA-H 124. Administering programs across the continuum of care including nursing homes, hospice, home health, and assisted living; Medicare and Medicaid financing; quality improvement; care management; and needs of special populations, particularly vulnerable elders.

SPEA-H 428 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.

SPEA-H 432 Health Care Marketing (3 cr.) P: SPEA-H 124. 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.

SPEA-H 455 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.

SPEA-H 456 Healthcare Reimbursement (3 cr.) P: SPEA-H 353 or SPEA-H 350. This course offers students a practical foundation in the systems and structures used to pay for healthcare delivery in the United States. The course is designed to provide students with the required knowledge and skills needed to succeed in entry-level positions within the healthcare setting,

including provider organizations, health insurers, medical suppliers and public healthcare financing agencies.

SPEA-S 456 Honors—Healthcare Reimbursement (3 cr.) P: SPEA-H 353 (or concurrent). Requires consent of SPEA Honors advisor. Course covers same content as SPEA-H 456; however, honors students will complete advanced coursework.

SPEA-H 459 Environmental Science and Health Data Analysis (3 cr.) P: SPEA-H 316; SPEA-K 300; 1 semester of chemistry. Provides students with an understanding of the 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.

SPEA-H 466 Public Health Field Experience (1-6 cr.) P: SPEA-H 124. 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. Students will be required to fulfill a minimum of 120 hours of professional relevant work.

SPEA-H 472 Applied Health Care Administration (3 cr.) P: SPEA-H 124 and senior standing. 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 applying management skills to and making comparisons of the current driving forces among health care delivery system components.

SPEA-H 474 Health Administration Ethics Seminar (3 cr.) This course examines healthcare ethical decision making challenges from managerial perspective and explores broader policy issues associated with ethical problems in healthcare institutions. It provides an overview of general theories of ethical challenges in everyday managerial activities.

SPEA-H 491 Directed Research in Public Health — Honors (3 cr.) This is an intensive research course for undergraduate public health majors in SPEA's Honors Program. The course focuses on theories, concepts, and case material selected by the student in consultation with a faculty member. Key research products for the course may include a substantial research paper or institutional analysis.

SPEA-H 492 Global Health Issues and Management (3 cr.) An overview of the theoretical underpinnings of, and current issues within, global health management. Topics include the impact of globalization on disease, health organization, program management, management of humanitarian events, and health system planning. The necessity of collective obligation and action for global health will be a recurring theme.

SPEA-H 499 Honors Thesis (3 cr.) Required of SPEA Honors Program students. Research and paper to be arranged with individual instructor and approved by the Director of Undergraduate Programs.

Public Affairs

SPEA-K 300 Statistical Techniques (3 cr.) P: MATH-M 014 or equivalent. R: MATH-M 118. 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 SPEA/PSY/CJUS/MATH K300 and ECON E 270/E 370, SOC-S 250, or PSY/MATH-K 310.

SPEA-K 301 Statistics Laboratory (1 cr.) This course is an optional module to accompany SPEA-K 300 Statistical Techniques and must be taken concurrently with K 300. The course focuses on application techniques being taught in K 300. This course will allow students to obtain tutoring with specific problems. Sessions are linked to K 300 lectures.

SPEA-V 100 Current Topics in Public Affairs (1-3 cr.) Readings and discussion of current public issues and problems. May be repeated for credit.

SPEA-V 130 Representative Bureaucracy and Social Equity (3 cr.) Diversity has become a central theme of public policy, as America has struggled to expand on the Constitution's charge to promote the general welfare. The broad parameters of diversity are discussed, including the concepts of representative bureaucracy, social equity, and affirmative action and equal employment opportunity responses to the problem.

SPEA-V 160 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 economics, crime, security, health, and energy. Credit not given for both V 160 and V 170.

SPEA-S 160 Honors—National and International Policy (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 160; however, honors students will complete advanced coursework.

SPEA-V 161 Urban Problems and Solutions (3 cr.) An introduction to urban policy issues. Topics include political, social, and economic foundations and development of cities and suburbs; urban planning; poverty; and other selected urban problems. Credit not given for both V 161 and V 264.

SPEA-S 161 Honors—Urban Problems and Solutions (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 161; however, honors students will complete advanced coursework.

SPEA-V 170 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 V 160 and V 170.

SPEA-V 181 US Policy and Administration (3 cr.) The policy making and implementation process in the United States is complex and effects the daily lives of citizens in a profound way. This course will introduce that process and highlight the forces have shaped some of the most salient policy battles of the last decade.

SPEA-V 182 Policy-making around the World: Comparative and International Approaches (3 cr.) This

course introduces students to the fields of comparative and international policy. The first part explores how and why governments around the world make policy choices and how these choices affect their citizens. The second part introduces students to how governments work together with other actors to solve global problems.

SPEA-V 184 Law and Public Affairs (3 cr.) (Bloomington only.) This course provides a basic understanding of the origins, process, and impact of law in the making and implementing public policy. Students learn who has power to make and implement laws, the different forms law takes, how to find and interpret law, and key principles of law that shape public affairs.

SPEA-V 185 Management of Public Problems and Solutions (3 cr.) (Bloomington only.) This course introduces students to the theory, skills, and processes of management across sectors. Topics of accountability, decision making, collaborative partnerships, and social equity are highlighted in considering how managers develop solutions for increasingly difficult governance problems.

SPEA-V 186 Introduction to Public Budgeting and Finance (3 cr.) (Bloomington only.) This course explores the budgetary process that governs spending in the public sector. It also describes the various revenue sources available to public and non-profit sectors and the accounting documents that are used to record financial activities in the public and non-profit sectors.

SPEA-V 200 Competitive Debate Seminar (1 cr.) This course is designed for students who wish to participate in the intercollegiate and competitive debate program. The Competitive Debate Seminar will be dedicated to advancing each particulars students understanding of debate concepts and theory, topic research, and practice debate rounds.

SPEA-V 201 International Policy-making Practicum: Model United Nations (3 cr.) This course prepares students to participate as delegates at an intercollegiate conference simulating UN negotiations. Students will learn about the history and institutions of the UN. They will become deeply knowledgeable about the nations they represent and understand how national interest, power, and international institutions affect policy outcomes.

SPEA-V 202 Contemporary Economic Issues in Public Affairs (3 cr.) P: ECON-E 251 OR ECON-B 251 (Bloomington only.) This course reinforces and deepens economic skills by applying basic economic concepts and models to a variety of areas, including tax, social, health, regulatory, environmental, and macroeconomic policy. Issues examined include the motivation for intervention in the economy, they types of intervention, and the predicted effects of policies.

SPEA-V 203 The Call of Public Service: History, Philosophy, Values and Outcomes (3 cr.)
Many people want to contribute in some positive way to their community, country, or cause. This contribution can be called "public service," which is an important institution pursued widely and valued globally. The course examines its historical evolution, relationships to world religions and philosophies, motivations, values, and outcomes.

SPEA-V 212 Statistics for Public and Environmental Affairs (3 cr.) The objectives of this course are to impart the concepts and tools of statistical analysis to students who may pursue additional coursework or careers in the public, private, or nonprofit sectors in arenas as diverse as governmental affairs, environmental management, and health management. Course assumes students have limited familiarity with statistics.

SPEA-S 220 Honors—Law and Public Affairs (3 cr.) (Bloomington only.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 220; however, honors students will complete advanced coursework.

SPEA-V 221 Nonprofit and Voluntary Sector (3 cr.) This course provides a broad overview of the U.S. 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.

SPEA-V 226 Managing Emergency Services (3 cr.) This course is designed to advance students' understanding of the chief administrator's role in directing police, fire, and emergency medical services on a day-to-day basis and during major disasters. This will include the challenges of planning for a major disaster, and managing the emergency and post recovery period.

SPEA-V 236 Managing and Leading Organizations (3 cr.) Managing and Leading Organizations (3 cr.) Course introduces domestic and global challenges of management in the public, nonprofit, and private sectors. Examines a range of management concepts and how they can be applied in a contemporary setting. Topics include the organizational environment as well as employee attitudes, cognition, behavior, and performance.

SPEA-S 236 Honors—Management Concepts and Applications I in Public and Private Organizations (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 236; however, honors students will complete advanced coursework.

SPEA-V 241 Management Foundations and Approaches (3 cr.) This course examines core functions of management and the political socio-economic 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.

SPEA-S 241 Honors—Management Foundation and Approaches (3 cr.) (Bloomington only.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 241; however, honors students will complete advanced coursework.

SPEA-V 246 Elements of Governmental and Nonprofit Financial Accounting Cycle (3 cr.) P: SPEA-V 186. This course is designed to prepare students for next level courses in governmental accounting and reporting; nonprofit accounting and reporting; and health accounting and finance.

SPEA-V 252 Career Development and Planning (1-3 cr.) Course highlights include: identification of work values and personality preference, a career research assignment, networking assignments designed to prepare students for contact with employers, in-depth tutorial and feedback concerning how to craft a marketable resume and cover letter, and development of an overall career development plan.

SPEA-V 260 Topics in Public Affairs (1-3 cr.) Study of selected issues in public affairs. Topics vary from semester to semester. May be repeated for credit.

SPEA-V 261 Using IT in Public Affairs (3 cr.) Course explores IT and computing in public affairs. Topics include basic IT concepts, project proposals, network and infrastructure design, security, ethics, data and document management, cloud computing, and IT futures. Applications include using office suites, website development, and building spreadsheets and statistics, and databases. Recommend basic understanding of computer operations.

SPEA-V 263 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.

SPEA-S 263 Honors—Public Management (3 cr.) (Bloomington only.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 263; however, honors students will complete advanced coursework.

SPEA-V 264 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-V 161 and SPEA-V 264.

SPEA-V 267 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.

SPEA-V 268 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.

SPEA-V 270 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 SPEA-V 270 and SPEA-J 310.

SPEA-V 272 Terrorism and Public Policy (3 cr.) A survey of the incidence of terrorism around the world. Overviews of ongoing conflicts with terrorist organizations in various countries are interspersed with analyses of significant terrorist events and public policies and responses such events create.

SPEA-V 275 Introduction to Emergency Management (3 cr.) An examination of the background and nature of the profession, the central theoretical debates concerning natural and human- induced disasters, mitigating and reacting to these catastrophic events, and the major roles and responsibilities of emergency managers. Current practical problems and future directions will be explored.

SPEA-V 320 Current Events and General Politics (3 cr.) (Washington Leadership Program only.) Course examines Federal decision makers: who are they, how they operate, and their paths. Speakers are from health care, finance, transportation, environment, homeland security, etc. Students attend Congressional hearings and write legislative briefs. Course concludes with a mock congressional hearing role playing by students.

SPEA-V 326 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 for effective communication as professionals.

SPEA-V 336 Managing External Collaboration and Networks (3 cr.) P: SPEA-V 185. Course introduces students to the theory, skills, and processes of collaboration. With the rise of infinitely complex issues such as globally linked economies and climate change, there is a move to maximize organizational success by using inter-agency, -firm, or -sectoral collaborations, public/private partnerships, and public engagement.

SPEA-S 336 Honors—Management Concepts and Applications II in Public and Private Organizations (3 cr.) P: SPEA-V 236 or SPEA-S 236. Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 336; however, honors students will complete advanced coursework.

SPEA-V 339 Legal History and Public Policy (3 cr.) P: SPEA-V 184 This course will cover a specific policy issue in American history (such as race relations or political protest/dissent) during specific time periods and focus on the role played by the U.S. Supreme Court in dealing with that issue.

SPEA-S 339 Honors-Legal History and Public Policy (3 cr.) P: SPEA-V 220 or S 220 Course covers same material as SPEA-V 339; honors students will complete advanced coursework.

SPEA-V 340 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.

SPEA-V 346 Introduction to Government Accounting and Financial Reporting (3 cr.) P: SPEA-V 246 (Bloomington only); BUS-A 200 or BUS-A 201 (Indianapolis only); or permission of the 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.

SPEA-S 346 Introduction to Government Accounting and Financial Reporting (3 cr.) Course covers same material as SPEA-V 346; honors students will complete advanced coursework.

SPEA-V 348 Management Science (3 cr.) P: SPEA-K 300, MATH-M 025, or MATH-M 118. 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 familiarization with computers is recommended, though not required.

SPEA-V 350 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.

SPEA-V 352 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 awarded for either SPEA-V 352, BUS-X 420 or ASCS-Q 299.

SPEA-V 356 Introduction to Nonprofit Accounting and Reporting (3 cr.) P: SPEA-V 246 (Bloomington only); BUS-A 200 or BUS-A 201 (Indianapolis only); 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.

SPEA-V 361 Financial Management (3 cr.) Presents the basic theory of financial management and its application to short- and long-term financing decisions by managers. Topics include: financial statement analysis; time value of money; capital budgeting concepts and techniques; securities valuation; cost of capital and optimal capital structure; risk and uncertainty; investment strategy and portfolio management.

SPEA-V 362 Nonprofit Management and Leadership (3 cr.) Students in this experiential course prepare themselves for this field as well as public and private sector jobs that intersect with the nonprofit sector. This course provides an overview of nonprofit management practices, including governance, leadership, planning, performance measurement, marketing, finances, ethics, team management, and staff and volunteer relations.

SPEA-S 362 Honors—Nonprofit Management and Leadership (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 362; in addition, honors students complete advanced course projects that apply to actual problems faced by nonprofit leaders.

SPEA-V 365 Urban Development and Planning (3 cr.) P: SPEA-V 161. 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.

SPEA-S 365 Honors-Urban Development and Planning (3 cr.) P: SPEA-V 161 or S161. Course covers same material as SPEA-V 365; honors students will complete advanced coursework.

SPEA-V 366 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.

SPEA-S 366 Honors—Managing Behavior in Public Organizations (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 366; however, honors students will complete advanced coursework.

SPEA-V 368 Managing Government Operations (3 cr.) P: SPEA-V 348. Application of analytical techniques to operating decisions in the 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.

SPEA-V 369 Managing Information Technology (3 cr.) Analysis and discussion of information technology as applied to problem solving and management in public and non-profit sectors. Topics include management, infrastructures, policies, and concepts such as scalability, manageability, security, and cost of technology. Focus is on high-level issues surrounding IT and the strategic positioning of IT in all sectors of business. Recommended: SPEA-V 261 or BUS-K 201.

SPEA-S 369 Honors—Managing Information Technology (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 369; however, honors students will complete advanced coursework.

SPEA-V 370 Research Methods and Statistical Modeling (3 cr.) P: SPEA-K300 or equivalent. This course will introduce the student to the basic methods, issues, analytical techniques, and ethical considerations of evaluation research.

SPEA-S 370 Honors-Research Methods Applied Research (3 cr.) P: SPEA-K300 or equivalent. Course covers same material as SPEA-V 370; honors students will complete advanced coursework.

SPEA-V 371 Financing Public Affairs (3 cr.) P: SPEA-V 202 (Bloomington only); SPEA-V 170 (Indianapolis only); 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.

SPEA-S 371 Honors-Financing Public Affairs (3 cr.) P: SPEA-V 160 or SPEA-S 160(Bloomington only); SPEA-V 170 (Indianapolis only); or ECON-E 201, E 202. Course covers same material as SPEA-V 371; honors students will complete advanced coursework.

SPEA-V 372 Government Finance and Budgets (3 cr.) P: SPEA-V 170, ECON-E 201 or E 202 (Indianapolis only). Study of fiscal management in public agencies, including revenue administration, debt management, and public budgeting.

SPEA-S 372 Honors—Government Finance and Budgets (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 372; however, honors students will complete advanced coursework.

SPEA-V 373 Human Resource 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.

SPEA-S 373 Honors—Human Resource Management in the Public Sector (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 373; however, honors students will complete advanced coursework.

SPEA-V 374 Intermediate Public Budgeting and Finance for Public Affairs (3 cr.) P: SPEA-V 186. The public and non-profit sectors provide resources and produce goods and services that are crucial for a well-functioning society. This requires plans for production, financing, and accounting. This course uses V186 a base to explore these issues.

SPEA-V 376 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.

SPEA-V 377 Legal Process and Contemporary Issues in America (3 cr.) P: SPEA-V 220 (Bloomington only); SPEA-V 376. An introduction to the U.S. 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.

SPEA-S 377 Honors—Legal Process and Contemporary Issues (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 377; however, honors students will complete advanced coursework.

SPEA-V 378 Federal Government Processes (3 cr.) In this class, through detailed examination of the legislative process, the budget process and the regulatory process, students will explore Federal Government processes and how they aid and hinder programmatic implementation. The skills and knowledge discussed in this class help students understand the inner workings of the Federal Government.

SPEA-S 378 Honors—Policy Processes in the United States (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 378; however, honors students will complete advanced coursework.

SPEA-V 379 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.

SPEA-V 380 Internship in Public and Environmental Affairs (0-6 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. Course is graded S/F (Satisfactory/Fail). May be repeated for credit.

SPEA-V 381 Professional Experience (1-6 cr.) Students will be required to fulfill a minimum of 120 hours of professional relevant work.

SPEA-V 386 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.

SPEA-S 386 Honors-Case Studies for Policy Analysis (3 cr.) Course covers same material as SPEA-V 386; honors students will complete advanced coursework.

SPEA-V 387 Public Administration and Emergency Management (3 cr.) An examination of the American federal system and how it affects policy making and emergency management. Topics include government programs, participation of agencies and actors from all three levels of government, the nonprofit sector, and the private sector. Administrative processes involved in managing major hazards and disasters will be presented.

SPEA-V 388 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.

SPEA-V 389 Risk and Hazard Mitigation (3 cr.) An examination of the principles and practice of risk and hazard mitigation at all levels of government and private industry. The tools, techniques, resources, programs, intergovernmental relationships, public-private partnerships, and the broader social context involved in planning for organizational and business continuity and implementing risk reduction strategies are covered.

SPEA-V 402 Human Behavior and Energy Consumption (3 cr.) We face many barriers that prevent us from conserving energy and other natural resources. This course is aimed at decreasing energy use in independent of top down regulations. Students

will understand the nature of energy, the importance of behavior, and how to create, and evaluate behavioral change.

SPEA-V 390 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.

SPEA-V 391 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.

SPEA-V 401 Financial and Cost-Benefit Analysis (3 cr.) P: SPEA-V 202 (Bloomington only). 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.

SPEA-S 401 Honors-Financial & Cost-Benefit Analysis (3 cr.) P: SPEA-V 361 (Bloomington only). Course covers same material as SPEA-V 401; honors students will complete advanced coursework.

SPEA-V 404 Advanced Public Management (3 cr.) P: SPEA-V 185. This course advances the effective management of public organizations by presenting a range of theories and ideas relevant to management and leadership of organizations and the people within them. Topics and skills include organizational structure, decision making, implementing new government programs, innovation, and assessing government performance

SPEA-V 405 Public Law and the Legislative Process (3 cr.) This course focuses on Congress as a policy-making body in the U.S. 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.

SPEA-S 405 Honors—Public Law and the Legislative Process (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 405; however, honors students will complete advanced coursework.

SPEA-V 406 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.

SPEA-V 407 Public Law and Government Relations (3 cr.) P: SPEA-V 184 or SPEA-V 203. This class explores advocacy: the processes by which citizens join together to shape issues of public importance. Includes: historical evolution of organized interests, philosophical underpinnings of right to petition the government, means by which individuals and interest groups affect policy, and challenges of advocating for change through governmental processes.

SPEA-S 407 Honors—Public Law and Government Relations (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 407; however, honors students will complete advanced coursework.

SPEA-V 409 Federal Policymaking and the Hearing Process (3 cr.) Using a structured speaker series as a base, this class exposes students to policy decision makers in the legislative and executive branches. The class requires students attend Congressional hearings, write hearing memos, and finishes the semester with a student run mock hearing.

SPEA-V 412 Leadership and Ethics (3 cr.) This course is designed to examine the complex leadership issues and challenges facing communities and to 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.

SPEA-V 413 Food Systems and Community Resilience (3 cr.) This course provides an overview of the food system in the U.S., focusing on the system shaping the food we eat, and the resilience of people, communities, and the environment. It explores community food system development in relation to food security and food sovereignty as catalysts to resilient communities.

SPEA-V 414 National Security Bureaucracy and Policy (3 cr.) Course is designed for students interested in US national security and bureaucracy policy and process, who want to work in the field, or who want to understand the nature of international security threats to the US. Course traces foundations, evolution, and future of national security bureaucracy and the policy process.

SPEA-V 415 Data Science in Public and Environmental Affairs (3 cr.) Course provides a practical experience for students to acquire useful, marketable skills in Data Science. Students will learn to effectively manage and analyze data with the purpose of finding solutions to difficult or complex issues and communicate findings to a larger audience.

SPEA-V 420 Financial Management and Accounting for Non-Profit Organizations (3 cr.) The purpose of the course is to introduce students to the role of financial management in modern not-for-profit organization. The course therefore covers applications of budgeting, financial and management accounting principles and procedures, and financial analysis for nonprofit organizations.

SPEA-V 421 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.

SPEA-V 422 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.

SPEA-V 424 Environmental Law, Justice, and Politics (3 cr.) An introduction to U.S. environmental politics and policy, focusing on the institutions and political actors involved in environmental protection. It emphasizes the difficult political, economic, and social justice questions that arise in the context of managing current and future public health and ecological risks.

SPEA-V 424 Homeland Security: Policy and Practice (3 cr.) This course examines homeland security policy through its practice in security agencies. Students will analyze primary sources and policy objectives, and survey U.S. homeland security through historical and recent incidents. Students will evaluate current events, and their implications for federalism, fiscal policy, civil liberties and future policymaking.

SPEA-V 427 International Development Finance (3 cr.) This course provides an overview of international financial tools utilized in development finance. It first develops a basic foundation in financial, credit and macroeconomic concepts. It then evaluates the instruments of financing development in countries that lack the capacity to raise sufficient capital to foster a higher quality of life.

SPEA-V 432 Labor Relations in the Public Sector (3 cr.) P: SPEA-V 373 (Bloomington only). 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.

SPEA-S 432 Honors—Labor Relations in the Public Sector (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 432; however, honors students will complete advanced coursework.

SPEA-V 434 NGO Management for International Development (3 cr.) Coursework prepares students for employment in international development. It covers a range of theoretical material and practical skills, answering questions like: What role do NGOs play in developing countries? How do we define and measure NGO success or failure? How do NGOs fundraise, plan, evaluate and collaborate on programs?

SPEA-V 435 Negotiation and Alternative Dispute Resolution (3 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.

SPEA-S 435 Honors—Negotiation and Alternative Dispute Resolution (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 435; however, honors students will complete advanced coursework.

SPEA-S 436 Honors—Communication for Government and Nonprofit Organizations (3 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA#V 326; however, honors students will complete advanced coursework.

SPEA-V 437 Public Transportation (3 cr.) The class will explore the basis of passenger transportation, including the models of bus, rail, paratransit, and taxi. Passenger Transportation Management Elements: Human Resources, Finance, Operations, Scheduling, Maintenance and Planning. Federal Policy; Program funding options: policy development, Interagency programs, and the Federal Authorization process. Mobility options: volunteer programs, car sharing, ridesharing and coordinated programs.

SPEA-V 438 Mass Media and Public Affairs (3 cr.) Course analyzes 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.

SPEA-V 439 Debates in Public Finance (3 cr.) P: SPEA-V 202 (Bloomington only). This course familiarizes students with the tools required to objectively analyze the potential impacts of various government policies. It covers important policies at the federal, state and local levels of government including income, sales taxes and property taxes, and mandatory and discretionary spending. Debt administration is also included.

SPEA-V 441 Topics in Financial Management and Policy (3 cr.) P: SPEA-V 372. Various topics focusing on financial management and policy are examined in state and local settings. May be repeated for credit.

SPEA-V 442 Topics in Budgeting or Cost-Benefit (3 cr.) P: SPEA-V 372. Various topics in budgeting or cost-benefit analysis are examined. Course may be repeated for different topics.

SPEA-V 443 Managing Workforce Diversity (3 cr.) The composition and nature of the workforce 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.

SPEA-V 444 Public Administrative Organization (3 cr.) A review of research findings and analysis of the operation of public agencies and their performance.

SPEA-V 447 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, on the White House, and on the Office of Management and Budget in the executive branch. Selected major policy areas will be considered.

SPEA-V 449 Senior Policy Seminar (3 cr.) 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.

SPEA-V 450 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.

SPEA-V 451 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.

SPEA-V 454 Human Resource Management in Nonprofit Organizations (3 cr.) R: SPEA-V 221 or SPEA-V 362. This course introduces students to the tools and managerial strategies that will support effective human resource management in nonprofit organizations and in the public agencies that work closely with nonprofits or with volunteers.

SPEA-V 456 Topics in Public Law (3 cr.) P: SPEA-V 184. Extensive analysis of selected contemporary issues in public law. Topics vary from semester to semester. May be repeated for credit.

SPEA-V 457 Human Resources Training and Development (3 cr.) P: SPEA-V 373. This course provides both a conceptual and pragmatic framework for understanding the needs of an organization for its employees' development and methods and strategies to best meet those needs. The course focuses on real-life examples through case studies and will deconstruct strategies, explore opposing viewpoints, and practice course creation.

SPEA-V 458 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.

SPEA-V 460 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.

SPEA-V 461 Cloud Computing Applications in Public Affairs (3 cr.) P: SPEA-V 261 or SPEA-V 369 or BUS-K 201 or CSCI-A 110 or INFO-I 101. This course is designed to provide students with the essentials of cloud computing needed to operate effectively in a public affairs enviroment. The course will emphasize public affairs applications using software packages and services.

SPEA-V 462 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.

SPEA-V 463 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.

SPEA-S 463 Honors—Interpersonal Relations in the Workplace (1-4 cr.) Requires consent of SPEA Honors advisor. Course covers same content as SPEA-V 463; however, honors students will complete advanced coursework.

SPEA-V 465 Geographic Information Systems for Public and Environmental Affairs (3 cr.) 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.

SPEA-V 470 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 previous semester.

SPEA-V 471 Urban Management Systems (3 cr.) 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.

SPEA-V 473 Management, Leadership, and Policy (3 cr.) P: SPEA-V 236 Management Concepts and Applications I and SPEA-V 336 Management Concepts and Applications II for Bloomington only; P: SPEA-K 300 and SPEA-V 370 for Indianapolis only. 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.

SPEA-V 475 Database Management Systems (3 cr.) P: SPEA-V 261 or SPEA-V 369 or BUS-K 201 or CSCI-A 110 or INFO-I 101. 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.

SPEA-V 476 Compensation Strategy and Systems (3 cr.) P: SPEA-V 373. The purpose of this course is to understand the complexity behind successful compensation systems that link organizations to the people they employ. Students will study topics of direct and indirect compensation, internal and external pay equity, and theories of public service motivation and how they apply to the three sectors.

SPEA-V 477 Strategic Human Resource Management (3 cr.) P: SPEA-V 373. This class covers the fundamental elements of Strategic Human Resource Management. The course builds on students' foundations of knowledge of HR methods and practices from the perspective of managers and practitioners working in the public and non-profit sectors.

SPEA-V 478 Employment Law for Human Resource Management (3 cr.) P: SPEA-V 184. This course focuses on employment laws that are relevant to the Human Resource Manager. Students will study employment laws and court cases that will provide them with the practical legal knowledge they need as a future HR professional working in the public and/or non-profit sectors.

SPEA-V 479 Employee Recruitment and Selection in the Public Sector (3 cr.) P: SPEA-V 373. This course will provide an in-depth examination of organizational staffing process in the public sector but is also relevant to the private and non-profit sectors. Effective employee selection and talent utilization for increasing organizational effectiveness will be covered. Other topics include the planning process, retention, and identifying talent.

SPEA-V 481 Grant Writing for Public and Nonprofit Organizations (3 cr.) The purpose of this course is to prepare students for grant proposal development. Students will explore various skills including how to identify appropriate grant sources; conceptualize, write and submit a grant proposal for funding; prepare a grant budget; and evaluate grant proposals.

SPEA-V 482 Overseas Topics in Public Affairs (0-15 cr.) SPEA Abroad Program: Study of selected topics in public affairs. Topics vary from semester to semester. May be repeated for credit.

SPEA-V 490 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.

SPEA-V 491 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.

SPEA-V 499 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.

Faculty

Meet our current and emeriti faculty