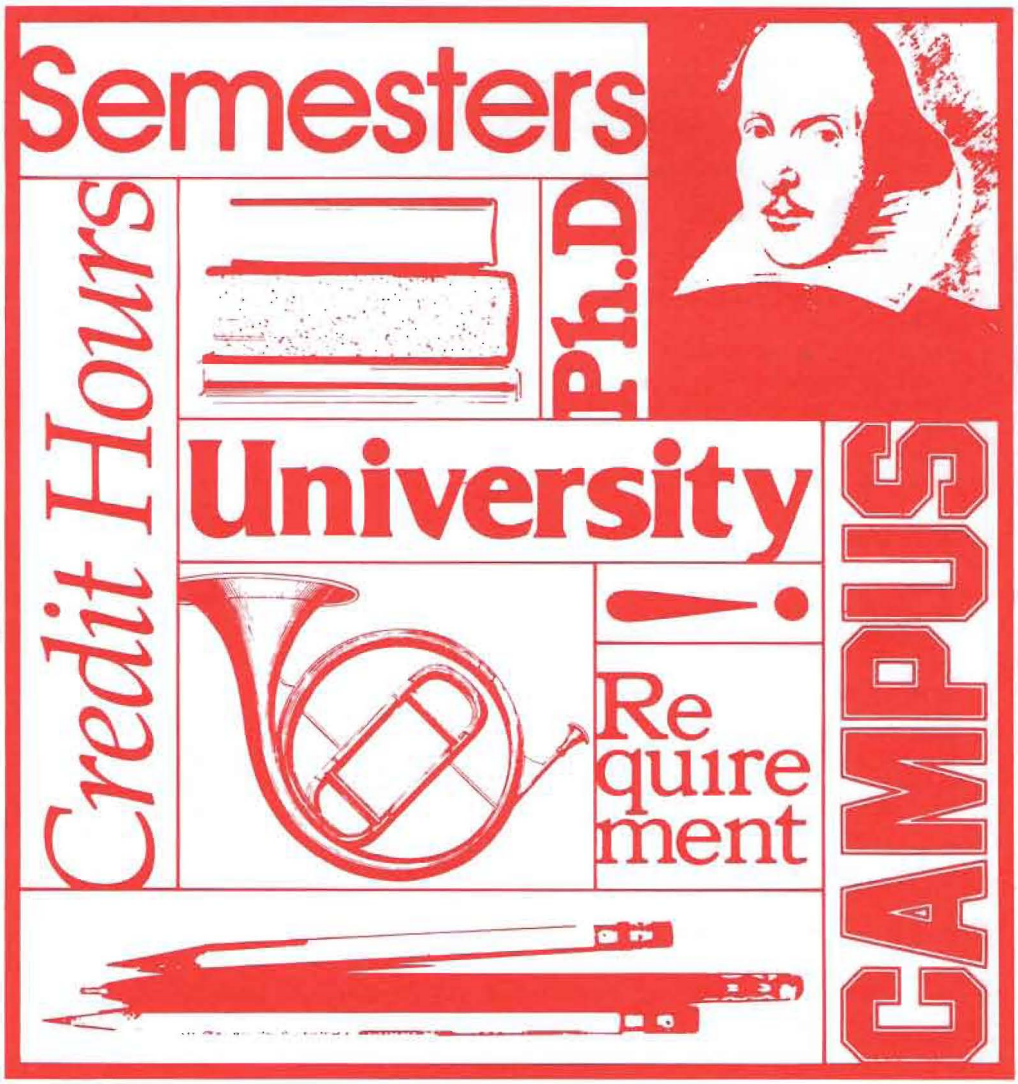
Indiana University Bulletin

42 ABI

School of Public
and Environmental Affairs

1980/81



INDIANA UNIVERSITY AT BLOOMINGTON

*College of Arts and Sciences
School of Journalism
*School of Business[1]
*School of Continuing Studies[2]
*School of Education[1]
Division of General and Technical Studies[3]
*School of Health, Physical Education, and Recreation
*School of Law-Bloomington
*School of Music
*School of Optometry
*School of Public and Environmental Affairs
*Graduate School
*Graduate Library School
*University Division

INDIANA UNIVERSITY-PURDUE UNIVERSITY AT INDIANAPOLIS

*School of Business[1]
*School of Continuing Studies[2]
*School of Dentistry
*School of Education[1]
School of Engineering and Technology (Purdue University)
*Herron School of Art
*School of Law-Indianapolis
*School of Liberal Arts
*School of Medicine
*Division of Allied Health Sciences
*School of Nursing
*School of Physical Education
*School of Public and Environmental Affairs
School of Science (Purdue University)
*School of Social Work
IUPUI University Division
Columbus (Indiana) Campus of IUPUI

THE REGIONAL CAMPUSES

Indiana University East (Richmond)
Indiana University at Kokomo
Indiana University Northwest (Gary)
Indiana University at South Bend
Indiana University Southeast (New Albany)
Indiana University-Purdue University at Fort Wayne (IPFW)

Bulletins for the divisions of the University marked (*) above may be obtained from the Office of Records and Admissions, Student Services Building, Indiana University, Bloomington, Indiana 47405. (Please note that there are two Indiana University Schools of Law and be sure to specify whether you want a bulletin of the Bloomington or the Indianapolis School.)

IUPUI bulletins for Purdue programs and for the IUPUI University Division may be obtained by writing directly to those units on the Indianapolis campus.

Write directly to the individual regional campus for its bulletin.

[1] Two bulletins are issued: graduate and undergraduate.
[2] Brochures on the Independent Study Division, Labor Studies, External Degrees, and Real Estate Certification Program are available from this School (Owen Hall).
[3] Information concerning programs of the Division of General and Technical Studies may be obtained from the Division office, 317 East Second Street, Bloomington, Indiana 47405.

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School of Public and Environmental Affairs

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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, courses, or other matters.

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School of Public and Environmental Affairs

When society changes quickly, its larger institutions have increasing difficulty keeping up. Although state universities, for instance, are always making small changes, they find it hard to make a large-scale reorientation to new societal needs. Reorientation requires a strong commitment from all members of the University community: faculty, students, administration, staff, and the governing board. It occurs only when most people agree that the University needs deliberately to update itself, to expand systematically into a new area of knowledge and action where its previous efforts have not been sufficiently focused and comprehensive. Indiana University's School of Public and Environmental Affairs, officially established on January 14, 1972, represents just such a firm commitment on the part of the University to large-scale change. It is a response of the University to new and important societal needs. It is a major effort to keep up with what our students, our faculty, and the community at large want. It is a priority effort for the University, with enthusiastic support from the state's Higher Education Commission, the University's Board of Trustees, and the administration. Its special mandate is to ensure that the University keeps up with important changes in the broader community.

The urgency of public and environmental needs is apparent. It is no news that it is becoming more and more difficult to run an increasingly complex technological democracy. It is no news that our natural environment is deteriorating rapidly, or that our increasing population and wealth are causing unanticipated problems in transportation, housing, health care, and public safety, or that our urban areas are less than utopian to live in. To cope with these problems, we need more skills and more trained people, and more knowledge about the institutions which serve us and control our environment.

Nor is it any news that universities have long had an ardent concern with these societal problems, that faculty and students wish to get more involved, wish to place their knowledge and expertise at the service of the community. The School of Public and Environmental Affairs (SPEA) reflects Indiana University's desire to develop better qualified manpower and to approach public problems in a more systematic manner and on a continuing and consistent basis. SPEA is an avenue for people who want to help government to do its job better and for students who want to enter the sphere for public activity better equipped to understand and work with public problems.

Several University centers and institutes and many individual faculty members are making positive contributions to the solution of public problems. SPEA, however, provides an integrated structure within which many of these activities can take place and from which they can receive needed support. SPEA is therefore meant to be innovative. Built on the skills of faculty and staff already experienced in public and environmental affairs, it is also built from their judgments as to responses required from the University. Existing programs and courses have been brought together in the School, and they have been joined by new courses and programs for which there was no previous place. Starting with some ongoing activities, SPEA is designed to build in fresh directions. Curriculum development is a continuing concern; SPEA is designed for change. The School's areas of professional concern are clearly demarcated, but within those areas its operations will depend on the interests and energies of the students, faculty, and institutions wishing to use its opportunities. SPEA is designed to be flexible and open. Procedures and policy will be a matter of response rather than command: response to public needs, professional standards, student interests, research opportunities, government requirements, and intellectual stimuli.

SPEA is concerned with the quality of our social, political, economic, and physical conditions. The physical sciences, the humanities, and the behavioral sciences all contribute to the understanding of the conditions on which attempts to improve the quality of life must be based. Because no single academic discipline and no single theoretical perspective can alone deal with public and environmental affairs, SPEA focuses its degree programs, research projects, and service efforts on problems, and organizes them by policy area. For example, the

areas of concentration for a graduate degree in Public Affairs include environmental policy, urban and regional policy, public financial management, and administrative policy. Such enduring social problems as pollution, poverty, population, housing, and occupational trends are central concerns in all areas of concentration. Or again, study of a particular environmental problem will include everything from the economic implications of a particular environmental policy to the geology of a lake intended for recreation. Other SPEA activities concern such diverse areas as consumer protection, public safety, health care delivery, and international comparative policy analysis.

It should be emphasized that at one level this focus on problems and policies is normative and conceptual, having to do with value judgements, theoretical assumptions, conceptual modes, and the like, while at another level it is strictly pragmatic—the problems of administering an agency, financing a program, choosing the best staff, communicating with the public, etc. SPEA deals both with policy and with how to implement policy.

The University has identified at least four groups SPEA can serve: Indiana University students, both graduate and undergraduate, from all the University's campuses; professionals and paraprofessionals presently working in public or environmental affairs careers; governmental agencies, both local, state, and federal; citizen groups and professional organizations. To respond to the diverse needs of these different constituencies, SPEA presently operates in three primary functional areas. The main burden of education is carried by the various academic programs of the School. In addition to regular graduate and undergraduate degree programs, the School offers special and innovative degree and nondegree programs for people already employed, including educational projects for various public agencies and interest groups. The School also includes the Office of External Program Services, which has the primary responsibility for facilitating contract research in applied public policy, both factual and conceptual.

The Division of Public Service provides training and other services to governmental agencies, both in Indiana and in other states. It includes the Center for Public Safety Training and other subdivisions. All four Divisions are supported by a full range of technical services, such as fiscal management, printing, graphics, design, and computerized information retrieval. The SPEA structure is intentionally loose-knit, so that each activity may reinforce the others and each Division may draw upon all the School's resources.

Five considerations were important in developing the School's activities. The first consideration is the need for people working in public and environmental affairs to use skills from several academic disciplines. The School is, therefore, multidisciplinary in both teaching and research. For example, the Basic Analytic Skills core of the Master of Public Affairs degree provides for the development of skills in economic analysis, statistics and computer utilization, behavioral analysis, and legal reasoning and research. The School is also multidisciplinary in that substantive knowledge in a given policy area can be supplemented by courses offered in the College of Arts and Sciences, the Graduate School, and the several professional schools of the University. The research activities of the School are also interdisciplinary, using experts from several disciplines backed up by all relevant support services. Individual faculty members may use these services, and for larger contracts special teams are created for each project. In 1977, the School's Academic Council approved the establishment of the following faculty area groupings: Policy and Administration, Finance and Economics, Urban and Regional Analysis, Environmental Science and Policy, and Criminal Justice, Law, and Public Safety.

The second consideration in the development of the School of Public and Environmental Affairs is Indiana University's geographic diversity. To respond positively to this geographic diversity, the School was established as an entity of the Indiana University system rather than limited to any single campus of the University. Thus, the faculty, the research teams, and the training programs are University-wide. Students can move from one campus to the other, as their interests and the University's resources suggest. The faculty and students on each campus can call on the resources of other campuses as necessary, and the School is assisting in the design of programs and specialties for which geographic location makes each campus

uniquely suited. Degrees not currently available at all campuses will be available through the School. Communication between government agencies and the whole University, especially at the local level, will become more immediate and personal.

The third influence in the design of the School of Public and Environmental Affairs is the continuing search for excellence in teaching, research, and service. To stimulate the quest for excellence, procedures are continually developed for course evaluation, the evaluation of teaching performance, and assessments of the quality and utility of research and service work. Regular curriculum evaluation and revision is an important device for keeping the School vital and in touch with the dynamics of social, economic, and political change. The development and maintenance of a critical capacity within the School also fosters the building of evaluative skills for people already in public affairs or preparing for public careers.

A fourth consideration in the design of the School is the professional and career needs of public affairs specialists. One of the continuing tasks of the School is the compilation of data on career opportunities and trends in the public affairs, on the training requirements and educational standards necessary to meet public affairs job requirements and the skills which students and government can best use in coming years. And, finally, the School takes professional placement and career development as one of its most important responsibilities. Liaison is established with public agencies and professional organizations across the country, and placement services are available to students of all campuses and areas of specialization.

The final consideration in developing the School's curriculum is the desire that education include more than just the classroom and more than just full-time students. It is not possible, we feel, to overemphasize the importance of an internship as part of a student's academic experience. It provides career goal definition and clarification, exposure to the professional world of work, and work experience that will greatly enhance the student's competitive position during a job search. In addition, the Public Careers Internship Program provides academic credit for internships. In the Division of Public Service, in-service training, contract education with government agencies, and special short-term programs on all campuses provide people already working in government with the additional skills and public orientation they need and want. The School's educational program is shaped as much as possible to the needs of its students, rather than to the traditional University format.

SPEA is working with some of the most difficult and emotive problems facing society today: what are we to do about the waste of our resources, the use of our land and water, the density of our population? what is to happen to the cities, and how can the people who live in them best survive dehumanization? how does a community work? how is the consumer of public services to communicate with those who render public services? can public agencies remain effective, and, if effective, can they stay human? how best can government learn? We believe that the interest of the public as a whole is best served by training public managers or agents in the skills and knowledge that will make their agencies efficient without reducing them to machines.

SPEA is trying to create a climate in which all those concerned with the public well-being may work cooperatively to solve problems which they already share. By insisting upon professionalism, by emphasizing that public policy should be influenced by people with skills and knowledge, and by demonstrating our effectiveness in training such people, we are trying to identify a community of interests shared by students, faculty, and public agencies. The endeavor is both idealistic and strictly pragmatic. On the one hand we will teach our students the broad concepts of public policy and ecological theory; on the other hand we will equip them with the skills by which they can get jobs and make a contribution toward the solution of pressing public problems.

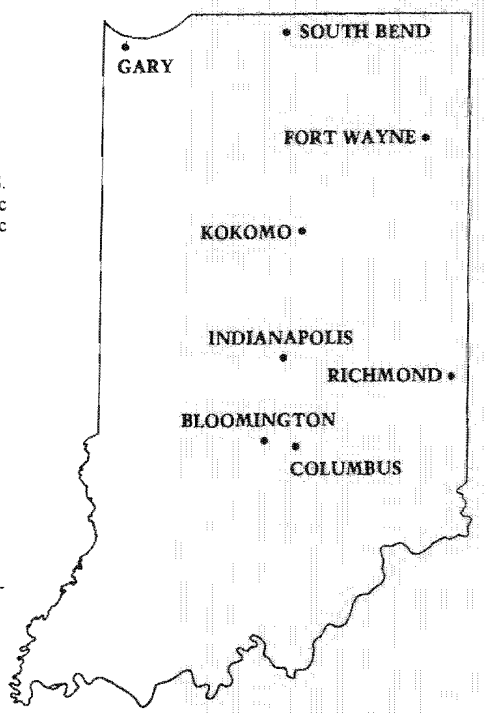
School of Public and Environmental Affairs (SPEA) System-wide Academic Degree Programs and Principal Contacts for Further Information

I.U. Northwest (Gary)/A.S. and B.S.-Public Affairs/Master of Public Affairs.
Contact: Dr. John Hunger
Director, DPEA
I.U. Northwest
3400 Broadway
Gary, IN 46408
(219) 980-6695

IU-PU at Indianapolis/(and Columbus Center)/A.S. and B.S.-Criminal Justice/A.S. and B.S.-Public Affairs/B.S.-Metropolitan Studies/Master of Public Affairs.
Contact: John H. Kragie
Assistant Dean
SPEA—Ball Residence
IUPUI
Indianapolis, IN 46223
(317) 264-4656

I.U. Bloomington/A.S. and B.S.—Public Affairs
Contact: Dr. Karl O'Lessker, Director
Undergraduate Program
SPEA—Poplars 327
Bloomington, IN 47405
(812) 337-3475

I.U. Bloomington/Master of Science in Environmental Science
Contact: Dr. J. C. Randolph, Director
Environmental Programs
SPEA—Poplars 438
Bloomington, IN 47405
(812) 337-9485



I.U. at South Bend/A.S.-Criminal Justice/A.S. and B.S.-Public Affairs/Master of Public Affairs
Contact: Dr. Frank X. Steggert
Director, DPEA
I.U. at South Bend
South Bend, IN 46615
(219) 237-4131

IU-PU at Fort Wayne/A.S.-Criminal Justice/A.S.-Public Affairs/Master of Public Affairs
Contact: Dr. Roy W. Shin
Director, DPEA
IU-PU at Ft. Wayne
Fort Wayne, IN 46805
(219) 482-5200

I.U. East (Richmond)
and
I.U. Kokomo/Both offer the A.S. in Criminal Justice
Contact: Dr. Lewis E. Wagner
Director,
Undergraduate Programs
SPEA—Ball Residence
IUPUI
Indianapolis, IN 46223
(317) 264-4656

I.U. Bloomington/Master of Public Affairs/J.D.-M.P.A./Ph.D.
Contact: Dr. Charles R. Wise, Director
Public Affairs Graduate Programs
SPEA—Poplars 327
Bloomington, IN 47405
(812) 337-3107

The Undergraduate Program

Admission

To the Undergraduate Program in the School of Public and Environmental Affairs through the University Division. A student must have completed 27 hours of satisfactory credit on the college level, either at Indiana University or elsewhere. For all course work completed, the student must have a minimum average of C (2.0). On Indiana University campuses with no University Division, this policy varies with campus regulations.

To the Undergraduate Program in the School of Public and Environmental Affairs from other campuses or other undergraduate schools of Indiana University. Students may transfer to SPEA from any other undergraduate school or division of Indiana University provided they are in good standing and have a 2.5 (C+) grade point average or above. Students with a 2.0 (C) average, but not a 2.5 average, may transfer into SPEA after the completion of two or more SPEA courses with a grade of C (2.0) or better in each course.

To the Undergraduate Program of another division of the School of Public and Environmental Affairs of Indiana University. Students registered in the School of Public and Environmental Affairs at any campus of Indiana University may transfer freely to the School of Public and Environmental Affairs on another Indiana University campus, provided they are in good standing. SPEA students who are on probation or have been dismissed must process a special transfer request through the campus of their last enrollment and will be transferred or denied transfer according to the circumstances and the decision of the Standards Committee on the desired campus.

Any student enrolled in SPEA who wishes to attend another Indiana University campus should report to the SPEA Recorder and secure an Inter-Campus Transfer form. This form should be completed for both temporary and permanent transfers.

To the Undergraduate Program in the School of Public and Environmental Affairs from other educational institutions. Students with 26 or more transferable hours will be admitted to full standing if they meet the following requirements:

1. A cumulative average of C (2.0) or higher. (Applicants residing outside Indiana must have approximately a 2.5 average.)
2. A high school record showing satisfactory entrance units.
3. Honorable dismissal from the institution last attended.
4. Presentation of a record of time spent and credits and grades secured in all subjects taken in other institutions. No credit will be allowed for courses taken in another institution in which the student received a grade equivalent at Indiana University to D+ or below.

Transfer Credit Policy. Students of approved colleges who transfer to undergraduate study in the School must take courses required by the School of Public and Environmental Affairs if they have not had equivalent courses in the school from which they transfer.

Requirements may be satisfactorily completed on all Indiana University campuses. However while courses may be taken throughout the system, some concentrations, for example environmental policy, may not be offered on all campuses.

Only credits earned at Indiana University will count toward a student's grade point average. Grades from other universities transfer as credit only, although transfer grades will appear on the credit transfer report. Courses in the Division of General and Technical Studies do not count for credit in the School of Public and Environmental Affairs.

Veteran's Credit. Veterans of military service are eligible for academic credit as a result of their military training and experience. The School follows the provisions of the *Guide to the Evaluation of Educational Experiences in the Armed Services* in granting credit. In general, this provides that a student who has completed from six months to one year of active duty is eligible for two credits, equivalent to first-year ROTC; and a veteran of more than one year is eligible for four credits, equivalent to two years of ROTC and two credits for one year of freshman physical education, less any physical education or basic ROTC credit previously

earned. Additional credit as may be justified is awarded on the basis of special training programs. Copies of official discharge or separation papers or transcripts must be submitted as a basis for granting credit. Evaluation of service credit is administered by the Office of Records and Admissions.

Policies Governing the Undergraduate Program

Hours Requirement. The minimum number of credit hours required for the baccalaureate degree is 120 in courses meeting the various requirements stated in this document.

Grade Code. The official grade code of the University is as follows: A (highest passing grade), A−, B+, B, B−, C+, C, C−, D+, D, D− (lowest passing grade), F (failed), I (incomplete), R (deferred), S (satisfactory), P (passing), and W (withdrawn).

Numerical Points. For purposes of determining the cumulative grade-point average, instructors in undergraduate courses use a grading system which includes plus and minus grades and the Registrar uses numerical grades for plus and minus grades when computing G.P.A.s (A=4.0, A−=3.7, B+=3.3, B=3.0, B−=2.7, C+=2.3, C=2.0, C−=1.7, D+=1.3. D=1.0, D−=0.7, F=0.0).

Grade-Point Average Requirements. A minimum cumulative grade-point average of C (2.0) is required to graduate. Students with a 3.5 grade-point average will graduate with distinction, a 3.7 will qualify for high distinction, and a 3.9 grade point average will earn an indication of highest distinction. It should be noted that any student who earns a passing grade (A to D) and repeats the course will have both grades computed in the grade-point average. However, the credit hours will be added to hours toward graduation only *once*. Transfer students admitted from other institutions with deficiencies in credit points are expected to overcome those deficiencies with Indiana University grades.

Grade-Point Average for Core and Concentration Requirements. To complete graduation requirements, a student must receive a grade of C (2.0) or better in all SPEA core courses and in all courses in the student's chosen area of concentration. In addition, it is the student's responsibility to understand fully and to comply with all the provisions of the degree program in which the student is enrolled.

Class Standing. Class standing is based on total credit hours which count toward minimum degree requirements. Credit hours required are as follows: senior, 86 or more; junior, 56-85; sophomore, 27-55; freshman, fewer than 27.

Semester Load. A typical academic load for full-time study is 12 to 17 credit hours, with an average load being approximately 15 credit hours. A student expecting to carry more than 17 credits should have a cumulative B (3.0) average or have earned a B (3.0) average in his last full semester. The maximum load is 20 credit hours.

Addition of Courses. No course may be added after the first two weeks of a regular session or one week in a summer session unless the instructor of the course petitions that an exception be made and the request is approved by the dean of the school in which the student is registered.

Withdrawals and Deadlines. Possibilities related to student withdrawal from a specific course are divided into three separate periods. The first period of the semester allows for "automatic withdrawal," which means that a grade of W is given automatically on the date of withdrawal to the student who submits a proper request. During the second period of the semester, withdrawal from a course requires permission of the instructor and signature of the appropriate SPEA administrator (dean or director). To qualify for the grade of W at this time, a student must be passing the course on the date of withdrawal. Failure to complete a course with an authorized withdrawal will result in a grade of F. In the last period of the semester, a student may not withdraw, except by special written permission of the appropriate SPEA administrator.

Deadlines for each of these three periods of a semester vary somewhat on each campus and the student should take care to check with the local SPEA administrator to verify deadlines. Local deadlines are strictly enforced.

Incomplete. All incomplete (I) grades should be completed within the time specified by the instructor of the course or within a maximum of one year. At the end of one year the Office of Records and Admissions will automatically convert all outstanding incomplete grades (I) to a failing grade (F).

FX Policy. Any undergraduate student who has retaken a course previously failed may petition to have only the final grade computed in the overall grade-point average. The original F grade will be ranked FX indicating that the F has been removed from the grade point average and only the second grade is counted in determining the cumulative grade-point average. A student could fail a course two or more times. Only the last grade will be included in the GPA calculation. The previous F's will be changed to FX's.

Pass-Fail Option. SPEA undergraduate students may elect to take one course each semester with a grade of P (pass) or F (fail) with a maximum of two such courses each school year, including summer sessions. For this option, each school year is assumed to begin in August. No more than a total of eight courses taken under this option may be applied to graduation from the B.S. programs (or two courses for the A.S. programs). The election of this option must be exercised by the student in conformance with campus policy on deadlines. Local P/F deadlines are strictly enforced.

The Pass-Fail Option is limited to electives. Students should not request the Pass-Fail Options for specific courses listed as requirements (including general education requirements), for the SPEA core, or for the SPEA concentration. Courses taken under the Pass-Fail Option simply become electives. Courses which are normally graded on a satisfactory-fail basis are not considered to be within this option.

Correspondence Study. A limited amount of credit earned through correspondence study may be applied toward the A.S. and B.S. degrees, with permission of the student's faculty adviser.

General Scholarship Rule. Any student who does not possess the necessary preliminary training or who lacks other qualifications may be required by the Standards Committee to enroll in such courses as the Committee may designate or to take such other corrective action as is necessary or desirable. The Committee may review a student's record at any time and take whatever actions seem necessary for the best interest of that student or of the School.

Upon the recommendation of the Standards Committee, and with the approval of the program administrator, any student whose work is unsatisfactory or whose conduct is unethical may be dismissed from the School.

Probation. Students are placed on probation anytime their semester or cumulative grade-point average is below a C (2.0). Students will remain on probation until such time as the semester and cumulative averages are C (2.0) or above.

Dismissal. Students may be dismissed from the School when, in the judgment of the Undergraduate Standards Committee, they have ceased to make progress toward the degree. When students are on academic probation for two consecutive semesters or make less than a D (1.0) average for one semester, they are automatically considered to be making no progress toward a degree. In special cases, a student who has been dismissed may petition the Undergraduate Standards Committee for readmission. In the case of readmission, the Standards Committee may specify appropriate conditions and standards for continued enrollment.

Absences. A student who misses a final examination and who has a passing grade up to that time is given temporarily a grade of Incomplete if the instructor has reason to believe the absence was beyond the student's control.

Physical Education and ROTC Courses. A maximum of four credits in Physical Education courses will be counted toward a B.S. degree (2 credits toward an A.S. degree).

ROTC (Reserve Officer Training Corps) courses are elective. Students interested in either the Army or Air Force program should check with the appropriate service representative.

Both Physical Education and ROTC courses carry regular credit and count toward minimum degree requirements. Grades earned in these courses are included in the cumulative grade-point average.

Concentration Declaration. The student must declare a concentration and/or specialization prior to the beginning of the junior year. Each concentration must consist of at least five independent courses, that is courses not counted elsewhere in the curriculum. Students may, however, double count courses within specializations. The student must notify the SPEA Recorder immediately of any change in concentration and/or specialization.

Requirements for a "double concentration." SPEA undergraduate students may pursue the completion of requirements in a second SPEA concentration. If they have completed the requirements for two concentrations, they will be considered to have completed a "double concentration." A double concentration requires that the student have at least five independent courses in each concentration. A student may also pursue a double specialization which may require less than 10 courses.

Degree Application. A candidate for graduation must file a formal application for the degree with the School at the beginning of the senior year. The School will not be responsible for the graduation of seniors who fail to meet this requirement.

Credit Deadline. All credit of candidates for degrees, except that for the work of the current semester, must be on record at least two months prior to the end of the semester in which they expect to graduate.

Student Guidance and Counseling Services. The undergraduate counselor is available to help students explore their educational and career alternatives. The Public Careers Internship and Placement Center assists students with career information and services. An important portion of total faculty time is devoted to assisting students to make proper program and career choices.

Requirements for a Second Bachelor's Degree. Normally the holder of a bachelor's degree who wishes to pursue further education is encouraged to become qualified for admission to graduate study. In certain cases, however, a student who already has a bachelor's degree may be admitted to candidacy for an associate or second bachelor's degree. When such admission is granted, the candidate must earn at least 30 additional credit hours as a student enrolled in SPEA and meet all the requirements of the SPEA degree (A.S. or B.S) being sought.

Off-Campus Credit Through Internships. The School strongly encourages students without previous job-related experience to work to seek an internship through the Public Careers Internship and Placement Center. Credit for approved internships is normally on the basis of six credit hours for a full-time experience for a semester.

The maximum credit allowable in the SPEA degree program for internships is 15 credit hours. If credit is granted by an academic program outside the School of Public and Environmental Affairs, the Standards Committee must approve the credit being applied toward the SPEA degree. In no case will more than ten (10) credits for internships granted by other institutions or departments be applied toward a degree in the School of Public and Environmental Affairs.

Residency Policy. It is strongly advised that students complete the last 30 credit hours on the campus where they expect to receive their degree.

The Honors Program

The SPEA Honors Program allows qualified students to pursue their academic interests while being recognized for outstanding performance. The Honors Program places emphasis on more intensive reading and research in areas of the student's own interest within the several fields of SPEA concentration.

Sophomores and juniors who have a cumulative grade-point average of 3.4 or higher may apply for admission to the program. The principal requirements are to maintain a 3.4 or higher grade-point average, to complete successfully no fewer than four honors courses, a minimum of two of which must be SPEA courses, and to write a senior thesis. Students should check with their campus Honors Adviser for specific details.

All seniors in the Honors Program are required to write a senior thesis. To do this, the student must reach agreement with a faculty member willing to direct the thesis and must then enroll in V499, *Honors Thesis*, for three credits. This can be done in either semester of the year, but arrangements with the thesis director should be completed well before registration. It is understood by all SPEA faculty that the honors thesis will be a substantial piece of research, involving an amount of effort on the student's part comparable to what would be expended in taking a three-credit senior level course.

Other honors courses may be taken from those offered by the University Honors Division or by individual departments, such as the honors sections of Economics S103 or S104. In addition to formal SPEA honors courses, a qualified student may make arrangements with individual instructors for additional readings and papers in courses in which the student intends to enroll. That additional work, certified by the instructor to the Honors Adviser on each campus, will permit the course to be counted as an "honors course."

If an Honors student's cumulative G.P.A. drops below 3.4 at any time, the student will be placed on "Honors Probation" and subject to being dropped from the Honors Program. The student will continue in a probationary status until such time as the cumulative G.P.A. returns to 3.4 or above. Should a student already on probation fail to achieve a *semester* G.P.A. of 3.4, he/she will be automatically dismissed from the Honors Program.

Accelerated Masters Program (A.M.P.)

Students who demonstrate particular excellence by maintaining a 3.6 cumulative grade-point average may apply for admission to the Master of Public Affairs or the Master of Science in Environmental Science graduate programs of SPEA during their junior year. The Admissions Committees of these programs will accept only those students to the A.M.P. whose application proposals relate their undergraduate and graduate concentrations so as to give considerable strength in a particular area.

The A.M.P. allows the student to fulfill some SPEA graduate requirements during his/her senior year. Some of the graduate courses may be counted toward the graduate degree requirements as well as the undergraduate degree requirements, but these "double-counted" courses cannot exceed 24 credit hours in the M.P.A. program and 18 cedit hours in the M.S.E.S. The A.M.P. does not entitle the student to waive any requirements of the bachelor's degree he/she is pursuing. All requirements for the B.A. or B.S. are to be met, however some requirements can be met concurrently for the bachelor's and graduate degree.

A.M.P. students may complete part or all of their masters degree on any campus of SPEA, assuming availability of courses and approval of the A.M.P. committee and local director.

Students seeking admission to, or desiring additional information regarding the SPEA Honors Program or the Accelerated Masters Program, should contact SPEA Honors representative on their campus.

Associate of Science in Public Affairs

The Associate of Science in Public Affairs requires 60 semester hours of study. It is offered in Bloomington, South Bend, Northwest (Gary), Indianapolis, and Fort Wayne. The major focus of the program is on upgrading the skills and general educational level of individuals now employed in various public service occupations. An area of concentration is developed in consultation with an adviser; major concentrations include environmental, criminal justice, and public administration areas.

General Requirements for the Associate of Science in Public Affairs

1. All applicants for this Associate of Science degree must be first admitted to Indiana University. Course work completed in special student or adult nondegree status may be accepted.
2. A minimum of sixty (60) semester hours with a cumulative grade point average of 2.0 is required.
3. Credit work for this degree may be taken at any regional campus of Indiana University, Indiana University-Purdue University at Indianapolis, the Bloomington Campus, or extension centers of Indiana University and IUPUI.
4. Not more than thirty (30) semester hours of transfer credit course work from another accredited institution may be applied toward this degree. Only grades of C (2.0) or higher will be accepted.
5. Credit earned through correspondence study in the Division of Independent Study of Indiana University and/or by special credit examination may be applied toward this degree.
6. A minimum cumulative grade-point average of C (2.0) is required. A grade of C (2.0) or better in all core and concentration courses is required for graduation.
7. Courses taken on the Pass/Fail option can only be applied as electives in meeting degree requirements, but in no case can more than two (2) Pass/Fail courses be applied toward this degree.
8. Students must apply for admission to the Associate Degree Program prior to completing thirty-five (35) semester hours of course work, creditable toward the degree. Students must complete associate degree requirements *before* attaining senior status, *(86 hours)* to be eligible for awarding of the Associate of Science in Public Affairs.
9. All credit of candidates for the Associate of Science degree, except for the current semester, must be on record at least six weeks prior to the conferring of degrees.
10. Faculty members and counselors are available to assist in course planning. However, students are responsible for planning their own program and for meeting degree requirements.

Associate of Science in Criminal Justice

The Associate of Science Degree in Criminal Justice is offered through the School of Public and Environmental Affairs on the campus of Indianapolis, Fort Wayne, and South Bend and through cooperative arrangement at Kokomo and Richmond. Courses meeting the Associate of Science degree requirements are those generally included in, or acceptable for, the baccalaureate degree programs of Indiana University. Through counseling and program planning, a student may continue work toward a baccalaureate degree after having received the Associate of Science in Criminal Justice with little or no loss of credit.

Dependent on a student's interest and educational objective, courses selected to satisfy associate degree requirements can be oriented to the career field of interest for pre-service students, or to professional or career development for the in-service students. Sufficient flexibility exists within the Associate of Science degree program to allow students with specific interests in the law enforcement, correctional administration, probation, or parole interest areas to select courses applicable to that area. Students entering the Associate of Science Criminal Justice program should consult with a Criminal Justice adviser in order to plan their degree program.

General Requirements for the Associate of Science in Criminal Justice

1. All applicants for the degree must be first admitted to Indiana University.
2. A minimum of 64 semester hours with a cumulative grade-point average of at least 2.0 is required.
3. A grade of at least C (2.0) must be attained in each course taken to satisfy the Criminal Justice Concentration.
4. Not more than eight Criminal Justice courses may be applied toward this degree.
5. Credit work for this degree may be taken at any campus of Indiana University.

6. Not more than 30 semester hours of transfer credit course work from another accredited institution may be applied toward this degree. Only grades of C (2.0) or higher will be accepted.

7. With permission, credit earned through correspondence study in the Division of Independent Study of Indiana University and/or by special credit examination may be applied toward this degree.

8. Courses taken on the Pass/Fail Option can only be applied as electives in meeting degree requirements. In no case can more than two Pass/Fail courses be applied toward this degree.

9. To avoid loss of credit and other problems, students must declare their intent to earn this degree prior to completing 35 semester hours of course work creditable toward the degree (excluding ROTC credit awarded through military service.) Applications for admission to the Associate of Science Program can be obtained from Offices of the Recorder, School of Public and Environmental Affairs, or the Appropriate Program Office at cooperating campuses.

10. Students must complete Associate Degree Requirements *before* attaining senior status, 86 hours, to be eligible for awarding of the Associate Degree in Criminal Justice.

11. Former Police Administration and current Forensic Studies courses offered by the Department of Forensic Studies of the College of Arts and Sciences are credited as Criminal Justice courses for this degree.

12. All credit of candidates for the Associate of Science Degree, except for the current semester, must be on record at least six weeks prior to the conferring of degrees.

13. Application for the Associate of Science Degree must be filed with the SPEA Recorder or Program Office not later than October 1 for January, May or August graduation.

Bachelor of Science in Public Affairs

The degree awarded in the four-year undergraduate curriculum is the Bachelor of Science in Public Affairs; it is offered in Bloomington, Fort Wayne, Indianapolis, South Bend, and Northwest (Gary). Through the School, the University has established an important new link between the ideas and people in the university community and public service in the state and nation.

The curriculum is broadly interdisciplinary and flexible in nature. It is intended as background for citizenship participation in public affairs and as orientation toward career entry into public service.

Students are encouraged to develop a study program in the area of public affairs most interesting to them. The School offers a set of "core" courses that have been developed as appropriate background for participation in public affairs. In addition, students are expected to select an area of public affairs concentration and a set of elective courses appropriate to their educational and career objectives. Opportunities for selection of electives and concentration options vary on each campus and allow the student to choose from a wide variety of course offerings.

Undergraduates with knowledge in a specific concentration area and a general background in public and environmental affairs will find entry-level employment in their field facilitated by the professional orientation provided in the SPEA program. The curriculum also provides background for advanced academic work in a professional area such as law, city planning, or urban administration.

The Public Careers Internship and Placement Center assists public affairs graduates by gathering up-dated information on career fields and specific jobs and providing a convenient point of referral for all public placement and employment opportunities.

The Bachelor of Science in Public Affairs is designed to provide the student with both a liberal education and a professional orientation. Students must complete a minimum of 120 credit hours in the four course work areas of general education, core, concentration, and electives.

The concentrations listed below are available on the campus indicated. Although the concentration availability varies by campus, students may pursue any undergraduate concentration for which they can complete required coursework. The list below indicates that all required courses for the concentration are available on the campus named.

Bloomington:
- Criminal Justice
- Environmental Health Management
- Environmental Policy
- Policy and Administration
  - (with the following specialization):
  - Law and Public Policy
  - Public Personnel Management/Labor Relations
  - Public Finance
  - Mass Communications
  - Management
- Urban Affairs (with the following specialization):
  - Urban Studies
  - Community Development and Planning
  - Transportation
  - Urban Administration

Fort Wayne:
- Criminal Justice
- Policy and Administration
- Urban Studies

Gary:
- Criminal Justice
- Policy and Administration
- Urban Studies

Indianapolis:
- Criminal Justice
- Policy and Administration
- Urban Studies

South Bend:
- Criminal Justice
- Policy and Administration
- Environmental Policy

Environmental Programs

SPEA Environmental Programs are cooperative undertakings of the College of Arts and Sciences of Indiana University at Bloomington and the School of Public and Environmental Affairs. They are administered by the School of Public and Environmental Affairs, and provide courses and degree programs for students, not only in the School, but across the University.

At the undergraduate level, the Environmental Programs offers an Environmental Studies Certificate which is available to all undergraduate students of the University and the Environmental Studies major for students in the College of Arts and Sciences. The Environmental Policy and the Environmental Health Management concentrations are for students seeking a Bachelor of Science degree from the School of Public and Environmental Affairs.

The four present undergraduate programs differ markedly in the degree of specialization. A *Certificate in Environmental Studies* provides an introductory survey and is available to undergraduate students enrolled in any division of the University. It provides an introduction to environmental problems and alternatives for specialists in a wide variety of disciplines. The Certificate requires 8 courses (26-27 semester hours). A *Major in Environmental Studies* is available only to undergraduate students in the College of Arts and Sciences. The major requires 15-18 courses (45-54 semester hours) and specifies that students must also complete another major of their choice. The requirement for a second major assures depth in a particular field. This program thus combines generalist (E.S. major) and specialist (other

major training at the bachelor degree level] in a number of natural and social science fields. In addition to providing strong preparation for those courses in which a B.A. in the second major is relevant, this program provides a sound basis for graduate work both in these disciplines and professional fields [e.g. law, medicine, or administration]. A *Concentration in Environmental Policy* is available to undergraduate students in the School of Public and Environmental Affairs. The concentration consists of 8 courses. The aim of this program is to produce a new kind of professional who combines a knowledge of governmental function [budget, personnel, policy] with a knowledge of environmental issues and the resources for their solutions and can apply these at policy and technical levels of government. The *Environmental Health Management Specialization* examines the man-environment-health interrelationships along with the administrative and socioeconomic problems associated with environmental health. Students are provided a strong public policy background as well as exposure to relevant areas of the natural sciences and applied technology. Graduates integrate proficiency in budgeting, management, environmental health planning, and the analysis of the socioeconomic and health impact of various environmental program proposals with knowledge about health hazard abatement technology. The two year *Associate of Science* degree with an environmental emphasis is also available through SPEA. This provides environmental training equivalent to the certificate through a subset of the courses required for the Environmental Policy concentration for the Bachelor of Public Affairs degree.

Interdisciplinary Programs

The School of Public and Environmental Affairs administers three interdisciplinary programs primarily for those undergraduate students who obtain their degrees in areas other than SPEA. The three areas of study in which programs are currently available are Public Affairs, Urban Studies, and Environmental Studies.

Certificate Programs are offered on IU campuses as follows:

Bloomington:	Public Affairs Certificate Environmental Studies Certificate Urban Studies Certificate
IUPUI:	Public Affairs Certificate
IU-Northwest:	Public Affairs Certificate
IU-South Bend:	Environmental Studies Certificate Urban Studies Certificate

Indiana University Bloomington

School of Public and Environmental Affairs

Undergraduate Programs

The School of Public and Environmental Affairs at Bloomington offers a wide range of academic programs leading to the associate and bachelor degrees and certificate programs.

The Associate of Science in Public Affairs requires 60 hours of study. The major program emphasis is on upgrading the skills and general educational level of individuals now employed in various public service occupations. Areas of concentration include: Public Administration, Criminal Justice, and Environmental Policy. Courses meeting the Associate Degree requirements are those which are generally included in, or acceptable for, the bachelor degree.

The Bachelor of Science degree program has a curriculum built around courses in composition, speech, psychology, sociology, mathematics, statistics, the biological or physical sciences, and the arts and humanities. Core and concentration courses offer classroom work in public affairs, environmental systems, urban systems, urban and regional planning, policy analysis, public administration, public financial management and several specialized public affairs fields. Students are encouraged to supplement classroom studies with an internship which provides practical experience in the public sector.

Interdisciplinary certificate programs in Environmental Studies, Public Affairs, and Urban Studies, plus an Environmental Studies Major for non-SPEA students, are offered on the Bloomington campus. The intent of these programs is to supplement course work in a given discipline with specialized or general knowledge of urban affairs, public affairs, and environmental problems. Faculty in these programs are drawn from a variety of disciplines and schools.

Students wishing information concerning the undergraduate programs offered at Bloomington should contact:

Dr. Karl O'Lessker
Director, Undergraduate Programs
School of Public and Environmental Affairs
The Poplars, Room 327
400 E. 7th St.
Bloomington, IN 47405
Phone: (812) 337-3475

Associate of Science in Public Affairs

Specific Degree Requirements

I. General Education Distribution (9 courses required)

A. Social Science—3 courses
   1. Econ E103 Intro to Microeconomics (3 cr.)
      or
      Econ E104 Intro to Macroeconomics (3 cr.)
   2. POLS Y103 Intro to American Politics (3 cr.)
   3. One course from:
      Sociology or psychology (3 cr.)

B. Quantitative Methods—2 courses
   1. One computer course
   2. One mathematics course (excluding mathematics for teachers)

Students are urged to fulfill this requirement by taking Mathematics M118 or M119 (one of which is required for the SPEA B.S. degree in Public Affairs.) Indiana University courses below the 100 level (e.g. M014) do not carry college credit and may not be applied toward the SPEA A.S. degree.

C. Communication—3 courses
   1. Eng W131 Elementary Composition (3 cr.)
   2. Eng W231 Professional Writing Skills (3 cr.)
   3. Speech—one course
D. Arts and Humanities—one course

II. SPEA CORE (4 courses required)
A. SPEA V170 Introduction to Public Affairs (3 cr.)
B. SPEA E200 Environment and People (3 cr.)
C. SPEA V264 Urban Strategies (3 cr.)
D. SPEA V270 Survey of Administrative Techniques (3 cr.)

III. Area of Concentration in Public Affairs—12-18 credits
A. Public Administration (12 cr.)
B. Criminal Justice (18 cr.)
C. Environment (18 cr.)
D. Special Concentration (minimum 12 cr.)
   May be developed by student and faculty adviser to meet special curriculum/career needs; must be approved by campus SPEA administrator.

IV. Electives—credits required to attain a minimum of 60 credit hours with a 2.0 G.P.A.

Public Administration Concentration Requirements
Required: four courses selected from below
SPEA V446 Introduction to Government Accounting and Financial Reporting (3 cr.)
(A201-A202 (3-3 cr.) may be substituted with approval of director)
SPEA V316 Environmental Health Management Orientation (3 cr.)
SPEA V366 Public Administration (3 cr.)
SPEA V372 Financial Management and Budgeting (3 cr.)
SPEA V373 Personnel Management in the Public Sector (3 cr.)
SPEA V376 Legal Process and Contemporary Issues in America (3 cr.)
Other approved options

Criminal Justice Concentration Requirements
The Criminal Justice Concentration requires six (6) courses
1. SPEA—J100 Foundations of Criminal Justice or Forensic Studies P100 Introduction to Forensic Studies
2. SPEA—J200 The American Criminal Justice System or Forensic Studies P201 Social Control Systems I
3. One of:
   SPEA—J301 Criminal Law *or* Forensic Studies P370 Legal Aspects of Criminal Justice System I
   SPEA—J302 Criminal Law Administration *or* Forensic Studies P371 Legal Aspects of Criminal Justice System II
4. One of:
   Sociology S320 Deviance and Control
   Sociology S335 Intergroup Relations
5. Two Criminal Justice or Forensic Studies courses at the 200-300 level directed toward student's area of interest. (Choice of courses under this option requires the approval of the Criminal Justice adviser.)

Environmental Concentration Requirements
The two-year degree, when properly planned, allows a student to make normal progress towards a four-year degree (Bachelor of Public Affairs) and select electives particularly suited to his or her own goals. The requirements of the Environmental Concentration for the A.S. degree provide an introduction to environmental problems and the options for their resolution.
The concentration requirements are:
1. A course in chemistry or physics.
2. Geography G107 Physical Geography (3 cr.) *or* Geology G103 Earth Science: Materials and Processes (3 cr.) *or* Geology G111 Elements of Geology I (3 cr.)
3. Economics E103 Introduction to Microeconomics *or* E104 Introduction to Macroeconomics (whichever is not taken for the social science requirement) (3 cr.)

4. Two of the following:
   Geography G213 Introduction to Economic Geography (3 cr.)
   Geography G304 Climatology (3 cr.)
   Geology G300 Environmental and Urban Geology (3 cr.)
   Geology G316 Mineral Resources (3 cr.)
   Biology L350 Environmental Biology (3 cr.)
   Political Science Y313 Environmental Policy (3 cr.)
5. SPEA V365 Urban and Regional Planning (3 cr.)
6. The mathematics requirement should be met with a course in calculus.
7. A course in statistics.
   (Options for statistics include Economics E370, Mathematics/Psychology/SPEA K300 or K310, Political Science Y205, or Sociology S250 and S251.)

Bachelor of Science in Public Affairs

English Composition. Every student must demonstrate his or her ability to use correct, clear, effective English. This requirement is represented through the requirement to complete W131 or its equivalent. *Any one* of the ways listed below may be used to complete this requirement. In addition, all SPEA students are required to complete the special course in professional writing skills, which is numbered W231.

1. By being exempted with or without credit. A score of 600 or better on the SAT verbal test will be sufficient for exemption. For exemption with credit, students must take both the SAT verbal test and the English Composition Achievement Test and receive 600 or better on both.

Students exempted from composition without credit who completed L202, L203, L204, L205, L206 or L220 with a grade of A or B will be eligible to apply 2 hours of composition credit (W198). The 2 hours will be granted in addition to the 3 hours of regular course credit. If the grade is A the grade for W198 will be A. If a B is earned, students will receive an S for W198. It is the student's responsibility to request that the Department of English forward this information to the SPEA Recorder (Poplars 319).

2. By completing English W131, Elementary Composition (3 credits), with a grade of C-(1.7) or better.

3. By completing English L141-L142, Introduction to Writing and the Study of Literature (4-4 credits), with a grade of C- (1.7) or better in each course. This option will satisfy both the English composition requirement and two courses of the arts and humanities requirement.

4. By completing two semesters of English W143, Introduction to the Interdisciplinary Study of Expository Writing (1-1 credit), with a grade of C- (1.7) or better. W143 is available in course sections of several departments which combine instruction in composition with an introduction to a specific discipline.

5. By completing either English L141 or L142 and one semester of English W143, with a grade of C- (1.7) or better.

Degree Requirements

I. General education requirements (total 16 courses):

1. Social science requirements—each of the following (5 courses):
   Economics E103-E104 Intro to Economics
   or other approved economics sequence
   (Economics E300 (5 cr.) is acceptable as a substitute for both E103 and E104.)
   POLS Y103 Intro to American Politics
   Sociology and/or Psychology—2 courses (Students may select either sociology or psychology or one course in each.)
2. Arts and Humanities; Biological and Physical Science—(5 courses):
   The student has the option of selecting 3 courses in arts and humanities and 2 courses in biological and physical sciences, or vice versa.

Arts and Humanities
Afro-American Studies
Comparative Literature
English (excluding courses counted for general education communications requirements)
Fine Arts
Folklore
History
History and Philosophy of Science
Musicology and Music History
Philosophy
Religious Studies
Speech (excluding courses counted for general education communications requirements)
Theatre and Drama
Languages:
Classical Studies
East Asian Languages and Literatures
French and Italian
Germanic Languages
Near Eastern Languages and Literatures
Slavic Languages and Literatures
Spanish and Portuguese
Uralic and Altaic Studies

Biological and Physical Sciences
Anatomy and Physiology
Astronomy
Biology
Chemistry
Geology
Microbiology
Physics
Plant Sciences
Zoology
Cross-listed courses: Anthropology B200, Geography G107, G208, G304, G405, G407, and G477, Psychology P101 or P106

3. Communications—3 courses:
   a) Elementary Composition
   b) Eng W231 Professional Writing Skills
   c) Speech—one course from:
      S121 Public Speaking
      S122 Interpersonal Communications
      S223 Business & Professional Speaking
      S227 Argumentation and Debate
      S228 Discussion and Group Methods
4. Quantitative methods—one course from each area (3 courses):
   a) Mathematics—one course from:
      M118 Finite Mathematics
      M119 Calculus
   (The Environmental Policy concentration requires M119 Calculus, M211 Calculus or M215 Analytic Geometry and Calculus I.)
   b) Statistics:
      SPEA K300 Statistical Techniques
      Other approved statistics courses
   c) Introduction to the Computer—one course from:
      Com Sc C201 Introduction to Computer Science
      Bus K201 Computer in Business
      Other approved computer course

Note: Double Counting: no course may be double counted (counted more than once) as a general education course. Courses in the "general education requirements" may not be counted in the "Public Affairs Core." However, some courses may be double counted in a Public Affairs Concentration *if*, and only to the extent that, the concentration requires more than the minimum of 5 courses.

II. Public Affairs Core. Each of the following areas must be studied. Seven of the 11 courses must be from SPEA.

1. Public and Environmental Affairs - one course
   V170 Introduction to Public Affairs
2. Environment - one course
   E200 Environment and People
   E400 Topics in Environmental Studies (permission required)
3. Urban Studies - one course
   V264 Urban Strategies
   Approved options
4. Planning - one course
   V365 Urban and Regional Planning
5. Administration - one course
   V366 Public Administration
6. Financial Management - one course
   V372 Financial Management and Budgeting
7. Law - one course
   V376 Legal Process and Contemporary Issues in America
   Approved options
8. Public Affairs Options - three courses
   V250 Problems in Public Affairs
   V260 Topics in Public Affairs
   V270 Survey of Administrative Techniques
   V348 Analytical Approaches to Public Policy
   E360 Public Finance
   V373 Personnel Management in the Public Sector
   V377 Legal Process and Contemporary Issues in America II
   E400 Topics in Environmental Studies
   V421 Dynamics of Urbanization
   V432 Labor Relations in the Public Sector
   V442 Seminar in Fiscal Management
   V446 Accounting for the Public Sector
   V450 Contemporary Issues in Public Affairs
   Approved options (list provided before registration each semester)
9. Policy Processes - one course
   V472 Policy Processes

III. Concentrations—5 courses minimum, depending on concentration chosen.
   Criminal Justice
   Environmental Health Management
   Environmental Policy
   Policy and Administration (with the following specialization):
      Law and Public Policy
      Public Personnel Management/Labor Relations
      Public Finance
      Mass Communications
      Management
   Urban Affairs (with the following specialization):
      Urban Studies
      Community Development and Planning
      Transportation
      Urban Administration

IV. Electives (May include up to 15 credit hours for internships. Minimum of 120 credit hours required for graduation with a 2.0 G.P.A.)

Areas of Concentration in Public Affairs

Each SPEA student is encouraged to select a concentration and/or specialization in public affairs. These concentration areas include a minimum of five courses, or 15 credit hours. One concentration is required. A "double concentration" may be fulfilled by a student completing all of the requirements of two concentrations.

Note on "double counting" in the concentration: Courses taken for the concentration requirements may be counted for other SPEA requirements (that is double counted) only if—and to extent that—more than 5 courses are required in the concentration. For a double concentration, the student must complete at least 5 independent courses in each concentration (that is, courses not counted elsewhere). Double specializations may be earned by satisfying the minimum requirements for two specializations within a concentration. Any courses which are common to both specializations may be double counted.

Policy and Administration Concentration

Students choosing the Policy and Administration Concentration may complete the requirements for one or more of the following specializations: Law and Public Policy, Public Personnel Management/Labor Relations, Mass Communications, Public Finance, and Management Specializations. Students may also elect to follow a general program. Those students choosing one of the specializations would take all their policy and administration courses from that one specialization.

General Policy and Administration Specialization

This program is suitable for those students who prefer the interdisicplinary aspects of SPEA, or those who have not chosen a specialization.

Requirements

1. SPEA V373 Personnel Management in the Public Sector
2. Four (4) Policy and Administration courses selected from:

SPEA V260 Topics in Public Affairs: Adviser approved topics
SPEA V348 Analytic Approaches to Public Policy
SPEA V376 Legal Process and Contemporary Issues in America I
SPEA V377 Legal Process and Contemporary Issues in America II
SPEA E400 Topics in Environmental Studies: Adviser approved topics
SPEA V421 Dynamics of Urbanization
SPEA V432 Labor Relations in the Public Sector
SPEA V442 Seminar in Fiscal Management
SPEA V444 Public Administrative Organization
SPEA V445 Policy in State Government
SPEA V446 Introduction to Government Accounting and Financial Reporting
SPEA V449 Applied Policy Analysis
SPEA V450 Contemporary Issues in Public Affairs—Adviser approved topics

Law and Public Policy Specialization

The Law and Public Policy Specialization is designed for pre-law students, those interested in graduate studies, or those interested in the interdisciplinary study of public policy.

Requirements

1. SPEA V373 Personnel Management in the Public Sector
2. Any four of the following courses:

Law

SPEA V377 Legal Process and Contemporary Issues II
SPEA V450 Contemporary Issues in Public Affairs—law topics
POLS Y304 and Y305 Judicial Process and American Constitutional Law I & II
BUS L407 Law of Competition and Deceptive Practices

Public Policy Processes and Analysis

SPEA V260 Topics in Public Affairs: public policy topics

SPEA V348 Analytic Approaches to Public Policy
SPEA V447 Federal Budget Policy
SPEA V449 Applied Policy Analysis
SPEA V450 Contemporary Issues in Public Affairs—public policy topics

Policy Areas
SPEA V450 Contemporary Issues in Public Affairs—policy area topics
ECON E345 Social Welfare Policy
POLS Y401 Topics in Political Science—policy area topics
SPEA E400 Topics in Environmental Studies—policy area topics
BUS M329 Consumer Policy and Marketing

Public Personnel Management/Labor Relations Specialization
The Public Personnel Management/Labor Relations Specialization provides a framework for students interested in labor issues and/or a professional career in professional or labor related areas in either the private or public sector.

Requirements
1. SPEA V373 Personnel Management in the Public Sector
2. SPEA V432 Labor Relations in the Public Sector
3. Any three of the following courses:

Labor Relations
SPEA V450 Contemporary Issues in Public Affairs—labor relations topics
ECON E340 Introduction to Labor Economics
ECON E348 Economics of Human Resources
ECON E445 Collective Bargaining: Practice and Problems
ECON E446 Public Policy in Labor Relations

Personnel Management
SPEA V450 Contemporary Issues in Public Affairs—personnel mgmt. topics
BUS C413 Methods of Employee Training
BUS Z440 Manpower Resources and Development
BUS Z441 Wage and Salary Administration
BUS Z444 Personnel Research and Measurement

Organizational Theory—ONLY one of the following:
SPEA V444 Public Administrative Organization
POLS Y302 Public Bureaucracy in Modern Society
BUS W430 Organizations and Organizational Change

Mass Communications Specialization
The Mass Communications Specialization is designed for those students interested in writing and the mass media. Students are exposed to such areas as public relations, advertising, and communications law.

Requirements
1. SPEA V373 Personnel Management in the Public Sector
2. One course from the following:
JOUR J300 Communications Law
JOUR J410 The Media as Social Institutions
TELE R287 Process and Effects of Mass Communications
TELE R401 Social Action via Mass Media
3. Two courses from the following:
JOUR J320 Principles of Creative Advertising
JOUR J330 Advertising as Communication
JOUR J337 Economics of Mass Media
JOUR J427 Public Relations in a Democratic Society

4. One course from the following:
JOUR J423 Public Opinion
POLS Y316 Public Opinion and Political Behavior
SPEA V447 Federal Budget Policy
SPEA V450 Contemporary Issues in Public Affairs—Adviser Approved Topics

Public Finance Specialization
The Public Finance Specialization is geared toward students who desire a career in public sector financial management and budgeting.

Requirements
1. SPEA V373 Personnel Management in the Public Sector
2. SPEA V442 Seminar in Fiscal Management—any topic
3. SPEA V446 Introduction to Government Accounting and Financial Reporting
4. Three of the following:
SPEA V442 Seminar in Fiscal Management—any topic not counted in #2
SPEA V447 Federal Budget Policy
BUS A201-A202 Introduction to Accounting (counts as one course)
ECON E361 Public Finance: Taxation
ECON E362 Public Finance: Government Spending
ECON E321 Theory of Prices and Markets
ECON E322 Theory of Income and Employment
ECON E350 Money and Banking
BUS L203 Commercial Law (cannot be taken if BUS L201 is taken in core)
BUS U300 Principles of Public Utilities
SPEA V432 Labor Relations in the Public Sector

Management Specialization
The Management Specialization provides a curriculum for students interested in working in a managerial capacity in either the public or private sector.

Requirements
1. SPEA V373 Personnel Management in the Public Sector
2. One course from the following:
SPEA V444 Public Administrative Organization
BUS Z300 Organizational Behavior and Leadership
POLS Y302 Public Bureaucracy in America Society
POLS Y390 Micropolitics and Organizational Behavior
3. At least one of the following:
(The second course may be selected for inclusion in #4)
SPEA V442 Seminar in Fiscal Management
SPEA V446 Introduction to Public Sector Accounting and Financial Reporting
4. Two of the following:
SPEA V432 Labor Relations in the Public Sector
SPEA V450 Contemporary Issues in Public Affairs—personnel and labor relations topics or urban government administration and policy
SPEA V348 Analytical Approaches to Public Policy
or POLS Y394 Public Policy Analysis
SPEA V447 Federal Budget Policy
SPEA V449 Applied Policy Analysis

Urban Affairs Concentration
Students choosing the Urban Affairs Concentration may complete the requirements for one or more of the following specializations: Community Development and Planning, Transportation, and Urban Administration. A student may also elect to follow a general urban studies program and select courses from any of the specializations. Those wishing to follow a general program should consult a concentration adviser to insure a coherent selection.

Transportation Specialization
The Transportation Specialization prepares a student for graduate school and/or a career in urban and regional transportation in the public sector.

Requirements
1. BUS T300 Principles of Transportation
2. SPEA V450 Contemporary Issues in Public Affairs: Transportation
3. One of the following sequences:

Urban Transportation
BUS T315 Urban Transportation and Public Policy
GEOG G412 Urban Transportation Analysis

Regional Transportation
GEOG G414 Regional Transport Systems
BUS T410 Costs, Demands and Pricing in Transport

4. One course from the following or from those not selected in 3:
BUS T415 Mass Transit Management
GEOG G488 Spatial Analysis
SPEA V421 Dynamics of Urbanization

Community Development and Planning Specialization
The Community Development and Planning Specialization is focused toward those students interested in planning and includes the study of urbanization, real estate, and zoning.

Requirements
1. Two courses chosen from:
SPEA V421 Dynamics of Urbanization
SPEA V450 Contemporary Issues in Public Affairs: Neighborhood and Community Development
SPEA V450 Contemporary Issues in Public Affairs: Workshop in Planning and Community Development
[The third course may be selected for inclusion in 2 below]
2. Three courses chosen from:
BUS R300 Principles of Real Estate
BUS L408 Real Estate Law
GEOG G412 Urban Transportation Analysis
SPEA V450 Contemporary Issues in Public Affairs: Transportation
POLS Y308 Urban Politics
BUS G330 Urban Economics
SOC S461 Urban Sociology
SPEA V442 Seminar in Fiscal Management: Grants Management and Intergovernmental Relations

Urban Administration Specialization
The Urban Administration Specialization is geared for students seeking an administrative career in the public sector or as a foundation for graduate school.

Requirements
1. Two courses chosen from:
SPEA V421 Dynamics of Urbanization
SPEA V450 Contemporary Issues in Public Affairs: Urban Government Administration and Policy
POLS Y308 Urban Politics
2. Three courses chosen from:
SPEA V348 Analytical Approaches to Public Policy
SPEA V373 Personnel Management in the Public Sector
SPEA V432 Labor Relations in the Public Sector

SPEA V442 Seminar in Fiscal Management
SPEA V444 Public Administration Organization
SPEA V446 Introduction to Public Sector Accounting and Financial Reporting
SPEA V450 Contemporary Issues in Public Affairs: Neighborhood and Community Development
SPEA V450 Contemporary Issues in Public Affairs: Transportation
SPEA J376 Principles of Public Safety
SSRV S352 Social Welfare Delivery Systems

Criminal Justice Concentration [**Note:** Criminal justice degree and concentration requirements were in the process of being revised when this *Bulletin* went to press. Separate publications will be available in early spring, 1980, describing the new requirements.] This concentration offers a variety of courses for students interested in law enforcement, correctional administration, and the study of legal procedures in the criminal justice system. This field of study provides a framework for those interested in graduate study in law or public administration and careers in the public sector.

Requirements:

1. SPEA J100 Foundations of Criminal Justice **or**
   Forensic Studies P100 Introduction to Forensic Studies
2. SPEA J200 The American Criminal Justice System **or**
   Forensic Studies P201 Social Control System I
3. One course from the following:
   SPEA J301 Criminal Law or Forensic Studies P370 Legal Aspects of Criminal Justice System I
   SPEA J302 Criminal Law Administration or Forensic Studies P371 Legal Aspects of Criminal Justice System II
4. Forensic Studies P400 Forensic Studies Proseminar
5. Psychology P324 Abnormal Psychology
6. Sociology S325 Criminology
7. Two: SPEA Criminal Justice courses or Forensic Studies courses at the 300-400 level directed toward the student's area of interest. [Choice of courses under this option requires adviser approval.]

Environmental Policy Concentration

This program includes a multi-disciplinary study of the nature, origin, and options for solutions for environmental problems with emphasis on their implications for public policy. The appropriateness of the Environmental Policy Concentration as preparation from graduate and professional schools or for possible employment depends strongly on the particular courses chosen for fulfilling the requirements and electives; a strong science background is recommended.

Requirements

1. A course in chemistry or physics
2. One of the following:
   GEOG G107 Physical Systems of the Environment
   GEOL G103 Earth Science: Materials and Processes
   GEOL G111 Elements of Geology I
3. A course in environmental biology

[Recommended BIOL L350 Environmental Biology. Students desiring to emphasize Field Biology or Water Resources Science should fulfill this requirement with L473, M420, or Z468.]

4. SPEA E400 Topics in Environmental Studies
5. POLS Y313 Environmental Policy
6. The SPEA mathematics requirement must be met with a course in calculus.

7. Three of the following courses (in addition to those used for requirements 1-6). It is strongly suggested that the student take all three from one of the emphasis groups listed. Additional sections SPEA E400 may sometimes be appropriate.

Field Biology

BIOL B364 Summer Flowering Plants
BIOL Z373 Entomology
BIOL Z383 Entomology Laboratory
BIOL B406 Veterbrate Zoology
BIOL S309 Ecological Biology
BIOL M420 Environmental Microbiology
BIOL Z468 Limnology
BIOL L473 Ecology
BIOL L474 Ecology Laboratory

Earth Science

CHEM C106 Quantitative Chemistry
CHEM C311-12 Analytical Chemistry
CHEM C341-42 Organic Chemistry
CHEM C360 Elementary Physical Chemistry
GEOG G304 Climatology and Meteorology
GEOG G335 Photogrammetry and Remote Sensing
GEOG G404 Elements of Soil Science
GEOG G405 Hydroclimatology
GEOG G407 Advanced Physical Geography
GEOG G435 Cartography and Remote Sensing
GEOG G477 Advanced Climatology and Meteorology
GEOL G300 Environmental and Urban Geology
GEOL G316 Mineral Resources
GEOL G406 Introduction to Geochemistry
GEOL G415 Principles of Geomorphology
PHYS E250 The Environment and Physics

Water Resources Sciences

CHEM C106 Quantitative Chemistry
CHEM C311-12 Analytical Chemistry
CHEM C360 Elementary Physical Chemistry
BIOL M420 Environmental Microbiology
BIOL Z468 Limnology
GEOG G304 Climatology and Meteorology
GEOG G404 Elements of Soil Science
GEOG G405 Hydroclimatology
GEOG G407 Advanced Physical Geography
GEOG G477 Advanced Climatology and Meteorology
GEOL G415 Principles of Geomorphology
GEOL G451 Principles of Hydrogeology

Environmental Social Analysis

ANTH A400 Seminar Topic: Ecology
BUS L409 Law and the Environment
ECON E485 Economics and Social Control of Industry
ECON E419 Location and Regional Economics
GEOG G213 Introductory Economic Geography
GEOG G315 Environmental Conservation
GEOG G320 Population Geography
GEOG G413 Location Theory
GEOG G414 Regional Transport Systems

GEOG G415 Advanced Urban Geography
GEOG G417 Land Use Analysis
GEOG G458 Spatial Analysis
SOC S305 Population and Human Ecology
HPER R372 Interpretive Resources and Techniques

Environmental Health Management Concentration

The Environmental Health Management Concentration offers a mixture of environmental and management disciplines. This field of study prepares students for a career in the public sector: local, state, or federal health-oriented careers.

Requirements

1. SPEA V316 Environmental Health Management Orientation
   SPEA V416 Environmental Health Management Seminar
2. Ten credits in chemistry from:
   CHEM C101-102 Elementary Chemistry (with C121 and C122 laboratories) or
   CHEM C105-106 Principles of Chemistry and Quantitative Chemistry (with C125 and C126 laboratories)
3. One course from:
   BIOL P130 Human Biology
   BIOL P215 Basic Human Physiology
4. Five credits in microbiology (either a or b):

a. BIOL M200 Microorganisms in Nature and Disease and
   BIOL M315 Microbiology Laboratory
b. BIOL M310 Microbiology and
   BIOL M315 Microbiology Laboratory

5. The general SPEA mathematics requirement must be met with a course in calculus.

Environmental Studies

Environmental Studies Major

An environmental studies major is available only to students in the College of Arts and Sciences. The program includes a multi-disciplinary study of the effects of population growth, resources utilization, energy generation, and agricultural systems, as well as the emergence of environment as a focus for public policy.

Students who major in this program must also complete the requirements for a major in another discipline as well as in environmental studies. Students who wish to graduate with both majors specified must have at least 25 hours applicable to each major which are not applied to the other major, and may thus need to take additional courses in one or both majors.

Two options are available for the environmental studies major. Option I is presented primarily for students in biological or physical sciences, whereas Option II is proposed primarily for students in social or behavioral sciences or humanities.

As students in the College of Arts and Sciences, environmental studies majors are subject to the following College requirements: English composition, 8 hours of a second year foreign language or of foreign cultural area courses, 4 courses in arts and/or humanities, 4 in social and/or behavioral sciences, 2 in biological sciences, and 2 in mathematics and/or physical sciences.

The appropriateness of the environmental studies major as preparation for graduate and professional schools or for possible employment depends strongly on both the other major selected and on the particular courses chosen for fulfilling the requirements. Students are urged to consult with an adviser for aid in formulating educational and career goals.

For the benefit of high school students, it is here noted that two years of high school algebra and one year of geometry, or their equivalent are assumed as background in this program and most related departmental programs.

Option I. Candidates using Option I must include in their program Chemistry C105-C106 (6 cr.) and C125-C126 (4 cr.); and Physics P201 General Physics I (5 cr.), Physics P221 Physics I (5 cr.), or Physics E250 The Environment and Physics (3 cr.); and a course in calculus and one in statistics, as well as complete all requirements of one other major in their choice. (Note that most of these courses have required or recommended prerequisites [see the course description under the appropriate department]. E250 may not be used to fulfill the physics requirements by students who are also majoring in physical sciences or mathematics. Students contemplating graduate study in science should consider P221-P222, and M215-M216 [Calculus] in selecting prerequisites and fulfilling requirements.)

Additional requirements under Option I are:
Physics P310 Environmental Physics (3 cr.) *or*
  Chemistry C341 Organic Chemistry I (3 cr.),
Geography G304 Climatology (3 cr.) *or*
  Geology G300 Environmental and Urban Geology (3 cr.), *or*
  Geography G404 Elements of Soil Science (3 cr.)
Geology G316 Mineral Resources (3 cr.) *or*
  Geography G315 Environmental Conservation (3 cr.)
Biology Z468 Limnology (4 cr.) *or*
  Biology M420 Environmental Microbiology (3 cr.)
Biology L473 Ecology (3 cr.) *or*
  Biology S309 Ecological Biology (5 cr.)
Economics E103-E104 Introduction to Economics I-II (3-3 cr.) *or*
  Economics E300 Principles of Economics (5 cr.)
Political Science Y313 Environmental Policy (3 cr.)
SPEA E400 Topics in Environmental Studies (2-3 cr.)

At least two additional courses from Group B of Option II. (E200 Environment and People [3 cr.] and/or an additional semester of E400 may be counted here.)

Option II. Candidates using Option II must include in their program (1) a course in chemistry or physics (usually Physics E250 The Environment and Physics, 3 cr.), (2) a course in statistics, (Options for statistics include Economics E370, Mathematics/Psychology K300 or K310, Political Science Y205, Sociology S250 and S251, or SPEA K300.) (3) a course in environmental biology (usually Biology L350 Environmental Biology, 3 cr.), and (4) *one* of the following sets of courses:

1. Biology: an introductory course and L473 Ecology and either: Z468 Limnology *or* M420 Environmental Microbiology. This also satisfies requirement 3, above.
2. Chemistry: C105-C106 (Introductory) and C125-C126 and C341 Organic Chemistry. This also satisfies requirement 1, above.
3. Geography: G107 Physical Geography and G304 Climatology and Meterology and either: G405 Hydroclimatology *or* G407 Advanced Physical Geography *or* G404 Elements of Soil Science
4. Geology: Introductory course and two of the following: G300 Environmental and Urban Geology, G316 Mineral Resources, G415 Geomorphology, *or* G451 Principles of Hydrogeology
5. Physics: P201 (or P221, Introductory), Mathematics M119 (or M215 Calculus) and Physics P310 Environmental Physics. This also satisfies requirement 1, above.

and must complete the requirements of one other major of their choice. Additional requirements under Option II are the courses in Group A *and* four courses from Group B:

Group A (all required)
SPEA E200 Environment and People (3 cr.)
Economics E103-E104 Introduction to Economics (3-3 cr.) *or*
  E300 Principles of Economics (5 cr.) *or*
Political Science Y313 Environmental Policy (3 cr.)
SPEA E400 Topics in Environmental Studies (2-3 cr.)

Group B (four required):
Anthropology E427 Cultural Ecology (3 cr.)
Business L409 Law and the Environment (3 cr.)
Economics E360 Public Finance: Survey (3 cr.)
Economics E485 Social Control of Industry (3 cr.)
Geography G213 Introduction to Economic Geography (3 cr.)
Geography G315 Environmental Conservation (3 cr.)
Geography G320 Population Geography (3 cr.)
Geography G417 Land Use Analysis (3 cr.)
Political Science Y204 Political Theory and Policy Analysis (3 cr.)
Recreation R372 Interpretive Resources and Techniques (3 cr.)
Sociology S305 Population and Human Ecology (3 cr.)
SPEA V365 Urban and Regional Planning (3 cr.)
SPEA V316 Environmental Health Management Orientation (3 cr.)
SPEA V416 Environmental Health Management Seminar (3 cr.)
SPEA E400 Topics in Environmental Studies (additional semester) (2-3 cr.)

Certificate Programs

Three certificate programs are administered by the School of Public and Environmental Affairs primarily for those undergraduate students who obtain their degrees in areas other than SPEA. The three areas of study in which programs are currently available are Public Affairs, Urban Studies, and Environmental Studies.

Public Affairs Certificate
The School of Public and Environmental Affairs offers the certificate in Public Affairs to students wishing to study public policy, governmental organization, and public management skills in addition to the major area of their undergraduate programs. The program is interdisciplinary in nature and students from any department or school of Indiana University are eligible.

The Certificate in Public Affairs requires a total of 27 credit hours, of which SPEA must teach at least 15 but no more than 21 hours. (Each course carries 3 hours of credit—SPEA courses among those listed below are indicated with a star [*].) To be eligible for a certificate Indiana University students must complete the following requirements in addition to satisfying all degree requirements for the Baccalaureate degree program of their choice.

1. All of the following:
   V170 Introduction to Public Affairs*
   E200 Environment and People*
   V264 Urban Strategies*

2. One course each from two of the following groups:
Organization Behavior
   V270 Survey of Administrative Techniques*
   Business Z300 (or Bus Z301) Organizational Behavior and Leadership
   Pol Sci Y390 Micropolitics and Organizational Behavior
   SPEA J310 Introduction to Administrative Process*
   Forensic Stud. P310 Introduction to Organizational Theory
Public Administration
   V366 Public Administration*
Law
   V376-377 Legal Process & Contemporary Issues in America*
   Pol Sci Y304-305 Judicial Process & American Constitutional Law
   Bus L201 Legal Environment & Business
   Forensic Stud. P370 Legal Aspects of Criminal Justice System
   SPEA J301 Criminal Law*

3. Four of the following:
School of Public and Environmental Affairs
   V260 Topics in Public Affairs*
   V348 Analytical Approaches to Public P

V349 Applied Policy Analysis*
V365 Urban and Regional Planning*
V372 Financial Management & Budgeting*
V373 Personnel Management*
V432 Labor Relations in the Public Sector*
V442 Seminar in Fiscal Management*
V444 Public Administrative Organization*
V445 Policy in State Government*
V446 Introduction to Government Accounting and Financial Reporting*
V450 Contemporary Issues in Public Affairs*
V472 Policy Processes

Political Science
Y200 Citizen and the Courts
(This is a Topics in Political Science course. The *only* acceptable topic is "Citizen and the Courts.")
Y302 Public Bureaucracy in Modern Society
Y306 State Politics in the U.S.
Y394 Public Policy Analysis

Forensic Studies/Criminal Justice
P100 Introduction to Forensic Studies *or*
J100 Foundations of Criminal Justice
P201 Social Control Systems I *or*
J200 American Criminal Justice System
P350 Science & Technology in Social Control Systems *or*
J322 Introduction to Criminalistics
P381 History of Social Control in the U.S. *or*
J370 Social Control Systems
(This is a Seminar in Criminal Justice course. The *only* acceptable topic is "Social Control Systems.")

Sociology
S320 Deviance and Control
S325 Criminology
S461 Urban Sociology
S424 Sociology of Law

Geography
G412 Urban Transportation Analysis
G414 Regional Transport Systems
G415 Advanced Urban Geography
G417 Land Use Analysis

Certificate in Environmental Studies

The Certificate in Environmental Studies is available to undergraduate students in all schools of the University. The program for the Certificate is designed to introduce students to selected aspects of current thinking and research on the nature, causes, and solutions of environmental problems. The program involves cooperation and contributions of faculty from a variety of disciplines and schools. Students desiring greater depth should consider an environmental studies major (College of Arts and Sciences) or an environmental policy concentration (School of Public and Environmental Affairs).

A Certificate in Environmental Studies will be granted upon completion of the requirements for a Baccalaureate degree plus the following:

1. A course in chemistry or physics
2. Geography G107 Physical Systems of the Environment (3 cr.) or Geology G103 Earth Science: Materials and Processes (3 cr.) or Geology G111 Elements of Geology I (3 cr.)
3. A course in ecology (usually Biology L350 Environmental Biology, 3 cr.)
4. Economics E103-E104 Introduction to Economics I-II (3-3 cr.) or Economics E300 Principals of Economics (5 cr.)
5. Political Science Y313 Environmental Policy (3 cr.)
6. SPEA E400 Topics in Environmental Studies (2-3 cr.)

7. & 8. Two *additional* courses selected from: (The list given is for Bloomington. Other campus lists vary.)

Anthropology E427 Cultural Ecology (3 cr.)
Biology M420 Environmental Microbiology (3 cr.)
Biology Z468 Limnology (4 cr.)
Biology L473 Ecology (3 cr.)
Chemistry C101 Elementary Chemistry I (3 cr.)
Chemistry C105 Principles of Chemistry (3 cr.)
Chemistry C311 Analytical Chemistry (3 cr.)
Chemistry C341 Organic Chemistry I (3 cr.)
Economics E360 Public Finance (3 cr.)
Economics E485 Social Control of Industry (3 cr.)
SPEA E200 Environment and People (3 cr.)
SPEA E400 Topics in Environmental Studies (2-3 cr.)
Geography G235 Maps and Aerial Photographs (3 cr.)
Geography G304 Climatology and Meteorology (3 cr.)
Geography G315 Environmental Conservation (3 cr.)
Geography G320 Population Geography (3 cr.)
Geography G350 Field Methods in Physical Geography (3 cr.)
Geography G404 Elements of Soil Science (3 cr.)
Geography G405 Hydroclimatology (3 cr.)
Geography G407 Advanced Physical Geography (3 cr.)
Geography G417 Land Use Analysis (3 cr.)
Geology G300 Environmental and Urban Geology (3 cr.)
Geology G316 Mineral Resources (3 cr.)
Geology G406 Introduction to Geochemistry (3 cr.)
Geology G415 Principles of Geomorphology (3 cr.)
Geology G451 Principles of Hydrogeology (3 cr.)
Political Science Y204 Political Theory and Policy Analysis (3 cr.)
Physics P201 General Physics I (3 cr.)
Physics P120 Energy and Technology (3 cr.)
Physics E250 The Environment and Physics (3 cr.)
Physics P310 Environmental Physics (3 cr.)
Recreation R372 Interpretive Resources and Techniques (3 cr.)
Sociology S305 Population and Human Ecology (3 cr.)
SPEA V316 Environmental Health Management Orientation (3 cr.)
SPEA V365 Urban and Regional Planning (3 cr.)
Statistics: e.g., Economics E370 (3 cr.), Political Science Y205 (3 cr.), Math/Psych/SPEA K300 or K310 (3 cr.), or Sociology S250 *and* S251 (6 cr.)

Note: More advanced courses may be chosen from the requirements for an environmental studies major. A list of appropriate sections of topics, courses, and other substitutions is available from the Environmental Studies and SPEA undergraduate offices during registration each semester.

Urban Studies Certificate

The Urban Studies Program at Indiana University is an Undergraduate program offered through the Center for Urban and Regional Analysis of the School of Public and Environmental Affairs. Faculty in the program are drawn from all sectors of the University, and the curriculum is under the direction of the Committee for Urban Affairs, which includes representatives from all sectors of the University.

The intent of the program is to supplement course work in a given discipline with specialized or general work in urban studies. The program is interdisciplinary and provides perspectives beyond those generally obtained through work in a single department; at the same tine, the program incorporates sufficient flexibility to provide background for those wishing to undertake graduate work in urban studies or urban planning, or to provide the student with capabilities that will enhance the potential of employment in urban-related positions.

Students wishing to obtain a concentration in urban studies in addition to their major departmental requirements must complete 25 hours of course work as described below.

Where applicable, students may take courses in their major department to satisfy the requirements below as well as those in their major. The Certificate in Urban Studies will be awarded upon completion of the requirements for the bachelor's degree and the following:

Core Requirements
V264 Urban Strategies
K300 Statistical Techniques
V365 Urban and Regional Planning
V421 Dynamics of Urbanization

Specialization—four courses
The student should take one of the following sequences, plus any other two courses.
Geography G314 Urban Geography
Geography G415 Advanced Urban Geography

Business T315 Urban Transportation and Public Policy
Geography G412 Urban Transport Analysis

Business G330 Principles of Urban Economics
Business G430 Economic Analysis of Urban Problems and Policies

Geography G417 Land Use Analysis
Geology G300 Environmental and Urban Geology

Political Science Y308 Urban Politics
Political Science Y394 Public Policy Analysis

Sociology S309 The Community
Sociology S410 Topics in Social Organization. Topic: Human Ecology

Business R300 Principles of Real Estate
Business L408 Law of Real Estate and Land Use Control

Additional Electives (may not be counted toward two-course sequence)
Anthropology E380 Urban Anthropology
History A347 Cities and Urbanization in American History

Indiana University-Purdue University At Indianapolis

School of Public and Environmental Affairs

Undergraduate Programs

The School of Public and Environmental Affairs at Indiana University-Purdue University at Indianapolis (IUPUI) is currently offering baccalaureate as well as associate degree programs. Course instructors include IUPUI faculty, Bloomington faculty, and city and state government personnel. As a part of the program, a major effort is being made to put students in direct contact with representatives and activities of city and state government. This is facilitated by numerous students and part-time faculty members who hold responsible positions in governmental agencies.

The undergraduate program includes Bachelor of Science degrees in Criminal Justice, Metropolitan Studies, and Public Affairs, as well as Associate of Science degrees in Criminal Justice and Public Affairs, and the Certificate in Public Affairs.

To receive the Bachelor of Science in Criminal Justice, the student must complete 122 credit hours of course work. Concentration areas in this program will depend on the interest of the student. Students entering the Criminal Justice Program have options concerning their degree concentration, depending on whether their educational objectives are directed toward professional or career improvement, preparation for college- or university-level professions, or specific positions within the career field. Major interest areas available in the Criminal Justice curriculum are law enforcement, probation, parole, and correctional administration.

The School's Bachelor of Science in Metropolitan Studies ensures a broadly-based inter-disciplinary background by requiring the student to take one upper-level course, in the appropriate department, in each of the following five areas: Urban Government and Urban History, Urban Environment, Urban Sociology, Urban Economics, and Urban Problems. In addition, the program requires a curriculum core in Metropolitan Studies. Flexibility in meeting the individual needs and interests of the student is provided by a seminar on selected topics in Urban Problems and through an Independent Reading Program.

The Bachelor of Science in Public Affairs curriculum is built around courses in composition, speech, psychology, sociology, mathematics and statistics, and preprofessional courses in the biological sciences, mathematics, physical sciences, and the arts and humanities. Core and concentration courses offer classroom work in public affairs, environmental systems, urban systems, urban and regional planning, policy analysis, public administration, public financial management, criminal justice, and environmental management. Classroom studies are supplemented by public service experience and training.

Candidates for the Associate of Science in Criminal Justice must complete 64 credit hours of course work. Courses meeting the Associate of Science degree requirements are those which either are generally included in, or acceptable for, baccalaureate degree programs. Courses selected to satisfy associate degree requirements can be oriented to the field of interest for pre-service students or to professional or career development for the in-service student. Sufficient flexibility exists within the associate degree program to allow students with specific interests in law enforcement, correctional administration, probation, or parole to select courses applicable to those areas.

The Associate of Science in Public Affairs requires 60 semester hours of study. The major focus of the program is on upgrading the skills and general educational level of individuals now employed in various public service occupations. An area of concentration is developed in consultation with an adviser; major concentrations include urban affairs, criminal justice, and public administration. Courses meeting the Associate of Science degree requirements are those which are generally included in, or acceptable for, baccalaureate degree programs.

The Certificate in Public Affairs program is offered to students wishing to study public policy, governmental organization, and public management skills in addition to the major

area of their undergraduate programs. Students from any department of school of Indiana University are eligible. The Certificate in Public Affairs requires a total of 27 credit hours, of which SPEA must teach at least 15 but no more than 21 hours.
Further information on the School's undergraduate programs may be obtained from:
Dr. Lewis E. Wagner, Director, Undergraduate Programs
School of Public and Environmental Affairs
Indiana University-Purdue University at Indianapolis
Ball Residence
1232 West Michigan Street
Indianapolis, Indiana 46223
Telephone: (317) 264-4656

Associate of Science in Public Affairs

Specific Degree Requirements

I. General Education Distribution—9 courses
A. Social Science—3 courses
1. E201 Intro to Microeconomics (3 cr.) *or*
E202 Intro to Macroeconomics (3 cr.)
2. Y103 Intro to American Politics (3 cr.)
3. One course from:
Sociology or psychology (3 cr.)
B. Quantitative Methods—2 courses
1. One computer course
2. One mathematics course (excluding mathematics for teachers)
(Students are urged to fulfill this requirement by taking Mathematics M118 or M119 [one of which is required for the SPEA B.S. degree in Public Affairs. Indiana University courses below the 100 level do not carry college credit and may not be applied toward the SPEA A.S. degree.)
C. Communication—3 courses
1. Eng W131 Elementary Composition I (3 cr.)
2. Eng W231 Professional Writing (3 cr.)
3. Speech—one course
Speech C104 Training the Speaking Voice (2 cr.)
Speech C110 Fundamentals of Speech Communication (3 cr.)
Speech C180 Introduction to Interpersonal Communication (3 cr.)
Speech C223 Business and Professional Speaking (3 cr.)
Speech C228 Discussion and Group Methods (3 cr.)
D. Arts and Humanities—one course

English	Music
Art History	Philosophy
Folklore	Religion
French	Spanish
German	Speech and Theatre
History	

II. SPEA Core (4 courses required)
A. SPEA V170 Introduction to Public Affairs (3 cr.)
B. SPEA V262 Environment: Problems and Prospects (3 cr.)
C. SPEA V264 Urban Strategies (3 cr.)
D. SPEA V270 Survey of Administrative Techniques (3 cr.)
III. Area of Concentration in Public Affairs—12-18 credits
A. Public Administration (12 cr.)
B. Criminal Justice (18 cr.)
C. Special Concentration (minimum 12 cr.)
May be developed by student and faculty adviser to meet special curriculum/career needs; must be approved by campus SPEA administrator.
IV. Selected Electives—credits required to obtain a minimum of 60 credit hours with a 2.0 G.P.A.

Public Administration Concentration Requirements
Required: four courses selected from:
V446 Introduction to Government Accounting and Financial Reporting (3 cr.)
(A201-A202 [3-3 cr.] may be substituted with approval of director)
V316 Environmental Health Management Orientation (3 cr.)
V366 Public Administration (3 cr.)
V372 Financial Management and Budgeting (3 cr.)
V373 Personnel Management in the Public Sector (3 cr.)
V376 Legal Process and Contemporary Issues in America I (3 cr.)

Criminal Justice Concentration Requirements
The Criminal Justice Concentration requires *six* (6) courses—each with a grade of C or higher in accordance with the following:
1. J100 Foundations of Criminal Justice (3 cr.)
2. J200 American Council Justice System (3 cr.)
3. *One* of the following:
   J301 Criminal Law (3 cr.)
   J302 Criminal Law Administration (3 cr.)
   J401 Criminal Law and Procedure (3 cr.)
   (In-service students only)
4. *One* of the following:
   Sociology R345 Crime and Society (3 cr.)
   Sociology R346 Control of Crime (3 cr.)
5. *Two* SPEA Criminal Justice Courses at the 300 level directed toward the student's area of interest. (Choice of courses under this option requires the approval of the appropriate local SPEA administrator.)

Note: It is recommended that students select Sociology R100 to meet the A.S. Social Science requirement of one course from Sociology or Psychology.

Associate of Science in Criminal Justice

General Requirements

1. A minimum of 64 semester hours with a cumulative grade point average of at least 2.0 is required.
2. A grade of at least C must be attained in each course taken to satisfy the Criminal Justice Concentration.
3. Not more than eight Criminal Justice courses may be applied toward this degree.
4. Credit work for this degree may be taken at any campus of Indiana University.
5. Not more than 30 semester hours of transfer credit course work from another accredited institution may be applied toward this degree. Only grades of C (2.0) or higher will be accepted.
6. With permission, credit earned through correspondence study in the Division of Independent Study of Indiana University and/or by special credit examination may be applied toward this degree.
7. Courses taken on the Pass/Fail Option can only be applied as electives in meeting degree requirements. In no case can more than two Pass/Fail courses be applied toward this degree.
8. To avoid loss of credit and other problems, students should declare their intent to earn this degree prior to completing 35 semester hours of course work creditable toward the degree (excluding ROTC credit awarded through military service). Applications for admission to the Associate of Science Program can be obtained from the Office of the Recorder, School of Public and Environmental Affairs.
9. Students must complete Associate Degree Requirements BEFORE attaining senior status, 86 hours, to be eligible for awarding of the Associate Degree in Criminal Justice.
10. Former Police Administration and current Forensic Studies courses offered by the Department of Forensic Studies of the College of Arts and Sciences are credited as Criminal Justice courses for this degree.

11. All credit of candidates for the Associate of Science Degree, except for the current semester, must be on record at least six weeks prior to the conferring of degrees.

12. Application for the Associate of Science Degree must be filed with the Recorder, SPEA, not later than October 1 for January, May, or August graduation.

Specific Degree Requirements

I. English W131 Elementary Composition I (3 cr.)
(See Area I in the B.S. in Criminal Justice degree for details.)

II. Speech: one of the following:
Speech C104 Training the Speaking Voice (2 cr.)
Speech C110 Fundamentals of Speech Communication (3 cr.)
Speech C180 Introduction to Interpersonal Communications (3 cr.)
Speech C223 Business and Professional Speaking (3 cr.)
Speech C228 Discussion and Group Methods (3 cr.)

III. General Education—6 courses

1. Arts and Humanities—1 course

English
Art History
Folklore
French
German
Speech and Theatre
Music
Philosophy
Religion
Spanish

2. Social and Behavioral Sciences—1 course
R: Soc R100 Introduction to Sociology

Anthropology
Economics
Geography
Linguistics
Political Science
Psychology
Sociology

3. Biological Sciences—1 course
R: Psy B105 Introductory Psychology II

Anatomy and Physiology
Biology
Botany
Zoology
Cross-listed course: B105

4. Mathematics and Physical Sciences—1 course

Astonomy
Chemistry
Geology
Mathematics and Computer Science
Physics
Computer Technology
Cross-listed courses: Geog G107 and G304

5. Sufficient other courses from areas, 1, 2, 3, and 4 above to meet the requirement of 6 general education courses.

IV. Criminal Justice Concentration—8 courses
Students are required to complete 8 Criminal Justice courses which must include:
J100 Foundations of Criminal Justice (3 cr.)
J200 The American Criminal Justice System (3 cr.)
J301 Criminal Law (3 cr.) *or* J401 Criminal Law and Procedure

Note: Two of Soc R345 Crime and Society, Soc R346 Control of Crime, and Soc R344 Juvenile Delinquency and Society, may be used in lieu of two Criminal Justice courses to complete the concentration requirement.

V. General Electives

1. Sufficient additional courses to meet the Associate of Science degree requirement of 64 credit hours.

2. Credit awarded by the University for active military service/ROTC may be included, but *not more* than six such hours may be applied toward this degree.

Bachelor of Science in Public Affairs

Specific Degree Requirements

I. **General Education Requirements**—16 courses

1. Social Science Requirements—each of the following (5 courses):
   Economics E201-E202 Intro to Economics (3-3 cr.)
   or other approved economics sequence
   Pol Sc Y103 Intro to American Politics (3 cr.)
   Sociology and/or Psychology—2 courses
   (Students may select either sociology or psychology, or one course in each.)
2. Arts and Humanities: Biological and Physical Science—(5 courses):

Biological and Physical Sciences	**Arts and Humanities**
Anatomy and Physiology	English
Biology	Art History
Zoology	Folklore
Astonomy	French
Chemistry	German
Geology	History
Physics	Music
	Philosophy
Cross-listed courses:	Religious Studies
Psy B105; Geog G107 and G304	Spanish
	Speech

3. Communications—3 courses
a. Eng W131 Elementary Composition I (3 cr.)
b. Eng W231 Professional Writing (3 cr.)
c. Speech—one course from:
   C110 Public Speaking (2 cr.)
   C180 Interpersonal Communications (2 cr.)
   C227 Argumentation and Debate (3 cr.)
   C228 Discussion and Group Methods (3 cr.)
4. Quantitative methods—one course from each area (3 courses):
a. Mathematics—one course from:
   M118 Finite Mathematics (3 cr.)
   M119 Calculus (3 cr.)
   (Math MA163 Calculus or MA164 Analytic Geometry and Calculus I accepted in lieu of M119)
b. Statistics—one course from:
   SPEA K300 Statistical Techniques (3 cr.) *or*
   Other approved statistics course
c. Introduction to the Computer—one course from:
   Comp Sc C208 Computer in Business (3 cr.)
   Comp Sc C201 Introduction to Computer Science (3 cr.)
   Computer Technology CPT100 Computer Utilization (5 cr.)
   Other approved computer course

Note:

1. "Other approved course" must be approved by the local SPEA administrator.
2. Courses which do not carry college credit (e.g., Math M001) may not be used for the general education requirement.
3. Double Counting: no course may be double counted (counted more than once) as general education course. Courses in the "general education requirements" may not be also counted in the "Public Affairs Core." However, some courses may be counted also in a Public Affairs Concentration *if*, and only to the extent that, the concentration required more than the minimum of 5 courses. Note particularly that students interested in environmental policy should take specific recommended courses in science.

II. **Public Affairs Core** (11 courses; 7 must be from SPEA, noted by *)
Each of the following areas must be studied, as indicated.
1. SPEA V170 Public and Environmental Affairs*

2. Environment—required:
   SPEA V262 Environment: Problems and Prospects (3 cr.)*
3. Urban Studies—one of:
   SPEA V264 Urban Strategies *
   Metro Studies U301 Introduction to Urbanism I*
   Metro Studies U302 Introduction to Urbanism II*
   Metro Studies U304 Seminar in Urban Problems*
4. Planning—required:
   SPEA V365 Urban and Regional Planning *
5. Administration - required:
   SPEA V366 Public Administration*
6. Financial Management-required:
   SPEA V372 Financial Management and Budgeting*
7. Law-one of:
   SPEA V376 Legal Process and Comtemporary Issues in America*
   CRJU J301 Criminal Law
   POLS Y304 Judicial Process & Constitutional Law I
   BUS L203 Commercial Law I
8. Policy Processes-required:
   SPEA V472 Policy Processes*
9. Public Affairs Option-three of the following:
   SPEA V260 Topics in Public Affairs*
   SPEA V270 Survey of Administrative Processes*
   CRJU J200 The American Criminal Justice System
   CRJU J310 Introduction to Administrative Processes*
   SPEA V373 Personnel Management in the Public Sector*
   SPEA V377 Legal Process and Comtemporary Issues in America
   ECON E360 Public Finance
   Other courses approved by a SPEA Academic Adviser

III. **Concentrations**—In all cases, B.S. concentrations must have at least five courses which are independent of other requirements, i.e., they cannot be double counted for any other SPEA requirement. Courses beyond this minimum of five may be double counted, as appropriate. The following concentrations are available:

Criminal Justice
Policy and Administration
Urban Studies

IV. **Electives**—(May include up to 15 credit hours of internships. Minimum of 120 credit hours required for graduation with a 2.0 G.P.A.)

Criminal Justice Concentration Requirements (**Note:** Criminal justice degree and concentration requirements were in the process of being revised when this *Bulletin* went to press. Separate publications will be available in early spring, 1980, describing the new requirements.)

The Criminal Justice Concentration requires *eight* (8) courses—each with a grade of C or higher in accordance with the following:
1. SPEA J100 Foundations of Criminal Justice (3 cr.)
2. SPEA J200 American Criminal Justice System (3 cr.)
3. *One* of the following:
   SPEA J301 Criminal Law (3 cr.)
   SPEA J302 Criminal Law Administration (3 cr.)
   SPEA J401 Criminal Law and Procedure (3 cr.)
   (In-service students only)
4. SPEA J470 Senior Seminar in Criminal Justice (3 cr.)
5. *One* of:
   Psychology B380 Abnormal Psychology (3 cr.)
   Psychology P324 Abnormal Psychology (3 cr.)
6. *One* of:
   Sociology R344 Juvenile Delinquency (3 cr.)
   Sociology R345 Crime and Society (3 cr.)
   Sociology R346 Control of Crime (3 cr.)

7. *Two* SPEA Criminal Justice courses directed toward the student's area of interest. (Choice of courses under this option requires the approval of the appropriate local SPEA administrator.)

Note:

1. SPEA-J401 Criminal Law and Procedure is only available on the Bloomington campus through the Indiana University Police Academy to fourth (senior) year students in the Indiana University Cadet Program.

2. In-service students may receive credit for successful completion of this course through attendance at the Indiana Law Enforcement Academy in Plainfield. This course is taught at the academy through SPEA-IUPUI.

Policy and Administration Concentration Requirements

Required:

1. Financial Management and Personnel Management—both courses
   SPEA V372 Financial Management and Budgeting (3 cr.)
   SPEA V373 Personnel Management in the Public Sector (3 cr.)
   (One of these courses may also be counted as a core requirement.)
2. Other policy and administration courses—4 selected from:
   SPEA V376 Legal Process and Contemporary Issues in America I (3 cr.)
   SPEA V377 Legal Process and Contemporary Issues in America II (3 cr.)
   SPEA V421 Dynamics of Urbanization (3 cr.)
   SPEA V432 Labor Relations in the Public Sector (3 cr.)
   SPEA V442 Seminar in Fiscal Management (3 cr.)
   SPEA V444 Public Administrative Organization (3 cr.)
   SPEA V445 Policy in State Government (3 cr.)
   SPEA V446 Introduction to Government Accounting and Financial Reporting (3 cr.)
   SPEA V450 Contemporary Issues in Public Affairs—approved topics only (3 cr.)
   SPEA V490 Directed Research in Public and Environmental Affairs—approved topics only (1-3 cr.)

Some alternate courses may be selected in fields such as personnel, management, industrial psychology, labor relations, organization theory, operations research, and policy analysis and evaluation. These alternate choices must be approved for a student's curriculum by the appropriate SPEA campus administrator.

(Any of these courses may be counted in the Policy and Administration concentration only *if they are not counted in the SPEA core courses.*)

Management Specialization

1. SPEA V373 Personnel Management in the Public Sector
2. *One* of:
   SPEA V444 Public Administrative Organization
   BUS Z300 Organizational Behavior and Leadership
   POLS. Y302 Public Bureaucracy in American Society
   POLS. Y390 Micropolitics and Organizational Behavior
3. At least *one* of:
   SPEA V442 Seminar in Fiscal Management
   SPEA V446 Introduction to Public Sector Accounting and Financial Reporting
4. *Two* of:
   SPEA V432 Labor Relations
   SPEA V450 Contemporary Issues in Public Affairs: Topic: Personnel and Labor Relations Topics
   SPEA V348 Analytical Approaches in Public Policy *or*
   POLS. Y394 Public Policy Analysis
   SPEA V449 Applied Policy
   SPEA V447 Federal Budget Policy

SPEA V450 Contemporary Issues in Public Affairs, Topic: Urban Government Administration and Policy

One of the following not taken to satisfy requirement three (3) may be selected as one of the courses for this requirement

SPEA V442 Seminar in Fiscal Management
SPEA V446 Introduction to Public Sector Accounting and Financial Reporting

Urban Affairs Concentration Requirements

The Urban Affairs Concentration offers a choice of three areas of specialization. Urban Administration; Community Development and Planning; General Program—Urban Studies

General Requirements-All Specializations

*SPEA V264 Urban Strategies
*SPEA V365 Urban and Regional Planning
***Note:** These courses also satisfy core requirements for the BSPA

Urban Administration Specialization

Two (2) courses chosen from the following:
SPEA V421 Urban and Regional Development
SPEA V450 Contemporary Issues in Public Sector: Urban Government Administration and Policy
POLS Y308 Urban Politics

Three *(3)* courses chosen from the following:
SPEA V373 Personnel Management in the Public Sector
SPEA V432 Labor Relations in the Public Sector
SPEA V442 Seminar in Fiscal Management
SPEA V446 Introduction to Public Sector Accounting and Financial Reporting
SPEA V348 Analytical Approaches to Public Policy
SPEA V444 Public Administrative Organization
SPEA V450 Contemporary Issues in Public Affairs: Neighborhood and Community Development
SPEA V450 Contemporary Issues in Public Affairs: Transportation

Community Development and Planning Specialization

Two *(2)* courses chosen from the following:
SPEA V421 Urban and Regional Development
SPEA V450 Contemporary Issues in Public Affairs: Neighborhood and Community Development
SPEA V450 Contemporary Issues in Public Affairs: Workshop in Planning and Community Development

Three *(3)* courses chosen from the following:
BUS R300 Principles of Real Estate
BUS L408 Real Estate Law
ECON E323 Urban Economics
GEOG G342 The Urban Mosaic: The Spatial Org. of the City
GEOG G412 Urban Transportation Analysis
POLS Y308 Urban Politics
SOC R329 Urban Sociology
SPEA V442 Seminar in Fiscal Management-Topic: Grants Management and Intergovernmental Relations
SPEA V450 Contemporary Issues in Public Affairs: Transportation

General Urban Studies Specialization

Students choosing the General Urban Studies Specialization may take courses from the Urban Administration Specialization or the Community Development and Planning Spe-

cialization to fulfill the requirements of the General Urban Studies Specialization. Courses should be selected in close consultation with the concentration adviser so as to insure a coherent selection.

Bachelor of Science in Criminal Justice

(Note: Criminal justice degree and concentration requirements were in the process of being revised when this *Bulletin* went to press. Separate publications will be available in early spring, 1980, describing the new requirements.)

To receive the Bachelor of Science degree in Criminal Justice, the student must complete 122 hours of course work. Students entering the Program have options depending on whether their objectives are for professional or career improvement, preparation for college- or university-level professions, or specific positions within the career field.

Concentration areas vary depending on the interest of the student. However, major interest areas available in the curriculum are Law Enforcement, Probation, Parole, and Correctional Administration.

Students considering a Criminal Justice concentration, regardless of major interest area, must consult with a Criminal Justice adviser to plan their programs. Through adequate planning, prerequisites of courses in the concentration group may be utilized to satisfy general requirements for the degree and/or specific requirements for the concentration area.

The detailed major requirements are listed below. The specific degree requirements which must be fulfilled by each student are those published in the bulletin current at the time of entry into the University or those in the bulletin current at the time of graduation, whichever the student chooses.

General Requirements for the B.S. in Criminal Justice

1. A minimum of 122 hours.
2. A grade of at least C must be attained in each course to satisfy the Area IV Concentration requirements. However, courses in which a student recieves a D will count toward the 122-hour total.
3. A minimum cumulative grade-point average of 2.0.
4. A minimum of 30 hours in courses at the 300-400 level.
5. A minimum of eight (8) Criminal Justice courses.
6. Courses taken on the Pass/Fail Option can be applied only as electives in meeting degree requirements.
7. By special permission, a limited amount of credit may be earned through correspondence study and/or special examination.
8. A student may take as many Criminal Justice courses as his/her total program will allow.
9. Courses taken to satisfy Area I (English and Writing) or Area II (Communications) may not be used to satisfy Area III (General Education), or Area IV (Concentration Area) Requirements.
10. Courses taken to satisfy Area III (General Education) Requirements may also be used to satisfy Area IV (Concentration Area) Requirements as appropriate.
11. Former Police Administration and current Forensic Studies courses offered by the Department of Forensic Studies of the College of Arts and Sciences are credited as Criminal Justice courses for this degree except for duplicate courses.
12. Not more than 60 hours earned in accredited junior colleges may be applied toward a degree.
13. All credit for candidates for degrees, except for the current semester, must be on record at least six weeks prior to conferring of degrees.
14. Application for the Bachelor of Science degree must be filed in the Office of the Recorder, School of Public and Environmental Affairs, not later than October 1 for January, May, or August graduation.

15. Credit work for this degree may be taken at any campus of Indiana University.

Specific Requirements fot the B.S. in Criminal Justice

Area I—English Composition and Writing

1. English W131 Elementary Composition I (3 cr.)
2. Two (2) courses in Writing: a) English W231 Professional Writing, and b) one other course approved by a Criminal Justice adviser selected from either the Writing Program of the English Department of the School of Liberal Arts or Business C204 (Business Communications).

Area II—Communications/Foreign Language Option

Students have the option of satisfying Area II requirements by either completing the Communications option of four courses or completing two courses in foreign language. A student planning graduate study should consult with an adviser concerning the advisability of taking a foreign language in addition to, or in lieu of, the communications requirements for this degree.

1. Communications Option—4 courses

One course selected from each of the following groups:

a. **Speech**
   Speech C104 Training the Speaking Voice
   Speech C110 Fundamentals of Speech Communication
   Speech C170 Introduction to Voice Science
   Speech C180 Introduction to Interpersonal Communications

b. **Language Structure**
   English G205 Introduction to the English Language
   English G206 Introduction to the Study of Grammar
   English G301 History of the English Language
   Speech C204 Phonetics of American Speech

c. **Language Patterns**
   English G310 Inner City Speech Patterns
   Folklore F220 Introduction to American Folklore
   Folklore F245 Chicano Folklore
   Folklore F394 Afro-American Folklore

d. **Communications Methods**
   Journalism J201 Verbal Communications
   Journalism C200 Introduction to Mass Communications
   Speech C223 Business and Professional Speaking
   Speech C227 Argumentation and Debate

2. Foreign Language Option

Two courses in a foreign language or their equivalent by examination. (See *School of Liberal Arts Bulletin* for language examination and special credit criteria.) Foreign Language courses taken to satisfy this requirement cannot be taken on the Pass/Fail Option.

Area III—General Education—12 courses

In an age of increasing specialization of functions and division of labor, it becomes more necessary than ever before to acquire a broad base of general knowledge, ideas, and skills that provide some level of general and humane learning. For this reason, the general education requirements are considered essential elements of the B.S. program.

1. Arts and Humanities (4 courses)
   English
   Art History
   Folklore
   French
   German
   History
   Music History and Musicology
   Philosophy
   Religion
   Spanish
   Speech and Theatre

2. Social and Behavioral Sciences (4 courses selected from 3 different departments)
   Anthropology
   Economics
   Political Science
   Psychology
   Sociology

3. Quantitative Methods (3 courses)
   a. Mathematics—selected from upper, lower, or dual level courses of Department of Mathematics (excluding math for teachers).
   b. Statistics—SPEA K300 or other statistics course approved by Criminal Justice Adviser
   c. Computer—select from Computer Science or Computer Technology.

4. Sciences (2 courses selected from 2 different disciplines listed below)

Anatomy and Physiology	Astronomy	Geology
Biology	Chemistry	Mathematics
Botany	Computer Technology	Physics
Zoology	Computer Science	

   Cross listed courses: Psy B105 and Geog G107 and G304.

Area IV—Concentration Area Requirements

Students are required to complete a minimum of 8 Criminal Justice and 4 directly-related courses in accordance with the following requirements: (Note: Grade of C or above MUST be made in any course used to fulfill Area IV requirements.)

1. Criminal Justice Concentration (8 courses)
   a. J100 Foundations of Criminal Justice
   b. J200 The American Criminal Justice System
   c. J370 Seminar in Criminal Justice—Topic: Social Control Systems
   d. One of:
      J301 Criminal Law
      J302 Criminal Law Administration
      J401 Criminal Law and Procedure
   e. J470 Senior Seminar
   f. Three other Criminal Justice courses directed toward the student's area of interest

2. Directly-Related (4 courses)
   One course from each area:
   a. Administration—one of:
      V270 Survey of Administrative Processes
      V366 Public Administration
      J310 Introduction to Administrative Processes
   b. Research Methods—use of:
      SOC R490 Sociological Research Methods
      Metro U401 Research Seminar *or*
      A research methods course approved by CRJU adviser
   c. Crime Causation—one of:
      SOC R344 Juvenile Delinquency and Society
      SOC R345 Crime and Society
      SOC R346 Control of Crime *or*
      other crime causation course approved by a Criminal Justice adviser
   d. Abnormal Behavior
      PSY B380 Abnormal Psychology

3. Secondary Concentration—6 courses
   Students must select a secondary concentration supporting area. This area is to be of the student's choice based upon the student's educational objective, but must be approved by a Criminal Justice academic adviser. This area must include a minimum concentration of six courses. No more than two 100-level courses may be used to fulfill this requirement.

Area V—Electives

Sufficient courses selected from total offerings of the University to meet Bachelor of Science degree requirement of 122 credit hours.

Bachelor of Science in Metropolitan Studies

SPEA/IUPUI offers the Bachelor of Science degree in Metropolitan Studies to provide students with a thorough understanding of components of urban life and the forces that are shaping its future. This program ensures a broadly based interdisciplinary background by requiring the student to select courses in each of five areas: urban government and urban history, urban environment, urban sociology, urban economics, and urban problems. In addition, a Metropolitan Studies curriculum core is required.

Students considering a major in Metropolitan Studies should consult with an adviser to plan their programs. Through adequate planning, prerequisites of courses in the concentration groups may be utilized to satisfy general requirements for the degree.

The detailed major requirements are listed below. The specific requirements which must be fulfilled by each student are those published in the bulletin current at the time of entry into the University or those in the bulletin at the time of graduation, whichever the student chooses.

General Requirements for the Bachelor of Science Degree

1. A minimum of 122 hours.
2. A grade of at least C must be attained in each course taken to satisfy the Concentration requirements. However, courses in which a student receives a D will count toward the 122-hour total.
3. A minimum cumulative grade-point average of 2.0.
4. A minimum of 30 hours in courses at the 300-400 level.
5. A minimum of five (5) Metropolitan Studies courses.
6. Credit work for the degree may be taken at any campus or extension center of Indiana University.
7. By special permission, a limited amount of credit may be earned through correspondence study and/or special examination.
8. A student may take as many Metropolitan Studies courses as his total program will allow.
9. Courses taken to satisfy the English Composition requirement may not be used to satisfy General Education or Concentration Area requirements.
10. Courses taken to satisfy General Education requirements may also be used to satisfy Concentration Area requirements as appropriate.
11. Not more than 60 hours earned in accredited junior colleges may be applied toward a degree.
12. All credit for candidates for degrees, except for the current semester, must be on record at least six weeks prior to conferring of degrees.
13. Application for the Bachelor of Science degree must be filed in the Office of the Recorder, School of Public and Environmental Affairs, not later than October 1 for January, May, or August graduation.

Specific Requirements for the B.S. in Metropolitan Studies

Area I—English Composition and Writing

English W131 Elementary Composition I (3 cr.)

Area II—General Education

In an age of increasing specialization of functions and division of labor, it becomes more necessary than ever before to acquire a broad base of general knowledge, ideas, and skills that provide some level of general and humane learning. For this reason, the general education requirements are considered essential elements of the B.S. program.

Students are required to complete 12 courses from the four following general education areas, as listed.

1. Arts and Humanities—4 courses

Art History
English
Folklore

French
German
History
Music History and Musicology
Philosophy
Religion
Spanish
Speech and Theatre

2. Social and Behavioral Sciences—4 courses
Anthropology
Economics
Geography
Linguistics
Political Science
Psychology
Sociology

3. Biological Sciences—2 courses
Anatomy and Physiology
Biology
Botany
Zoology
Cross-listed course: Psychology B105

4. Mathematics and Physical Sciences—2 courses
Astronomy
Chemistry
Geology
Mathematics and Computer Science
Physics
Computer Technology
Cross-listed courses: Geography G107 and G304

Area III—Concentration Area Requirements

Students are required to complete a minimum of five (5) metropolitan studies courses and five (5) urban-related courses in accordance with the following major concentration area requirements.

1. Metropolitan Studies Core Courses
U301-U302 Introduction to Urbanism I-II
U401-U402 Research Seminars: The City I-II
U403 Practicum

2. Urban-Related Courses
One course selected from each of the following groups:
a. Urban Government and History
History A347 Cities and Urbanization in American History
Political Science Y302 Public Bureaucracy in Modern Society
Political Science Y307 Indiana State Government and Politics
Political Science Y308 Urban Politics
Political Science Y312 Workshop in State and Local Government
b. Urban Environment
Biology B285 Environmental Biology
Geography G314 Urban Geography
Geology G300 Environmental and Urban Geology
c. Urban Sociology
Psychology B270 Industrial Psychology
Sociology R317 Sociology of Work
Sociology R329 Urban Sociology
Sociology R461 Race and Ethnic Relations
Sociology R465 Population and Human Ecology
Sociology R478 Formal Organizations

d. Urban Economics
Business R300 Principles of Real Estate
Business T300 Principles of Transportation
Economics E323 Urban Economics
Economics E340 Introduction to Labor Economics
Economics E360 Public Finance
e. Urban Problems
SPEA J200 Introduction to American Criminal Justice System
SPEA U304 Seminar in Urban Problems
Social Work S352 Social Welfare and Current Social Issues
Sociology R345 Crime and Society
Sociology R346 Control of Crime

Area IV—Electives

Sufficient courses selected from the total offerings of the University to meet Bachelor of Science degree requirements of 122 credit hours.

Public Affairs Certificate

The School of Public and Environmental Affairs offers the Certificate in Public Affairs to students wishing to study public policy, governmental organization, and public management skills in addition to the major area of their undergraduate programs. The program is interdisciplinary in nature and available to Baccalaureate students in good standing at Indiana University or other accredited colleges and universities.

Eligibility and Application Procedure

1. Students in good standing and enrolled in baccalaureate programs at Indiana University or other accredited colleges or universities are eligible.
2. Students in either the AS or BS Public Affairs programs of the School of Public and Environmental Affairs are not eligible to receive the certificate.
3. Students must declare their intent to earn this certificate prior to completing fifteen (15) semester hours creditable toward the certificate. Applications for admission may be obtained through the Office of the SPEA Recorder at the campus where the student enrolls in the certificate program.
4. Upon certification that the student has been awarded a bachelors degree and completion of required certificate courses with a grade of C or higher in each course, the student will be awarded the certificate.

The Certificate Requirements

General Requirements:

1. A minimum of 27 credit hours, of which at least 15 but no more than 21 hours must be SPEA courses.
2. A minimum cumulative grade-point average of 2.0.
3. A maximum of 6 hours of appropriate credit from another institution may be applied toward this certificate.
4. Credit work for this certificate may be taken at any campus of the Indiana University system.

Specific Requirements:

Each course carries 3 hours of credit—SPEA courses among those listed below are indicated with a star *.

1. All of the following:
SPEA V170 Introduction to Public Affairs*

SPEA V262 Environment: Problems and Prospects*
SPEA V264 Urban Strategies*
2. One course each for two of the following groups:
Organizational Behavior
SPEA V270 Survey of Administrative Techniques*
BUS Z300 or Z301 Organizational Behavior and Leadership
POLS Y390 Micropolitics and Organizational Behavior
SPEA J310 Introduction to Administrative Process
Public Administration
SPEA V366 Public Administration*
Law
SPEA V376 Legal Process and Contemporary Issues in America*
POLS Y304 Judicial Process and American Constitutional Law
BUS L201 Legal Environment of Business
SPEA J301 Criminal Law
SPEA J401 Criminal Law and Procedure
3. Four of the following:
Criminal Justice
SPEA J200 American Criminal Justice System*
SPEA J302 Criminal Law Administration*
SPEA J322 Introduction to Criminalistics*
SPEA J370 Seminar in Criminal Justice - Topic: Offender Typologies*
SPEA J401 Criminal Law and Procedure*
Public Affairs
SPEA V260 Topics in Public Affairs*
SPEA V348 Analytical Approaches to Public Policy*
SPEA V349 Applied Policy Analysis*
SPEA V365 Urban and Regional Planning*
SPEA V372 Financial Management and Budgeting*
SPEA V373 Personnel Management*
SPEA V432 Labor Relations in the Public Sector*
SPEA V442 Seminar in Fiscal Management*
SPEA V444 Public Administrative Organization*
SPEA V445 Policy in State Government*
SPEA V446 Introduction to Government Accounting and Financial Reporting*
SPEA V450 Contemporary Issues in Public Affairs*
SPEA V472 Policy Processes*
Political Science
POLS Y200 Contemporary Political Problems - Topic: Citizen and the Courts
POLS Y302 Public Bureaucracy in Modern Society
POLS Y306 State Politics in the U.S.
POLS Y394 Public Policy Analysis
Sociology
SOC R329 Urban Sociology
SOC R345 Crime and Delinquency
SOC R346 Control of Crime
SOC R480 Sociology and Social Policy
Geography
GEOG G342 The Urban Mosaic-Spatial Org. of the City
GEOG G344 Urbanization: A Geographic Prospect
GEOG G412 Urban Transportation Analysis
GEOG G414 Regional Transport Systems

Indiana University-Purdue University at Fort Wayne
Division of Public and Environmental Affairs

Undergraduate Programs

The newest Division of Public and Environmental Affairs at Indiana University-Purdue University at Fort Wayne is currently offering associate and bachelor degree programs.

The Division offers two Associate of Science programs—the Associate of Science in Criminal Justice and the Associate of Science in Public Affairs—which are designed to develop paraprofessionals for public service. They are intended for those persons already employed in the public sector and for those who anticipate entry into the public sector. The programs' curricula include general education and professionally oriented courses.

The Bachelor of Science in Public Affairs degree program has a curriculum built around courses in composition, speech, psychology, sociology, mathematics, statistics, the biological or physical sciences, and the arts and humanities. Core and concentration courses offer classroom work in public affairs, public policy analysis and administration, urban systems and planning, criminal justice, and several other specialized public affairs fields. Students are encouraged to supplement classroom studies with an internship which provides practical experience in the public sector.

Students wishing further information concerning the undergraduate programs offered at IU-PU at Fort Wayne should contact:

Dr. Roy W. Shin, Director
Division of Public and Environmental Affairs
Indiana University-Purdue University at Fort Wayne
2101 Coliseum Boulevard East
Fort Wayne, Indiana 46805
Telephone: (219) 482-5200

Associate of Science in Public Affairs

Specific Degree Requirements

I. General Education Distribution (9 courses required)
A. Social Science—3 courses
  1. E103 Intro to Microeconomics (3 cr.) *or*
     E104 Intro to Macroeconomics (3 cr.)
  2. Y103 Intro to American Politics (3 cr.)
  3. One course from:
     Sociology or psychology (3 cr.)
B. Quantitative Methods—2 courses
  1. One computer course
  2. One mathematics course (excluding mathematics for teachers and MA111)
     (Students are urged to fulfill this requirement by taking Mathematics M118 or M119, one of which is required for the SPEA B.S. degree in Public Affairs.)
C. Communication—3 courses
  1. Eng W131 Elementary Composition (3 cr.) (see note in A.S. in C.J. requirement)
  2. Eng W232 Introduction to Business Writing (3 cr.)
  3. Speech—one course
     Com 114 Public Speaking (3 cr.)
D. Arts and Humanities—one course
II. SPEA Core (4 courses required)
A. V170 Introduction to Public Affairs (3 cr.)
B. V262 Environment: Problems and Prospects (3 cr.)

C. V264 Urban Strategies (3 cr.)
D. V270 Survey of Administrative Techniques (3 cr.)

III. Area of Concentration in Public Affairs—12-18 credits
A. Public Administration (12 cr.)
B. Criminal Justice (18 cr.)
C. Special Concentration (minimum 12 cr.)
May be developed by student and faculty adviser to meet special curriculum/career needs; must be approved by campus SPEA administrator.

IV. Selected Electives—credits required to attain a minimum of 60 credit hours with a 2.0 G.P.A.

Public Administration Concentration Requirements
Required: four courses selected from below
SPEA V446 Accounting for the Public Sector (3 cr.)
(A201-A202 [3-3 cr.] may be substituted with approval of director)
SPEA V316 Environmental Health Management Orientation (3 cr.)
SPEA V366 Public Administration (3 cr.)
SPEA V372 Financial Management and Budgeting (3 cr.)
SPEA V373 Personnel Management in the Public Sector (3 cr.)
SPEA V376 Legal Process and Contemporary Issues in America I (3 cr.)

Criminal Justice Concentration Requirements
The Criminal Justice Concentration requires *six* (6) courses—each with a grade of C or higher in accordance with the following:

1. SPEA J100 Foundations of Criminal Justice (3 cr.)
2. SPEA J200 American Criminal Justice System (3 cr.)
3. *One* of the following:
   SPEA J301 Criminal Law (3 cr.)
   SPEA J302 Criminal Law Administration (3 cr.)
4. *One* of the following:
   Sociology S320 Deviance and Control (3 cr.)
   Sociology S420 Topics in Deviance—Criminology (3 cr.)
5. *Two* SPEA Criminal Justice Courses at the 300 level directed toward the student's area of interest. (Choice of courses under this option requires the approval of the appropriate local SPEA administrator.)

NOTE: It is recommended that students select S161 to meet the A.S. Social Science requirement of one course from Sociology or Psychology.

Associate of Science in Criminal Justice

Specific Degree Requirements
I. Elementary Composition English W131 or Equivalent (3 cr.)
NOTE: Every student must demonstrate the ability to use correct, clear, effective English. This requirement will be satisfied when English W100, Developmental Composition; W131, Elementary Composition; or English W140, Elementary Composition, Special Program, shall have been completed with a grade of C or higher.

Entering freshman will be placed in composition courses on the basis of their scores on entrance and achievement examinations. Students showing inadequate competence will be required to enroll in English W130, Principles of Composition (no credit applicable toward graduation), and earn a grade of C or higher before enrolling in W131 OR enroll in W100, Developmental Composition, and earn a grade of C or higher.

II. Speech—1 course
Com 114 Public Speaking (3 cr.)

III. General Education—6 courses
1. Arts and Humanities—1 course

English	French
Fine Arts	German
Folklore	History

Music
Philosophy
Religion
Spanish
Speech and Theatre

2. Social and Behavioral Sciences—1 course
Anthropology
Economics
Geography
Linguistics
Political Science
Psychology
Sociology

3. Biological Sciences—1 course
Psy P101 Introductory Psychology
Anatomy and Physiology
Bioanthropology
Biology
Botany
Zoology

4. Mathematics and Physical Sciences—1 course
Astronomy
Chemistry
Geology
Mathematics and Computer Science
Physics
Computer Technology
Cross-listed courses: Geog G107 and G304

5. Sufficient other courses from areas 1, 2, 3, and 4 above to meet the requirement of 6 general education courses.

IV. Criminal Justice Concentration—8 courses
Students are required to complete 8 Criminal Justice courses which must include:
J100 Foundations of Criminal Justice (3 cr.)
J200 The American Criminal Justice System (3 cr.)
J301 Criminal Law (3 cr.)

V. Electives
1. Sufficient additional courses to meet the Associate of Science degree requirement of 64 credit hours.
2. Credit awarded by the University for active military service/ROTC may be included, but *not more* than six such hours may be applied toward this degree.

Bachelor of Science in Public Affairs

Specific Degree Requirements
1. **General Education** (16 courses)
1. Social Science requirements—5 courses
   a. ECON E103 Introduction to Microeconomics
   b. ECON E104 Introduction to Macroeconomics
   c. POLS Y103 Introduction to American Politics
   d. Sociology and/or Psychology (2 courses)
2. Arts and Humanities—Biological and Physical Science—5 courses
   a. Arts and Humanities (3 courses)
      Biological and Physical Science (2 courses)
      (Cross-listed courses: ANTH B200; GEOG G107, G304; PSY 101)
   b. or vice versa
3. Communications—(3 courses)
   a. ENG W131 Elementary Composition
   b. ENG W232 Introduction to Business Writing
   c. Speech
4. Quantitative methods—one course from each area—3 courses
   a. Mathematics—one course from:
      M118 Finite Mathematics
      M119 Calculus
   b. Statistics—one course from:
      ECON E370 Statistical Theory in Economics and Business
      POLS Y205 Elements of Political Analysis

PSY 301 Introduction to Quantitative Topics in Psychology
SOC S250-S251 Methods and Statistics I-II
c. Introduction to the Computer—one course

II. **Public Affairs Core**—11 courses
1. Environment—required
SPEA V262 Environment: Problems and Prospects
2. Urban Studies—required
SPEA V264 Urban Strategies
3. Planning-required
SPEA V365 Urban and Regional Planning
4. Administration—required
SPEA V366 Public Administration
5. Public Finance—required
SPEA V372 Financial Management and Budgeting
6. Public Management—required
SPEA V170 Introduction to Public Affairs
7. Law—one of:
SPEA V376 Legal Process and Contemporary Issues in America I
SPEA J301 Criminal Law
POLS Y304 Judicial Process and American Constitutional Law I
8. Policy Processes—required
SPEA V472 Policy Processes
9. Public Affairs Options—required: SPEA J200 The American Criminal Justice System
SPEA V270 Survey of Administrative Techniques
SPEA V373 Personnel Management in the Public Sector

III. **Concentrations**
The following concentrations are available:
Criminal Justice
Policy and Administration
Urban Studies

IV. **Electives** (May include up to 15 credit hours for internships. Minimum of 120 credit hours required for graduation with a 2.0 G.P.A.)
1. Double Counting: No course may be double counted (counted more than once) toward graduation credits. Courses in the "general education requirements" may not be also counted in the "Public Affairs Core." Some courses, however, may be counted also in a Public Affairs Concentration.
2. Every student must pass W131 Elementary Composition, all SPEA core courses, and all concentration requirements with a grade of C or higher.

Criminal Justice Concentration Requirements
The Criminal Justice Concentration requires 8 courses.
1. SPEA J100 Foundations of Criminal Justice
2. SPEA J200 American Criminal Justice System
3. One of the following:
SPEA J301 Criminal Law
SPEA J302 Criminal Law Administration
4. SPEA J370 Seminar in Criminal Justice
5. One of the following:
PSY 340 General Social Psychology
PSY 350 Abnormal Psychology
6. One of the following:
SOC S320 Deviance and Control
SOC S420 Topics in Deviance—Criminology
7. Two criminal justice courses directed toward the student's area of interest (approval of adviser).

Policy and Administration Concentration Requirements
The Policy and Administration Concentration requires 6 courses.
1. Financial Management and Personnel Management (2 courses)

SPEA V372 Financial Management and Budgeting
SPEA V373 Personnel Management in the Public Sector
(One of these courses may also be counted as a core requirement.)
2. Other policy and administration courses (4 courses)
(Any of these courses may be counted in the Policy and Administration concentration only if they are not counted in the SPEA core courses.)
SPEA V376 Legal Process and Contemporary Issues in America I
SPEA V377 Legal Process and Contemporary Issues in America II
SPEA V421 Dynamics of Urbanization
SPEA V446 Introduction to Government Accounting and Financial Reporting
SPEA V450 Contemporary Issues in Public Affairs—Selected Topics
SPEA V472 Policy Processes
SPEA V490 Directed Research in Public Affairs—Approved topics only
Recommended options for V376-V377 are POLS Y304-Y305; recommended option for V421 is URBN U421.

Some alternate courses may be selected in fields such as personnel, management, industrial psychology, labor relations, organization theory, operations research, and policy analysis and evaluation. These alternate choices must be approved by the student's adviser.

Urban Studies Concentration Requirements
The Urban Studies Concentration requires 8 courses.
1. Core Requirements (4 courses)
(May be taken by SPEA students to fulfill other requirements.)
SPEA V264 Urban Strategies
SPEA V365 Urban and Regional Planning
SPEA V421 Dynamics of Urbanization
(Recommended option URBN U421.)
PSY 301 Introduction to Quantitative Topics in Psychology
2. Specialization (4 courses)
The student should take one of the following sequences, plus any other two courses.
GEOG G315 Environmental Conservation
GEOL G300 Environmental and Urban Geology

BUS T300 Urban Transportation and Public Policy
GEOL G300 Environmental and Urban Geology

POLS Y308 Urban Politics
POLS Y394 Public Policy Analysis

SOC S309 The Community
SOC S410 Topics in Social Organization: Topic: Human Ecology

BUS R300 Principles of Real Estate
BUS L408 Law of Real Estate and Land Use Control

Indiana University Northwest
Division of Public and Environmental Affairs

Undergraduate Programs

The Division of Public and Environmental Affairs at Indiana University Northwest (IUN) is currently offering associate, bachelor, and certificate programs at its campus in Gary.

The Associate of Science in Public Affairs is designed primarily as a mid-career program with courses being offered during the evening hours. Students also can pursue this degree program as a full-time course of study. The associate degree program is a sixty (60) hour course of study and is discussed in detail elsewhere in the text.

The Bachelor of Science degree program has a curriculum built around courses in composition, speech, psychology, sociology, mathematics, statistics, the biological or physical sciences and the arts and humanities. Core and concentration courses offer classroom work in public affairs, environmental systems, urban systems, urban and regional planning, policy analysis, public administration, public financial management and several specialized public affairs fields. Students are encouraged to supplement classroom studies with an internship which provides practical experience in the public sector.

The Certificate in Public Affairs program is offered to students wishing to study public policy, governmental organization, and public management skills in addition to the major area of their undergraduate programs. Students from any department or school of Indiana University are eligible. The Certificate in Public Affairs requires a total of 27 credit hours, of which SPEA must teach at least 15 but no more than 21 hours.

In addition to its formal academic programs, the Division of Public and Environmental Affairs offers research and other educational services to local communities and agencies. The Division is involved in a number of managerial training, planning, service delivery, and environmental research projects for the Federal and State governments, and for the local governments of the region.

Students wishing further information concerning the SPEA undergraduate programs offered at I.U.-Northwest should contact:

Dr. John M. Hunger, Director
Division of Public and Environmental Affairs
Indiana University Northwest
3400 Broadway
Gary, Indiana 46408
Telephone: 219-980-6695

Associate of Science in Public Affairs

Specific Degree Requirements

I. General Education Distribution (9 courses required)

A. Social Science—3 courses
1. E103 Intro to Microeconomics (3 cr.) *or*
   E104 Intro to Macroeconomics (3 cr.)
2. Y103 Intro to American Politics (3 cr.)
3. One course from:
   Sociology or psychology (3 cr.)

B. Quantitative Methods—2 courses
1. One computer course
2. One mathematics course (excluding mathematics for teachers)
   (Students are urged to fulfill this requirement by taking Mathematics M118 or M119, one of which is required for the SPEA B.S. degree in Public Affairs. Indiana University courses below the 100 level do not carry college credit and may not be applied toward the SPEA A.S. degree.)

C. Communication—3 courses
1. Eng W131 Elementary Composition (3 cr.)
2. Eng W231 Professional Writing Skills (3 cr.)
3. Speech—one course
D. Arts and Humanities—one course
E. Biological or Physical Science—one course

II. SPEA CORE (4 courses required)
A. V170 Introduction to Public Affairs (3 cr.)
B. V262 Environment: Problems and Prospects (3 cr.)
C. V264 Urban Strategies (3 cr.)
D. V270 Survey of Administrative Techniques (3 cr.)

III. Area of Concentration in Public Affairs—12-18 credits
A. Public Administration (12 cr.)
B. Criminal Justice (18 cr.)
C. Environmental (18 cr.)
D. Special Concentration (minimum 12 cr.)
(May be developed by student and faculty adviser to meet special curriculum/career needs; must be approved by campus SPEA administrator.)

IV. Electives—credits required to attain a minimum of 60 credit hours with a 2.0 G.P.A.

Public Administration Concentration Requirements

Required: four courses selected from below
V446 Introduction to Government Accounting and Financial Reporting
(A201-A202 [3-3 cr.] may be substituted with approval of director)
V316 Environmental Health Management Orientation (3 cr.)
V366 Public Administration (3 cr.)
V372 Financial Management and Budgeting (3 cr.)
V373 Personnel Management in the Public Sector (3 cr.)
V376 Legal Process and Contemporary Issues in America I (3 cr.)

Criminal Justice Concentration Requirements

The Criminal Justice Concentration requires *six* (6) courses
1. SPEA J100 Foundations of Criminal Justice (3 cr.)
2. SPEA J200 American Criminal Justice System (3 cr.)
3. *One* of the following:
SPEA J301 Criminal Law (3 cr.)
SPEA J302 Criminal Law Administration (3 cr.)
SPEA J401 Criminal Law and Procedure (3 cr.)
(In-service students only)
4. *One* of the following:
Sociology R345 Crime and Delinquency (3 cr.)
Sociology R346 Control of Crime (3 cr.)
Sociology S325 Criminology (3 cr.)
Sociology S420 Topics in Deviance—Criminology (3 cr.)
5. *Two* SPEA Criminal Justice Courses at the 300 level directed toward the student's area of interest. (Choice of courses under this option requires approval of the appropriate local SPEA admininstrator.)

Note: It is recommended that students select S161 to meet the A.S. Social Science requirement of one course from Sociology or Psychology.

Environmental Concentration Requirements

The Associate of Science degree is a 60 credit, two-year degree program available *only* to students in the School of Public and Environmental Affairs. The two-year degree, when properly planned, allows a student both to make normal progress towards a four-year degree (Bachelor of Public Affairs) and select electives particularly suited to his own goals. The requirements of the Environmental Concentration for the A.S. degree provide an introduction to environmental problems and the options for their resolution.

The concentration requirements are:
1. A course in Chemistry or Physics
2. Geography G107 Physical Geography (3 cr.) or Geology G102 Earth Science: Materials and Processes (3 cr.) *or* Geology G111 Elements of Geology I (3 cr.)

3. Economics E103 Introduction to Microeconomics *or* E104 Introduction to Macroeconomics (whichever is not taken for the social science requirement) (3 cr.)
4. Two of the following:
   Geography G213 Introduction to Economic Geography (3 cr.)
   Geography G304 Climatology (3 cr.)
   Geology G300 Environmental and Urban Geology (3 cr.)
   Geology G316 Mineral Resources (3 cr.)
   Biology L350 Environmental Biology (3 cr.)
   Political Science Y313 Environmental Policy (3 cr.)
5. SPEA V365 Urban and Regional Planning (3 cr.)
6. The mathematics requirement should be met with a course in calculus.
7. A course in statistics. (Calculus and statistics will fulfill the prerequisites for V365.)
   (Options for statistics include Economics E370, Mathematics/Psychology/SPEA K300 or K310, Political Science Y205, or Sociology S250 and S251.)

Bachelor of Science in Public Affairs

Specific Degree Requirements

I. General education requirements (total of 16 courses):
1. Social science requirements—each of the following (5 courses):
   Economics E103-E104 Intro to Economics (3-3 cr.)
   POLS Y103 Intro to American Politics (3 cr.)
   Sociology and/or Psychology—2 courses
   (Student may select either Sociology or Psychology or one course in each.)
2. Arts and Humanities; Biological and Physical Science—(5 courses):
   The student has the option of selecting 3 courses in arts and humanities and 2 courses in biological and physical sciences, or vice versa
3. Communications—one course from each area (3 courses):
   a. W131 Elementary Composition
   b. W231 Professional Writing Skills (3 cr.)
   c. Speech—one course from:
      S121 Public Speaking (3 cr.)
      S122 Interpersonal Communications (3 cr.)
      S228 Argumentation and Debate (3 cr.)
      S229 Discussion and Group Methods (3 cr.)
4. Quantitative methods—one course from each area (3 courses):
   a. Mathematics—one course from:
      M118 Finite Mathematics (3 cr.)
      M119 Calculus (3 cr.)
      (Math M211 Calculus or M215 Analytic Geometry and Calculus I accepted in lieu of M119)
   b. Statistics—one course from:
      Math, Psy, SPEA K300 Statistical Techniques (3 cr.)
      Math or Psy K310 Statistical Techniques (3 cr.)
      Econ E370 Interpretation of Business and Economic Data (3 cr.)
      Other approved statistics course
   c. Introduction to the Computer—one course from:
      Math C201 Introduction to Computer Science (3 cr.)
      Bus K201 Computer in Business (3 cr.)
      Other approved computer course

Note:

1. "Other approved course" must be approved by the local SPEA administrator.
2. Courses which do not carry college credit (e.g., Math M014) may not be used for the general education requirement.
3. Double Counting: no course may be double counted (counted more than once) as general education course. Courses in the "general education requirements" may not be also counted in the "Public Affairs Core." However, some courses may be counted also in a Public Affairs Concentration *if*, and only to the extent that, the concentration required more than the minimum of 5 courses. Note particularly that students interested in environmental policy should take specific recommended courses in science.

4. Every student must pass W131 Elementary Composition with a grade of C or higher. (Students should note when they register for classes that not all sections of W131 are the same; some have special topics or may be connected with writing assignments for another course.)

II. Public Affairs Core (11 courses; 7 must be from SPEA, noted by *)
Each of the following areas must be studied, as indicated.
1. Environment—required:
SPEA V262 Environment: Problems and Prospects (3 cr.)*
2. Urban Studies—one of:
SPEA V264 Urban Strategies (3 cr.)*
Other approved urban introduction options
3. Planning—required:
SPEA V365 Urban and Regional Planning*
4. Administration—
SPEA V366 Public Administration*—(prerequisite or concurrent:
Bus Z301 or equivalent [3 cr.])
5. Public Finance
SPEA V372 Financial Management and Budgeting (P: E360) (3 cr.)*
6. Public Management
SPEA V170 Introduction to Public Affairs (3 cr.)*
7. Law—one of:
SPEA V376 Legal Process and Contemporary Issues in America I (3 cr.)
Bus L201 Legal Environment of Business (3 cr.)
SPEA J301 Criminal Law (3 cr.)
POLS Y304 Judicial Process and American Constitutional Law (3 cr.)
8. Policy Processes—required:
V472 Policy Processes (3 cr.)
9. Public Affairs Options—one of:
SPEA V170 Introduction to Public Affairs (3 cr.)
SPEA J200 The American Criminal Justice System (3 cr.)
SPEA V260 Topics in Public Affairs (3 cr.)
Other approved options (may not include courses listed elsewhere in the Public Affairs Core)

III. Concentrations—5 or more courses:
The following concentrations are available:
Criminal Justice
Policy and Administration
Urban Studies

IV. Electives (May include up to 15 credit hours for internships. Minimum of 120 credit hours required for graduation with a 2.0 G.P.A.)

Criminal Justice Concentration Requirements (**Note:** Criminal justice degree and concentration requirements were in the process of being revised when this *Bulletin* went to press. Separate publications will be available in early spring, 1980, describing the new requirements.)
The Criminal Justice Concentration requires *eight* (8) courses—each with a grade of C or higher in accordance with the following:
1. SPEA J100 Foundations of Criminal Justice (3 cr.)
2. SPEA J200 American Criminal Justice System (3 cr.)
3. *One* of the following:
SPEA J301 Criminal Law (3 cr.)
SPEA J302 Criminal Law Administration (3 cr.)
4. SPEA J370 Seminar in Criminal Justice—Topic: Research and Development in Criminal Justice (3 cr.)
5. *One* of:
Psychology B380 Abnormal Psychology (3 cr.)
Psychology P324 Abnormal Psychology (3 cr.)
6. *One* of:
Sociology R345 Crime and Delinquency (3 cr.)
Sociology R346 Control of Crime (3 cr.)

Sociology S325 Criminology (3 cr.)
Sociology S420 Topics in Deviance—Criminology (3 cr.)
7. *Two* SPEA Criminal Justice courses directed toward the student's area of interest. (Choice of courses under this option requires the approval of the appropriate local SPEA administrator.)

Policy and Administration Concentration Requirements
Required: (5 courses)
1. SPEA V373 Personnel Management in the Public Sector (3 cr.)
2. Other policy and administration coures—4 selected from:
(Any of these courses may be counted in the Policy and Administration concentration if they are not counted in the SPEA core courses.)
SPEA V376 Legal Process and Contemporary Issues in America I (3 cr.)
SPEA V377 Legal Process and Contemporary Issues in America II (3 cr.)
SPEA V421 Dyanics of Urbanization (3 cr.)
SPEA V432 Labor Relations in the Public Sector (3 cr.)
SPEA V442 Seminar in Fiscal Management (3 cr.)
SPEA V444 Public Administrative Organization (3 cr.)
SPEA V445 Policy in State Government (3 cr.)
SPEA V446 Introduction to Government Accounting and Financial Reporting
SPEA V450 Contemporary Issues in Public Affairs—approved topics only (3 cr.)
SPEA V490 Directed Research in Public and Environmental Affairs—approved topics only (1-3 cr.)

Some alternate courses may be selected in fields such as personnel, management, industrial psychology, labor relations, organization theory, operations research, and policy analysis and evaluation. These alternate choices must be approved for a student's curriculum by the appropriate SPEA campus administrator.

Urban Studies Concentration Requirements

Core Requirements
SPEA V421 Dynamics of Urbanization (3 cr.)

Specialization—four courses
The student should take one of the following sequences, plus any other two courses.

Geography G314 Urban Geography (3 cr.)
Geography G415 Advanced Urban Geography (3 cr.)

Business T315 Urban Transportation and Public Policy (3 cr.)
Geography G412 Urban Transport Analysis (3 cr.)

Business G330 Principles of Urban Economics (3 cr.)
Business G430 Economic Analysis of Urban Problems and Policies (3 cr.)

Geography G417 Land Use Analysis (3 cr.)
Geology G300 Environmental and Urban Geology (3 cr.)

Political Science Y308 Urban Politics (3 cr.)
Political Science Y394 Public Policy Analysis (3 cr.)

Sociology S309 The Community (3 cr.)
Sociology S410 Topics in Social Organization. Topic: Human Ecology (3 cr.)

Business R300 Principles of Real Estate (3 cr.)
Business L408 Law of Real Estate and Land Use Control (3 cr.)

Additional Electives (may not be counted toward two-course sequence)

Anthropology E380 Urban Anthropology (3 cr.)
History A347 Cities and Urbanization in American History (3 cr.)

Public Affairs Certificate

The School of Public and Environmental Affairs offers the certificate in Public Affairs to students wishing to study public policy, governmental organization, and public management skills in addition to the major area of their undergraduate programs. The program is interdis-

ciplinary in nature and students from any department or school of Indiana University are eligible.

The Certificate in Public Affairs requires a total of 27 credit hours, of which SPEA must teach at least 15 but no more than 21 hours. (Each course carries 3 hours of credit—SPEA courses among those listed below are indicated with a star [*].) To be eligible for a certificate Indiana University students must complete the following requirements in addition to satisfying all degree requirements for the baccalaureate degree program of their choice. (Course numbers may differ on the various campuses.)

1. All of the following:
V170 Introduction to Public Affairs
V262 Environment: Problems and Prospects
V264 Urban Strategies*

2. One course each from two of the following groups:

Organization Behavior
V270 Survey of Administrative Techniques*
Business Z300 (or Bus Z301) Organizational Behavior and Leadership
POLS Y390 Micropolitics and Organizational Behavior
SPEA J310 Introduction to Administrative Process*

Public Administration
V366 Public Administration*

Law
V376 Legal Process & Contemporary Issues in America*
POLS Y304 Judicial Process & American Constitutional Law
Bus L201 Legal Environment of Business
SPEA J301 Criminal Law*
SPEA J401 Criminal Law and Procedure

3. Four of the following:

School of Public and Environmental Affairs
V260 Topics in Public Affairs*
V348 Analytical Approaches to Public Policy*
V349 Applied Policy Analysis*
V365 Urban and Regional Planning*
V372 Financial Management & Budgeting*
V373 Personnel Management in the Public Sector*
V432 Labor Relations in the Public Sector*
V442 Seminar in Fiscal Management*
V444 Public Administrative Organization
Y445 Policy in State Government*
V446 Introduction to Government Accounting and Financial Reporting*
V450 Contemporary Issues in Public Affairs*
V472 Policy Processes

Political Science
Y200 Citizen and the Courts (This is a Topics in Political Science course. The ONLY acceptable topic is "Citizen and the Courts.")
Y302 Public Bureaucracy in Modern Society
Y306 State Politics in the U.S.
Y394 Public Policy Analysis

Criminal Justice/SPEA
J100 Foundations of Criminal Justice
J200 American Criminal Justice System
J322 Introduction to Criminalistics
J370 Social Control System (This is a Seminar in Criminal Justice course. The ONLY acceptable topic is "Social Control Systems.")

Sociology
S320 Deviance and Control
S325 Criminology
S461 Urban Sociology
S424 Sociology of Law

Geography
G412 Urban Transportation Analysis
G414 Regional Transport Systems
G415 Advanced Urban Geography
G417 Land Use Analysis

Indiana University At South Bend

Division of Public and Environmental Affairs

Undergraduate Programs

The Division of Public and Environmental Affairs at Indiana University at South Bend (IUSB) is currently offering undergraduate work at three levels, the associate program (two-year), the baccalaureate program (four-year), and the certificate programs.

The Bachelor of Science degree program has a curriculum built around general education courses in composition, speech, psychology, sociology, mathematics, statistics, the biological or physical sciences and the arts and humanities. Core and concentration courses offer classroom work in public affairs, environmental systems, urban systems, urban and regional planning, policy analysis, public administration, public financial management and several specialized public affairs fields. Students are encouraged to supplement classroom studies with an internship which provides practical experience in the public sector.

ISUB also provides an Associate of Science degree program in Public Affairs. This is a flexible two-year program for the part-time student who is already working in the public sector. This program is aimed at allowing the student to attain the first step toward a formal educational background in his or her own service field.

Also presently available at IUSB is an Associate of Science degree program in Criminal Justice, designed to provide a systematic study of law violation through instruction in the methodology, problems, and sciences of law enforcement.

The full range of activities in the IUSB Division of Public and Environmental Affairs is designed so that skills gained at one level of study may provide the basis for further development of the student as his life situation and the needs of the public sector change. The objective is to make both managers and technicians in public careers mobile laterally and vertically, with each level of training and education serving as the foundation for other levels.

Based on the School's "career-ladder concept," a variety of additional curricula have been implemented. These include certificate programs in Urban Studies and Environmental Studies and a variety of professional development workshops, short courses, and seminars regarding particular substantive and skill areas.

Further information about the Undergraduate Program at IUSB may be obtained from:

Dr. Frank X. Steggert, Director
Division of Public and Environmental Affairs
Indiana University at South Bend
1700 Mishawaka Ave.
South Bend, Indiana 46615
Telephone: (219) 237-4130

Associate of Science in Public Affairs

Specific Degree Requirements

I. General Education Distribution (9 courses required)
A. Social Science—3 courses
  1. E103 Intro to Microeconomics (3 cr.) *or*
     E104 Intro to Macroeconomics (3 cr.)
  2. Y103 Intro to American Politics (3 cr.)
  3. One course from:
     Sociology or Psychology (3 cr.)
B. Quantitative Methods—2 courses
  1. One computer course (3 or 4 cr.)

2. One mathematics course (excluding mathematics for teachers)
(Students are urged to fulfill this requirement by taking Mathematics M118 or M119 [one of which is required for the SPEA B.S. degree in Public Affairs]. Indiana University courses below the 100 level do not carry college credit and may not be applied toward the SPEA A.S. degree. Students who concentrate in Environmental Policy must take Math M119.)

C. Communication—3 courses
1. Eng W131 Elementary Composition (3 cr.) or equivalent (see note following B.S. General Education requirements)
2. Eng W231 Professional Writing Skills (3 cr.)
3. Speech—one course
Speech S121 Public Speaking (3 cr.) *or*
Speech S228 Argumentation and Debate (3 cr.)

D. Arts and Humanities—one course

II. SPEA Core (4 courses)
A. V170 Introduction to Public Affairs (3 cr.)
B. V262 Environment: Problems and Prospects (3 cr.)
C. V264 Urban Strategies (3 cr.)
D. V270 Survey of Administrative Processes (3 cr.)

III. Area of Concentration in Public Affairs (4-7 courses)
A. Public Administration (12 cr.)
B. Criminal Justice (18 cr.)
C. Environment (18 cr.)
D. Special Concentration (minimum 12 cr.)
(May be developed by student and faculty adviser to meet special curriculum/career needs; must be approved by campus SPEA administrator.)

IV. Electives—credits required to attain a minimum of 60 credit hours with a 2.0 G.P.A.

Public Administration Concentration Requirements
Required: four courses selected from below
SPEA V446 Accounting for the Public Sector (3 cr.)
(A201-A202 [3-3 cr.] may be substituted with approval of director)
SPEA V316 Environmental Health Management Orientation (3 cr.)
SPEA V366 Public Administration (3 cr.)
SPEA V372 Financial Management in the Public Sector (3 cr.)
SPEA V373 Personnel Management in the Public Sector (3 cr.)
SPEA V376 Legal Process and Contemporary Issues in America I (3 cr.)

Criminal Justice Concentration Requirements (Note: Criminal justice degree and concentration requirements were in the process of being revised when this *Bulletin* went to press. Separate publications will be available in early spring, 1980, describing the new requirements.)
The Criminal Justice Concentration requires *six* (6) courses—each with a grade of C or higher in accordance with the following:
1. SPEA J100 Foundations of Criminal Justice (3 cr.)
2. SPEA J200 American Criminal Justice System (3 cr.)
3. *One* of the following:
SPEA J301 Criminal Law (3 cr.)
SPEA J302 Criminal Law Administration (3 cr.)
4. *One* of the following:
Sociology S320 Deviance and Control (3 cr.)
Sociology S325 Criminology (3 cr.)
Sociology S328 Juvenile Delinquency
5. *Two* SPEA Criminal Justice Courses at the 300 level directed toward the student's area of interest. (Choice of courses under this option requires the approval of the appropriate local SPEA administrator.)

Note: It is recommended that students select S161, S100 or R100 to meet the A.S. Social Science requirement of one course from Sociology or Psychology.

Environmental Concentration Requirements

This Associate of Science degree is a 60-credit, two-year degree program available *only* to students in the School of Public and Environmental Affairs. The two-year degree, when properly planned, allows a student both to make normal progress towards a four-year degree (Bachelor of Public Affairs) and select electives particularly suited to his own goals. The requirements of the Environmental Concentration for the A.S. degree provide an introduction to environmental problems and the options for their resolution.

The concentration requirements are:

1. A course in Chemistry or Physics
2. Geography G107 Physical Geography (3 cr.) *or* Geology G102 Earth Science: Materials and Processes (3 cr.) *or* Geology G111 Elements of Geology I (3 cr.)
3. Economics E103 Introduction to Microeconomics *or* E104 Introduction to Macroeconomics (whichever is not taken for the social science requirement) (3 cr.)
4. Two of the following:
   Geography G213 Introduction to Economic Geography (3 cr.)
   Geography G304 Climatology (3 cr.)
   Geology G300 Environmental and Urban Geology (3 cr.)
   Geology G316 Mineral Resources (3 cr.)
   Biology L350 Environmental Biology (3 cr.)
   Political Science Y313 Environmental Policy (3 cr.)
5. SPEA V365 Urban and Regional Planning (3 cr.)
6. The mathematics requirement should be met with a course in calculus.
7. A course in statistics.

   (Options for statistics include Econ E370, Math/Psy/SPEA K300 or K310, POLS Y205, or Soc S250 and S251.)

Associate of Science in Criminal Justice

(**Note:** Criminal justice degree and concentration requirements were in the process of being revised when this *Bulletin* went to press. Separate publications will be available in early spring, 1980, describing the new requirements.)

Specific Degree Requirements

I. English Composition W131 or Equivalent
(See note in B.S. General Education requirements.)

II. Speech—one of the following:
   Speech S121 Public Speaking
   Speech S228 Argumentation and Debate

III. General Education—6 courses

1. Arts and Humanities—1 course

Communication Arts	History
Cultural Studies (only B250)	Music (only M174, M175)
English (advanced lit. courses only)	Philosophy
Foreign Languages	Religious Studies

2. Social and Behavioral Sciences—1 course
   R: Soc S161 Principles of Sociology (3 cr.)

Anthropology	Political Science
Economics	Psychology
Geography	Sociology
Linguistics	

3. Biological Sciences—1 course
   R: Psy P103 General Psychology (3 cr.)
4. Mathematics and Physical Sciences—1 course

Astronomy	Mathematics and Computer Science
Chemistry	Physics
Geology	Computer Technology

   Cross listed course: Geog G107 and G304

5. Sufficient other courses from areas 1,2,3, and 4 above to meet the requirement of 6 general education courses.

IV. Criminal Justice Concentration—8 courses
Students are required to complete 8 Criminal Justice courses which must include:
J100 Foundations of Criminal Justice (3 cr.)
J200 The American Criminal Justice System (3 cr.)
J301 Criminal Law (3 cr.)

V. Electives
1. Sufficient additional courses to meet the Associate of Science degree requirement of 64 credit hours.
2. Credit awarded by the University for active military service/ROTC may be included but *not more* than six such hours may be applied toward this degree.

Bachelor of Science in Public Affairs

Specific Degree Requirements
I. General education requirements (total 16 courses):
1. Social science requirements—each of the following (5 courses):
Economics E103-E104 Intro to Economics (3-3 cr.)
POLS Y103 Intro to American Politics (3 cr.)
Sociology and/or Psychology—2 courses
(Student may select either Sociology or Psychology or one course in each.)
2. Arts and Humanities; Biological and Physical Science—(5 courses):
The student has the option of selecting 3 courses in arts and humanities and 2 courses in biological and physical sciences, or vice versa
3. Communications—3 courses
a. Eng W131 Elementary Composition (3 cr.)
b. Eng W231 Professional Writing Skills (3 cr.)
c. Speech—one course from:
S121 Public Speaking (2 cr.)
S228 Argumentation and Debate (3 cr.)
4. Quantitative methods—one course from each area (3 courses):
a. Mathematics—one course from:
M118 Finite Mathematics (3 cr.)
M119 Calculus (3 cr.)
(Math M211 Calculus or M215 Analytic Geometry and Calculus I accepted in lieu of M119)
b. Statistics—one course from:
SPEA K300 Statistical Techniques (3 cr.)
Econ E370 Interpretation of Business and Economic Data (3 cr.)
Other approved statistics course
c. Introduction to the Computer—one course from:
SPEA V450 Contemporary Issues in Public Affairs Topic: Computerization in the Public Sector (3 cr.)
Business K201 Computer in Business (3 cr.)
Comp Sc C201 Introduction to Computer Programming (4 cr.)
Other approved computer course

Note:
1. "Other approved course" must be approved by the local SPEA administrator.
2. Courses which do not carry college credit (e.g., Math M014) may not be used for the general education requirement.
3. Double Counting: no course may be double counted (counted more than once) as general education course. Courses in the "general education requirements" may not be also counted in the "Public Affairs Core." However, some courses may be counted also in a Public Affairs

Concentration *if*, and only to the extent that, the concentration required more than the minimum of 5 courses. Note particularly that students interested in environmental policy should take specific recommended courses in science.
4. Every student must pass W131 Elementary Composition with a grade of C or higher. (Students should note when they register for classes that not all sections of W131 are the same; some have special topics or may be connected with writing assignments for another course.)

II. Public Affairs Core (11 courses; 7 must be from SPEA)
Each of the following areas must be studied, as indicated. A grade of C or higher must be attained in all core courses.
1. Public and Environmental Affairs—required:
SPEA V170 Introduction to Public Affairs (3 cr.)
2. Environment—required:
SPEA V262 Environment: Problems and Prospects (3 cr.)
3. Urban Studies—one of:
SPEA V264 Urban Strategies (3 cr.)
Other approved urban introduction options
4. Planning—required:
SPEA V365 Urban and Regional Planning (3 cr.)
5. Administration—one course.
SPEA V366 Public Administration (3 cr.)
6. Financial Management
SPEA V372 Financial Management and Budgeting (3 cr.)
7. Law—one course:
SPEA V376 Legal Process and Contemporary Issues in America I (3 cr.)
Bus L201 Legal Environment of Business (3 cr.)
SPEA J301 Criminal Law (3 cr.)
POLS Y304 Judicial Process and American Constitutional Law (3 cr.)
8. Policy Processes—required:
SPEA V472 Policy Processes (3 cr.)
9. Public Affairs Options—three courses:
Consult adviser for approved list.

III. Concentrations—5 or more courses:
The following concentrations are available:
Criminal Justice
Policy and Administration
Environmental Policy

IV. Electives (May include up to 15 credit hours for internships. Minimum of 120 credit hours required for graduation with a 2.0 G.P.A.)

Criminal Justice Concentration Requirements (Note: Criminal justice degree and concentration requirements were in the process of being revised when this *Bulletin* went to press. Separate publications will be available in early spring, 1980, describing the new requirements.)
The Criminal Justice Concentration requires *eight* (8) courses—each with a grade C or higher in accordance with the following:
1. SPEA J100 Foundations of Criminal Justice (3 cr.)
2. SPEA J200 American Criminal Justice System (3 cr.)
3. *One* of the following:
SPEA J301 Criminal Law (3 cr.)
SPEA J302 Criminal Law Administration (3 cr.)
4. SPEA J370 Seminar in Criminal Justice (3 cr.)
5. Psychology P324 Abnormal Psychology (3 cr.)
6. *One* of:
Sociology S320 Deviance and Control (3 cr.)
Sociology S325 Criminology (3 cr.)
Sociology S328 Juvenile Delinquency (3 cr.)

7. *Two* SPEA Criminal Justice courses directed toward the student's area of interest. (Choice of courses under this option requires the approval of the appropriate local SPEA administrator.)

Policy and Administration Concentration Requirements

The Policy and Administration concentration requires five (5) courses (each with a grade of C or higher) in accordance with the following.

Required:

1. SPEA V373 Personnel Management in the Public Sector (3 cr.)
2. Other policy and administration courses—4 selected from:

(Any of these courses may be counted in the Policy and Administration concentration only *if they are not counted in the SPEA core courses*)

SPEA V376 Legal Process and Contemporary Issues in America I (3 cr.)
SPEA V377 Legal Process and Contemporary Issues in America II (3 cr.)
SPEA V421 Dynamics of Urbanization (3 cr.)
SPEA V432 Labor Relations in the Public Sector (3 cr.)
SPEA V442 Seminar in Fiscal Management (3 cr.)
SPEA V444 Public Administrative Organization (3 cr.)
SPEA V445 Policy in State Government (3 cr.)
SPEA V446 Introduction to Government Accounting and Financial Reporting (3 cr.)
SPEA V450 Contemporary Issues in Public Affairs—approved topics only (3 cr.)
SPEA V490 Directed Research in Public and Environmental Affairs—approved topics only (1-3 cr.)

Some alternate courses may be selected in fields such as personnel, management, industrial psychology, labor relations, organization theory, operations research, and policy analysis and evaluation. These alternate choices must be approved for a student's curriculum by the appropriate SPEA campus administrator.

Environmental Policy Concentration Requirements

An Environmental Policy Concentration is available *only* to students in SPEA. The program includes a multi-disciplinary study of the nature, origin, and options for solutions for environmental problems with emphasis on their implications for public policy.

The appropriateness of the environmental studies policy concentration as preparation for graduate and professional schools or for possible employment depends strongly on the particular courses chosen for fulfilling the requirements and electives. Students are urged to consult with an adviser for aid in formulating educational and career goals.

The requirements are:

1. A course in chemistry or physics (3 cr.)
2. Geography G107 Physical Systems of the Environment (3 cr.) *or*
   Geology G103 Earth Science: Materials and Processes (3 cr) *or*
   Geology G111 Elements of Geology I (3 cr.)
3. A course in environmental biology (recommended Biology L350 Environmental Biology, 3 cr.). (Students desiring to emphasize Field Biology or Water Resources Science should fulfill this requirement with L473, M420, or Z468.)
4. Topics in Environmental Studies E400 (approved sections) (2-3 cr.)
5. SPEA V316 Environmental Health Management Orientation (3 cr.)
6. The SPEA mathematics requirement must be met with a course in calculus.

7-9. Three of the following courses (*in addition* to those used for requirements 1-6):

It is strongly suggested that the student take all 3 from *one of the emphasis groups listed.* Additional sections of E400 may sometimes be appropriate.

(One of these should be used to fulfill the environmental biology requirement. Four additional are required.)

Field Biology

Biol B364 Summer Flowering Plants (5 cr.)
Biol Z373 Entomology (3 cr.)
Biol Z383 Entomology Laboratory (2 cr.)

Biol Z406 Vertebrate Zoology (5 cr.)
Biol S309 Ecological Biology (5 cr.)
Biol M420 Environmental Microbiology (3 cr.)
Biol Z468 Limnology (4 cr.)
Biol L473 Ecology (3 cr.)
Biol L474 Ecology Laboratory (3 cr.)

Earth Sciences

Chem C101 Elementary Chemistry I (3 cr.)
Chem C105 Principles of Chemistry (3 cr.)
Geog G304 Climatology and Meteorology (3 cr.)
Geog G335 Photogrammetry and Remote Sensing (3 cr.)
Geog G404 Elements of Soil Science (3 cr.)
Geog G405 Hydroclimatology (3 cr.)
Geog G407 Advanced Physical Geography (3 cr.)
Geog G435 Cartography and Remote Sensing (3 cr.)
Geog G477 Advanced Climatology and Meteorology (3 cr.)
Geol G300 Environmental and Urban Geology (3 cr.)
Geol G316 Mineral Resources (3 cr.)
Geol G406 Introduction to Geochemistry (3 cr.)
Geol G415 Principles of Geomorphology (3 cr.)
Phys E250 The Environment and Physics (3 cr.)

Water Resources Science

Biol M420 Environmental Microbiology (3 cr.)
Biol Z468 Limnology (4 cr.)
Chem C101 Elementary Chemistry I (3 cr.)
Chem C105 Principles of Chemistry (3 cr.)
Geog G304 Climatology and Meteorology (3 cr.)
Geog G404 Elements of Soil Science (3 cr.)
Geog G405 Hydroclimatology (3 cr.)
Geog G407 Advanced Physical Geography (3 cr.)
Geog G477 Advanced Climatology and Meteorology (3 cr.)
Geol G415 Principles of Geomorphology (3 cr.)
Geol G451 Principles of Hydrogeology (3 cr.)

Environmental Social Analysis

Anth A400 Seminar Topic: Ecology (3 cr.)
Bus L409 Law and the Environment (3 cr.)
Econ E419 Location and Regional Economics (3 cr.)
Econ E485 Economics and Social Control of Industry (3 cr.)
Geog G213 Introductory Economic Geography (3 cr.)
Geog G315 Environmental Conservation (3 cr.)
Geog G320 Population Geography (3 cr.)
Geog G413 Location Theory (3 cr.)
Geog G414 Regional Transport Systems (3 cr.)
Geog G415 Advanced Urban Geography (3 cr.)
Geog G417 Land Use Analysis (3 cr.)
Geog G458 Spatial Analysis (3 cr.)
Soc S305 Population and Human Ecology (3 cr.)
HPER R372 Interpretive Resources and Techniques (3 cr.)

Note: A list of topics courses which may be counted for requirement 6 is available from your Environmental Policy concentration adviser during registration each semester.

Beyond the general SPEA requirements, the minimum number of courses required for an Environmental Policy concentration is 5 (assuming that three environmental science courses

are selected for the distribution requirement). Students may wish to take more courses in order to obtain more thorough training in biology, chemistry, geology, or geography.

Interdisciplinary Programs For Non-Majors

Two interdisciplinary programs are administered by the Division of Public and Environmental Affairs primarily for undergraduates who are obtaining their baccalaureate degrees in areas other than SPEA. These are the Urban Studies and the Environmental Studies Certificate Programs.

Urban Studies Certificate Program

The undergraduate Urban Studies Certificate Program is designed to introduce students to selected aspects of current thinking and research concerning the nature and problems of cities, urban life, and urban development. In addition, it provides a foundation for advanced studies and activity in the fields of city planning and municipal government.

The Urban Studies Certificate is awarded upon completion of a set of specified course requirements. The student must also complete the requirements for a baccalaureate degree in some area other than the urban studies. Typically such majors include business, economics, political science, geography, or sociology. Students of SPEA desiring the certificate may qualify by arranging their curricula to fulfill the certificate requirements.

A Certificate in Urban Studies will be granted upon completion of seven courses.

V264 Urban Strategies (3 cr.)
V365 Urban and Regional Planning (3 cr.)
A347 Cities and Urbanization in American History (3 cr.)
S306 Urban Society (3 cr.)
Y308 Urban Politics (3 cr.)
G314 Urban Geography (3 cr.)
G330 Principles of Urban Economics (3 cr.)

Environmental Studies Certificate Program

The Environmental Studies Certificate Program is designed to introduce students to selected aspects of current thinking and research on the nature, causes, and solutions of environmental problems. The program involves cooperation and contributions of faculty from a variety of disciplines and schools.

The Environmental Studies Certificate is awarded upon completion of a set of specified course requirements. The student must also complete the requirements for a degree in some area other than environmental studies. Students of SPEA desiring the certificate may qualify by arranging their curricula to fulfill certificate requirements.

A Certificate in Environmental Studies will be granted upon completion of the following (in special cases, substitution for the courses listed may be made to meet the needs of individual students):

Track for Science Majors

V262 Environment: Problems and Prospects (3 cr.)
V365 Urban and Regional Planning (3 cr.)
C303 Environmental Chemistry (3 cr.)
L473 Ecology (3 cr.)
S305 Population and Human Ecology (3 cr.)
G315 Environmental Conservation (3 cr.)
E400 Topics in Environmental Studies (3 cr.)

Track for Non-Science Majors

V262 Environment: Problems and Prospects (3 cr.)
V365 Urban and Regional Planning (3 cr.)
E250 The Environment and Physics (3 cr.)
L350 Environmental Biology (3 cr.)
S305 Population and Human Ecology (3 cr.)
G315 Environmental Conservation (3 cr.)
E400 Topics in Environmental Studies (3 cr.)

The Graduate Programs

The Graduate Programs of the School of Public and Environmental Affairs encompasses both degree programs and doctoral minors. The graduate degrees are the Master of Public Affairs (M.P.A.), the Master of Science in Environmental Science (M.S.E.S.), the Doctor of Philosophy (Ph.D.) in Political Science and Public Affairs, the Doctor of Philosophy (Ph.D.) in Regional Analysis and Planning. The School participates in a combined Doctor of Jurisprudence-Master of Public Affairs (J.D.-M.P.A.). The School also provides for three different minor fields for persons in doctoral programs in other parts of Indiana University. The minor fields are Public and Environmental Affairs, Urban Affairs, and Environmental Studies. In addition, the Graduate Program includes the nondegree program, Advanced Studies in Science, Technology, and Public Policy, and certificate programs in several areas.

Admission to the Graduate Programs

Application. Applications for admission and financial aid can be obtained from the director of the appropriate degree program (M.P.A., M.S.E.S., J.D.-M.P.A., Ph.D.) on any Indiana University campus offering the degree, or from:
Office of Graduate Admissions
School of Public and Environmental Affairs
Indiana University
400 East Seventh Street
Bloomington, Indiana 47405

The forms should be returned to the campus where the student intends to enroll.

It is suggested that applications for both admission and *financial aid* be made on or before the following dates:

—for Summer: February 15
—for Fall: March 15
—for Spring: October 15

Applications received after these dates will receive less favorable consideration for financial support. All applications must be accompanied by one complete transcript of previous college and university work. Indiana University graduates should request the Office of Records and Admissions to send official copies of their transcripts to the director of the appropriate degree programs. The student must request that all colleges and universities attended mail certified copies of transcripts to the director of the degree program selected.

Application Fee. A nonrefundable application fee of $15 is required of all applicants who have not previously attended Indiana University.

Baccalaureate Certificate. Certification of a baccalaureate degree is required for entrance. Although the student may not have completed his undergraduate work at the time of application, a decision will be made on the strength of the student's work at the time of application. However, a final transcript showing graduation must become a part of the student's permanent record before he or she can be formally enrolled.

Application References. The student should request three individuals, preferably professors, who are familiar with his or her activities and potential to fill out an Application Reference Form. These forms will be provided with the application form.

Validity. Following notice of admission, an applicant has one calendar year in which to enroll. Supplementary transcripts of any academic work undertaken during that period are required, and a department may request additional letters of recommendation. Should the updated material prove unsatisfactory, the admission may be cancelled. If the applicant fails to enroll within one year, a complete new application is required.

Examinations for Admission. Applicants for admission to the graduate programs are required to take the Aptitude Test of the Graduate Record Examination (GRE). Applicants for the J.D.-M.P.A. Program may submit the Law School Admission Test (LSAT). Information

concerning the GRE and the LSAT is available from the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey 08540.

Admissions Committees. Each application, with accompanying transcripts and other documents, is considered carefully by the admissions committee for the appropriate degree. Personal interviews are encouraged where possible. While the applicant's undergraduate scholastic performance is the most significant index of ability to do graduate work, the test scores, recommendations, and the student's statement can weigh heavily in the final decision of the admissions committee. The aim is to select those applicants who can successfully complete graduate study and be effective in public affairs.

Continuing Nondegree Students. The holder of a bachelor's degree who wishes to study on a nondegree basis may be admitted to the Graduate School as a continuing nondegree student. Enrollment is limited to those courses for which the student can obtain specific permission to register, which takes into consideration the requisite background and course enrollment limitations.

If a student initially admitted as a continuing nondegree student later wishes to obtain a graduate degree, this student must make a formal application for admission to the Public Affairs Admissions Committee.

No more than 12 hours of graduate credit taken as a continuing nondegree student may be credited toward a SPEA graduate degree. Students who have been denied admission to a SPEA graduate program may enroll as continuing nondegree students only with approval of the program director. (This restriction does not apply to students in SPEA certificate programs.)

A continuing nondegree student may enroll in more than 12 hours of SPEA graduate courses only if the student maintains a G.P.A. of at least 3.0.

Grade Average, Provisional, and Probationary Status. Students may be admitted on a provisional basis for particular reasons, such as deficiencies in certain areas. The provisional status will be removed upon fulfillment of the stipulated conditions. A cumulative grade-point average of 3.0 (A=4.0) or higher for all work taken for graduate credit must be earned as a prerequisite for continuation in good standing and for graduation. Students whose cumulative grade-point average falls below 3.0 will be placed on probation. To be removed from probation, students either placed on probation or admitted on a provisional basis are required to attain an average of at least 3.0 for all graduate work completed by the end of the next semester of full-time enrollment or its equivalent (12 credit hours). Failure to do so will be cause for dismissal.

Academic Standing

The official grading system of the School of Public and Environmental Affairs is as follows:

A (4.0)—Highest Passing Grade
A− (3.7)
B+ (3.3)
B (3.0)
B− (2.7)
C+ (2.3)
C (2.0)—Lowest Passing Grade
C− (1.7)
D+ (1.3)
D (1.0)
D− (0.7)
F (0.0)—Failed
I—Incomplete
W—Withdrawn
R—Deferred
NR—No Report

An overall grade index of 3.0 (4.0 = A) or higher in all work taken for graduate credit must be earned as a prerequisite to continuation in good standing and for the purpose of completing graduation requirements. Only courses with grades of C or above may be counted toward degree requirements, although grades of D and lower are used in computing the overall grade index. If a grade of F is received, that course must be repeated.

Withdrawals and Deadlines: Possibilities related to student withdrawal from a specific course are divided into three separate periods. The first period of the semester allows for "automatic withdrawal," which means that a grade of W is given automatically on the date of withdrawal to the student who submits a proper request. During the second period of the semester, withdrawal from a course requires permission of the instructor and signature of the appropriate SPEA administrator (dean or director). To qualify for the grade of W at this time, a student must be passing the course on the date of withdrawal. Failure to complete a course with an authorized withdrawal will result in a grade of F. In the last period of the semester, a student may not withdraw, except by special written permission by the appropriate SPEA administrator.

Deadlines for each of these three periods of a semester vary somewhat on various campuses and the student should take care to check with the local SPEA administrator to verify deadlines. Local deadlines are strictly enforced.

Incomplete. All incomplete (I) grades must be completed within the time specified by the instructor of the course or within a maximum of one year or they will automatically be changed to F.

Transfer Policy. Students registered in the School of Public and Environmental Affairs at any campus of Indiana University may transfer to SPEA on another campus, provided they are in good standing. SPEA students who are on probation or have been dismissed must process a special transfer request through the campus of their last enrollment and the request will be approved or denied by the Admissions Committee on the desired campus. Transfers should be requested by means of an inter-campus transfer form, available from the SPEA Recorder on each campus.

Residency Requirements. The campus at which a student completes the plurality of the required course work will certify and award the degree provided the campus is authorized to grant the degree.

The policies of the Graduate School relating to work done at Indiana University campuses other than Bloomington apply to students working for the Ph.D. degree in Political Science and Public Affairs, and the Ph.D. in Regional Analysis and Planning. Students must obtain the approval of their proposed program of courses to be taken at another campus from the Director of Public Affairs Graduate Programs.

Petitioning Procedure

A student may find it necessary to petition the Public Affairs Committee or the Environmental Programs Committee (for M.S.E.S. students) relative to such matters as dismissal, requirements, transfers, class load, etc. Such requests must be presented in writing to the appropriate graduate committee.

Financial Assistance

Graduate Assistantships. The School of Public and Environmental Affairs awards a limited number of School graduate assistantships that generally consist of a cash stipend and either half or full remission of all fees, up to 12 credit hours per semester, with the exception of a $6.60 per credit hour assessment for University-allocated fees each semester. Hours in excess of the first 12 hours must be paid for at the regular tuition rate by the student.

Graduate assistantships carry a service obligation to the School of Public and Environmental Affairs, such as working with faculty members in teaching, on research projects, administrative duties, counseling, and other official activities. Work assignments for assist-

antships will be made during counseling. All necessary forms will also be completed at this time.

School of Public and Environmental Affairs Fellowships. The School of Public and Environmental Affairs awards a limited number of School fellowships to academically deserving students. They consist of a cash stipend and entitlement to pay fees up to 12 credit hours per semester at the in-state rate. Any hours in addition to the first 12 per semester are charged according to the student's residency status as determined by the Registrar's Office. School fellowships do not carry a service obligation. All necessary forms will be completed during the counseling appointment.

Other Types of Aid. Other types of appointments available for SPEA financial aid include: associate instructorships, Public Service Fellowships, Traffic Safety Fellowships, and research assistantships.

Graduate Work-Study Program and Educational Loans. Indiana University has a graduate work-study program and several loan programs administered through the Office of Scholarships and Financial Aids. The graduate work-study program and loans are offered on a University-wide basis rather than through the School of Public and Environmental Affairs. Students who need financial assistance not provided by the SPEA awards are eligible to apply for either the graduate work-study program or short- or long-term loans which carry a low rate of interest.

The graduate work-study program and the University loan program are administered by the Office of Scholarships and Financial Aids, which also makes disbursements under the National Defense Student Loan Program. Inquiries concerning these sources should be made directly to the Office of Scholarships and Financial Aids on the campus at which the student intends to enroll.

Master of Public Affairs

The Master of Public Affairs Program is an integrated course of study which provides knowledge and experience that can be used by the professional in various roles within a changing public sector. It is also an interdisciplinary professional program drawing on diverse faculty talents and resources.

Candidates are admitted to this program from a variety of educational backgrounds, including the social sciences, the humanities, the physical and biological sciences. Some are already experienced in public affairs (see the Mid-Career Option) while others have had no such training or experience. The goal of the program is to equip the individual with the necessary skills and knowledge to enter local, state, or federal governmental or quasi-governmental service and to broaden comprehension of the economic, political, and social context in which the public servant works. The contemporary public servant operates in a complex and diversified setting and must accomplish a variety of tasks. The curriculum of this program encompasses preparation in a broad range of skills relevant to the operation of public agencies.

The Master of Public Affairs Program is structured to familiarize the student with the multi-faceted nature of public problems, so that he may apply a variety of approaches to problems during his public career. The curriculum is, therefore, interdisciplinary—based on the academic disciplines, but not limited to any one; it is also problem-oriented, bringing the disciplines to bear on critical social, economic, and administrative conditions.

Although the environment of the public service is diverse and changing, effectiveness in that environment requires the development of special skills based on a deep knowledge of a chosen field of concentration. The fields of concentration span the variety of professional specialties found in public service. Thus, the program provides both expertise in a specific area and a general working knowledge of public affairs.

Candidates for the Master of Public Affairs degree without previous career-related job experience are strongly encouraged to consider an internship as part of their graduate cur-

riculum. The School's Public Careers Internship and Placement Center organizes off-campus professional learning experiences for credit. Up to six hours of credit may be taken in internships or field experience. Normally, not more than three hours of credit for V585, Practicum in Public Affairs, can be applied to the field of concentration. The activities of the Public Careers Internship and Placement Center are described at the back of this bulletin.

Admission Policies and Procedures

Admission to the Master of Public Affairs Program is limited to students of demonstrated aptitude and scholarship. The Program is interdisciplinary in nature, and thus no particular undergraduate major is specifically required. Undergraduate grades, more than study in a particular discipline on the undergraduate level, often predict success or failure in graduate study. Normally, an accumulative grade-point index of 3.0 (4.0=A) is the minimum level of undergraduate academic performance necessary for regular admission.

Degree Requirements:

Length of Program and Course Load. A minimum of 48 credit hours must be completed in order to qualify for the degree, except for those students whose previous public affairs experience makes them eligible for the Mid-Career Option. Those admitted to the Master of Public Affairs Program may enroll either full-time or part-time. The full-time student customarily takes 12 hours of credit per semester. Students may petition the Director of the Program to waive requirements on the basis of previous course work which substantially duplicates the requirements of the program.

The Master of Public Affairs Program contains two main components: The M.P.A. core curriculum of 21 credit hours and except for the environmental policy concentration, a field of concentration of 18 credit hours. The remaining 9 credit hours are electives which can be used either to add breadth to a student's program or to deepen a field of concentration, or to enhance skills in using foreign languages, quantitative tools, or administrative techniques.

Transfer of Credit. Up to 9 credit hours of appropriate graduate course work can be transferred from schools other than Indiana University and applied toward the Master of Public Affairs degree when approved by the program director. Credit transfers reduce the hours of Indiana University credits which must be earned. Requirement waivers, on the other hand, do not reduce credit hours to be earned but do increase the elective choices available in a student's program. No work may be transferred from another institution unless the grade is a B or better.

Graduation Requirements. It is the responsibility of the student to be certain that his graduation or other academic requirements are met. The M.P.A. Office will keep a record of the student's progress and will aid in program planning.

Mid-Career Option. The purpose of the Mid-Career Option of the Master of Public Affairs Program is to enhance the professional capabilities of those with previous training or experience in the public service. It is a program capable of being specially designed to meet the educational and professional needs of the individuals. Some administrators are engaged in professional capacities requiring deeper understanding of certain specialties. Others with considerable experience in a specialization may wish to broaden their knowledge and perspectives. The Mid-Career Option can accommodate these needs.

The increasingly diverse demands placed upon the public service continually add new dimensions to the role of today's public executive, requiring the continual renewal of his or her knowledge of public processes and policy areas. The Mid-Career Option enables the student to update his or her knowledge of social science developments and managerial techniques.

Up to 15 credit hours may be granted Mid-Career Option students for significant administrative or policy-level work experience. This work experience may be of a managerial nature or may be in a program or policy development (which may or may not include experience in management, e.g., as a planner). The work experience need not necessarily be with a governmental agency. Many private and quasi-public organizations have significant governmental

contacts. Furthermore, much management-level experience in the private sector is applicable to the public sector.

Students wishing to take full advantage of the Mid-Career Option should complete the Mid-Career application by the middle of their first semester of work. A determination of eligibility for the Mid-Career Option for each applicant is made by the Public Affairs Admissions Committee. Students granted the Mid-Career Option for more than six credits may not take V585, Practicum in Public Affairs, for credit. Decisions about the Mid-Career Option are made separately from decisions about transfer of credit. Under no circumstances will the Mid-Career Option and the transfer of credit total more than 24 hours of the 48-hour degree requirement. Students receiving the Mid-Career Option should carefully plan their programs in consultation with an adviser as early as possible. Certification of the plan of study by the adviser is necessary.

Core Courses: 21 credit hours

The M.P.A. core is designed to ensure that each student acquires both the prerequisite analytical skills and an understanding of the crucial policy issues and governmental structures and processes which comprise the environment within which graduates will pursue their careers. Thus, 12 hours of course work are required in the analytical area dealing with quantitative analysis, computer usage, economic analysis, and legal analysis.

In addition, students take 9 hours of required courses dealing with public administrative structure and process and with major problems of public policy—particularly environmental problems—with which public servants will have to cope.

Unusually well-prepared applicants may petition the program director to waive one or more of the core requirements based on advanced work done elsewhere. Students may be exempted based on satisfactory equivalent course work or by an examination administered by professors in the core fields. Credit hours waived from the core will add to the electives a student may use as described above.

Fields of Concentration: 18 credit hours

The concentrations are designed to give the student a focused educational experience in a substantive area of the student's interest, with a view to working in this area upon graduation. The student chooses a concentration in consultation with the director of the M.P.A. Program, and the course of study in the concentration area is determined in conjunction with a concentration adviser. Courses offered both within the School of Public and Environmental Affairs and in other departments of the University are utilized. All concentrations require 18 credit hours of course work except Environmental Policy which requires 21 credit hours. Up to 3 credit hours of the policy concentration may be taken in V585, Practicum in Public Affairs, if the field experience is relevant to the policy concentration and approved in advance by the concentration adviser and the chairman of the Graduate Program. Concentration requirements may be waived on the same basis as core requirements.

Concentrations presently developed on the Bloomington campus include the following:

Comparative and International Affairs
Environmental Policy
Health Systems Administration
Management of Public Affairs
Planning
Policy Analysis
Public Financial Administration
Public Safety Policy
Public Sector Labor Relations
Urban Affairs

Concentrations presently developed on the IUPUI campus include the following:
Criminal Justice
Management of Public Affairs

Personnel Management
Public Financial Administration
Planning
Urban Affairs

Concentrations presently developed on the Fort Wayne campus include the following:
Management of Public Affairs
Criminal Justice

Concentrations presently developed on the Northwest campus include the following:
Management of Public Affairs
Public Financial Administration
Public Safety Policy
Urban Affairs

Concentrations presently developed on the South Bend campus include the following:
Criminal Justice
Management of Public Affairs
Public Policy and Administration
Urban Affairs

Students wishing to do professional staff work with legislative bodies rather than executive branch agencies will want to specialize in legislative administration in addition to taking a regular concentration listed above and described below. The legislative administration specialization is available on the Indianapolis and Bloomington campuses. Students electing this specialization take the following two courses in addition to their other required coursework.

SPEA V571 State Policy Processes (3 cr.)
SPEA V685 Seminar in State and Local Legislatures (3 cr.)

Specially designed concentrations can be used to meet the needs of those whose interests will not be met by the pre-designed concentrations. Concentrations can also be arranged with schools other than SPEA in such fields as historic preservation (Graduate School), journalism (School of Journalism), and information sciences (Graduate Library School). The student may change his policy concentration by notifying the M.P.A. Office of the intention to do so and by securing a new concentration adviser. Students wishing more information about a particular concentration should obtain *full concentration descriptions* from the M.P.A. Office or from the campus where the student will enroll. Students should note that the specific requirements of each concentration may vary from campus to campus. Except for the environmental policy concentration, students should take five hours of program electives chosen either to add breadth, deepen a concentration field or enhance skills in foreign languages, quantitative tools or administrative techniques.

Combined Doctor of Jurisprudence-Master of Public Affairs Program

The combined J.D.-M.P.A. Program enables the student to take a four-year sequence of courses leading to the receipt of both degrees. The student must have a bachelor's degree from an accredited institution of higher education and must apply to both the School of Law (Bloomington) and the School of Public and Environmental Affairs. If the applicant is admitted to only one school, he will be permitted to attend the school to which he is admitted and will, of course, be required to meet graduation requirements of that school.

It is preferred that the student apply to both schools simultaneously for the combined J.D.-M.P.A. Program. It is possible, however, for a person already enrolled in the School of Law to apply for admission to the School of Public and Environmental Affairs up to the completion of his second year of law study. It is also possible for a student enrolled in the School of Public

and Environmental Affairs to seek admission to the School of Law up to the end of the first year of his M.P.A. course of study.

Grade averages in the School of Law and the School of Public and Environmental Affairs will be computed separately. Continuation in the program will require the student to meet academic standards in each school. A student failing in one school but meeting academic standards in the other may complete his work for the degree in the school in which he is able to meet the academic standards. Such completion must be upon the same conditions (credit hours, residency, etc.) as required of regular (noncombination) degree candidates, i.e., 82 credit hours for law and 48 credit hours for SPEA. Students will be eligible for honors in each school based on the criteria of each school.

Students enrolled in the combined program will be assigned co-advisers—one each from the faculty of the Law School and School of Public and Environmental Affairs. Co-advisers will be responsible for reviewing and counseling with respect to course selection of the students for each semester to assure attainment of educational objectives. Co-advisers will also assist in scheduling problems which the student might encounter as a result of the combined degree program.

The student will customarily spend his first academic year in the School of Law. Thereafter, the student will divide the second, third and fourth years between the two schools, taking an average of seven to eight hours of law courses each semester, and four to seven hours of SPEA courses. Thus, the student will have a continuing educational experience in both Schools.

Requirements for graduation for persons admitted to the combined J.D.-M.P.A. are as follows:

a. 76 credits of law courses, including all degree requirements (e.g., required first-year courses, research seminars, residency, etc.).

b. 34 credits of SPEA courses. Required courses include the M.P.A. core courses, with the exception of V540, Law and Public Affairs. The remaining 16 hours will consist of 2 hours of SPEA credit for the joint research paper and the required courses for a concentration to be chosen by the student.

c. A research paper is to be completed in the last year of the combined program and jointly supervised by advisers from both schools. Credit for this supervised research will be arranged and will count toward degree requirements in both schools. A minimum of 4 credit hours must be taken with at least 2 hours of research counting for the J.D. degree and 2 hours of V590, Research in Public Affairs, counting toward the M.P.A. program. The topic must be selected no later than the end of the third year of the combined program, must include elements of both disciplines, and must be approved by the student's co-advisers.

Master of Science in Environmental Science

The increasingly technological nature of our society and the concerns that environmental effects must routinely be considered in formulating both public and private policy have created an unprecedented need for individuals whose expertise spans both administrative and technical fields. The goal of the Master of Science in Environmental Science (M.S.E.S.) program is to produce a new kind of professional who combines specialization in a particular environmental science area with the basic social science and administrative skills necessary for integrating this knowledge into a broader conceptual and operational framework. The degree allows specialization in either disciplinary or interdisciplinary applied environmental science areas.

The M.S.E.S. degree is offered by the School of Public and Environmental Affairs with the cooperation of several departments in the Graduate School.

A bachelor's degree in a physical or life science, engineering, mathematics, or its equivalent is required for consideration for admission to the two-year program. At least a B average in undergraduate work is expected. Students who have *not* had courses in differential and integral calculus and in statistics will be required to take these during their first year in the

program in addition to the other degree requirements. Students who have *not* had a basic course in computer programming (FORTRAN recommended) should plan to take either a credit or noncredit programming course during their first year in the program. Students who have *not* had at least two semesters of chemistry with laboratories, including coverage of organic chemistry, will be required to take appropriate work in chemistry (usually C102 or C341) in addition to the other degree requirements.

The M.S.E.S. program requires a minimum of 48-credit hours distributed among four components: Basic Environmental Science (12 cr.), Environmental Management and Policy (9 cr.), Applied Environmental Science Concentration (21 cr.), and Professional Experience (6 cr.). Some students admitted to the program may have had courses that exempt them from some of the requirements. The credits from these course exemptions are usually used to build a stronger concentration.

A mid-career option is available to individuals with appreciable professional experience in environmental science or management. On the basis of case-by-case petitions, the degree requirements may be modified to accommodate the special backgrounds and needs of those with such experience. For example, a different relative emphasis in credit hours among the major components of the degree may be appropriate for mid-career students. Experience may also be accepted in lieu of one to six credit hours of course work in other components of the degree.

Doctor of Philosophy in Political Science and Public Affairs

The Department of Political Science and the School of Public and Environmental Affairs (SPEA) collaborate in a joint doctoral program which provides additional options for individuals who wish to combine graduate study in political science and public affairs. The joint Ph.D. prepares individuals for teaching and meets the needs of in-service professionals in the public sector who want to improve conceptual, analytical, and managerial abilities. The program develops the competence necessary to conduct research leading to the solution of complex problems.

Fields of Study

Students select two of the following fields in Political Science, and also select two fields in SPEA from the following concentrations or combinations of concentrations as approved by the supervisory committee:

Political Science

American Politics
International Relations
Comparative Politics
Political Theory and Methodology
Public Administration, Law, and Policy

SPEA

Comparative and International Affairs
Environmental Policy
Health Systems Administration
Management of Public Affairs
Planning
Policy Analysis
Public Financial Administration
Public Safety Policy
Public Sector Labor Relations
Urban Affairs

Students must also demonstrate competence in at least one field of study outside Political Science and SPEA. The structure of the outside minor depends upon individual

educational objectives and may be concentrated in one field or comprised of courses in several departments.

Requirements:
Candidates for the joint doctoral degree must complete at least 90 semester hours of graduate credit.

Candidates must demonstrate proficiency in one of the following languages or research skills: French, German, Spanish, Russian, mathematics, logic, statistics, computer science, or another language or research skill with the approval of the supervisory committee and the Dean of the Graduate School.

Doctor of Philosophy in Regional Analysis and Planning

The Ph.D. in Regional Analysis and Planning addresses the need for cooperation and communication among those involved in regional problem analysis, program planning and program administration. It does this by integrating existing courses in regional analysis, planning, and public affairs from the Department of Geography and the School of Public and Environmental Affairs into a joint doctoral degree program. The program is intended to prepare students for teaching and research in these areas, to enhance their employability, and to bring to the public sector the necessary skills to solve complex regional problems.

Fields of Study
The major core curriculum consists of courses in planning, quantitative methods, and research seminars. Each student must also select one of the following concentration areas:

Socioeconomic Systems
Environmental Systems

Every student will be required to attain competence in at least one field outside geography and SPEA. The minor should complement the program and contribute to educational objectives of the student. Possible minors would include: Business (Applied Urban Economics); Business (Quantitative Business Analysis); Business (Transportation); Urban Affairs, Computer Science, or Recreation (Community and Recreational Planning). Requirements for the minor are set by the department or program which offers it. The minor selected must be from the list of approved minors in the *Graduate School Bulletin* (unless exceptions are approved by the Graduate School).

The student must complete these required courses with a grade of B or better prior to nomination to candidacy for the Ph.D. degree. A minimum of 90 graduate credit hours of work is required.

The Public and Environmental Affairs Doctoral Minors

The School of Public and Environmental Affairs provides course work and other student-related activities for those working toward doctoral degrees in other schools and colleges of Indiana University who select Public and Environmental Affairs as their minor field. Three such minor fields are available: General Public and Environmental Affairs, Environmental Studies, and Urban Affairs.

General Public and Environmental Affairs Minor
To satisfy the General Public and Environmental Affairs Minor, the doctoral student must do the following *after obtaining approval from his or her doctoral committee:*

1. Secure an adviser from the faculty of the School of Public and Environmental Affairs.
2. Select a minimum of 12 credit hours of course work, agreed upon by the student and the adviser, only 3 hours of which can be in V580 Readings in Public Affairs or V590 Directed Research.
3. Maintain a minimum grade-point average of 3.0 (A=4.0) in courses in the minor.

The adviser must agree to serve as the representative of the School of Public and Environmental Affairs in all examinations or other requirements of the student's doctoral program which relate to his or her minor field.

The Environmental Studies Minor

Students in Ph.D. programs at Indiana University may, with the consent of their committee, choose Environmental Studies as an outside minor. The minor is flexible and is usually designed by students in accordance with their needs.

Requirements:

1. The Ph.D. candidate must secure a faculty adviser in consultation with the Director of Environmental Programs. The adviser may not be from the candidate's major department. The candidate's adviser will serve as the representative in all examinations or other requirements of the candidate's Ph.D. program that relate to the minor. The adviser shall decide on the character of the examination, if any, in the minor field, and shall certify that the candidate has met the requirements of the minor when s/he has done so.

2. The candidate must take at least twelve credit hours of graduate level courses related to Environmental Studies. These must be from at least two different disciplines outside the candidate's major department. The choice of courses should be made in consultation with the candidate's adviser and must be approved by the Director of Environmental Programs.

Acceptance of the proposed minor will be based on two criteria: (a) the courses must be a direct relationship to Environmental Studies and (b) the courses must not normally be required as part of the major or tool skill options in the student's major department.

3. A minimum grade-point average of 3.0 (B) must be maintained in courses used for the minor.

Courses in the minor program should be selected according to student interest. Students majoring in areas other than the natural sciences, for example, may wish to peruse carefully the offerings in natural science departments. Similarly, natural science students should examine course offerings in the social and behavioral sciences.

Students should note that although most courses from Business, Law, and SPEA have *not* been accepted for general use in the graduate school, approval can be sought for the inclusion of courses from these schools in the minor when they are especially appropriate to the student's objectives. Students should consult the *Bulletin* of SPEA, Schools of Business, Law, and Health, Physical Education and Recreation in addition to the *Graduate Bulletin* for additional course listings.

The Urban Affairs Minor

Students in doctoral programs at Indiana University may choose Urban Affairs as an outside minor. To offer Urban Affairs as a minor, the doctoral candidate must:

1. Secure a faculty adviser from the Urban Affairs Committee in consultation with the Director of the Urban Affairs Center; the faculty adviser must not be in the candidate's major department.
2. Take at least 12 credit hours of courses in Urban Affairs available for graduate credit, from at least two different disciplines outside the candidate's major. The choice of courses must be made in consultation with the candidate's adviser from among those listed or appropriate substitutes.
3. Maintain a minimum grade-point average of 3.0 (A=4.0) in courses in the minor.

The candidate's adviser will serve as the representative of the Urban Affairs Committee in all examinations or other requirements of the candidate's doctoral program which relate to the minor. The adviser shall decide on the character of the examination, if any, in the minor field and shall certify that the candidate has met the requirements of the candidate's doctoral program which relate to the minor. The adviser shall decide on the character of the examination, if any, in the minor field and shall certify that the candidate has met the requirements of the minor when he has done so.

Certificate Programs in Public and Environmental Affairs

The Graduate Program of the School of Public and Environmental Affairs provides course work and special programs leading to the Public Management Certificate and the Urban Affairs Certificate. A baccalaureate degree is required for admission to the program.

Public Management Certificate

The Public Management Certificate provides a focused program of study in public management. The certificate program is flexible enough to be adapted to the needs of pre-career and in-service individuals. Pre-career students can use the certificate to explore the field of public management before committing themselves to an extended degree program. Graduate students in other fields can use the program to supplement their primary fields with course work in public management, possibly using the certificate courses as a doctoral minor. Career employees of public and community agencies who want a sequence of core courses in public management, and especially those changing from professional or technical roles to managerial roles will find the certificate program ideal.

The Public Management Certificate is awarded upon completion of the following nine-hour required core and six hours of electives.

Core. 9 cr. hours
V502 Public Management
V560 Public Finance and Budgeting
V561 Public Personnel and Manpower Systems

Electives. 6 cr. hours
Select from:
V504 Public Organization
V563 The Planning Process
V595 Managerial Decision-Making
V630 Topics in Planning

Urban Affairs Certificate

The Urban Affairs Certificate, which is available on the I.U.-South Bend campus, is awarded upon completion of the following courses:

A347 Cities and Urbanization in American History
G314 Urban Geography
F525 Applied Urban Economics: Theories, Problems, and Policy
V532 Urban Decision Making
V564 Urban Administration
S610 Urban Sociology

Note: Admission to the Public Management Certificate or the Urban Affairs Certificate program does not guarantee concurrent or subsequent admission to the MPA Program.

Indiana University-Bloomington
School of Public and Environmental Affairs

Graduate Programs

The Graduate Programs of the School of Public and Environmental Affairs encompass both degree programs and doctoral minors. The graduate degrees available on the Bloomington campus are the Master of Public Affairs (M.P.A.), the Master of Science in Environmental Science (M.S.E.S.), the Doctor of Philosophy (Ph.D.) in Political Science and Public Affairs, the Doctor of Philosophy (Ph.D.) in Regional Analysis and Planning, and the Doctor of Jurisprudence-Master of Public Affairs (J.D.-M.P.A.). Doctoral minors are available in the fields of Public and Environmental Affairs, Urban Affairs, and Environmental Studies. In addition, nondegree programs are available in Advanced Studies in Science, Technology, and Public Policy, and certificate programs in several areas.

Students wishing information concerning the Public Affairs Graduate Programs offered at Bloomington should contact:

Dr. Charles R. Wise
Director, Public Affairs Graduate Programs
School of Public and Environmental Affairs
The Poplars, Room 327
400 E. 7th Street
Bloomington, IN 47405
Phone: (812) 337-3107

Master of Public Affairs

Core Courses: 21 credit hours
The M.P.A. core is designed to ensure that each student acquires both the prerequisite analytical skills and an understanding of the crucial policy issues and governmental structures and processes which comprise the environment within which graduates will pursue their careers. Thus, 12 hours of course work are required in the analytical area dealing with quantitative analysis, computer usage, economic analysis, and legal analysis. These courses are as follows:

V506 Quantitative Analysis for Public Management I (3 cr.)
V507 Quantitative Analysis for Public Management II (3 cr.)
V517 Public Management Economics (3 cr.)
V540 Law and Public Affairs (3 cr.)

In addition, students take 9 hours of required courses dealing with public administrative structure and process and with major problems of public policy—particularly environmental problems—with which public servants will have to cope. These courses are as follows:

V502 Public Management (3 cr.)
V520 Environmental and Social Systems (3 cr.)
V560 Public Finance and Budgeting (3 cr.)

Unusually well-prepared applicants may petition the program director to waive one or more of the core requirements based on advanced work done elsewhere. Students may be exempted based on satisfactory equivalent course work or by an examination administered by professors in the core fields. Credit hours waived from the core will add to the electives a student may use.

Elective Courses: 9 credit hours
Elective courses are used either to add breadth to a student's program, or to deepen a field of concentration, or to enhance skills in using foreign languages, quantitative tools, or administrative techniques.

Fields of Concentration: 18 credit hours
Concentrations are designed to give the student a focused educational experience in a substantive area of the student's interest, with a view to working in this area upon graduation. The student chooses a concentration in conjunction with the M.P.A. program director and his concentration adviser. Concentrations offered at the Bloomington campus include: Comparative and International Affairs, Environmental Policy, Management of Public Affairs, Policy Analysis, Public Financial Administration, Public Safety Policy, Public Sector Labor Relations, Planning, Health Systems Administration, and Urban Affairs.

Comparative and International Affairs Concentration Requirements
The Comparative and International Affairs concentration is designed for both preservice students, many of whom will be foreign nationals, and for mid-career students, either American or foreign, who will be employed by foreign governments, foreign-aid programs, and international organizations. Normally students should come into the concentration with some language training, although the 5 hours of electives can be used to enhance language skills and knowledge of particular cultures. All students in the concentration take the following three core courses:

V575 Comparative and International Administration (3 cr.)
V576 Comparative and International Development (3 cr.)
V577 Comparative and International Economics (3 cr.)

The remaining 9 hours of the concentration will be taken in an area of interest to the student. A list of some of the departmental offerings from which the student may choose is shown below:

Anthropology
E420 Economic Anthropology (3 cr.)
E440 Political Anthropology (3 cr.)
E460 The Arts in Anthropology (3 cr.)
E520 Problems in Economic Anthropology (3 cr.)
E580 Applied Social Anthropology (3 cr.)
P500 Proseminar in Archaeology (4 cr.)
P600 Seminar in Prehistoric Archaeology (3 cr.)

Business
D420 International Business Administration (3 cr.)
D490 Special Studies in International Business (cr. arr.)
D496 Foreign Study in Business (2-6 cr.)
D502 Introduction to International Business (3 cr.)
D519 Environmental Analysis for International Business (3 cr.)
D527 Latin America: Business and Economic Development (3 cr.)

Economics
E430 Introduction to International Economics (3 cr.)
E495 Economic Development: Less Developed Areas (3 cr.)
E530 International Economics (3 cr.)
E533 Current Problems in International Economics (3 cr.)
E592 Economic Development and Growth (3 cr.)
E792 Workshops in Problems of Development (3 cr.)
E793 Seminar in Planning Strategies and Techniques (3 cr.)
E825 Readings in Comparative Economic Systems (1-6 cr.)
E830 Readings in International Economics (1-6 cr.)

Education
W513 Education and Change in Underdeveloped Countries (2 cr.)
W525-W526 Comparative Education I-II (3 cr. each)
W527 Travel Study (cr. arr.)
W590 Research in Higher Education (cr. arr.)
W715 Comparative Higher Education (2 cr.)

Folklore
F485 Latin American Indian Music (3 cr.)
F486 Latin American Folk Music (3 cr.)
F610 Seminar in Yoruba Folklore (3 cr.)
F638 Seminar in Latin American Folklore (3 cr.)
F650 South American Indian Folklore (3 cr.)
F800 Research in Folklore (cr. arr.)
F816 Seminar in Latin American Ethnomusicology (3 cr.)

History
E431 History of Africa I (3 cr.)
F432 History of Africa II (3 cr.)
E437 History of North Africa from 640 A.D. to the Present (3 cr.)
F444 History of Mexico (3 cr.)
F445 Cuban Revolution (3 cr.)
F447 United States-Latin American Relations to 1945 (3 cr.)
H575 Individual Readings in History (cr. arr.)
H665 Colloquium in Latin American History (Colonial Period) (4 cr.)
H670 Colloquium in Latin American History (National Period) (4 cr.)
H695 Colloquium in African History (4 cr.)
S865 Seminar in Latin American History (Colonial Period) (4 cr.)
S870 Seminar in Latin American History (National Period) (4 cr.)

Journalism
J513 International Communication I (3 cr.)

Latin American Studies
L400 Contemporary Mexico (3 cr.)
L402 Contemporary Brazil (3 cr.)
L404 Contemporary Argentina (3 cr.)
L406 Contemporary Peru and Chile (3 cr.)
L425 Special Topics in Latin American Studies (1-3 cr.)

Law
B771 Seminar in International Development (3 cr.)

Political Science
Y657 Comparative Politics (3 cr.)
Y663 Political and Administrative Development (3 cr.)
Y669 International Politics (3 cr.)
Y680 Readings in Political Science (cr. arr.)
Y757 Comparative Politics (3 cr.)
Y759 Cross-Cultural Political Analysis (3 cr.)

Sociology
S615 Problems in Demography and Ecology (3 cr.)

Normally, students should select the remaining 9 hours of concentration electives (and even the remaining 5 hours of program electives) to add greater knowledge of a single subject. For instance, a student may wish to cover a single global area in greater depth and take courses in, say, Latin American history, politics, and economics. A second alternative would be for a student to take courses in a single substantive area without regard to global area, such as international business and economics. Still a third alternative would be for a student to select courses from another M.P.A. concentration such as Management of Public Affairs or Urban Affairs. In all cases a student's program should be developed in consultation with his or her adviser.

Environmental Policy Concentration Requirements
Students considering an M.P.A. with an environmental policy concentration should note that entry level positions are usually awarded on the basis of ability to perform specific analytical or technical functions and not just for a mastery of environmental policy perspectives. An environmental policy concentration will often be appropriate for mid-career students either seeking specific skills or desiring to modify a strong technical base to embrace wider en-

vironmental and administrative perspectives. Precareer students who have appropriate undergraduate technical or analytical training will find the concentration applicable to a more restricted range of career goals. However, precareer students who lack relevant undergraduate training may find themselves at a disadvantage in seeking entry level positions. Such students who have an interest in the environment may wish to consider taking another concentration and selecting related environmental courses as electives or may wish to pursue a double concentration. In all cases the professional strength of the degree will be appreciably increased by early selection of a specific entry or mid-career position as a focus for the educational program.

As soon as a student decides to pursue an environmental policy concentration, he or she must (1) choose a particular environmental career objective, (2) design a preliminary concentration of at least 21 hours for this objective, and (3) apply to the Environmental Policy Concentration Adviser for a faculty advisory committee. The faculty advisory committee will assist the student in formulating a final concentration in accord with the student's career objectives and must approve the program.

1. The following courses can serve either to initiate specialization or to provide breadth to the student.
Law B660 Environmental Law
SPEA V527 Applied Ecology
SPEA V536 Environmental Chemistry
SPEA V547 Applied Earth Science
SPEA V549 Environmental Planning
SPEA V552 Environmental Engineering
2. The following lists of courses are provided in order to assist the student in formulating a specific focus within the environmental policy concentration. Note, however, that the selection of courses must in every case take account of the student's background and objectives.

a. Land Use Analysis Focus. A focus in this area is most appropriate for students with backgrounds in geography or geology, or with skills in economic or demographic analysis.
BUS L408 Law of Real Estate and Land Use Control
BUS R501 Real Estate and Land Economics
BUS T501 The Transportation Dimension
BUS G591 Methods of Population Analysis and Their Application
BUS G630 Methods of Urban and Regional Analysis
BUS G631 Problems and Policy for Urban Development
ECON E419 Location and Regional Economics
GEOG G335 Photogrammetry and Remote Sensing
GEOG G336 Environmental Remote Sensing
GEOG G404 Elements of Soil Science
GEOG G405 Hydroclimatology
GEOG G407 Advanced Physical Geography
GEOG G413 Location Theory
GEOG G414 Regional Transportation Systems
GEOG G417 Land Use Analysis
GEOG G435 Cartography and Graphics
GEOG G477 Advanced Climatology and Meteorology
GEOG G535 Advanced Cartography
GEOG G802 Seminar in Physical Geography
GEOG G830 Readings in Geography (1-3 cr.)
GEOL G451 Principles of Hydrogeology
LAW B615 Land-Use Control
LAW B660 Environmental Law
SOC S615 Problems in Demography and Ecology
SPEA V548 Applied Earth Sciences Laboratory
SPEA V549 Environmental Planning
SPEA V551 Environmental Systems Planning and Design
SPEA V552 Environmental Engineering

b. Energy Policy Focus. Background in geology, another physical science, or economic analysis is appropriate.
BUS U501 Public Utilities Theory and Analysis
BUS U506 Problems in Public Utilities Regulation and Management (P: U501)
GEOG G417 Land Use Analysis
PHYS P310 Environmental Physics
SPEA V503 Public Affairs and the Environment (2 cr.)
SPEA V510 The Political, Economic, and Regulatory Aspects of Environmental Control (2-3 cr.)
SPEA V513 Energy and Materials Residuals
SPEA V515 Technology Assessment
SPEA V550 Topics in Public Affairs
SPEA V552 Environmental Engineering
SPEA V555 Topics in Environmental Science
SPEA V633 Seminar in Public Transportation Policy

c. Science and Technology Management Focus
BUS P502 Operations Management
BUS Z503 Organizational Behavior and Organizational Effectiveness
BUS W512 Perspectives of Future Managers (2 cr.)
BUS P530 Research Management
PSCI Y665 Science, Technology and Public Policy
PSCI Y765 Science and Social Evolution
SOC S647 Social Change
SPEA V515 Technology Assessment
SPEA V550 Topics in Public Affairs

Health Systems Administration Concentration Requirements
The Health Systems concentration is designed for public administration students who want to assume a managerial position in the public health field. The policy concentration affords the student the opportunity to study policy, issues, and programs.

Combined with the M.P.A. core requirements, the concentration trains students to assume a leadership role in administering public health programs in organizations such as: health departments, health systems agencies, professional standards review organizations, planning councils, health maintenance, foundations, etc.

Required courses for concentration majors are the following:

V545 U.S. Public Health Policy I (3 cr.)
V546 U.S. Public Health Policy II (3 cr.)
V631 Seminar in Health Planning (3 cr.)

In addition to the three required courses, students will select three electives. These electives may be selected from the following or any other course with the permission of the concentration adviser.

V585 Practicum in Public Affairs (1-6 cr.)
AHL B421 Management in Health Organizations (3 cr.)
AHL B401 Introduction to Hospital Administration (3 cr.)
H366 Health Problems in the Community (3 cr.)
C511 Epidemiology (3 cr.)
C512 Environmental Health Science (3 cr.)
C523 Community Health Organization and Administration (3 cr.)
C591 Public Health Statistics (3 cr.)
H519 Problems and Issues in Health (3 cr.)
V580 Readings in Public Affairs (1-3 cr.)
V586 Public Safety in the United States (3 cr.)
V590 Research in Public Affairs (1-3 cr.)

Management of Public Affairs Concentration Requirements
Candidates who select the Management of Public Affairs concentration take advanced courses in the major administrative subjects: personnel management, budgeting and program evaluation, management analysis, information systems management, and general manage-

ment and administration. Normally, pre-entry students will select a single subject area *other than* general management and administrative behavior and concentrate in that one advisory specialization. Mid-career students and those pre-entry students headed for unspecialized administrative jobs may wish to take general management courses drawn from all the administrative subjects.

Students are required to take V504, Public Organization. In addition, students select two of the following concentration core courses:

V595 Managerial Decision-Making (3 cr.)
A508 Accounting for Public Administration (3 cr.)
V562 Public Program Evaluation (3 cr.)

The remaining 12-13 credit hours may be drawn from the following advisory specializations:

Personnel Management
V561 Public Personnel and Manpower Systems (3 cr.)

Plus electives to be chosen from:
V570 Public Sector Labor Relations (3 cr.)
V650 Topics in Public Personnel Management (1-3 cr.)
—Occupational Health and Safety
—Equal Employment Opportunity and Affirmative Action
—Manpower Forecasting and Planning
V661 Seminar in Public Personnel Administration (3 cr.)
V662 Seminar in Productivity and Program Evaluation (3 cr.)
V670 Topics in Public Sector Labor Relations (1-3 cr.)
—Collective Bargaining
—Dispute Settlement
—Administration of Labor Agreements
—Labor Relations Law in the Public Sector
V675 Issues and Problems in Public Sector Labor Relations (3 cr.)

Budgeting and Program Evaluation—electives to be chosen from:
V516 Managing Public Information Systems (3 cr.)
V550 Topics in Public Affairs (cr. arr.)
V562 Public Program Evaluation (3 cr.)
V610 Seminar in Government Budget and Program Analysis (3 cr.)
V662 Seminar in Productivity and Program Evaluation (3 cr.)
V664 Seminar in Complex Public Organization (3 cr.)
V665 Seminar in Policy and Administration (3 cr.)
Economics E562 Analysis of Public Expenditure Programs (3 cr.)
Political Science Y665 Public Law and Policy: Approaches to Policy Analysis (3 cr.)

Management Analysis—choose one of:
Business K512 Multivariate Statistical Analysis (3 cr.)
Psychology P554 Advanced Statistics in Psychology II (3 cr.)
Sociology S650 Fundamentals of Social Statistics II (3 cr.)

Electives to be chosen from:
V516 Managing Public Information Systems (3 cr.)
V562 Public Program Evaluation (3 cr.)
V563 Seminar in Planning Process (3 cr.)
V662 Seminar in Productivity and Program Evaluation (3 cr.)
V664 Seminar in Complex Public Organization (3 cr.)
V665 Seminar in Policy and Administration (3 cr.)
K511 Fundamentals of Mathematical Optimization (3 cr.)
K515 Quantitative Analysis in Decision-Making (3 cr.)
K520 Introduction to Operations Research (3 cr.)
E671 Econometrics I (3 cr.)
E672 Econometrics II (3 cr.)

Information Systems Management—electives to be chosen from:
V516 Managing Public Information Systems (3 cr.)
L544 Introduction to Information Science (3 cr.)

L643 Computer Applications in Information Systems (4 cr.)
L644 Information Storage and Retrieval Methods and Techniques (3 cr.)
L645 Systems Analysis and Design (4 cr.)
L646 Information Systems Administration (3 cr.)

Students desiring a general management and administrative behavior emphasis should, in consultation with an adviser, select courses in the field of organization theory and in the other administrative specialties listed above.

Planning Concentration Requirements

The Planning Concentration offers students the opportunity to develop conceptual and analytical tools applicable to a variety of substantive concerns in urban and regional development planning. At the core of this concentration are three required courses designed to promote an understanding of theoretical, methodological and substantive expertise in the execution of the planning function. These include:

V563 Seminar in the Planning Process (3 cr.)
V593 Analytical Methods in Planning and Policy Analysis (3 cr.)
V594 Principles of Urban and Regional Science (3 cr.)

In addition to these three required courses, students will select three elective courses chosen such that two of them fall into a sequence in one of the following three areas:

1. Planning Theory
2. Planning Methods
3. General Regional Systems

The third elective course should fall into one of the remaining two areas. Furthermore, to ensure a degree of substantive experience at least one of the three elective courses must be either a planning-relevant V585 Practicum in Public Affairs *or* a course chosen from the area of General Regional Systems. The following suggest the sequences that might be chosen from courses offered on the Bloomington campus.

1. Sequences in Planning Theory

Institutional Development:
a. S613 Complex Organizations (3 cr.) *and*
   S647 Social Change (3 cr.)
b. V664 Seminar in Complex Public Organization (3 cr.) *and*
   V665 Seminar in Policy and Administration (3 cr.)

Economic Development
a. E591 Quantitative Economic Policy and Planning (3 cr.) *and*
   E793 Seminar in Planning Strategies and Techniques (3 cr.)
b. V576 Comparative and International Development (3 cr.) *and*
   V577 Comparative and International Economics (3 cr.)

Philosophical Issues in Planning and the Social Sciences:
a. X454 The History and Philosophy of Social Science (3 cr.) *and*
   X492 Foundations of Scientific Inference (3 cr.)
b. X552 Survey of the Philosophy of Science (3 cr.) *and*
   X654 Seminar: Philosphy of the Social Sciences (3 cr.)

2. Sequences in Planning Methods

Information Systems:
a. V516 Managing Public Information Systems (3 cr.) *and*
   P507 Management Information Systems Applications (3 cr.)
b. K511 Fundamentals of Mathematical Optimization (3 cr.) *and*
   P525 Operations Information and Control Systems (3 cr.)

Methods of Regional Economic Analysis:
a. V533 Applied Urban Economics (3 cr.) *or*
   G630 Methods of Urban and Regional Analysis (3 cr.) *and*
   G631 Problems and Policy for Urban Development (3 cr.)

Methods of Financial Planning and Analysis:
a. V525 Public Financial Administration (3 cr.) *and*
   V610 Seminar in Government Budget and Program Analysis (3 cr.)
b. V665 Seminar in Policy and Administration (3 cr.) *or*
   V666 Seminar in Public Expenditure Theory and Administration (3 cr.) *and*
   V667 Seminar in Public Capital and Debt Theory and Administration (3 cr.) *or*
   V668 Problems in Federal Fiscalism (3 cr.)

Spatial Analysis:
a. G413 Location Theory (3 cr.) *or*
   G488 Spatial Analysis (3 cr.) *and*
   G515 Mathematical Models in Geography (3 cr.)

Quantitative Decision Analysis:
a. K511 Fundamentals of Mathematical Optimization (3 cr.) *and*
   K515 Quantitative Analysis in Decision-Making (3 cr.) *or*
   K520 Introduction to Operations Research (3 cr.) *or*
   K525 Quantitative Systems Analysis (3 cr.)
b. K506 Introduction to Probabilistic Models (3 cr.) *and*
   K615 Stochastic Processes (3 cr.)

Economic Analysis:
a. E671 Econometrics I (3 cr.) *and*
   E672 Econometrics II (3 cr.)

Applied Urban Planning Methods:
a. Three of these 2 cr. modules: V530 Urban Physical Structure, V531 Urban Social Structure, V534 Urban Technology, and V535 Urban Demography
b. V532 Urban Decision Making (3 cr.) *and*
   V533 Applied Urban Economics (3 cr.)

3. Sequences in General Regional Systems

Housing and Land Use:
a. G415 Advanced Urban Geography (3 cr.) *or*
   G417 Land Use Analysis (3 cr.) *or*
   L408 Real Estate Law (3 cr.) *or*
   E419 Location and Regional Economics (3 cr.) *and*
   V621 Seminar in Housing and Public Affairs (3 cr.)

Transportation
a. G412 Urban Transportation Analysis (3 cr.) *or*
   G414 Regional Transport Systems (3 cr.) *and*
   T501 The Transportation Dimension (3 cr.) *or*
   B633 Seminar in Public Transportation Policy (3 cr.)

Environmental:
a. V510 The Political, Economic and Regulatory Aspects of Environmental Control (3 cr.) *and*
   V511 Environmental Systems Dynamics (3 cr.)
b. V527 Applied Ecology (3 cr.) *and*
   V620 Environmental Analsysis Workshop (3 cr.)

Socio-Economic Development Planning:
a. E448 Human Resources Development (3 cr.) *and*
   E548 Economics of Manpower Planning (3 cr.)
b. E591 Quantitative Economic Policy and Planning (3 cr.) *and*
   E592 Economic Development and Growth (3 cr.)
c. S352 Social Welfare Delivery Systems (3 cr.) *and*
   V630 Topics in Planning: Health Care Planning (3 cr.)

Although similar in purpose, the structure of the Planning Concentration on the Indianapolis campus differs in some important details. There, four concentration core courses are required with an additional six credit hours to be selected from a list planning-related electives.

Policy Analysis Concentration Requirements

The Policy Analysis concentration is designed for those interested in issues, methods, and skills involved in the analysis of complex policy problems in a variety of fields. Such capabilities are useful for careers as policy analysts found in such organizations as legislative staff agencies, budget agencies, executive policy planning and analysis agencies, and departmental analysis staffs at federal, state, and local levels of government. The concentration provides interdisciplinary education in a variety of analytical skills and conceptual approaches. Students apply these to a variety of substantive policy problems.

All students in the concentration take:
V593 Analytical Approaches in Planning and Policy Analysis
V691 Seminar in Problems and Issues in Policy Analysis

Students also choose two of the following courses:
V562 Program Evaluation
V595 Managerial Decision-Making
V610 Seminar in Government Budget and Program Analysis
V662 Seminar in Productivity and Program Administration

In consultation with the Policy Analysis concentration adviser, students choose two electives. Possible examples include:
Y665 Policy Analysis 1 and 2
E562 Analysis of Public Expenditure Programs
K520 Introduction to Operations Research
K525 Quantitative Systems Analysis
V526 Applied Mathematics in Environmental Science
E671 Econometrics I

Public Financial Administration Concentration Requirements

Courses in the concentration focus on technical skills necessary for budget preparation, analysis, and operation, tax system policy and administration and public financial planning. Students often elect double concentrations that combine public financial administration with urban administration, public labor relations, comparative and international affairs, or management of public affairs. The concentration includes 18 credit hours.

The following courses are required for all students selecting the Public Financial Administration concentration:

V525 Public Financial Administration (3 cr.)
V660 Cases and Problems in Fiscal Administration (3 cr.)

When appropriate and approved, the following may be substituted:
V585 Practicum in Public Affairs (cr. arr.) *or*
V590 Research in Public Affairs (1-3 cr.)
A508 Accounting for Public Administration (3 cr.)

Depending on the interest of the student, two of the following five specialization courses may be selected:

V609 Seminar in Revenue Policy and Administration (3 cr.)
V610 Seminar in Government Budget and Program Analysis (3 cr.)
V668 Problems in Fiscal Federalism (3 cr.)
A523 Business Information Systems (3 cr.)
F545 Money and Capital Markets (3 cr.)

Electives may be selected from the following kinds of courses:

V516 Managing Public Information Systems (3 cr.)
V562 Public Program Evaluation (3 cr.)
V563 Seminar in the Planning Process (3 cr.)
V662 Seminar in Productivity and Program Evaluation (3 cr.)
V665 Seminar in Policy and Administration (3 cr.)
A514 Auditing Theory and Practice (3 cr.)

A515 Federal Income Taxes (3 cr.)
E560 Micro-Economic Aspects of Public Finance (3 cr.)
E561 Macro-Economic Aspects of Public Finance (3 cr.)
E562 Analysis of Public Expenditure Programs (3 cr.)
R501 Real Estate and Land Economics (3 cr.)

Public Safety Policy Concentration Requirements

The Public Safety Policy concentration offered on the Bloomington campus is designed to give the student a flexible format to explore his area(s) of interest within this broadly defined field. Possible areas of special development include criminal justice, highway traffic safety, judicial administration, and general public safety management. The concentration is designed to allow the student to develop his specialty in light of career goals. Students must complete at least eighteen credit hours of work.

Students are required to take 9 hours from the following list of courses:

V586 Public Safety in the United States (2-3 cr.)
V581 Public Safety Law (3 cr.)
(Students selecting the Public Safety Policy Concentration may substitute V581 Public Safety Law, for V540 Law and Public Affairs.)

Students select at least three hours from the following:
V582 Criminal Justice System (2-3 cr.)
V583 Highway Safety Systems (2-3 cr.)
V584 Emergency Services Systems (2-3 cr.)

Elective courses to be selected in consultation with the concentration adviser (9 credit hours):
V682 Seminar in Criminal Justice Planning, Management, and Issues (3 cr.)
V683 Seminar in Highway Safety Planning, Management, and Issues (3 cr.)
V684 Seminar in Emergency Services Planning, Management, and Issues (3 cr.)

Requirements for the Public Safety Policy concentration may be satisfied by courses taken from the following list or other courses which meet the student's needs. Final course selection will be determined by the consultation between the student and his/her adviser.

B694 Clinic in Parole Problems (1 cr.)
B701 Juvenile Court Problems (1 cr.)
B739 Criminal Procedure (2 cr.)
B776 Seminar in Criminal Law (2 cr.)
J551 Reporting the Law (3 cr.)
P410 Criminal Justice Information Systems (3 cr.)
P480 Law Enforcement and Societal Response (3 cr.)
P501 Proseminar: Forensic Studies I (4 cr.)
P680 Seminar: Issues in Forensic Studies (3 cr.)
S557 Public Health Accident Control (3 cr.)
S620 Deviance and Social Control (3 cr.)
S655 Problems in Driver Education and Highway Safety (3 cr.)

Traffic Safety Program Management Track: Under sponsorship of the U.S. Department of Transportaiton, National Highway Traffic Safety Administration, SPEA has adopted a specialized track in traffic safety program *development, management,* and *evaluation,* within the Public Safety Policy Concentration. Three courses of specialized traffic safety management instruction have been integrated into the M.P.A. curriculum. This track emphasizes the managerial and public affairs/administration skills and knowledge required in traffic safety management.

In addition to the required courses for the Public Safety concentration, students in the Traffic Safety Program must take the following courses:
V522 Traffic Safety Program Development (4 cr.)
V523 Traffic Safety Program Management (4 cr.)
V524 Traffic Safety Program Evaluation (4 cr.)

Public Sector Labor Relations Concentration Requirements
Students who select the Public Sector Labor Relations concentration take 6 hours of required work:

V570 Public Sector Labor Relations (3 cr.)
V675 Issues and Problems in Public Sector Labor Relations (3 cr.)

The remaining 12 hours of the concentration will be chosen from the following list of departmental offerings:

SPEA
V561 Public Personnel and Manpower Systems (3 cr.)
V562 Public Program Management and Evaluation (3 cr.)
V650 Topics in Public Personnel Management (3 cr.)
V661 Seminar in Public Personnel Administration (3 cr.)
V662 Seminar in Productivity and Program Evaluation (3 cr.)
V670 Topics in Public Sector Labor Relations (1-3 cr.)

Business
Z513 Administration of Manpower Systems (3 cr.)
Z514 Seminar in Industrial Relations (3 cr.)

Economics
E445 Collective Bargaining: Practices and Problems (3 cr.)
E447 Economics of the Labor Market (3 cr.)
E540 Labor Economics: Graduate Survey (3 cr.)
E547 Government Regulation of Labor Relations (3 cr.)

Education
A615 Workshop in School Law: Collective Negotiations (1-3 cr.)

Law
B663 Labor Law I (3 cr.)
B664 Labor Law II (3 cr.)
B788 Seminar in Labor Law (2 cr.)

Sociology
S410 Topics in Social Organization: Class, Status and Conflict (3 cr.)

Urban Affairs Concentration Requirements
Students who select Urban Affairs as their field of concentration may take a general sequence of urban courses or a specialized sequence of urban courses. All students are required to take V564, Urban Administration. In either the general sequence or the specialized sequence in the Urban Affairs concentration, up to three credits of V585, Practicum in Public Affairs, may be substituted for optional courses in the concentration.

For those selecting the *general* sequence, the remaining fifteen hours of course work in the Urban Affairs concentration require at least one seminar in urban economics or geography, one seminar in urban sociology, anthropology, or psychology, and one seminar in political science.

It is also possible for the student taking the Urban Affairs concentration to devise a more specialized sequence of courses totaling fifteen hours. Three examples of such specialized sequences are listed below and serve to illustrate work in urban planning, urban housing and land use, and urban transportation. Similar specialized course sequences in the Urban Affairs concentration can be developed with the concentration adviser.

Students selecting a specialized sequence in urban planning would take V563, Seminar in the Planning Process, and four additional courses to be selected from among:

B615 Land Use Control (3 cr.)
B789 Seminar in Land Use Control (2 cr.)
G415 Advanced Urban Geography (3 cr.)
G603 (S603) Methods of Urban and Regional Analysis (3 cr.)
G604 (S631) Problems and Policies for Urban Development (3 cr.)
G814 Seminar in Settlement and Urban Geography (3 cr.)

Students selecting a specialized sequence in urban housing and land use would take V563, Seminar in the Planning Process, and the following:

V621 Seminar in Housing and Public Affairs (3 cr.)
B615 Land Use Control (3 cr.)
B789 Seminar in Land Use Control (2 cr.)
L408 Real Property and Land Use Control (3 cr.)

Students selecting a specialized sequence in urban transportation would take the following courses:

G412 Urban Transportation Analysis (3 cr.)
T590 Research in Transportation (cr. arr.)
T607 Seminar in Transport Problems (3 cr.)
V633 Seminar in Public Transportation Policy (3 cr.)

Combined Doctor of Jurisprudence-Master of Public Affairs Program

The combined J.D.-M.P.A. Program enables the student to take a four-year sequence of courses leading to the receipt of both degrees. The student must have a bachelor's degree from an accredited institution of higher education and must apply to both the School of Law (Bloomington) and the School of Public and Environmental Affairs. If the applicant is admitted to only one school, he will be permitted to attend the school to which he is admitted and will, of course, be required to meet graduation requirements of that school.

It is preferred that the student apply to both schools simultaneously for the combined J.D.-M.P.A. Program. It is possible, however, for a person already enrolled in the School of Law to apply for admission to the School of Public and Environmental Affairs up to the completion of his second year of law study. It is also possible for a student enrolled in the School of Public and Environmental Affairs to seek admission to the School of Law up to the end of the first year of his M.P.A. course of study.

Grade averages in the School of Law and the School of Public and Environmental Affairs will be computed separately. Continuation in the program will require the student to meet academic standards in each school. A student failing in one school but meeting academic standards in the other may complete his work for the degree in the school in which he is able to meet the academic standards. Such completion must be upon the same conditions (credit hours, residency, etc.) as required of regular (non-combination) degree candidates, i.e., 82 credit hours for law and 48 credit hours for SPEA. Students will be eligible for honors in each school based on the criteria of each school.

Students enrolled in the combined program will be assigned co-advisers—one each from the faculty of the Law School and School of Public and Environmental Affairs. Co-advisers will be responsible for reviewing and counseling with respect to course selection of the students for each semester to assure attainment of educational objectives. Co-advisers will also assist in scheduling problems which the student might encounter as a result of the combined degree program.

The student will customarily spend his first academic year in the School of Law. Thereafter, the student will divide the second, third, and fourth years between the two schools, taking an average of seven to eight hours of law courses each semester and four to seven hours of SPEA courses. Thus, the student will have a continuing educational experience in both Schools.

Requirements for graduation for persons admitted to the combined J.D.-M.P.A. are as follows:

a. 76 credits of law courses, including all degree requirements (e.g., required first-year courses, research seminars, residency, etc.).

b. 34 credits of SPEA courses. Students are required to take the following M.P.A. core courses:

V502 Public Management (3 cr.)
V506 Quantitative Analysis for Public Management I (3 cr.)
V507 Quantitative Analysis for Public Management II (3 cr.)
V517 Public Management Economics (3 cr.)
V520 Environmental and Social Systems (3 cr.)
V560 Public Finance and Budgeting (3 cr.)
The remaining 16 hours will consist of 2 hours of SPEA credit for the joint research paper and the required courses for a concentration to be chosen by the student.

c. A research paper is to be completed in the last year of the combined program and jointly supervised by advisers from both schools. Credit for this supervised research will be arranged and will count toward degree requirements in both schools. A minimum of 4 credit hours must be taken with at least 2 hours of research counting for the J.D. degree and 2 hours of V590, Research in Public Affairs, counting toward the M.P.A. program. The topic must be selected no later than the end of the third year of the combined program, must include elements of both disciplines, and must be approved by the student's co-advisers.

Master of Science in Environmental Science

The increasingly technological nature of our society and the concerns that environmental effects must routinely be considered in formulating both public and private policy have created an unprecedented need for individuals whose expertise spans both administrative and technical fields. The goal of the Master of Science in Environmental Science (M.S.E.S.) program is to produce a new kind of professional who combines specialization in a particular environmental science area with the basic social science and administrative skills necessary for integrating this knowledge into a broader conceptual and operational framework. The degree allows specialization in either disciplinary or interdisciplinary applied environmental science areas.

The M.S.E.S. degree is offered by the School of Public and Environmental Affairs with the cooperation of several departments in the Graduate School.

A bachelor's degree in a physical or life science, engineering, mathematics, or its equivalent is required for consideration for admission to the two-year program. At least a B average in undergraduate work is expected. Students who have *not* had courses in differential and integral calculus and in statistics will be required to take these during their first year in the program in addition to the other degree requirements. Students who have *not* had a basic course in computer programming (FORTRAN recommended) should plan to take either a credit or noncredit programming course during their first year in the program. Students who have *not* had at least two semesters of chemistry with laboratories, including coverage of organic chemistry, will be required to take appropriate work in chemistry (usually C102 or C341) in addition to the other degree requirements.

The M.S.E.S. program requires a minimum of 48-credit hours distributed among four components: Basic Environmental Science (12 cr.), Environmental Management and Policy (9 cr.), Applied Environmental Science Concentration (21 cr.), and Professional Experience (6 cr.). Some students admitted to the program may have had courses that exempt them from some of the requirements. The credits from these course exemptions are usually used to build a stronger concentration.

A mid-career option is available to individuals with appreciable professional experience in environmental science or management. On the basis of case-by-case petitions, the degree requirements may be modified to accommodate the special backgrounds and needs of those with such experience. For example, a different relative emphasis in credit hours among the major components of the degree may be appropriate for mid-career students. Experience may also be accepted in lieu of one to six credit hours of course work in other components of the degree.

Students wishing information concerning the M.S.E.S. program offered at Bloomington should contact:

Dr. J. C. Randolph
Director, Environmental Programs
School of Public and Environmental Affairs
The Poplars, Room 438
400 E. 7th Street
Bloomington, IN 47405
Phone: (812) 337-9485

A. **Basic Environmental Science** (12 cr.) All four courses are required.
SPEA V526 Mathematics for Environmental Science (3 cr.)
SPEA V527 Applied Ecology (3 cr.)*
SPEA V536 Environmental Chemistry (3 cr.)*
SPEA V547 Applied Earth Science (3 cr.)*

*(These courses have optional laboratories, each of which may be appropriate in the concentrations for some students.)

B. **Environmental Management and Policy** (9 cr.)
Three courses are required.
1. SPEA V517 Public Management Economics (3 cr.) *or*
   five hours of undergraduate economics with a grade of A or B
2. Two of the following:
   LAW B660 Environmental Law (3 cr.)
   SPEA V540 Law and Public Affairs (3 cr.)
   SPEA V549 Environmental Planning (3 cr.)
   SPEA V552 Environmental Engineering (3 cr.)
   SPEA V560 Public Finance and Budgeting (3 cr.)

C. **Applied Environmental Science Concentration** (21 cr.)
Each student's concentration will be developed individually in consultation with a faculty member from the environmental science concentration field and in consideration of the student's background and professional objectives. The list below provides *examples* of groups of courses within which concentrations may be chosen. Students whose backgrounds and career needs are not well served by a concentration in one of the areas listed may seek faculty advice and propose an individual concentration designed for their own goals.

(All courses are three credits unless specified otherwise.)

1. **Environmental Impact Analysis**
BIOL B364 Summer Flowering Plants
BIOL L465 Advanced Field Biology
BIOL L575 Ecosystem Ecology
BIOL Z468 Limnology (4 cr.)
BIOL Z570 Stream Limnology
BIOL Z571 Production Limnology
GEOG G335 Photogrammetry and Remote Sensing
GEOG G336 Environmental Remote Sensing
GEOG G404 Elements of Soil Science
GEOG G405 Hydroclimatology
GEOG G417 Land Use Analysis
GEOG G435 Cartography and Remote Sensing
GEOG G477 Advanced Climatology and Meteorology
GEOL G551 Advanced Hydrogeology
GEOL G635 Soil Geomorphology
SPEA V528 Applied Ecology Laboratory
SPEA V537 Environmental Chemistry Laboratory
SPEA V548 Applied Earth Science Laboratory
SPEA V549 Environmental Planning
SPEA V552 Environmental Engineering
SPEA V553 Differential Equations in Environmental Science
SPEA V620 Environmental Analysis Workshop (1-3 cr.)

2. **Water Resources**
BIOL M420 Environmental Microbiology
BIOL Z468 Limnology (4 cr.)
BIOL Z570 Stream Limnology
BIOL Z571 Production Limnology
GEOG G404 Elements of Soil Science
GEOG G405 Hydroclimatology
GEOG G407 Advanced Physical Geography
GEOG G477 Advanced Climatology and Meteorology
GEOL G415 Principles of Geomorphology
GEOL G451 Principles of Hydrogeology
GEOL G551 Advanced Hydrogeology
GEOL G635 Soil Geomorphology
SPEA V537 Environmental Chemistry Laboratory
SPEA V553 Differential Equations in Environmental Science
SPEA V620 Environmental Analysis Workshop (1-3 cr.)

3. **Geography and Land-Use Analysis**
GEOG G304 Climatology and Meteorology
GEOG G335 Photogrammetry and Remote Sensing
GEOG G336 Environmental Remote Sensing
GEOG G350 Field Methods in Physical Geography
GEOG G404 Elements of Soil Science
GEOG G405 Hydroclimatology
GEOG G407 Advanced Physical Geography
GEOG G413 Location Theory
GEOG G417 Land Use Analysis
GEOG G435 Cartography and Graphics
GEOG G477 Advanced Climatology and Meteorology
GEOG G535 Advanced Cartography
GEOG G802 Seminar in Physical Geography
GEOG G830 Readings in Geography (1-3 cr.)
LAW B660 Environmental Law
SPEA V528 Applied Ecology Laboratory
SPEA V548 Applied Earth Sciences Laboratory
SPEA V549 Environmental Planning
SPEA V552 Environmental Engineering
SPEA V553 Differential Equations in Environmental Science

4. **Geology**
GEOL G316 Mineral Resources
GEOL G406 Introduction to Geochemistry
GEOL G413 Introduction to Earth Physics
GEOL G415 Principles of Geomorphology
GEOL G416 Economic Geology
GEOL G451 Principles of Hydrogeology
GEOL G535 Quaternary Geology
GEOL G537 Organic Geochemistry
GEOL G551 Advanced Hydrogeology
GEOL G587 Organic Geochemistry
GEOL G626 Industrial Minerals
GEOL G635 Soil Geomorphology
SPEA V537 Environmental Chemistry Laboratory
SPEA V548 Applied Earth Science Laboratory

5. **Ecology**
BIOL L473 Ecology
BIOL L474 Field and Laboratory Ecology (2 cr.)
BIOL L560 Physiological Ecology
BIOL L565 Community Ecology
BIOL L570 Seminar in Ecology and Environmental Biology (2 cr.)
BIOL L575 Ecosystem Ecology

BIOL L578 Population Biology
BIOL Z465 Evolution
BIOL Z468 Limnology (4 cr.)
BIOL Z508 Advanced Ornithology (4 cr.)
BIOL Z540 Genetics of Populations (2 cr.)
BIOL Z570 Stream Limnology
BIOL Z571 Production Limnology
SPEA V528 Applied Ecology Laboratory

6. **Field Biology**
BIOL B364 Summer Flowering Plants (5 cr.)
BIOL L465 Advanced Field Biology
BIOL M420 Environmental Microbiology
BIOL Z383 Laboratory in Entomology (2 cr.)
BIOL Z406 Vertebrate Zoology (5 cr.)
BIOL Z468 Limnology (4 cr.)
BIOL Z508 Advanced Ornithology (4 cr.)
BIOL Z570 Stream Limnology
SPEA V528 Applied Ecology Laboratory

7. **Microbiology**
BIOL B340 Algae (5 cr.)
BIOL B351 Fungi
BIOL B352 Fungi: Laboratory (2 cr.)
BIOL M420 Environmental Microbiology
BIOL M430 Virology
BIOL M435 Viral-Medical Laboratory (1-3 cr.)
BIOL M440 Medical Microbiology
BIOL M445 Medical Microbiology: Laboratory (2 cr.)
BIOL M460 Biology of Procaryotes
BIOL M465 Biology of Procaryotes: Laboratory
BIOL M525 Procaryotic Physiology
BIOL M540 Medical Microbiology Lecture
SPEA V537 Environmental Chemistry Laboratory
SPEA V552 Environmental Engineering

D. **Professional Experience** (6 cr.)
Each recipient of the M.S.E.S. degree must obtain professionally relevant experience through a guided on-the-job internship, advanced project (e.g., in environmental impact analysis), or through research directly related to a particular employment role. A report, paper, or thesis is usually prepared as part of this component. This will normally occur during the final year of the program.

SPEA V589 Practicum in Environmental Science (Arranged with SPEA Internship Office) *or*
SPEA V625 Research in Environmental Science

Environmental Science Double Masters Program

The Double Masters programs are three-year, 60-credit hour programs that give the student more depth and breadth than is generally possible with a single degree. Both degrees will be awarded simultaneously after the student has completed the requirements for both degrees.

A student must make application to and be accepted by both the School of Public and Environmental Affairs and either the Program in Ecology and Evolutionary Biology of the Department of Biology, the Department of Geography, or the Department of Geology. The student must select a supervisory committee of at least four faculty members, representing both SPEA and either Ecology and Evolutionary Biology, Geography, or Geology.

Course requirements for the three double masters programs include:

1. Basic Environmental Science Courses (12 cr.)

2. **Environmental Management and Policy Courses (10 cr.)**
   (Please see M.S.E.S. description for complete listings. These are required for all three double masters.)
3. **Ecology and Evolutionary Biology Concentration Courses**
4. **Geography Concentration Courses**
5. **Geology Concentration Courses**
   The student should consult with the supervisory committee to determine the particular courses that will comprise the concentration.
6. **Research (6 cr.)**

Master of Public Affairs
Double Concentration: Planning and Environmental Policy

There is an increasing emphasis on incorporating environmental data into the planning process. The double concentration in planning and environmental policy is a unique program designed to fill the need for environmental planners. Environmental planners are seen as a critical link between city officials and environmental consultants. They are able to critically analyze the work done by the consultants, and interpret the results within a public policy perspective.

Admission Requirements
Admission requirements are the same as those for admission into the general M.P.A. program.

Degree Requirements
A. At least 48-credit hours must be completed for the M.P.A. degree with a double concentration in planning and environmental policy.
B. M.P.A. Core Courses (21 cr.).
C. Requirements for Double Concentration. (All courses are three credits unless specified otherwise.)

1. Planning Core
SPEA V563 The Planning Process
SPEA V593 Analytical Methods in Planning and Policy Analysis (P: V507)
SPEA V594 Principles of Urban and Regional Science
SPEA V549 Environmental Planning

2. Environmental Science and Management
SPEA V527 Applied Ecology
SPEA V547 Applied Earth Science
SPEA V552 Environmental Engineering

3. Additional Courses (two courses from one of the following groups)
Spatial Analysis
GEOG G413 Location Theory
GEOG G488 Spatial Analysis
GEOG G515 Mathematical Models in Geography
Regional Land Use
BUS L408 Real Estate Law
ECON E419 Location and Regional Economics
GEOG G414 Regional Transportation Systems
GEOG G415 Advanced Urban Geography
GEOG G417 Land Use Analysis
LAW B615 Land Use Control
Terrestrial Systems
GEOG G335 Photogrammetry and Remote Sensing
GEOG G336 Environmental Remote Sensing
GEOG G404 Elements of Soil Science
GEOG G407 Advanced Physical Geography
GEOG G435 Cartography and Remote Sensing

SPEA V528 Applied Ecology Laboratory
SPEA V548 Applied Earth Science Laboratory
SPEA V620 Environmental Analysis Workshop
Water Resources
BIOL M420 Environmental Microbiology
BIOL Z468 Limnology (4 cr.)
GEOG G405 Hydroclimatology
GEOL G451 Principles of Hydrogeology
GEOL G551 Advanced Hydrogeology

Doctor of Philosophy
Political Science and Public Affairs

Department of Political Science Graduate Faculty
University Professors Buehrig, Willbern; *Arthur F. Bentley Professor* Caldwell; *Professors* B. Carter, G. Carter, Chapman, Christoph, Diamant, Hammer, Harik, Liebenow, Lovell, Miller, Morris, E. Ostrom, V. Ostrom, Rieselbach, Ryan, Siffin, Zinnes; *Associate Professors* Fishel, Furniss, Hershey, Hoole, McPheron, Montaperto, O'Meara, Ritter, Starr, Stryker, Tilton, Weber; *Adjunct Associate Professor* Hattery; *Assistant Professors* Bielasiak, Carmines, Jackson, Keller, Kuklinsky, Metlay

School of Public and Environmental Affairs Graduate Faculty
University Professor Wilbern; *Arthur F. Bentley Professor* Caldwell; *Professors* Bonser, Hopkins, Jumper, Meinschein, O'Lessker; *Associate Professors* Black, McCaffery, McGregor, Mendelsohn, Mikesell, Miller, Nelson, O'Meara, Patterson, Rubin, and Wise.

Special Departmental and School Requirements
Admission: Students may be admitted to the joint Ph.D. program from four possible categories: new graduate students without graduate degrees; political science graduate students choosing this program; students continuing beyond the SPEA M.P.A. degree; and other students with prior master's degrees. Students without the master's degree may be admitted initially by either SPEA or the Department of Political Science to a master's program or as Special Students. A student may apply for admission to the Ph.D. program any time after completing at least one semester of full-time study in graduate work in political science or SPEA at Indiana University, Bloomington. Those seeking admission to the joint program (and students with master's degrees from other institutions seeking preliminary admission as Special Students) are subject to approval by a joint SPEA-Political Science Committee.

Doctor of Philosophy Degree Requirements:
Fields of Study. The student will select two fields in political science, from the following: American politics; international relations; comparative politics; political theory and methodology; public administration, law and policy. In addition, the student will select two concentrations from SPEA. SPEA fields may be selected from the following concentrations or combinations of concentrations as approved by the supervisory committee; comparative and international affairs; environmental policy; management of public affairs; policy analysis; public financial administration; public safety policy; public sector labor relations; urban affairs; planning; and health systems administration.

Course Requirements. All students who have not already taken Y570, Introduction to the Study of Politics, and V506 and V507, Quantitative Analysis for Public Management I and II, or their equivalents, will be expected to take them during the first year after admission. Each student will be expected to complete at least seven seminars in Political Science and seven graduate level courses in SPEA, each with a grade of 2.0 or better, averaging at least a grade of 3.0 in all courses, prior to nomination to candidacy for the Ph.D. degree.

Minor. Every student will be required to attain competence in at least one field outside political science and SPEA. The structure of the outside minor, which may be taken in one, or

more than one, department outside political science or SPEA, depends upon the educational objectives of the student. Requirements for the outside minor vary in different departments and programs.

Language and Research Skill. The student must demonstrate proficiency in one of the following languages or research skills: French, German, Spanish, Russian, mathematics, logic, statistics, computer science, or another language or research skill with approval of the supervisory committee and the Dean of the Graduate School. Students will not be permitted to take qualifying examinations until these requirements are satisfied, except that examinations may be taken in the semester in which the last of the requirements is being completed.

Qualifying Examination. The qualifying examination is both written and oral covering both the major and minor fields. The written qualifying examination is administered three times a year, in the autumn, winter, and spring.

Advisory Committee. The advisory committee will consist of at least two faculty members from SPEA, two from political science, and one from the outside minor. The chairman of the committee serves as the student's principal adviser. The committee will supervise the student's course of study and will conduct the qualifying examination. Fairly early in the student's work—but in no case later than the second semester after admission to the program—the advisory committee will provide the student with a formal review of his progress toward the degree.

SPEA Courses
V502 Public Management (3 cr.)
V504 Public Organization (3 cr.)
V506 Quantitative Analysis for Public Management I (3 cr.)
V507 Quantitative Analysis for Public Management II (3 cr.)
V508 Topics in Quantitative Analysis (3 cr.)
V510 The Political, Economic, and Regulatory Aspects of Environmental Control (2-3 cr.)
V511 Environmental Systems Dynamics (3 cr.)
V513 Energy and Material Residuals in the Environment (2-3 cr.)
V514 Problems in Public Utilities Regulation and Management (3 cr.)
V515 Technology Assessment (3 cr.)
V516 Public Management Information Systems (3 cr.)
V517 Public Management Economics (3 cr.)
V520 Environmental and Social System (3 cr.)
V522 Traffic Safety Program Development (4 cr.)
V523 Traffic Safety Program Management (4 cr.)
V524 Traffic Safety Program Evaluation (4 cr.)
V525 Public Financial Administration (3 cr.)
V526 Applied Mathematics for Environmental Science (3 cr.)
V527 Applied Ecology (3 cr.)
V528 Applied Ecology Laboratory (3 cr.)
V536 Environmental Chemistry (3 cr.)
V537 Environmental Chemistry Laboratory (3 cr.)
V540 Law and Public Affairs (3 cr.)
V545 U.S. Public Health Policy I (3 cr.)
V546 U.S. Public Health Policy II (3 cr.)
V547 Applied Earth Science (3 cr.)
V548 Applied Earth Science Laboratory (3 cr.)
V549 Environmental Planning (3 cr.)
V550 Topics in Public Affairs (cr. arr.)
V552 Environmental Engineering (3 cr.)
V553 Differential Equations in Environmental Science (3 cr.)
V555 Topics in Environmental Science (2-3 cr.)
V560 Public Finance and Budgeting (3 cr.)
V561 Public Personnel and Manpower Systems (2-3 cr.)
V562 Public Program Evaluation (3 cr.)
V563 Seminar in Planning Process (3 cr.)

V564 Urban Administration (3 cr.)
V570 Public Sector Labor Relations (3 cr.)
V571 State Policy Processes (3 cr.)
V575 Comparative and International Administration (3 cr.)
V576 Comparative and International Development (3 cr.)
V577 Comparative and International Economics (3 cr.)
V579 Readings in Environmental Science (cr. arr.)
V580 Readings in Public Affairs (1-3 cr.)
V581 Public Safety Law (3 cr.)
V582 Criminal Justice Systems (2-3 cr.)
V586 Public Safety in the U.S. (2-3 cr.)
V590 Research in Public Affairs (1-3 cr.)
V593 Analytical Methods in Planning and Policy Analysis (3 cr.)
V594 Principles of Urban and Regional Science (3 cr.)
V595 Managerial Decision-Making (2-3 cr.)
V609 Seminar in Revenue Theory and Administration (3 cr.)
V610 Seminar in Government Budget and Program Analysis (3 cr.)
V620 Environmental Analysis Workshop (1-3 cr.)
V621 Seminar in Housing and Public Affairs (3 cr.)
V625 Research in Environmental Science (1-3 cr.)
V630 Topics in Planning (3 cr.)
V631 Seminar in Health Planning (3 cr.)
V633 Seminar in Public Transportation Policy (3 cr.)
V650 Topics in Public Personnel Management (1-3 cr.)
V660 Cases and Problems in Fiscal Administration (3 cr.)
V661 Seminar in Public Personnel Administration (3 cr.)
V662 Seminar in Productivity and Program Evaluation (3 cr.)
V663 Seminar in Regulatory Process (3 cr.)
V664 Seminar in Complex Public Organization (3 cr.)
V665 Seminar in Policy and Administration (3 cr.)
V666 Seminar in Public Expenditure Theory and Administration (3 cr.)
V667 Seminar in Public Capital and Debt Theory and Administration (3 cr.)
V668 Problems in Fiscal Federalism (3 cr.)
V670 Topics in Public Sector Labor Relations (1-3 cr.)
V675 Issues and Problems in Public Sector Labor Relations (3 cr.)
V682 Seminar in Criminal Justice Planning, Management, and Issues (3 cr.)
V683 Seminar in Highway Safety Planning, Management, and Issues (3 cr.)
V684 Seminar in Emergency Services Planning, Management, and Issues (3 cr.)
V685 Seminar in State and Local Legislatures (3 cr.)
V690 Seminar in the Public Policy Process (3 cr.)
V691 Seminar in Problems and Issues in Policy Analysis (3 cr.)
V890 Thesis (Ph.D.) (cr. arr.)

Political Science Courses
Y300 American Politics for Foreign Students (3 cr.)
Y311 National Security in a Democratic Polity (3 cr.)
Y312 Workshop in State and Local Government (3 cr.)
Y313 Environmental Policy (3 cr.)
Y330 Comparative Political Analysis (3 cr.)
Y333 Chinese Political System (3 cr.)
Y334 Japanese Political System (3 cr.)
Y337 Latin American Political Systems (3 cr.)
Y338 African Political Systems (3 cr.)
Y339 Middle Eastern Political Systems (3 cr.)
Y340 Eastern European Political Systems (3 cr.)
Y342 Topics on the Regional Politics in Africa (3 cr.)
Y343 Developmental Problems of Non-Industrial Societies (3 cr.)
Y364 International Organization: Political and Security Aspects (3 cr.)
Y365 International Organization: Social and Economic Aspects (3 cr.)
Y367 International Law (3 cr.)
Y368 Soviet Foreign Policy (3 cr.)

Y369 Introduction to East Asian Politics (3 cr.)
Y370 Interpretations of International Politics (2 cr.)
Y371 Workshop in International Topics and American Foreign Relations for Teachers and Community Leaders (3 cr.)
Y372 The Analysis of International Politics (3 cr.)
Y381 History of Political Theory I (3 cr.)
H382 History of Political Theory II (3 cr.)
H383 American Political Ideas I (2 cr.)
Y384 American Political Ideas II (2 cr.)
Y385 Russian Political Ideas (3 cr.)
Y386 East Asian Political Ideas (3 cr.)
Y387 Near Eastern Political Ideas (3 cr.)
Y388 Marxist Theory (3 cr.)
Y390 Micropolitics and Organizational Behavior (3 cr.)
Y391 Political Decision Making (3 cr.)
Y392 Problems of Contemporary Political Philosophy (3 cr.)
Y393 Logic of Political Association (3 cr.)
Y394 Public Policy Analysis (3 cr.)
Y550 Political Science and Political Education (3 cr.)
Y570 Introduction to the Study of Politics (3 cr.)
Y580 Research Methods in Political Science (3 cr.)
Y581 Political Data Analysis (3 cr.)
Y591 The Use of Computing Machinery in Political Science (1 cr.)
Y592 Bibliography of Political Science (1 cr.)
Y657 Comparative Politics (3 cr.)
Y661 American Politics (3 cr.)
Y663 Political and Administrative Development (3 cr.)
Y665 Public Law and Policy (3 cr.)
Y669 International Relations (3 cr.)
Y671 Public Administration (3 cr.)
Y673 Empirical Theory and Methodology (3 cr.)
Y675 Political Philosophy (3 cr.)
Y681 Readings in Comparative Politics (1-4 cr.)
Y683 Readings in American Politics (1-4 cr.)
Y685 Readings in Public Administration, Law and Policy (1-4 cr.)
Y687 Readings in International Relations (1-4 cr.)
Y689 Readings in Political Theory and Methodology (1-4 cr.)
Y757 Comparative Politics (3 cr.)
Y761 American Politics (3 cr.)
Y763 Political and Administrative Development (3 cr.)
Y765 Public Law and Policy (3 cr.)
Y769 International Relations (3 cr.)
Y771 Public Administration (3 cr.)
Y773 Empirical Theory and Methodology (3 cr.)
Y775 Political Philosophy (3 cr.)
Y780 Directed Research in Political Science (1-4 cr.)
Y880 Thesis (A.M.) (1-4 cr.)
Y890 Thesis (Ph.D.) (cr. arr.)
G591 Methods of Population Analysis and Their Applications (3 cr.)

Doctor of Philosophy
Regional Analysis and Planning

Department of Geography Graduate Faculty:
Professors Black, Haynes, Hidore, Taaffe; *Associate Professors* Bennett, Kingsbury, Mackay, Miller, Onesti, Wohlenberg; *Assistant Professors* Conway, Davis, Greer, Odland.

School of Public and Environmental Affairs Graduate Faculty:
University Professor Willbern; *Arthur F. Bentley Professor* Caldwell; *Professors* Black,

Bonser, Haynes, Hopkins, Jumper, Meinschein, Mikesell, O'Lessker; *Associate Professors* McCaffery, McGregor, Miller, Nelson, O'Meara, Patterson, Rubin, Wise.

Special Departmental and School Requirements

Admission. Students may be admitted to the Regional Analysis and Planning Ph.D. program from four possible categories: new graduate students without graduate degrees; geography graduate students choosing this program; students continuing beyond the SPEA M.P.A. degree; and other students with prior master's degrees. Students without the master's degree may apply for admission to either SPEA or Geography for their master's program or they may apply to the program's admission committee.

The Regional Analysis and Planning program admission committee is composed of two representatives from each unit above (SPEA and Geography). Evidence considered by the admissions committee in evaluating applications to the program include: (1) student performance as an undergraduate student; (2) student performance in any graduate work completed in Geography, SPEA, or elsewhere; and (3) any evidence of scholarly skill and attainment as evidenced by previous written work and faculty evaluations. If an application for the program is rejected by the committee, the applicant may reapply after at least one additional semester of course work has been completed.

Doctor of Philosophy Degree Requirements:

Fields of Study. The student will complete a required major consisting of courses in planning, quantitative methods, and research seminars. Each student must then select a concentration area. The concentrations approved are: Socioeconomic Systems and Environmental Systems. Students must complete 15 graduate hours of course work in the concentration selected.

Course Requirements. A 31 credit hour core curriculum consisting of Seminar in the Planning Process (V563), Research Problems in Geography (G500), Principles of Urban and Regional Science (V594), Public Finance and Budgeting (V560), and Law and Public Affairs (V540) must be completed by all students. In addition, each candidate must complete the program's quantitative requirements which include Advanced Quantitative Methods in Geography (G504), Mathematical Models in Geography (G515), and Analytical Methods in Planning and Policy Analysis (V593), and two seminars from those approved for this program. The student must complete these required courses with a grade of B or better prior to nomination to candidacy for the Ph.D. degree. A minimum of 90 graduate credit hours of work beyond the B.A. level is required.

Minor. Every student will be required to attain competence in at least one field outside geography and SPEA. The minor should complement the program and contribute to educational objectives of the student. Possible minors would include: Business (Applied Urban Economics); Business (Quantitative Business Analysis); Business (Transportation); Urban Affairs, Computer Science, or, Recreation (Community and Recreational Planning). Requirements for the minor are set by the department or program which offers it. The minor selected must be from the list of approved minors in the *Graduate School Bulletin* (unless exceptions are approved by the Graduate School).

Advisory Committee. The program's Admissions Committee will serve as the student's Advisory Committee during the first semester in residence. By the beginning of the second semester the student should select an adviser. The adviser, with the approval of the student, will select the members of the Advisory Committee, which will consist of at least two faculty members from SPEA, two from Geography, and one from the outside minor. The student's principal adviser will serve as chairman of the Advisory Committee. The Advisory Committee will supervise the student's course of study and will conduct the qualifying examination.

Qualifying Examination. The qualifying examination will consist of written and oral parts and is intended to evaluate the student's substantive knowledge and analytical ability over the core requirements and concentration area. Whether the outside minor is covered on this examination rests with the department offering the minor.

Candidacy and Research Committee. Following successful completion of the qualifying examination, the student should identify a dissertation topic and prepare a proposal on that topic. Depending on the topic selected, the student may wish to identify a new adviser and committee for his dissertation work. This Research Committee will also be selected by the new adviser and the student, and must include at least two members from Geography, two from SPEA, and a representative of the outside minor. The Advisory Committee may also serve as the Research Committee. The committee identified is appointed by the Graduate School on recommendation of the Department of Geography and SPEA. Following a formal presentation of the dissertation proposal and its acceptance by the Research Committee, the student is admitted to candidacy for the Ph.D.

Final Examination. A final examination or defense of the dissertation is required.

A. **Core Courses** (Required)
1. Group 1 (Basic)
   V563 Seminar in the Planning Process (3 cr.)
   G500 Research Problems in Geography (4 cr.)
   V594 Principles of Urban and Regional Science (3 cr.)
   V560 Public Finance and Budgeting (3 cr.)
   V540 Law and Public Affairs (3 cr.)
2. Group 2 (Quantitative)
   G504 Advanced Quantitative Methods in Geography (3 cr.)
   V593 Analytical Methods in Planning and Policy Analysis (3 cr.)
   G515 Mathematical Models in Geography (3 cr.)
3. Group 3 (Seminars: 2 required)
   G814 Seminar in Settlement and Urban Geography (3 cr.)
   G825 Seminar in Transport Analysis (3 cr.)
   G803 Seminar in Economic Geography (3 cr.)
   G802 Seminar in Physical Geography (3 cr.)

B. Field of Concentration—no less than 15 hours of coursework should emphasize one of the subject areas below:
1. Socioeconomic Systems
   G412 Urban Transportation Analysis (3 cr.)
   G414 Regional Transport Systems (3 cr.)
   G415 Advanced Urban Geography (3 cr.)
   V502 Public Management (3 cr.)
   V504 Public Organization (3 cr.)
   V517 Public Management Economics (3 cr.)
   V525 Public Financial Administration (3 cr.)
   G531 Applied Urban Economics (3 cr.) (Business)
   V562 Public Program Evaluation (2-3 cr.)
   V564 Urban Administration (3 cr.)
   V580 Readings in Public Affairs (3 cr.)
   V590 Research in Public Affairs (3 cr.)
   L612 Land Use Control (3 cr.) (Law)
   V621 Seminar in Housing and Public Affairs (3 cr.)
   G630 Methods of Urban and Regional Analysis (3 cr.) (Business)
   G631 Problems and Policy for Urban Development (3 cr.) (Business)
   V633 Seminar in Public Transportation Policy (3 cr.)
   G830 Readings in Geography (3 cr.)
   G840 Research in Geography (cr. arr.)
2. Environmental Systems
   G304 Climatology (3 cr.)
   G404 Elements of Soil Science (3 cr.)
   G405 Hydroclimatology (3 cr.)
   G417 Land Use Analysis (3 cr.)
   G477 Advanced Climatology (3 cr.)
   V510 The Political, Economic, and Regulatory Aspects of Environmental Control (2-3 cr.)
   V511 Environmental Systems Dynamics (3 cr.)
   V527 Applied Ecology (3 cr.)

V528 Applied Ecology Laboratory (3 cr.)
V547 Applied Earth Science (3 cr.)
V548 Applied Earth Science Laboratory (3 cr.)
V549 Environmental Planning (3 cr.)
V552 Environmental Engineering (3 cr.)
V555 Topics in Environmental Science (3 cr.)
V580 Readings in Public Affairs (1-3 cr.)
V590 Research in Public Affairs (1-3 cr.)
G830 Readings in Geography (3 cr.)
G840 Research in Geography (cr. arr.)

The Public and Environmental Affairs Doctoral Minors

The School of Public and Environmental Affairs provides course work and other student-related activities for those working toward doctoral degrees in other schools and colleges of Indiana University who select Public and Environmental Affairs as their minor field. Three such minor fields are available: General Public and Environmental Affairs, Environmental Studies, and Urban Affairs.

General Public and Environmental Affairs Minor
To satisfy the General Public and Environmental Affairs Minor, the doctoral student must do the following *after obtaining approval from his or her doctoral committee:*

1. Secure an adviser from the faculty of the School of Public and Environmental Affairs.
2. Select a minimum of 12 credit hours of course work, agreed upon by the student and the adviser, only 3 hours of which can be in V580 Readings in Public Affairs or V590 Directed Research.
3. Maintain a minimum grade-point average of 3.0 (A=4.0) in courses in the minor.

The adviser must agree to serve as the representative of the School of Public and Environmental Affairs in all examinations or other requirements of the student's doctoral program which relate to the minor field.

The Environmental Studies Minor
Students in Ph.D. programs at Indiana University may, with the consent of their committee, choose Environmental Studies as an outside minor. The minor is flexible and is usually designed by students in accordance with their needs.

Requirements
1. The Ph.D. candidate must secure a faculty adviser in consultation with the Director of Environmental Programs. The adviser may not be from the candidate's major department. The candidate's adviser will serve as the representative in all examinations or other requirements of the candidate's Ph.D. program that relate to the minor. The adviser shall decide on the character of the examination, if any, in the minor field, and shall certify that the candidate has met the requirements of the minor when s/he has done so.
2. The candidate must take at least twelve credit hours of graduate level courses related to Environmental Studies. These must be from at least two different disciplines outside the candidate's major department. The choice of courses should be made in consultation with the candidate's adviser and must be approved by the Director of Environmental Programs.

Acceptance of the proposed minor will be based on two criteria: (a) the courses must be a direct relationship to Environmental Studies and (b) the courses must not normally be required as part of the major or tool skill options in the student's major department.
3. A minimum grade-point average of 3.0 (B) must be maintained in courses used for the minor.

Courses in the minor program should be selected according to student interest. Students majoring in areas other than the natural sciences, for example, may wish to peruse carefully the offerings in natural science departments. Similarly, natural science students should examine course offerings in the social and behavioral sciences.

Students should note that although most courses from Business, Law, and SPEA have *not* been accepted for general use in the graduate school, approval can be sought for the inclusion of courses from these schools in the minor when they are especially appropriate to the student's objectives. Students should consult the *Bulletins* of SPEA, Schools of Business, Law, and Health, Physical Education and Recreation in addition to the *Graduate Bulletin* for additional course listings.

The Urban Affairs Minor

Students in doctoral programs at Indiana University may choose Urban Affairs as an outside minor. To offer Urban Affairs as a minor, the doctoral candidate must:

1. Secure a faculty adviser from the Urban Affairs Committee in consultation with the Director of the Urban Affairs Center; the faculty adviser must not be in the candidate's major department.
2. Take at least 12 credit hours of courses in Urban Affairs available for graduate credit from at least two different disciplines outside the candidate's major. The choice of courses must be made in consultation with the candidate's adviser from among those listed or appropriate substitutes.
3. Maintain a minimum grade-point average of 3.0 (A=4.0) in courses in the minor.

The candidate's adviser will serve as the representative of the Urban Affairs Committee in all examinations or other requirements of the candidate's doctoral program which relate to the minor. The adviser shall decide on the character of the examination, if any, in the minor field and shall certify that the candidate has met the requirements of the candidate's doctoral program which relate to the minor. The adviser shall decide on the character of the examination, if any, in the minor field and shall certify that the candidate has met the requirements of the minor when he has done so.

Courses Suitable for Doctoral Minor in Urban Affairs

Public and Environmental Affairs
V365 Urban and Regional Planning (3 cr.)
V564 Urban Administration (3 cr.)
V621 Seminar in Housing and Public Affairs (3 cr.)
V633 Seminar in Public Transportation Policy (3 cr.)

Afro-American Studies
A440 History of Education of Black Americans (3 cr.)

Anthropology
E380 Urban Anthropology (3 cr.)

Applied Economics
G531 Applied Urban Economics: Theory Problems and Policy (3 cr.)
G630 Methods of Urban and Regional Analysis (3 cr.)
G631 Problems and Policies for Urban Development (3 cr.)

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

Geography
G412 Urban Transportation Analysis (3 cr.)
G415 Advanced Urban Geography (3 cr.)
G814 Seminar in Settlement and Urban Geography (3 cr.)

History
A347 Cities and Urbanization in American History (3 cr.)
S870 Seminar in Latin American History (National Period)
Topic: Urbanization in Latin America (4 cr.)

Political Science
Y308 Urban Politics (3 cr.)
Y671 Public Administration Topic: Urban Administration (3 cr.)

Sociology
S426 Control of Crime (3 cr.)
S427 Social Conflict (3 cr.)
S565 Seminar in Community Power Structures (3 cr.)

Law School
B618 Introduction to Welfare Law (3 cr.)

Public Management Certificate Program

The Graduate Program of the School of Public and Environmental Affairs provides course work and special programs leading to the Public Management Certificate. A baccalaureate degree is required for admission to the program.

Public Management Certificate

The Public Management Certificate is awarded upon completion of the following nine-hour required core and six hours of electives.

Core. 9 cr.

V502 Public Management
V560 Public Finance and Budgeting
V561 Public Personnel and Manpower Systems

Electives. 6 cr.

Select from:
V504 Public Organization
V563 The Planning Process
V595 Managerial Decision-Making
V630 Topics in Planning

Advanced Studies in Science, Technology, and Public Policy

Advanced Studies in Science, Technology, and Public Policy is a graduate education and research program which was initiated at Indiana University in 1965 with assistance from the National Science Foundation. The Program is associated with the School of Public and Environmental Affairs and the Graduate School of Indiana University.

Several publications resulted from this effort: A comprehensive bibliography was prepared to cover the major aspects of public policy for science and technology. In addition, the program developed three study guides for organizing science, technology, and public policy courses in universities: (1) Science and Public Policy, (2) Science and Social Evolution, and (3) Environmental Policy, Law, and Administration. Both the bibliography and the study guides have been requested and favorably received by scholars in the United States and abroad. Each study guide forms the basis of an advanced course at Indiana University.

In addition, the Program implemented a graduate study program at Indiana University for federal executives engaged in the administration of public policy programs for science and technology. Approximately ten mid-career federal administrators come annually to Indiana University for a year of graduate study. This program for government administrators was originally a result of a cooperative arrangement between Indiana University and the U.S. Civil Service Commission.

The United States Civil Service Commission now has direct responsibility for the program through its Bureau of Training, and a new phase of the program, entitled Education for Public Management, has been instituted by the Bureau.

The following federal agencies have sent administrators to Indiana University to take part in this graduate study program: the Atomic Energy Commission, Bureau of Standards, Patent Office, Food and Drug Administration, Department of Agriculture, National Institute of Health, National Aeronautics and Space Administration, Federal Aviation Agency, Federal Communications Commission, Treasury Department, United States Army, Department of

Transportation, and General Services Administration. A number of other universities also offer this mid-career education program, but only Indiana University operates a program which focuses upon the inter-relationships of science, technology and public policy.

A two-semester Seminar on Science, Technology, and Public Policy has provided the core of the Indiana University instructional program in this area. Participants in the seminar generally include graduate students from various departments, research staff from the natural and social sciences, and recipients of the Education for Public Management award. The variety of backgrounds represented by the participants of the seminar provides a unique opportunity for the study of subjects which cannot be covered within the framework of traditional departments.

Related studies conducted by staff members of the Science, Technology, and Public Policy Program have included application of simulation techniques to environmental studies, technology assessments and forecasting, public policy for safety of nuclear reactors, international organization for environmental protection, case studies in environmental policy, and management of the living resources of the sea.

Assisted by grants from the National Science Foundation and other funding sources, the Program has undertaken several major projects resulting in publication. In addition to the study guides described above, the Program has published a three-volume annotated bibliography on science, technology, and public policy, a bibliography on administrative technology, a collection of case studies on citizen action on environmental issues, in-depth case studies on ethics and values in the applications of science and technology, and has cosponsored workshops on the public understanding of science.

The Program is directed by Lynton K. Caldwell, Professor of Public and Environmental Affairs and Professor of Political Science.

Indiana University-Purdue University At Indianapolis

School of Public and Environmental Affairs

Graduate Programs

The IUPUI graduate programs generally follow the basic structure of the SPEA graduate programs described earlier in the Bulletin. To receive the M.P.A. degree, the student must complete 48 credit hours. In addition to core course work, specializations are available in the areas of management, personnel management, public financial administration, planning, urban affairs, and criminal justice. Students with specialized professional needs may find the graduate certificate programs of interest. For example, a 15 credit hour certificate is offered in public management. Offerings are scheduled to permit completion of the chosen degree or certificate on a full-time or part-time basis.

Students wishing further information concerning the SPEA graduate programs offered at IUPUI should contact:

Dr. Keith G. Baker, M.P.A. Director
School of Public and Environmental Affairs
Indiana University-Purdue University at Indianapolis
Ball Residence
1232 West Michigan Street
Indianapolis, Indiana 46223
Telephone: (317) 264-4656

Master of Public Affairs

Core Courses: 21 cr.
The M.P.A. core is designed to ensure that each student acquires both the prerequisite analytical skills and an understanding of the crucial policy issues and governmental structures and processes which comprise the environment within which graduates will pursue their careers. Thus, 12 hours of course work are required in the analytical area dealing with quantitative analysis, computer usage, economic analysis, and legal analysis. These courses are as follows:

SPEA V506 Quantitative Analysis for Public Management I (3 cr.)
SPEA V507 Quantitative Analysis for Public Management II (3 cr.)
SPEA V517 Public Management Economics (3 cr.)
SPEA V540 Law and Public Affairs (3 cr.)

In addition, students take 9 hours of required courses dealing with public administrative structure and process and with major problems of public policy—particularly environmental problems—with which public servants will have to cope. These courses are as follows:

SPEA V502 Public Management (3 cr.)
SPEA V520 Environmental and Social Systems (3 cr.)
SPEA V560 Public Finance and Budgeting (3 cr.)

Unusually well-prepared applicants may petition the program director to waive one or more of the core requirements based on advanced work done elsewhere. Students may be exempted based on satisfactory equivalent course work or by an examination administered by professors in the core fields. Credit hours waived from the core will add to the electives a student may use.

Elective Courses: 9 credit hours
Elective courses are used either to add breadth to a student's program, or to deepen a field of concentration, or to enhance skills in using foreign languages, quantitative tools, or administrative techniques.

Fields of Concentration: 18 credit hours
Concentrations are designed to give the student a focused educational experience in a substantive area of interest with a view to working in this area upon graduation. The student chooses a concentration in conjunction with the faculty adviser and appropriate SPEA administrator. Concentrations offered on the IUPUI campus include: Management of Public Affairs, Personnel Management, Public Financial Administration, Planning, Urban Affairs, and Criminal Justice.

Criminal Justice Concentration Requirements
18 Required Credit Hours
All students enrolled in this concentration take the three following courses:

V562 Public Program Evaluation
V588 Law and Control in Society
V682 Seminar in CJ Planning, Management, and Issues
(May be repeated with consent of adviser.)

All students complete the concentration with 9 additional hours in an area of special interest unless the individual has had no prior experience and/or academic work in the CJ field. Such students are required to take as part of their program:

V581 Public Safety Law
V582 Criminal Justice Systems

Management of Public Affairs Concentration Requirements
Required courses: (9 cr.)
SPEA V504 Public Organizations (3 cr.)
Two of the following:

SPEA V562 Public Program Evaluation (3 cr.)
SPEA V595 Managerial Decision Making (3 cr.)
BUS A508 Accounting for Public Administration (3 cr.)

The remaining 12 credit hours required for this concentration should be selected from the courses listed below. A maximum of 3 credit hours from the Research group will be allowed towards satisfying concentration requirements. SPEA V508, Topics in Quantitative Analysis (3 cr.), is strongly recommended for students in this concentration. The following groups of specialization courses can be categorized roughly as (1) Accounting and Information Systems, (2) Finance, (3) Management, and (4) Personnel and Organization.

Specialization
SPEA V516 Managing Public Information Systems (3 cr.)
Bus A504 Development of Information Systems (3 cr.)
Bus A513 Accounting Data for Management Control (3 cr.)
Bus A523 Business Information Systems (3 cr.)
Bus K502 Mathematical Tools Laboratory (1 cr.)
Bus K505 Electronic Data Processing Methods (3 cr.)

SPEA V525 Public Financial Administration (3 cr.)
SPEA V609 Seminar in Revenue Policy and Administration (3 cr.)
SPEA V610 Seminar in Government Budget and Program Analysis (3 cr.)
SPEA V660 Cases and Problems in Fiscal Administration (3 cr.)
SPEA V668 Problems in Fiscal Federalism (3 cr.)

SPEA V508 Topics in Quantitative Analysis (3 cr.)
SPEA V562 Public Program Evaluation (3 cr.)
SPEA V563 Seminar in the Planning Process (3 cr.)
SPEA V662 Seminar in Productivity and Program Evaluation (3 cr.)
SPEA V663 Seminar in the Regulatory Process (3 cr.)

SPEA V665 Seminar in Policy and Administration (3 cr.)
Bus W502 Administration (3 cr.)
Bus P503 Analysis and Design of Operating System (3 cr.)

SPEA V561 Public Personnel and Manpower Systems (3 cr.)
SPEA V565 Administrative Organization (2 cr.)
SPEA V566 Executive Leadership (2 cr.)
SPEA V661 Seminar in Public Personnel Adm. (3 cr.)
SPEA V664 Seminar in Public Organization (3 cr.)
SPEA V650 Topics in Public Personnel Management (3 cr.)
SPEA V670 Seminar in Public Labor Relations (3 cr.)

Research Courses
SPEA V580 Independent Readings (1-3 cr.)
SPEA V585 Practicum (cr. arr.)
SPEA V590 Directed Research (1-3 cr.)

Courses not listed here may be selected on approval of the concentration adviser in consultation with the Graduate Program Coordinator.

Personnel Management Concentration Requirements
Students who select the Personnel Management concentration take the following course:

V561 Public Personnel and Manpower Systems (3 cr.)

The remaining 15 units of this 18-credit concentration may be selected from among the following courses, with the following conditions:

a. Other courses may be included in the concentration, subject to approval by the concentration adviser in consultation with the Graduate Program Coordinator.
b. At least 6 credits must be in 600-level courses.

Possible concentration courses are as follows:

V565 Administrative Organization (2 cr.)
V566 Executive Leadership (2 cr.)
V570 Public Sector Labor Relations (3 cr.)
V650 Topics in Public Personnel Management (1-3 cr.)
V662 Seminar in Production Program Evaluation (3 cr.)
V664 Seminar in Complex Public Organizations (3 cr.)
V670 Topics in Public Sector Labor Relations (1-3 cr.)

Students may wish to consider independent study courses such as:

V580 Readings in Public Affairs (1-3 cr.)
V585 Practicum in Public Affairs (cr. arr.)
V590 Research in Public Affairs (1-3 cr.)

Business
Z502 Organizational Behavior and Human Performance (3 cr.)
Z503 Organizational Behavior and Organizational Effectiveness (3 cr.)
Z514 Seminar in Industrial Relations (3 cr.)
Z515 Personnel Measurement (3 cr.)

Psychology
P570 Industrial Psychology (3 cr.)
P572 Organizational Psychology (3 cr.)
P683 Seminar in Industrial-Social Psychology (3 cr.)

Public Financial Administration Concentration Requirements
Courses in the concentration focus on technical skills necessary for positions in budget analysis, preparation, and operation, in revenue system administration and in public financial planning. The concentration includes 18 credit hours.

The following courses are required for all students selecting the Public Financial Administration concentration:

V525 Public Financial Administration (3 cr.)
V660 Cases and Problems in Fiscal Administration (3 cr.)
When appropriate and approved, the following may be substituted:
V585 Practicum in Public Affairs (cr. arr.) *or*
V590 Research in Public Affairs (3 cr.)
A508 Accounting for Public Administration (3 cr.)

Depending on the interest of the student, two of the following five specialization courses are to be selected:

V609 Seminar in Revenue Policy and Administration (3 cr.)
V610 Seminar in Government Budget and Program Analysis (3 cr.)
V668 Problems in Fiscal Federalism (3 cr.)
A523 Business Information Systems (3 cr.)
F545 Money and Capital Markets (3 cr.)

The remaining may be selected from the following:

V516 Managing Public Information Systems (3 cr.)
V562 Public Program Evaluation (3 cr.)
V563 Seminar in the Planning Process (3 cr.)
V662 Seminar in Productivity and Program Evaluation (3 cr.)
V665 Seminar in Policy and Administration (3 cr.)
A514 Auditing Theory and Practice (3 cr.)
A515 Federal Income Taxes (3 cr.)
E560 Micro-Economic Aspects of Public Finance (3 cr.)
E561 Macro-Economic Aspects of Public Finance (3 cr.)
E562 Analysis of Public Expenditure Programs (3 cr.)
R501 Real Estate and Land Economics (3 cr.)

A maximum of 3 credit hours of research courses is acceptable towards meeting the concentration requirement:

SPEA V580 Readings in Public Affairs (1-3 cr.)
SPEA V585 Practicum in Public Affairs (cr. arr.)
SPEA V590 Directed Research in Public Affairs (1-3 cr.)

Planning Concentration Requirements
The following three courses are required as components in the total of 18 credits necessary for the concentration.

SPEA V563 The Planning Process (3 cr.)
SPEA V593 Analytical Methods in Planning and Policy Analysis (3 cr.)
SPEA V594 Principles of Urban and Regional Science (3 cr.)

The remaining 9 credit hours required for this concentration should be selected from the courses listed below. At least 6 credit hours of courses must be sequenced from within one of the three areas listed. In addition, at least 3 credit hours must be in the area of general regional systems, or V585.

Planning Theory
SPEA V562 Public Program Evaluation (3 cr.)
SPEA V564 Urban Administration (3 cr.)
SPEA V580 Readings in Public Affairs (1-3 cr.)
SPEA V585 Practicum in Public Affairs (3 cr.)
SPEA V590 Research in Public Affairs (3 cr.)
SPEA V630 Topics in Planning (3 cr.)
SPEA V662 Seminar in Productivity and Program Evaluation (3 cr.)
SPEA V664 Seminar in Complex Public Organization (3 cr.)
SPEA V665 Seminar in Policy and Administration (3 cr.)
SPEA V690 Seminar in the Public Policy Process (3 cr.)

Planning Methods
SPEA V508 Topics in Quantitative Analysis (3 cr.)
SPEA V511 Environmental Systems Dynamics (3 cr.)

SPEA V516 Public Management Information Systems (3 cr.)
SPEA V525 Public Financial Administration (3 cr.)
SPEA V532 Urban Decision-Making (3 cr.)
SPEA V533 Applied Urban Economics (3 cr.)
SPEA V562 Public Program Evaluation (3 cr.)
SPEA V572 Urban Topics (3 cr.)
SPEA V580 Readings in Public Affairs (1-3 cr.)
SPEA V585 Practicum in Public Affairs (1-6 cr.)
SPEA V590 Research in Public Affairs (3 cr.)
SPEA V595 Managerial Decision Making (3 cr.)
SPEA V610 Seminar in Government Budget and Program Analysis (3 cr.)
SPEA V630 Topics in Planning (3 cr.)
SPEA V662 Seminar in Productivity and Program Evaluation (3 cr.)
SPEA V691 Seminar in Problems and Issues in Policy Analysis (3 cr.)
STAT Stat513 Applications of Statistics in Industry (3 cr.)
IE IE533 Methods of Experimental Research (3 cr.)
BUS A508 Accounting for Public Administration (3 cr.)
BUS A513 Accounting Data for Management Control (3 cr.)
BUS G550 Seminar in Business Conditions Analysis (3 cr.)
BUS K502 Mathematical Tools Laboratory (1 cr.)
BUS K506 Introduction to Probabilistic Models (3 cr.)
BUS K511 Fundamentals of Mathematical Optimization (3 cr.)
BUS K512 Multivariate Statistical Analysis (3 cr.)
BUS K515 Quantitative Analysis in Decision-Making (3 cr.)
BUS K520 Introduction to Operations Research (3 cr.)
BUS K525 Quantitative Systems Analysis (3 cr.)
BUS P502 Operations Management (3 cr.)
BUS P503 Analysis and Design of Operations Systems (3 cr.)
BUS P507 Management Information Systems Applications (3 cr.)
BUS P525 Operations Information and Control Systems (3 cr.)

General Regional Systems
SPEA V530 Urban Physical Structure (2 cr.)
SPEA V531 Urban Social Structure (2 cr.)
SPEA V534 Urban Technology (2 cr.)
SPEA V535 Urban Demography (2 cr.)
SPEA V580 Readings in Public Affairs (1-3 cr.)
SPEA V585 Practicum in Public Affairs (1-6 cr.)
SPEA V590 Research in Public Affairs (3 cr.)
SPEA V595 Managerial Decision Making (3 cr.)
SPEA V621 Seminar in Housing and Public Affairs (3 cr.)
SPEA V630 Topics in Planning (3 cr.)
SPEA V633 Seminar in Public Transportation Policy (3 cr.)
SPEA V663 Seminar in the Regulatory Process (3 cr.)
SPEA V682 Seminar in Criminal Justice Planning, Management, and Issues (3 cr.)
BUS G430 Economic Analysis of Urban Problems and Policies (3 cr.)
BUS G531 Applied Urban Economics: Theory, Problems, and Policy (3 cr.)
BUS G550 Seminar in Business Conditions Analysis (3 cr.)
BUS R501 Real Estate and Land Economics (3 cr.)
BUS T501 The Transportation Dimension (3 cr.)

Courses not listed here may be selected on approval of the concentration adviser in consultation with the Graduate Program Coordinator.

Urban Affairs Concentration Requirements
SPEA V563 Seminar in the Planning Process (3 cr.) is a requirement for the Urban Affairs concentration.

Of the remaining 15 credit hours required for the concentration, at least 12 hours must be in specialization courses, including a maximum of 3 credit hours of research courses. The following courses are acceptable towards meeting Urban Policy concentration requirements:

Specialization
SPEA V530 Urban Physical Structure (2 cr.)
SPEA V531 Urban Social Structure (2 cr.)
SPEA V532 Urban Decision-Making (3 cr.)
SPEA V533 Applied Urban Economics (3 cr.) *or*
BUS G531 Applied Urban Economics (3 cr.)
SPEA V534 Urban Technology (2 cr.)
SPEA V535 Urban Demography (2 cr.)
SPEA V572 Urban Seminar (3 cr.)

Research Courses
SPEA V580 Independent Readings (1-3 cr.)
SPEA V585 Practicum (cr. arr.)
SPEA V590 Directed Research (1-3 cr.)

Other Courses
SPEA V561 Public Personnel and Manpower Systems (3 cr.)
SPEA V562 Public Program Evaluation (3 cr.)
BUS A508 Accounting for Public Administration (3 cr.)

Courses not listed here may be selected on approval of the concentration advisor in consultation with the Graduate Program Coordinator.

Public Management Certificate Program

The Graduate Program of the School of Public and Environmental Affairs provides course work and special programs leading to the Public Management Certificate. A baccalaureate degree is required for admission to the program.

Public Management Certificate

The Public Management Certificate is awarded upon completion of the following nine-hour required core and six hours of electives.

Core. 9 cr.

V502 Public Management
V560 Public Finance and Budgeting
V561 Public Personnel and Manpower Systems

Electives. 6 cr.
Select from:

V504 Public Organization
V525 Public Financial Administration
V562 Public Program Evaluation
V563 The Planning Process
V582 Criminal Justice Systems
V595 Managerial Decision Making
V630 Topics in Planning
V665 Seminar in Policy and Administration

Indiana University - Purdue University At Fort Wayne

Division of Public and Environmental Affairs

Graduate Programs

The Master in Public Affairs degree program is a 48 credit hour integrated course of study which provides knowledge and experience that can be used by the professional in various roles within a changing public sector.

The *Fort Wayne Bulletin* should be consulted for fields of concentration and coursework contained therein, since they differ among campuses. Potential students should note the possibility of receiving academic credit for previous professional experience via the Mid-Career Option.

Students with specialized professional needs may find the graduate certificate program of interest. For example, a 15 credit hour certificate is offered in public management.

Further information concerning SPEA graduate programs at Fort Wayne may be obtained by contacting:

Dr. Roy W. Shin, Director
Division of Public and Environmental Affairs
Indiana University-Purdue University at Fort Wayne
2101 Coliseum Boulevard East
Fort Wayne, Indiana 46805
Telephone: (219) 482-5200

Master of Public Affairs

Core Courses: 21 credit hours
The M.P.A. core is designed to ensure that each student acquires both the prerequisite analytical skills and an understanding of the crucial policy issues and governmental structures and processes which comprise the environment within which graduates will pursue their careers. Thus, 12 hours of course work are required in the analytical area dealing with quantitative analysis, computer usage, economic analysis, and legal analysis. These courses are as follows:

V506 Quantitative Analysis for Public Management I (3 cr.)
V507 Quantitative Analysis for Public Management II (3 cr.)
V517 Public Management Economics (3 cr.)
V540 Law and Public Affairs (3 cr.)

In addition, students take 9 hours of required courses dealing with public administrative structure and process and with major problems of public policy—particularly environmental problems—with which public servants will have to cope. These courses are as follows:

V502 Public Management (3 cr.)
V520 Environmental and Social Systems (3 cr.)
V560 Public Finance and Budgeting (3 cr.)

Unusually well-prepared applicants may petition the program director to waive one or more of the core requirements based on advanced work done elsewhere. Students may be exempted based on satisfactory equivalent course work or by an examination administered by professors in the core fields. Credit hours waived from the core will add to the electives a student may use.

Elective Courses: 9 credit hours
Elective courses are used either to add breadth to a student's program, or to deepen a field of concentration, or to enhance skills in using foreign languages, quantitative tools, or administrative techniques.

Fields of Concentration: 18 credit hours
Concentrations are designed to give the student a focused educational experience in a substantive area of interest with a view toward working in this area upon graduation. The student chooses a concentration in conjunction with the faculty adviser and the appropriate SPEA administrator. Concentrations offered on the Fort Wayne campus include: Management of Public Affairs, Criminal Justice, and Public Policy and Administration.

Management of Public Affairs Concentration Requirements
Candidates who select the Management of Public Affairs concentration take advanced courses in the major administrative subjects. Pre-career students will probably want to choose one track. Mid-career students may desire to select courses from among tracks.

Required: (9 credit hours)
SPEA V504 Public Organization (3 cr.)
SPEA V525 Public Financial Administration (3 cr.)
SPEA V561 Public Personnel and Manpower Systems (3 cr.)
SPEA V563 The Planning Process (3 cr.)
SPEA V595 Managerial Decision-Making (3 cr.)

Remainder from among the following tracks:

Management
SPEA V550 Topics in Public Affairs: Accounting (3 cr.)
SPEA V562 Public Program Evaluation (3 cr.)
SPEA V564 Urban Administration (3 cr.)
SPEA V662 Seminar in Productivity and Program Evaluation (3 cr.)
SPEA V663 Seminar in the Regulatory Process (3 cr.)

Personnel
SPEA V570 Public Sector Labor Relations (3 cr.)
SPEA V650 Topics in Public Personnel Management (1-3 cr.)
SPEA V661 Seminar in Public Personnel Administration (3 cr.)

Finance
SPEA V550 Topics in Public Affairs: Accounting (3 cr.)
SPEA V609 Seminar in Revenue Theory and Administration (3 cr.)
SPEA V610 Seminar in Government Budget and Program Analysis (3 cr.)
SPEA V668 Problems in Fiscal Federalism (3 cr.)

Criminal Justice Concentration Requirements
18 Required Credit Hours
All students enrolled in this concentration take the three following courses:

V562 Public Program Evaluation
V588 Law and Control in Society
V682 Seminar in CJ Planning, Management, and Issues
(May be repeated with consent of adviser.)

All students complete the concentration with 9 additional hours in an area of special interest unless the individual has had no prior experience and/or academic work in the CJ field. Such students are required to take as part of their program:

V581 Public Safety Law
V582 Criminal Justice Systems

Public Policy and Administration Concentration Requirements
Candidates who select the Public Policy and Administration area will design individual programs of study consisting of eighteen credit hours of approved courses.

Public Management Certificate Program

The Graduate Program of the School of Public and Environmental Affairs provides course work and special programs leading to the Public Management Certificate. A baccalaureate degree is required for admission to the program.

Public Management Certificate

The Public Management Certificate is awarded upon completion of the following courses:

Core.

V502 Public Management
V560 Public Finance and Budgeting
V561 Public Personnel and Manpower Systems

Electives.

Six hours of electives may be taken from SPEA graduate courses or approved courses from other graduate programs (with consent of SPEA advisor).

Indiana University Northwest
Division of Public and Environmental Affairs

Graduate Programs

The Master of Public Affairs and the Public Management Certificate programs are offered at Indiana University Northwest. Course instructors include IUN faculty, faculty from area institutions, and city, state, and governmental personnel. Most students in the program are already employed in government service and pursue the Mid-Career Option. Programming is designed for courses to be offered during the evening hours.

The nature of the IUN graduate program generally follows the basic structure of the SPEA program described earlier in the text. Concentration programs are developed utilizing resources at Indiana University Northwest and the needs of the students and area governments in northwestern Indiana.

Complete information on the Division and its graduate program may be obtained by contacting:

Dr. John M. Hunger, Director
Division of Public and Environmental Affairs
Indiana University Northwest
3400 Broadway
Gary, Indiana 46408
Telephone: (219) 980-6695

Master of Public Affairs

Core Courses: 21 credit hours
The M.P.A. core is designed to ensure that each student acquires both the prerequisite analytical skills and an understanding of the crucial policy issues and governmental structures and processes which comprise the environment within which graduates will pursue their careers. Thus, 12 hours of course work are required in the analytical area dealing with quantitative analysis, computer usage, economic analysis, and legal analysis. These courses are as follows:

V506 Quantitative Analysis for Public Management I (3 cr.)
V507 Quantitative Analysis for Public Management II (3 cr.)
V517 Public Management Economics (3 cr.)
V540 Law and Public Affairs (3 cr.)

In addition, students take 9 hours of required courses dealing with public administrative structure and process and with major problems of public policy—particularly environmental problems—with which public servants will have to cope. These courses are as follows:

V502 Public Management (3 cr.)
V520 Environmental and Social Systems (3 cr.)
V560 Public Finance and Budgeting (3 cr.)

Unusually well-prepared applicants may petition the program director to waive one or more of the core requirements based on advanced work done elsewhere. Students may be exempted based on satisfactory equivalent course work or by an examination administered by professors in the core fields. Credit hours waived from the core will add to the electives a student may use.

Elective Courses: 9 credit hours
Elective courses are used either to add breadth to a student's program, or to deepen a field of concentration, or to enhance skills in using foreign languages, quantitative tools, or administrative techniques.

Fields of Concentration: 18 credit hours

Concentrations are designed to give the student a focused educational experience in a substantive area of interest with a view to working in this area upon graduation. The student chooses a concentration in conjunction with the faculty adviser and appropriate SPEA administrator. Concentrations offered on the Northwest campus include: Public Financial Administration, Urban Affairs, Management of Public Affairs, and Public Safety Policy.

Public Financial Administration Concentration Requirements

A. Required (9 cr.)

1. Select one
   V666 Seminar in Public Expenditure Theory and Administration (3 cr.)
   V525 Public Financial Administration (3 cr.)
   E562 Analysis of Public Expenditure Program (3 cr.)
2. Required
   V550 Topics in Public Affairs (3 cr.) *or*
   A508 Accounting for Public Administration (3 cr.)
3. Required (3 cr.) select one
   V668 Problems in Fiscal Federalism (3 cr.)
   D551 Financial Management (3 cr.)

B. Specialization Options (6 cr.)

Students may select one of the specializations suggested below or, in consultation with their adviser, develop another specialization.

1. Financial Management
   E560 Microeconomic Aspects of Public Finance (3 cr.)
   E545 Money and Capital Markets (3 cr.)
2. Financial Management in Urban Settings
   V609 Seminar in Revenue Theory and Administration
   V667 Seminar in Public Capital and Debt Theory and Administration (3 cr.)
3. Financial Management in a Social Service Milieu
   E591 Quantitative Economic Policy and Planning (3 cr.)
   V660 Cases and Problems in Fiscal Administration (3 cr.)*
   *When appropriate and approved, the following may be substituted:
   V585 Practicum in Public Affairs (cr. arr.) *or*
   V590 Research in Public Affairs (1-3 cr.)

Substitutes for the required courses may be made with the consent of the Director and the student's adviser.

Urban Affairs Concentration Requirements

A. Required (9 cr.)

1. Select one
   V666 Seminar in Public Expenditure Theory and Administration (3 cr.)
   V525 Public Financial Administration (3 cr.)
   E562 Analysis of Public Expenditure Program (3 cr.)
2. Required
   V550 Special Topics—Public Accounting (3 cr.) *or*
   A508 Accounting for Public Administration (3 cr.)
3. Required (3 cr.) select one
   G604 Problems and Policies for Urban Development (3 cr.)
   V564 Urban Administration (3 cr.)

B. Specialization Options (6 cr.)

Students may select one of the specializations suggested below or, in consultation with their adviser, develop another specialization.

1. Social Economic Analysis
   E748 Seminar in the Economics of Labor and Human Resources Development (3 cr.)
   S610 Urban Sociology (3 cr.)
2. Urban Administration
   V660 Cases and Problems in Fiscal Administration (3 cr.)
   G531 Applied Urban Economics: Theory, Problems and Policy (3 cr.)

3. Urban Affairs
   A411 Historical and Philosophical Bases of Disadvantagement (3 cr.) *or*
   A341 Comparative Analysis of the Urban Poor (3 cr.)
   S657 Community Power Structure (3 cr.)

Substitutes for the Required courses may be made with the consent of the Director and the student's adviser.

Management of Public Affairs Concentration Requirements

A. Required (11 cr.)
   V504 Public Organization (3 cr.) or
   A508 Accounting for Public Administration (3 cr.)
   V561 Public Personnel and Manpower Systems (3 cr.)
   V562 Public Program Evaluation (3 cr.)
   V566 Executive Leadership (2 cr.)

B. Administrative Specialization Options (6 cr.)

Students may select one of the specializations suggested below or, in consultation with their adviser, develop another specialization.

1. Public Personnel and Manpower
   V661 Seminar in Public Personnel Administration (3 cr.)
   V670 Seminar in Public Labor Relations (3 cr.)
2. Public Program Management and Evaluation
   V662 Seminar in Productivity and Program Evaluation (3 cr.)
   V690 Seminar in the Public Policy Process (3 cr.)
3. Public Management Processes (select two)
   V516 Managing Public Information Systems (3 cr.)
   V563 The Planning Process (3 cr.)
   V564 Urban Administration (3 cr.)
   V664 Seminar in Complex Public Organization (3 cr.)
   V595 Planning and Implementation Simulation (2 cr.)
4. Public Management Finance (select two)
   V666 Seminar in Public Expenditure, Theory and Administration (3 cr.)
   V668 Problems in Fiscal Federalism (3 cr.)
   V525 Public Financial Administration (3 cr.)

Substitutes for Major Administrative Subject courses may be made with the consent of the Director and the student's adviser.

Public Safety Policy Concentration Requirements

A. Required (8-9 cr.)
1. V586 Public Safety in the United States (2-3 cr.)
2. V581 Public Safety Law (3 cr.)
3. Select one
   V582 Criminal Justice Systems (2-3 cr.)
   V583 Highway Safety Systems (2 cr. module)
   V584 Emergency Service Systems (2 cr. module)

B. The remaining courses (9-10 cr.), selected with the approval of the concentration adviser.

Public Management Certificate Program

The Graduate Program of the School of Public and Environmental Affairs provides course work and special programs leading to the Public Management Certificate. A baccalaureate degree is required for admission to the program.

Public Management Certificate
The Public Management Certificate is awarded upon completion of the following nine-hour required core and six hours of electives.

Core. 9 cr.

V502 Public Management
V560 Public Finance and Budgeting
V561 Public Personnel and Manpower Systems

Electives. 6 cr.

V504 Public Organization
V563 The Planning Process
V595 Managerial Decision-Making
V630 Topics in Planning

Indiana University At South Bend

Division of Public and Environmental Affairs

Graduate Programs

The Master of Public Affairs degree program at IUSB is normally a 48 credit hour integrated course of study which provides knowledge and experience that can be used by the professional in various roles within a changing public sector. The Master of Public Affairs degree program provides four concentrations that are available at IUSB: Criminal Justice, Management of Public Affairs, Public Policy and Administration, and Urban Affairs.

Also available are courses and special programs leading to the Public Management Certificate and the Urban Affairs Certificate.

Students wishing further information concerning the SPEA graduate programs offered at I.U.S.B. should contact:

Dr. Frank X. Steggert, Director
Division of Public and Environmental Affairs
Indiana University at South Bend
1700 Mishawaka Ave.
South Bend, Indiana 46615
Telephone: (219) 237-4130

Master of Public Affairs

Core Courses: 21 credit hours
The M.P.A. core is designed to ensure that each student acquires both the prerequisite analytical skills and an understanding of the crucial policy issues and governmental structures and processes which comprise the environment within which graduates will pursue their careers. Thus, 12 hours of course work are required in the analytical area dealing with quantitative analysis, computer usage, economic analysis, and legal analysis. These courses are as follows:

V506 Quantitative Analysis for Public Management I (3 cr.)
V507 Quantitative Analysis for Public Management II (3 cr.)
V517 Public Management Economics (3 cr.)
V540 Law and Public Affairs (3 cr.)

In addition, students take 9 hours of required courses dealing with public administrative structure and process and with major problems of public policy with which public servants will have to cope. These courses are as follows:

V502 Public Management (3 cr.)
V520 Environmental and Social Systems (3 cr.)
V560 Public Finance and Budgeting (3 cr.)

Unusually well-prepared applicants may petition the program director to waive one or more of the core requirements based on advanced work done elsewhere. Students may be exempted based on satisfactory equivalent course work or by an examination administered by professors in the core fields. Credit hours waived from the core will add to the electives a student may choose.

Elective Courses: 9 credit hours
Elective courses are used either to add breadth to a student's program, or to deepen a field of concentration, or to enhance skills in using foreign languages, quantitative tools, or administrative techniques. V504, Public Organization (3 cr.) is strongly urged as an elective course.

Fields of Concentration: 18 credit hours

Concentrations are designed to give the student a focused educational experience in a substantive area of interest, with a view to working in this area upon graduation. The student chooses a concentration in conjunction with a faculty adviser and the appropriate SPEA administrator. Concentrations offered on the South Bend campus include: Management of Public Affairs, Public Policy and Administration, Criminal Justice, and Urban Affairs.

Management of Public Affairs Concentration Requirements
Candidates who select the Management of Public Affairs concentration take advanced courses in major administrative subjects: personnel management, budgeting and program evaluation, management analysis, information systems management, and general management and administration. Normally, pre-entry students will select a single subject area *other than* general management and administrative behavior and concentrate in that one advisory specialization. Mid-career students and those pre-entry students headed for unspecialized administrative jobs may wish to take general management courses drawn from all the administrative subjects.

All students in this concentration take the following core courses (12 credit hours):

V550 Topics in Public Affairs: Accounting for Public Administration (3 cr.)
V561 Public Personnel and Manpower Systems (3 cr.)
V563 The Planning Process (3 cr.)
V595 Managerial Decision Making (3 cr.)

The remaining six credit hours should be drawn from the following specializations:

Personnel Management
V570 Public Sector Labor Relations (3 cr.)
V650 Topics in Public Personnel Management (1-3 cr.)
—Occupational Health and Safety
—Equal Employment Opportunity and Affirmative Action
—Manpower Forecasting and Planning
V661 Seminar in Public Personnel Administration (3 cr.)
V665 Seminar in Policy and Administration (3 cr.)
V670 Topics in Public Sector Labor Relations (1-3 cr.)
—Collective Bargaining
—Dispute Settlement
—Administration of Labor Agreements
—Labor Relations Law in the Public Sector

Budgeting and Program Evaluation—electives to be chosen from:
V550 Topics in Public Affairs (cr. arr.)
V562 Public Program Management and Evaluation (3 cr.)
V610 Seminar in Government Budget and Program Analysis (3 cr.)
V662 Seminar in Productivity and Program Evaluation (3 cr.)

Public Policy and Administration Concentration Requirements
Candidates who select the Public Policy and Administration concentration will design, with the director, individual programs of study consisting of 18 credit hours of approved courses. A substantial part of their programs will consist of an inter-disciplinary analysis of a specific public policy problem.

Criminal Justice Concentration Requirements
Candidates who select the Criminal Justice concentration take a core of 4 advanced courses in law and social control, criminal violation, and the American criminal justice system. The student then selects an option in an area of his or her career interest.

Required courses: 12 credit hours.
V582 Criminal Justice System (3 cr.)
V587 Criminal Violation: Problems and Characteristics (3 cr.)
V588 Law and Control in Society (3 cr.)
V682 Seminar in Criminal Justice Planning, Management, and Issues (3 cr.)

Students will select 2 additional courses from available options. Courses may include Criminal Law and Police Administration, Police-Community Relations, Criminal Law and the Correctional Process, Community-based Corrections, and Correctional Rehabilitation of the Offender.

Urban Affairs Concentration Requirements
Candidates who select the Urban Affairs Concentration generally take 6 specific courses. Such courses cover urban dimensions of history, geography, economics, sociology, and public affairs. The 6 usual courses are as follows:

A347 Cities and Urbanization in American History
G314 Urban Geography
F525 Applied Urban Economics: Theories, Problems, and Policy
V532 Urban Decision Making
V564 Urban Administration
S610 Urban Sociology (or appropriate approved equivalent)
With permission of the instructor, V563 The Planning Process, may be substituted for one of the courses enumerated above.

The Urban Affairs Concentration for the M.P.A. degree has the same requirements as the Urban Affairs Certificate. Students who have completed A347 and G314 as undergraduates will be required to complete two additional courses approved by the program director.

Certificate Programs in Public and Environmental Affairs

The Graduate Program of the School of Public and Environmental Affairs provides course work and special programs leading to the Public Management or the Urban Affairs Certificate. A baccalaureate degree is required for admission to the program.

Public Management Certificate
The Public Management Certificate is awarded upon completion of the following nine-hour required core and six hours of electives.

Core. 9 cr.

V502 Public Management
V560 Public Finance and Budgeting
V561 Public Personnel and Manpower Systems

Electives. 6 cr.
Select from:

V504 Public Organization
V563 The Planning Process
V595 Managerial Decision-Making
V665 Seminar in Policy and Administration

Urban Affairs Certificate
The Urban Affairs Certificate is awarded upon completion of the following courses:

A347 Cities and Urbanization in American History
G314 Urban Geography
F525 Applied Urban Economics: Theories, Problems, and Policy
V532 Urban Decision Making
V564 Urban Administration
S610 Urban Sociology

Course Descriptions

Undergraduate Courses

The abbreviation "P" refers to the course prerequisite or prerequisites. The number of hours of credit given a course is indicated in parparentheses following the course title.

SPEA Courses

V170 Introduction to Public Affairs (3 cr.) Not recommended for students who have taken SPEA E200, V262, or V264. Broad coverage of public and environmental affairs through critical and analytic inquiry into selected policy areas. Attention is given to current as well as perennial public issues.

V250 Problems in Public Affairs (3 cr.) Analysis of selected issues or problems in public affairs. Topics vary from semester to semester. May be repeated once for credit, with permission of instructor.

V260 Topics in Public Affairs (3 cr.) Selected topical courses that are specifically chosen as appropriate to fulfill the SPEA requirement of "public affairs options." Topics vary from semester to semester.

V262 Environment: Problems and Prospects (3 cr.) A survey of different aspects of the interaction between man and his environment, with an emphasis on the complex interactions within systems. Subjects discussed include population levels, natural resources, energy use, various types of pollution and means of controlling them. Credit not given for both E200 and V262.

V264 Urban Strategies (3 cr.) An introduction to urban studies. Topics considered include growth, population, housing, transportation and government, with discussion of related public policy.

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

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

V316 Environmental Health Management Orientation (3 cr.) An orientation to the broad concerns of environmental health management, including sanitation, stream pollution, air pollution, and food and drug control. Course includes an introduction to the programs and procedures involved with environmental health management.

V333 Student Colloquia in Public Affairs (3 cr.) Topics of current interest selected on the basis of student initiative and involvement in course instruction. May be repeated once for credit.

V348 Analytical Approaches to Public Policy (3 cr.) P: K300. Introduction to models of inquiry, concept and theory formation, research design, operationalization and measurement, and data collection and analysis. Potential applications to policy problems emphasized.

V352 Personal Career Planning (1 cr.) P: Sophomore standing. Investigation of careers, the world of work and the career planning process. The focal point is the student and his/her goals. Provides assistance in developing practical, meaningful and realistic insights into the nature of making a public career choice in today's world. Course is graded S/F (satisfactory/fail).

V365 Urban and Regional Planning (3 cr.) P: Statistics. Introduction to the general planning process. Examination of planning approaches to economic, environmental, and social issues involved in regional growth and change.

V366 Public Administration (3 cr.) Study of public agency management emphasizing the special constraints of administration in the public context.

V372 Financial Management and Budgeting (3 cr.) Study of fiscal management in public agencies, including revenue administration, debt management, and public budgeting. Emphasis will be given to the fiscal processes in state and local agencies.

V373 Personnel 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.

V376-V377 Legal Process and Contemporary Issues in America (3-3 cr.) P for V377 = V376. An introduction to the American legal system, including the constitution, courts system, and administrative law in federal and state agencies. Readings and discussion center around current issues affected by the legal process.

V380 Internship in Public and Environmental Affairs (1-6 cr.) P: permission of instructor. Open to interested students upon approval of 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.

V390 Independent Readings in Public and Environmental Affairs (1-3 cr.) P: permission of instructor. Independent readings and research related to a topic of special interest to the student. Written report required.

V391 Honors Readings in Public and Environmental Affairs (1-3 cr.) P: approval of instructor and SPEA Honors adviser. Restricted to students in SPEA Honors Program.

V416 Environmental Health Management Seminar (3 cr.) P: V316 or permission of instructor. Course designed for environmental health concentration students who have completed or are in the process of completing an internship and have completed V316 and chemistry requirements. Course consists of seminar-type discussion sessions and laboratory analysis practicum in applied environmental health problems.

V421 Dynamics of Urbanization (3 cr.) P: consent of instructor. The structure of cities and the processes that shape their growth and development. Complex set of systems at work in urban places and how they interact. Simulation gaming and case studies of several cities.

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

V442 Seminar in Fiscal Management (3 cr.) P: V372 or permission of instructor. Comprehensive study of techniques of public fiscal management, primarily at the state and local level, and discussion of current issues. (Course may be repeated for different topics.)

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

V445 Policy in State Government (3 cr.) This course will take a broad look at the way policies get made and implemented at the state (and perhaps regional) level. Importantly included will be both federal and sub-state intergovernmental relations. Description and some analysis of the major institutions of state government will be the main focus of attention.

V446 Introduction to Government Accounting and Financial Reporting (3 cr.) No previous knowledge of accounting is assumed. An introduction to government accounting, including comparison with accounting for the private sector, intended as background for use of financial administrators. The course deals primarily with municipal accounting. It also includes accounting by and for the federal government, auditing practices, and financial reporting.

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

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

V450 Contemporary Issues in Public Affairs (3 cr.) Extensive analysis of selected contemporary issues in public affairs. Topics vary from semester to semester. [Course may be repeated for different topics.]

V472 Policy Processes (3 cr.) P: senior standing and completion of two SPEA core courses. Intended as an integrative senior course, primarily for SPEA students. Course content includes analytic perspectives of the policy process, the centers of policy, and the public interest. Selected cases involving problem analysis and decision making on public issues are included, as well as discussion of current policy issues.

V490 Directed Research in Public and Environmental Affairs (1-3 cr.) To be arranged with the individual instructor and approved by the chairman of the Undergraduate Program.

V491 Honors Research in Public and Environmental Affairs (1-3 cr.) P: Approval of instructor and SPEA Honors adviser. Restricted to students in SPEA Honors Program.

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

Environmental Studies Courses

E200 Environment and People (3 cr.) An interdisciplinary examination of the problems of population, pollution, and natural resources and their implications for society. Usually presented as a series of lectures by faculty from several departments and schools. Credit not given for both E200 and V262.

E400 Topics in Environmental Studies (2-3 cr.) An interdisciplinary consideration of specific environmental topics. May be repeated once for credit.

Criminal Justice Courses

J100 Foundations of Criminal Justice (3 cr.) [Prerequisite for all 300- and 400-level Criminal Justice courses.] Principles underlying social control devices with emphasis on legal systems. Historical and philosophical background of criminal justice systems.

J200 The American Criminal Justice System (3 cr.) Introduction to elements of the criminal justice system—the police, the courts, corrections—as they function in contemporary American society. Course is divided into three segments and team taught.

J201 Criminal Justice System Operations I (3 cr.) An introduction to the role, responsibilities, and functions of the law enforcement agencies in the American Criminal Justice System.

J202 Criminal Justice System Operations II (3 cr.) This course will focus upon the structure, operations, and some of the major problems of the Criminal Justice System in the United States, excluding the role of the police.

J301 Criminal Law (3 cr.) The development, limitations, and application of substantive criminal law utilizing the case-study method.

J302 Criminal Law Administration (3 cr.) Criminal law application and procedure from the initiation of police activity through the correctional process utilizing the case-study method.

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

J304 Legal Aspects of Correction (3 cr.) Legal problems from conviction to release: presentence investigations, sentencing, probation and parole, incarceration, loss and restoration of civil rights.

J305 Juvenile Justice Process (3 cr.) Current developments in the legal, administrative, and operational aspects of the juvenile justice system.

J310 Introduction to Administrative Processes (3 cr.) Introduction to principles of management and systems theory for the administration of criminal justice agencies.

J320 Criminal Investigation (3 cr.) Theory of investigation, crime scene procedures, interviews, interrogations, surveillances and sources of information; collection and preservation of physical evidence; investigative techniques in specific crimes.

J321 Introduction to American Law Enforcement (3 cr.) A broadly based study of the operations and inter-relationships of the American police system, including discussion of the limitations of the police function, inter-jurisdictional matters, and intra-agency processes.

J322 Introduction to Criminalistics (3 cr.) R: J301. The broad range of physical evidence developed through the investigative process and methods of identifying and establishing validity and relevance through forensic laboratory techniques.

J326 Highway Safety Administration (3 cr.) R: J200. A survey of the agencies and institutions in the highway transportation system, their roles and function with emphasis on criminal justice agencies.

J330 Trends in Correction (3 cr.) Analysis and evaluation of contemporary correctional systems. Discussion of recent research concerning the correctional institution and the various field services.

J333 Institutional Corrections (3 cr.) The history and development of the jail, penitentiary, prison, and reformatory. Analysis and evaluation of contemporary imprisonment.

J340 Probation and Parole (3 cr.) Development, organization, operation, and results of probation and parole as substitutes for incarceration.

J370 Seminar in Criminal Justice (3 cr.) P: three (3) courses in Criminal Justice or consent of instructor. Selected contemporary topics in Criminal Justice. May be repeated for credit.

J376 Principles of Public Safety (3 cr.) Examination of threats to public safety and governmental response at various levels to those threats. Treatment of such areas as transportation and highway threats; occupational safety and health; criminal threats; emergency and disaster planning; consumer protection; and fire control and suppression. Discussion of techniques to identify and measure risk, the acceptability of risk, and governmental attempts to control risk.

J401 Criminal Law and Procedure (3 cr.) The development, limitations, and applicability of criminal law and procedure under the Constitution of the United States. Not open to students with credit for J301 or J302.

J410 Information Systems (3 cr.) R: J310. Records, their use, maintenance, analysis, and interpretation. Use of computer applications and other automated techniques and devices in the Criminal Justice System.

J470 Senior Seminar in Criminal Justice (3 cr.) P: senior standing or consent of Department. Emphasizes current developments in Legal, Administrative, and Operational aspects of the Criminal Justice System.

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

Metropolitan Studies Courses

U301 Introduction to Urbanism I (3 cr.) Exploration of the environmental, historical, economic, political, and social characteristics of cities and their interaction.

U302 Introduction to Urbanism II (3 cr.) P: U301. Emphasis on governmental services such as law enforcement, education, sanitation, health, welfare. Specific case studies of conflict and resulution in these areas.

U303 Independent Reading (9 cr. maximum) By arrangement and consent of instructor. P: U302. Intensive study of selected topics or problems. Approximately three thousand pages will constitute 3 credit hours.

U304 Seminar in Urban Problems (3 cr.) P: U302. Selected topics in urban problems such as poverty, pollution, urban education. May be taken twice for credit with approval of chairman.

U401 Research Seminar: The City I (3 cr.) P: U302. Introduction to and evaluation of tools for managing complex data, traditional research techniques, experimental design, models, and systems analysis. Students will decide on area for research and begin survey of relevant literature. The chairman may accept a substitute for this course.

U402 Research Seminar: The City II (3 cr.) P: U401 or consent of chairman. Students will present drafts of their projects to the seminar for evaluation. Research problems, data interpretation, and appropriate form will be discussed. At the end of the seminar, students will submit their completed projects.

U403 Practicum (3 cr.) P: U302. Guided field experience with city or private agency; weekly discussion groups; students may register with department six weeks before semester starts to be placed. This course may be repeated twice with approval of chairman. (Graded on Satisfactory/Fail basis.)

Graduate Courses

SPEA Courses

V500 Quantitative Tools for Public Management (3 cr.) Basic algebraic concepts, statistics, and probability. Designed to prepare students for V506. Not open to students who have had V506 or V507. (Students required to take V500 may take it as an elective.)

V501 Public Affairs in the United States (2-3 cr.) Discussion of the role of public management and the operation and constraints of bureaucracy in a democratic setting. Examination of the position of the public manager within the executive function of government. Analysis of political-bureaucratic relationships, of demands and supports from the public and legislative bodies, and of the public manager's relationship of them.

V502 Public Management (1-3 cr.) Analysis of concepts, methods, and procedures involved in managing public organizations. Problems of organization, planning, decision-making, performance evaluation, and the management of human resources are considered. Cases are drawn from a variety of public services found at federal, state, and local levels of government.

V503 Public Affairs and the Environment (2 cr. module) Begins from the approach that even though the public manager's decision-making is directed toward a specific service mission, the resultant decisions and policies often are accompanied by externalities that affect the physical environment. Analyzes many of the same policies examined in the Services course, but focuses on the externalities involved: effects on ecology, environmental health, and on urban and rural settings.

V504 Public Organization (3 cr.) Focuses on behavior within the context of the public organization. Includes such topics as perception, need satisfaction, attitude formation, motivation, leadership, systems theory, role theory, group theory, conflict theory, communication theory, and decision theory.

V506 Quantitative Analysis for Public Management I (3 cr.) P: Basic courses in college algebra and statistics or the equivalent; or an examination; or V500. An introduction to quantitative methods of analysis and their application to public sector problems. Scientific methods of research; concepts in basic mathematics, including calculus, linear algebra, and probability; and computer packages are introduced. Mathematical models and computer packages are used to analyze public sector problems in the areas of resource allocation, scheduling, routing, and design of service systems.

V507 Quantitative Analysis for Public Management II (3 cr.) P: V506. A continuation of the study and application of quantitative methods of analysis. Statistical methods and associated computer packages are introduced. Public sector applications of probability, statistics, and computer packages are made in the areas of experimental and quasi-experimental design, data collection, data analysis, evaluation, and decision-making.

V508 Topics in Quantitative Analysis (3 cr.) P: consent of instructor. Study and application of selected quantitative methods of analysis. Additional topics which are not included in V506 or V507 may be presented, or more advanced examination of topics which are introduced in V506 and V507 may be undertaken.

V509 Financing Public Affairs in the United States (module 2 cr.) Examines the principles of tax policy and their relationship to public expenditures. The role of the federal government as a source of revenue for state and local governments and the relationship involved.

V510 The Political, Economic, and Regulatory Aspects of Environmental Control (3 cr.) A consideration of environmental policy-making from the perspectives of state, local, and national, political, economic, and regulatory factors. Alternative forms of environmental regulation are considered in the light of their political and economic feasibility and consequences.

V511 Environmental Systems Dynamics (3 cr.) P: Permission of instructor. A modeling seminar in which logical, particularly deductive, analysis and the synthesis of complex environmental systems are the focus.

V513 Energy and Material Residuals in the Environment (3 cr.) The interrelationship among residuals (gaseous, liquid, solid, noise, heat) and the activities appropriate to effective environmental quality management.

V514 Problems in Public Utilities Regulation and Management (3 cr.) Examines some of the more traditional issues of regulation, the logic behind economic regulation in government and the growing importance of environmental regulatory agencies with rule-making, administrative, and adjudicatory powers. An examination of innovative regulatory approaches.

V515 Technology Assessment (3 cr.) A study of the methods for a systematic analysis of the rationale, current status, possible future developments, and implications for society of particular technoscientific programs. Both the positive as well as the less desirable social and environmental implications of a number of selected technologies will be examined in detail.

V516 Public Management Information Systems (3 cr.) The economic, social, demographic, technological, and political data necessary for the effective analysis and management of public services. The formation and classification of information on public programs and services. The organization, gathering, storage, and retrieval of complex data banks. The assessment of public organizational data needs.

V517 Public Management Economics (3 cr.) Provides the student with the central core of economic theory as it relates to the public sector. The use of micro-economic skills at the managerial level in the public sector is emphasized. The course includes a unit on macro-economics to include monetary theory, fiscal theory, economic stabilization, national income accounts.

V520 Environmental and Social Systems (3 cr.) The interrelationships among social, technical, and natural systems. Theories of growth. Causes and implications of environmental problems. Alternative policies and mechanisms for environmental control and bases for choice.

V521 Environmental Science (4 cr.) Principles of environmental science, with emphasis on applicable principles of ecology. Environmental physics and chemistry, as well as applications to air and water pollution problems. Lecture, laboratory, and field trips.

V522 Traffic Safety Program Development (4 cr.) State-of-the-art of traffic safety. Implementation of traffic safety programs. Communications and involvements of constituencies. Obtaining funds. Intergovernmental relations, including executive, legislative, and judicial branches. Role of national standards. Problem identification. The Highway Safety Program Plan.

V523 Traffic Safety Program Management (4 cr.) Management theory applied to traffic safety program management. Utilization of personnel resources including staffing and training. Budgeting and finance. Role of advisory committees for traffic safety coordination design and use of management information systems among state and local agencies concerned with safety program implementation. Planning, organizing, communicating, integrating, operating, and evaluating a state traffic safety program.

V524 Traffic Safety Program Evaluation (4 cr.) Designing and planning for evaluation. Identification, collection, analysis, and interpretation of data. Dissemination of evaluation results. Use of evaluation results in decision-making. Measurement as a prerequisite for prediction and control. Administrative and effectiveness (impact) evaluation concepts and methods.

V525 Public Financial Administration (3 cr.) P: V517, V560, or consent of instructor. Problems of financial management in governmental units; alternative revenue sources, financial planning and control, cash debt management; survey of modern expenditure management, control, and planning.

V526 Applied Mathematics for Environmental Science (3 cr.) P: Differential and integral calculus, FORTRAN. Philosophy and techniques of mathematical modeling, with emphasis on practical applications. Numerical analysis, applied calculus, differential equations, system simulation.

V527 Applied Ecology (3 cr.) P: An introductory level ecology course. Ecosystem concepts in natural resource management. Techniques of ecosystem analysis. Principles and practices of ecological natural resource management.

V528 Applied Ecology Laboratory (3 cr.) P or concurrent, V527. Field techniques for quantitative analyses of ecosystems. Introduction to laboratory techniques for applied ecological research.

V530 Urban Physical Structure (module 2 cr.) Theories of land use; geographic and geological bases of urban communities; location theory; land use and zoning; urban design.

V531 Urban Social Structure (module 2 cr.) Composition of urban populations: stratification; ethnic and racial minorities; age and sex categories; distribution of population in neighborhoods; dynamics of distribution.

V532 Urban Decision-Making (3 cr.) Administrative decision-making against the background of urban politics, power structures, bureaucracies, commercial and industrial interests, and citizen participation.

V533 Applied Urban Economics (3 cr.) Economic base analysis; input-output matrices; economic forecasting.

V534 Urban Technology (module 2 cr.) An introduction for the administrator to technical and engineering problems in the delivery of governmental and utility services.

V535 Urban Demography (module 2 cr.) Population trends in metropolitan, urban and suburban areas; vital statistics and census materials; collection and use of demographic materials in research and reporting; techniques of population forecasting.

V536 Environmental Chemistry (3 cr.) P: Organic Chemistry. Sampling methods and sample storage; environmental analytical methods and instruments; water, air, and soil quality and their measurements; special pollutant substances, their chemistry, sources, toxicological effects and analyses; industrial hygiene tests.

V537 Environmental Chemistry Laboratory (3 cr.) P or concurrent: V536 or consent of instructor. Experimental work in environmental chemical analysis to demonstrate analytical methods and instrumentation used in environmental laboratories, having reference to air, water, and soil quality.

V540 Law and Public Affairs (3 cr.) Explanation of law in society and its influence on public sector operations. Examination of some of the central substantive areas of the study of law, including regulatory processes, administrative adjudication, the Administrative Procedures Act, ombudsmen, citizen rights, among others.

V545 U.S. Public Health Policy I (3 cr.) An analysis of the delivery of health care in the U.S. from 1900-1975. Major system components are defined and studied. Topics covered include: organization of health programs on federal, state, and local levels of government; community and volunteer organizations and alternative health delivery systems.

V546 U.S. Public Health Policy II (3 cr.) P: V545. An examination of three major health issues: politics and health policy, cost and quality of care, and public health law.

V547 Applied Earth Science (3 cr.) Principles of the earth sciences and their applications to environmental analysis and management. Identification, quantification, and analysis of critical components of watershed systems. Interaction of human activities with the physical environment.

V548 Applied Earth Science Laboratory (3 cr.) Principles and methods of sampling, collection, measurement, analysis, interpretation of data concerning processes and features of the physical environment. Students will become familiar with field and laboratory equipment within the context of research projects. Emphasis is placed on practical application of basic techniques to real problems.

V549 Environmental Planning (3 cr.) The link between environmental quality and land use planning. Analytical and regulatory approaches for incorporating physical environmental concerns into everyday planning practice. NEPA and state environmental planning programs. Methods for assessing the physical and socio-economic effects of community and regional development proposals for inclusion in Environmental Impact Statements.

V550 Topics in Public Affairs (cr. arr.) Selected research and discussion topics organized on a semester-by-semester basis, usually with significant student input in the course design.

V552 Environmental Engineering (3 cr.) Concerned with biological, chemical, physical, and engineering knowledge essential to the achievement of environmental quality objectives. Theory and design of unit operations and processes for air, water, and land pollution abatement. Emphasis on water quality control, industrial wastewater treatment, and solid waste management.

V553 Differential Equations in Environmental Science (3 cr.) P: V526 or permission of instructor. Origin and methods for solving ordinary and partial differential equations arising in environmental science. Emphasis will be on equations for energy and mass transfer, but other topics will be considered.

V555 Topics in Environmental Science (1-3 cr.) Selected research and discussion topics in Environmental Science usually organized in a seminar format.

V560 Public Finance and Budgeting (1-3 cr.) The fiscal role of government in a mixed economy, sources of public revenue and credit; administrative, political, and institutional aspects of the budget and the budgetary process; problems and trends in intergovernmental fiscal relations.

V561 Public Personnel and Manpower Systems (1-3 cr.) Discussion of the selection and management of personnel. Personnel systems and the role of the merit system in government. Emphasis on public labor relations and continuous training of personnel for professional development.

V562 Public Program Evaluation (3 cr.) Examination of how the programs of public agencies are proposed, established, operated, and evaluated. Discussion of the role and conduct of research in the program evaluation process. In addition, techniques of effective evaluation and analysis are discussed.

V563 The Planning Process (3 cr.) Seminar designed to familiarize student with planning ramifications of policy issues faced by governments. The focal topics selected for study will vary. Emphasis placed on identification and analysis of substantive issues, methods employed for resolution, and application of planning techniques for achieving goals.

V564 Urban Administration (3 cr.) The course deals with the administration of public policy in American urban government, with special attention to the relationship of structure, process, and policy in selected functional areas. Students will be expected to read widely and to analyze and compare different perspectives and practices rather than to conduct an intensive inquiry into some particular area.

V565 Administrative Organization (module 2 cr.) Discussion of various principles of organization theory as discussed by several theorists. Examination of various governmental structures in view of the principles discussed. View taken is of the public manager operating within the organization context.

V566 Executive Leadership (module 2 cr.) Analysis of executive leadership within the context of public organizations in the United States. Examines the role of public managers and the principles and factors that affect their actions in light of current research and practice.

V570 Public Sector Labor Relations (3 cr.) An introductory overview of labor relations concepts within the framework of the public sector. The development, practice, and extent of the collective bargaining process as well as the administration of the labor agreement will be examined for state agencies, local municipalities, and school districts.

V571 State Policy Processes (3 cr.) An examination of the way policies get made and implemented at the state and regional levels of government. Description and analysis of the major institutions of state government, and federal and sub-state inter-governmental relations.

V572 Urban Topics (3 cr.) Selected topics in urban policy and administration. The course is sometimes restricted to a special group of students focusing on a particular research interest.

V575 Comparative and International Administration (3 cr.) Reading and discussion of case studies and comparative analyses of formal organizations with emphasis on governmental bureaucracies, public corporations, and international organizations. Topics include bureaucratic environment and culture, technology and organizations, program evaluation, communication and decision-making, and administrative structure and process.

V576 Comparative and International Development (3 cr.) Examination of the application of development theory to the public sector. Topics include modernization theory, urbani-

zation, development administration, community development, ethnicity, ideology, and national planning. Area case study project to include problems of policy implementation in developing areas.

V577 Comparative and International Economics (3 cr.) Examination of topics in international economics as related to problems of economic development. Topics include international trade, comparative economic policy, economic growth theory, economic integration, foreign aid investment, exchange rates, and international economic organization.

V579 Readings in Environmental Science (cr. arr.) Readings on selected topics in environmental science to be arranged with the individual instructor.

V580 Readings in Public Affairs (1-3 cr.) Readings on selected topics in public affairs to be arranged with the individual instructor.

V581 Public Safety Law (3 cr.) Survey of historical development of Anglo-American law of public safety, including criminal law, civil remedies, administrative regulation of risk, and recent developments in employee and consumer safety. Emphasis on understanding legal theory and practice as basis for management decisions. Comparison of jurisprudential viewpoints and other disciplinary approaches to causation, prevention, and correction of public safety problems.

V582 Criminal Justice Systems (2-3 cr.) P: V586. Detailed examination of operations of police, courts, and correctional agencies. Study of management problems in system response to criminal activity. Development of understanding of interrelationships among system components. Examination of major policy issues in criminal justice, with emphasis on decision-making techniques.

V583 Highway Safety Systems (module 2 cr.) P: V586. Detailed examination of operation of traffic law system agencies and institutions. Discussion of traffic law system as a risk management process. Management of systems of traffic enforcement, licensing, and driver control. Engineering factors in decision-making techniques.

V584 Emergency Services Systems (2 module cr.) P: V586. Detailed examination of emergency services systems, including fire, rescue, disaster and emergency medical services. Discussion of legal issues involved in decision-making. Management of emergency services systems.

V585 Practicum in Public Affairs (cr. arr.) Open to interested students through the Public Careers Internship and Placement Center or Field Study Program. Students hold work assignments with public agencies; final product such as a report, oral examination, or examples of materials developed in the Practicum is required. Grading is on a satisfactory-fail basis.

V586 Public Safety in the U.S. (2-3 cr.) Overview of Criminal Justice and Public Safety. Definitions of public safety and identification of major components. Functional description of major public safety agencies. Discussion of basic issues in public safety. Management in public safety system.

V587 Criminal Violation: Problems and Characteristics (3 cr.) Communalities in criminal behavior. The criminal act: circumstances leading to commission, subsequent perceptions of them. Family, community, and other environments affecting criminal behavior. Behavioral consequences of processes of crime control.

V588 Law and Control in Society (3 cr.) The role of law versus other forms of social control. How social change and social institutions shape the law. Social factors influencing the administration of law.

V589 Practicum in Environmental Science (1-6 cr.) Open to interested students through the Public Careers Internship and Placement Center. Students hold work assignments with public agencies; final product such as a report, oral examination, or examples of materials developed in the Practicum is required. Grading is on a satisfactory-fail basis.

V590 Research in Public Affairs (1-3 cr.) Research on selected topics in public affairs to be arranged with the individual instructor.

V593 Analytical Methods in Planning and Policy Analysis (3 cr.) P: V507. Topics include forecasting (e.g., population, employment, land use), optimization (e.g., CPM, PERT), operations research (e.g., queues), estimation and simulation of structural equation models.

V594 Principles of Urban and Regional Science (3 cr.) Discussion of the basic processes of change and development in regional systems, with emphasis on metropolitan regions. Includes economic demographic, and environmental aspects and their interactions.

V595 Managerial Decision-Making (1-3 cr.) Applications of decision-making tools to substantive public management problems. A variety of managerial cases and issues are selected for intensive discussion and analysis.

V609 Seminar in Revenue Theory and Administration (3 cr.) P: V517 or consent of instructor. This seminar examines the basic objectives and the political and economic aspects of tax administration. In the course of an examination of the interrelationships of tax policy, tax laws, and tax administration, the course reviews the major economic issues raised by types of taxes and user charges. The seminar also examines the fundamentals of tax legislation. Major emphasis is on state and local administration, although some federal problems will be covered.

V610 Seminar in Government Budget and Program Analysis (3 cr.) P: V525 or consent of instructor. Advanced study of management aspects of budgetary process. Special cases are analyzed and budget problem-solving exercises are utilized.

V620 Environmental Analysis Workshop (1-3 cr.) P: permission of instructor. Projects in environmental analysis.

V621 Seminar in Housing and Public Affairs (3 cr.) A seminar on the policy and implementation problems associated with housing. The emphasis is on the analytical, managerial, decisional skills and responsibilities of appointed public officials in the field of housing. Both macro questions of domestic housing policy and micro questions of density, code making, enforcing, and the like are treated.

V625 Research in Environmental Science (1-3 cr.) Research on selected topics in environmental science to be arranged with the individual instructor.

V630 Topics in Planning (1-3 cr.) P: Permission of instructor. A discussion of topics in planning, both methodological and substantive. Topic selected for study will vary.

V631 Seminar in Health Planning (3 cr.) A seminar in analysis and use of existing data and data systems in a planning context. Focus of the seminar will be on general systems theory as a planning tool. Student projects will be required.

V633 Seminar in Public Transportation Policy (3 cr.) P: V501 or V502. A seminar in the policy and implementation problems associated with public transportation. The analytical, managerial, and decisional skills and responsibilities of public administrators in the field of transportation are treated. May include cases and problem-solving exercises in traffic systems management, integrating transportation systems with other social service systems, and the like.

V650 Topics in Public Personnel Management (1-3 cr.) P: V561. Readings and research on selected topics in the public personnel field. Topics may include such subjects as affirmative action, occupational health and safety, manpower forecasting and planning, and approaches to position classification.

V660 Cases and Problems in Fiscal Administration (3 cr.) P: V560 or consent of instructor. An advanced seminar in the management aspects of public finance which focuses on the budgetary process. Special cases are analyzed and budget problem-solving exercises are utilized.

V661 Seminar in Public Personnel Administration (3 cr.) P: V561. The analysis and evaluation of problems in public personnel administration including training, labor relations, mobility, and the operations of civil service manpower systems.

V662 Seminar in Productivity and Program Evaluation (3 cr.) Examines the problem of rigorously determining the productivity of governmental services, including problems of defining and measuring public products, specifying public service inputs, and statistically estimating public service production functions. Concepts are given concrete application through careful investigation of attempts to measure productivity of governmental services.

V663 Seminar in the Regulatory Process (3 cr.) P: V501 or V502. An examination of the independent regulatory agencies in the Federal government and their counterparts at the local and state level. The special focus is on the interrelationship between the administrative, juridical, and rule-making powers of these agencies and their political, bureaucratic, and legal settings.

V664 Seminar in Complex Public Organization (3 cr.) P: V501 or V502. An advanced course in theories of organization with a special focus on the complex organization in the public sector. Both general theories, such as systems theory, and middle-range theories, such as decision theory, communications theory, and the like, are used.

V665 Seminar in Policy and Administration (3 cr.) Politics of program development and management. Translation of plans into viable, administrable programs. Marshalling support, political processes, strategies, constraints, tradeoffs, etc.

V666 Seminar in Public Expenditure Theory and Administration (3 cr.) P: V517. This seminar reviews the major political, economic, and sociological theories of public expenditure and the contribution they make toward an understanding of public action. The relationship of these theories toward administration and evaluation of public activity is examined.

V667 Seminar in Public Capital and Debt Theory and Administration (3 cr.) P: V517 or consent of instructor. This seminar examines the options open to governments, especially state and local, and why they resort to debt finance. The issues raised by the alternatives are examined in detail. Among the topics are public authority debt, revenue bonds, methods of placement, lease-purchase finance, and maturity choice. In addition, management of idle cash balances will be considered.

V668 Problems in Fiscal Federalism (3 cr.) P: V517 or consent of instructor. An advanced seminar in intergovernmental fiscal relations: aid programs, geographic spillovers, tax overlapping and coordination, and fiscal imbalance.

V670 Topics in Public Sector Labor Relations (1-3 cr.) P: V570 or permission. Selected research and discussion topics in the field of public sector labor relations arranged on a semester-by-semester basis. Possible topics are collective bargaining in the public sector and dispute settlement in public sector labor relations.

V675 Issues and Problems in Public Sector Labor Relations (3 cr.) P: V570 or permission. A capstone seminar providing an integrated examination of the most significant current issues and problems facing public employees and their governmental employers.

V680 Seminar in Environmental Science and Policy (1-3) P: Consent of Instructor. A seminar in current topics in environmental science and policy. Topics will vary.

V682 Seminar in Criminal Justice Planning, Management, and Issues (3 cr.) P: V582. A seminar addressing selected issues in criminal justice. Topics may include management, planning, organized crime, juvenile delinquency, law enforcement, courts, corrections, and other issues. Topics will vary each semester. Different sections may address different topics. The course may be taken more than once.

V683 Seminar in Highway Safety Planning, Management, and Issues (3 cr.) P: V583. A seminar addressing selected issues in highway safety. Topics may include management, planning, accident causation, injury reduction, post crash response, driver control, behavior modification techniques, traffic law system, and other issues. Topics will vary each semester. Different sections may address different topics. The seminar may be taken more than once.

V684 Seminar in Emergency Services Planning, Management, and Issues (3 cr.) P: V584. A seminar addressing selected issues in emergency services. Topics may include management, planning, disaster control, fire services, emergency medical services, emergency rescue, and other issues. Topics will vary each semester. Different sections may address different topics. The seminar may be taken more than once.

V685 Seminar in State and Local Legislatures (3 cr.) Structures and procedures of state and local legislatures, including the role of legislatures in the total governmental process and administrative aspects of legislative operation (information systems, preparation of the legislative budget, scheduling and coordination of hearings). Students serve as legislative interns with a state or local legislative body.

V690 Seminar in the Public Policy Process (3 cr.) An evaluation of the theoretical and empirical literature on public policy processes. The findings of policy research are evaluated. An integrative paper is required.

V691 Seminar in Problems and Issues in Policy Analysis (3 cr.) An advanced consideration of policy analysis for the student with a background of calculus and statistics. The seminar considers contrasting models of policy analysis and the appropriate quantitative techniques suited to each model. The seminar requires the treatment of a specific public policy problem and the use of quantitative analysis in problem assessment.

V890 Thesis (Ph.D.) (cr. arr.) (S-F only)

Other Principal Divisions and Activities

Division of Public Service

The School of Public and Environmental Affairs is charged by the Indiana University Board of Trustees with participating "in mid-career education programs for civil servants and other public career personnel" through faculty resources. Related to this professional development challenge, the School was also designated to "serve as the coordinating agency to facilitate the University's role in the solution of selected problems faced by the State and the Nation." These training and technical services are a part of Indiana University's efforts to respond to public needs and problems by bringing the resources of the University to bear on the real problems of governance in the local and state governments of Indiana and the nation. The Division of Public Service has the responsibility for carrying out this mission.

The Division provides a wide variety of services, including the following substantive areas and skills: public personnel management and manpower analysis, public labor relations, public financial management, the administration of justice, environmental management, urban and regional planning, and intergovernmental relations. Division services are offered to personnel in executive, middle management, technical, and supervisory roles in federal, state, and local government units. The Division's programs are available across the state of Indiana via the School of Public and Environmental Affairs on the Indianapolis and regional campuses of Indiana University.

Division personnel are also involved in a number of cooperative activities with other state and local agencies in the six Great Lakes states and with the federal government. These activities include overall program coordination and regional Intergovernmental Personnel Act programming, public personnel assessment, training, and labor relations.

The activities of the Division are supported not only by Indiana University, but by grants and contracts as well. The principal outside sources of support are the Law Enforcement Assistance Agency, the Intergovernmental Personnel Act, Title 1 of the Higher Education Act, and Lilly Endowment, Inc.

Center for Public Safety Training

The Center for Public Safety Training, established in 1971 and incorporated into SPEA in 1972, has been supported by LEAA grant assistance to support participants from Indiana jurisdictions. The Center's programs have had impact in numerous areas of the criminal justice system. Considerable progress has been made, for example, in regularizing training efforts in the field of law enforcement; the Center has contributed to this progress with the cooperative and perceptive participation of key operating officials and agencies throughout the state. Center personnel have also assisted in the development of records systems; the application of community psychology to police problems; development of testing procedures for the selection and promotion of public safety personnel; and the organization of criminal justice agencies. In addition to the state police, officers from over 70 different law enforcement agencies have participated in the Center's programs.

The Center's goals and objectives are summarized below:

—to continue to provide high-quality training programs of an advanced and technical nature to persons within the criminal justice system

—to focus training objectives in three basic areas: (1) the technical area, (2) the behavioral area, and (3) the management area

—to identify personnel classifications within the criminal justice system for purposes of program development and curriculum design

—to broaden the overall scope of the training program to include components which would fall into the broader area of public safety

—to allocate more manpower and resources to program development and design in an effort to devise a more substantive program core

—to design and implement new and imaginative training packages which depart from conventional training concepts and practices

—to identify new sources of funding for training projects

—to become involved in all areas of the criminal justice system as well as those areas falling in the broader public safety area where training is involved

SPEA Divisional personnel are instrumental in assisting the Center in identifying potential training opportunities as well as in coordinating program delivery operations. The Center also draws freely on the resources of SPEA and, in turn, assists other units of SPEA whenever it can. The Center relies heavily on operating officials who assist throughout the various stages of the training process. The Office of the Governor, the Indiana Criminal Justice Planning Agency, and the Indiana Law Enforcement Training Board, as well as state and local law enforcement agencies, are in this category. In addition to Center and SPEA staff, faculty for training programs is selected from skilled experts across the state and the nation. The larger University faculty provides much of the expertise utilized by the Center.

The Midwest Center for Public Sector Labor Relations

The Midwest Center for Public Sector Labor Relations was set up in response to the need for better understanding of the changing relationship between public employees and their governmental employers. Headed by a full-time coordinator, the program provides a forum for the exchange of information about problems, concerns, and ideas among individuals interested in or involved with public labor relations. The Center publishes the *Midwest Monitor*, a bimonthly digest of information on significant issues, events, and literature in the area of public sector labor relations. The Center also publishes a Practioners' Guide series which includes such titles as, "Primer in Public Sector Labor Relations," "Public Sector Labor Legislation in the Midwest," and "Terms in Public Sector Labor Relations."

The Center began its development of training programs for the State School Board Association in 1973. Other programs have been designed for the State Control Board, supervising collective bargaining for teachers, the Department of Corrections, and city administrators in Gary, South Bend, Fort Wayne, Indianapolis, and Bloomington.

Office of External Program Services.

Located on the Bloomington campus, the Office of External Program Services assists SPEA faculty, professional staff, institutes, and centers in developing new externally funded projects of all types, including educational and technical assistance, as well as research. Basically, this office facilitates the delivery of services, researching and planning potential target programs, identifying and working with potential sponsors and SPEA counterparts to develop new programs, and planning, coordinating, and producing proposals and grant applications. The Office also provides planning and management assistance for externally funded activities upon request.

The Institute for Research in Public Safety

The Institute for Research in Public Safety (IRPS) performs research, provides technical assistance, and trains personnel in a disparate range of substantive areas for a wide variety of federal, state, regional, and local agencies and private concerns. The Institute is nationally recognized for its work in the area of *Highway Traffic Safety*, but its project agenda encompasses many fields, including *Criminal Justice; Public, Occupational, and Consumer Health and Safety; Federal Election Law;* and other areas.

In the area of *Highway Traffic Safety* recent Institute projects have included the development of a methodology for assessing traffic accident risk in conjunction with the National Accident Sampling Systems (NASS) for the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA); the collection, processing, and analysis of traffic accident data for accident reconstruction; establishing a zone center for the NASS; and assessing individual differences in driver attention, all for NHTSA. Recent

projects undertaken for the Indiana Department of Traffic Safety and Vehicle Inspection include formulating the State Highway Safety Management Plan, offering technical assistance in local highway safety problem identification, and the development and distribution of the Governor's Traffic Safety Memo. In the past, the Institute has conducted studies regarding the influences of drug usage on driver behavior, seat belt usage, the frequency of safety-related defects in new motor vehicles, and a tri-level examination of accident causation. Assistance was also provided by IRPS to various federal and state agencies in conducting seminars for judges, prosecutors, and probation officers in 35 states in the nationwide Alcohol Safety Action Project.

The Institute has also done a great deal of work in the field of *Criminal Justice,* having helped in the planning of statewide standards and goals for the criminal justice system, drafting the comprehensive regional plans for the Indiana Criminal Justice Planning Agency, and surveying the Indiana Criminal Justice System. IRPS has also produced a model police record system, and conducted numerous police department management, organization, and consolidation studies. Other Institute Criminal Justice work has included the development of the first set of Indiana Criminal Justice Standards and Goals, the conduct of LEAA training conferences, and an evaluation of Indiana's probation services and volunteers-in-probation program.

Public, Occupational, and Consumer Health and Safety projects performed by the Institute include a survey of state emergency response planning for radiological transportation accidents, for the U.S. Nuclear Regulatory Commission; the design of a boating accident reporting system for the U.S. Coast Guard; and an analysis and evaluation of Emergency Medical Services in central Indiana. Other health and safety activities conducted by IRPS have been the preparation of a technical assistance manual to identify information and training needs of Area Agencies on Aging; development of a standard reporting system on federal employees' occupational accidents and illnesses; and training programs for work-related accident control.

The Institute for Research in Public Safety also performs work across other disciplines. The Institute has analyzed laws and procedures governing contested elections and recounts for the Federal Election Commission, analyzed absentee voting and registration laws and procedures for the General Accounting Office, developed a manual and conducted training workshops for local government officials on computer use in Indiana, and performed research work in several other areas.

Public Careers Internship and Placement Center

The School is committed to the concept of service-learning—education through meaningful work experiences. Administered through the Public Careers Internship and Placement Center, the experiences offered include internships, cooperative education assignments, independent research projects, student-faculty research teams, or special course offerings which allow the student to combine classroom learning with practical experience. These opportunities are designed not only as learning experiences, but also provide the student with an opportunity to test career options, establish a credible work record and experience personal growth. Every student is highly encouraged to participate in one of the service-learning programs during the course of his or her academic career. Service-learning is likewise a key vehicle for implementing the School's mission to serve the community which supports Indiana University.

Students participating in most service-learning experiences earn six hours of credit per experience. Usually a cash stipend is provided as well. In the undergraduate program a maximum of 15 credits [V380 Internship in Public Affairs] is allowed for participation in service-learning programs. A maximum of six credits [V585 Practicum in Public Affairs] is allowed in the graduate program.

The work of the Center is closely integrated with the graduate and undergraduate programs of the School so as to ensure the integration of service-learning experiences with

degree curricula. Ordinarily, the Center arranges the details of most of the internships, field experiences, and other service-learning programs. However, with the guidance and approval of the Center students may, under the Field Study Program, make arrangements for their own internship with a governmental agency.

Cooperative Education Program

The Cooperative Education Program is designed for students entering their junior year. Assignments normally carry six hours of credit and are with federal government agencies on a semester-on, semester-off basis for the junior and senior years. The benefits of the program not only include work experience and personal growth but noncompetitive entry into the federal service upon graduation. From time-to-time, a limited number of graduate co-op opportunities will become available.

Public Service Internship Program

Full-time internships in public agencies are developed by the Center for the fall, spring, and summer semesters. The internships vary greatly, both in focus (criminal justice, environment, financial management, consumer protection, health care, planning, social service, personnel administration, community development, and urban policy) and in the role played by the student (research, administration, communication, and program implementation). Student applicants are selected to interview with the host agency on the basis of their suitability to the internship. Public Service interns earn six credits and are paid a stipend ($1,400 for graduate students, $1,200 for undergraduates) for their work.

The Center conducts special seminars for Public Service interns. When required by the project it also provides interns with a travel allowance and publishes the student's final report. Staff of the Center meet periodically with the student and his/her supervisor to help resolve problems or support the internship in some other way. The faculty and professional staff of the School likewise stand behind the interns to offer the guidance and technical assistance needed for the internship.

The Center provides the host agencies with internship planning assistance, the capability to screen and select appropriate students for each internship, payroll administration and financial support for many internships. The Center seeks to act as a conduit for channeling the research, training, and technical assistance capabilities of the School to the interns and their host agencies.

Field Study Program

The Center also seeks to accommodate students who, on their own efforts, have developed meaningful work experiences in the public sector. Such students may request up to six hours credit by submitting a learning contract to the Center. Although the extensive support services provided by the Center in the Public Service Internship Program are not available under the Field Study Program, the Center seeks to assist Field Study interns informally. In order to complete the credit requirements, students must satisfactorily complete biweekly progress reports.

Resource Development Internship Project

The Center also houses a midwestern regional program which is operated under a grant from the Economic Development Administration.

RDIP organizes and funds internships and provides program development support in thirteen states for students from many midwestern colleges and universities as well as Indiana University. Internships through this project are modelled after the Public Service Internship Program.

Public Careers Placement

Public Careers Placement exists to serve the students of SPEA by providing them with placement assistance which is designed to complement the student's own placement efforts. Registration with the office is required for all Seniors, and is available as an option to

second-year M.P.A. candidates. Because of the potential assistance provided by the Office, SPEA strongly suggests that M.P.A. candidates use this service.

Regular placement service is provided whereby contacts are made between potential public affairs and private sector employers and students. Interviews are conducted through this office, but are more often made available in the offices of potential employers through notification to qualified students of current job openings, both within the state of Indiana and elsewhere. The office also regularly receives listings of other job openings which are kept up to date in the Public Careers Library.

The Public Careers Office also provides professional counseling services to students through "The Job Search," a one-day intensive workshop offered four times yearly, which concentrates on the development of good cover letters and resumes, and intensive preparation for the interview process. The latter stresses good interview techniques, supplemented by videotaped vignettes of different interview situations. Students then undergo individual interviews which are videotaped and played back to the interviewer for analysis. Individual counseling is also offered on resumes, cover letters and other aspects of the job search.

Center for Urban and Regional Analysis

The Center for Urban and Regional Analysis offers the Urban Studies program at Indiana University. This program supplements course work in a given discipline with specialized or general work in urban studies, including land use analysis, urban politics, and urban and regional planning. The Center is committed to the concept of service-learning education through meaningful work experience. Students can acquire such experience through public service internships or through field study in public agencies.

Research activities of the Center have included an evaluation of the impact of railroad abandonments under the current rail reorganization process on communities in Indiana for the Office of the Governor, and the development of a State Railroad Plan for the Public Service Commission of Indiana. The Center staff also drafted the original bill which became the State Rail Preservation Act, and have presented technical testimony for the State on numerous occasions before the Interstate Commerce Commission.

Current research and service activities of the Center include technical assistance to small cities, evaluation of federal housing guidelines, and policy and planning analysis of federal and state transportation programs.

Further information on CURA and its programs may be obtained by writing to the Director, Center for Urban and Regional Analysis, Poplars 405, 400 East Seventh Street, Bloomington, Indiana 47405.

Environmental Systems Application Center

The Environmental Systems Application Center expands the academic program in the School of Public and Environmental Affairs through the addition of interdisciplinary environmental research and community education projects. The Center conducts environmental research in applied ecology and natural resources, as well as analysis of the impact of human activity on the natural environment. In addition, the Center is concerned with the socioeconomic, legal, and institutional aspects of environmental regulation and planning.

The core research staff is composed of SPEA faculty and graduate students, whose backgrounds span several disciplines. Faculty of the SPEA Environmental Programs also regularly interact with faculty from the other departments at Indiana University. Inter-institutional efforts are supported and encouraged by the Center when the solutions to research problems require a broader array of talent from the Midwest. Several efforts of this type are now being conducted in the areas of land-use analysis, environmental impact analysis, energy extension, and energy conservation. By incorporating the resources of SPEA with the institutional and inter-institutional resources available to ESAC, an effective arrangement has been made for environmental applications in research and education.

The School of Public and Environmental Affairs Library

The SPEA Library is an official branch of Indiana University Library and is designed to serve the research needs of faculty and students of the School of Public and Environmental Affairs. Founded in August, 1972, the library has about ten thousand books and receives regularly nearly three hundred periodicals. Along with books and periodicals, the library has an extensive collection of documents, pamphlets, papers, conference proceedings, etc., vital to research and study in the public affairs area.

The library's books are classified according to the Library of Congress system. Journals are placed alphabetically on open shelves. The vertical file material is classified by a special scheme and is accessible through a computer print-out index.

The library is located at the Poplars Research and Conference Center.

Members of the library staff are Michael Parrish and Meredith Kirkpatrick.

Pi Alpha Alpha

Pi Alpha Alpha is the national honorary society for schools of public affairs and administration. The society acknowledges outstanding scholarship and contributions to these fields. It was founded in 1972 by the National Association of Schools of Public Affairs and Administration (NASPAA) to honor those who have demonstrated distinctive performance in public affairs. The Indiana chapter of Pi Alpha Alpha is a charter chapter.

The Indiana chapter offers several types of Pi Alpha Alpha membership. Undergraduate students are eligible when they are in the top ten percent of their graduating class with a minimum of a 3.5 grade-point average, at least 15 semester hours of SPEA courses, and in the last semester of the junior year or in the senior year.

Graduate students qualify for membership by being in the top twenty percent of their graduating M.P.A./M.S.E.S. class with a minimum 3.5 grade-point average for 50 percent of the required course work (i.e., 18 semester hours).

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

Any full-time faculty member of a NASPAA member institution offering course work in a public affairs or administration degree program at which a Pi Alpha Alpha chapter is located is eligible for membership.

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

Although Pi Alpha Alpha is a fairly new organization, it will soon become the summary vehicle for recognition of the outstanding qualities of students of public affairs. Membership in Pi Alpha Alpha may be compared to membership in Phi Beta Kappa for liberal arts graduates. The citation of membership on a resume or curriculum vita may eliminate the need for a transcript of grades. A person evaluating credentials in the various fields of public service should recognize the professional quality such a designation represents.

The Undergraduate Student Council

The Undergraduate Student Council is an organization formed in response to a growing need for greater student representation and involvement in the School of Public and Environmental Affairs. Besides involving the student in the decisions made by the School, the USC also serves as an actual microcosm of the field of public administration. Each member has duties and responsibilities to perform in conjunction with goals set by the general membership of the council. Positions vary from Staff Director to seats on various SPEA committees.

The Council is guided by a Charter drafted by its original appointees which is constantly being updated. Prospective new members are granted interviews by an Appointments Committee. A formal election is held each Spring to fill the more formal positions on the Council.

Examples of USC accomplishments include: the creation of a Women in Public Affairs Committee, a SPEA Student Survey, a monthly USC Newsletter, and an EXTERN Program which provides actual on-the-job experience for students.

Advisory Group

School of Public and Environmental Affairs

Board of Visitors

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Faculty and Senior Professional Staff School of Public And Environmental Affairs 1979-80

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Indiana University

When you become a student at Indiana University you join an academic community internationally known for the excellence and diversity of its programs. The University attracts students from all fifty states and around the world. The full-time faculty numbers over 3,000 and includes members of many academic societies such as the American Academy of Arts and Sciences, the American Philosophical Society, and the National Academy of Sciences.

Indiana University was founded at Bloomington in 1820 and is one of the oldest and largest of the state-supported universities. It serves over 70,000 students on eight campuses. The residential campus at Bloomington and the urban center at Indianapolis form the core of the University system. Regional campuses in Gary, Fort Wayne, Kokomo, New Albany, Richmond, and South Bend join Bloomington and Indianapolis in bringing an education of high quality within reach of all of Indiana's citizens.

The Bloomington Campus

The environment and facilities of the Bloomington campus make it a dynamic place to live and study. Over 30,000 students pursue undergraduate and graduate degrees at Bloomington.

The academic resources of the campus provide both opportunity and challenge. The University Library ranks in the top ten academic libraries in the United States and the Lilly Library is internationally known for its collection of rare books and manuscripts. The libraries support the work of faculties in areas such as the Humanities, Foreign Languages, and the Social Sciences who are renowned for their scholarship and research. Laboratories in departments such as Biology, Chemistry, and Physics are engaged in work at the frontiers of knowledge. Particularly notable is the 200 million volt variable particle cyclotron, which attracts scientists from around the world. The Schools of Business and Public and Environmental Affairs enjoy high prestige with business and government leaders. Programs of distinction are offered in the Schools of Law and Optometry, the Graduate Library School, and the School of Health, Physical Education, and Recreation. The School of Music is ranked first among all such schools in the nation and the School of Education ranks third. An extraordinary variety of lectures and seminars complement classroom and laboratory inquiry. The University Theatre, the Art Museum, and the large Musical Arts Center serve as major resources for the University's programs in the performing and fine arts.

Housing is provided on the Bloomington campus in residence halls, sororities, and fraternities. For married students and their families the University offers apartments and trailers. Students also rent off-campus housing in Bloomington.

The Bloomington campus provides many services for its students. The University Division gives special support and counseling to incoming freshmen, helping them to plan and carry through a sound academic program. The Student Health Center, the Career Counseling Center, job placement services, Student Legal Services, the Psychological Clinic, the Optometry Clinic, and services for the handicapped, minority students, women, and veterans are described in the student handbook, which is available from the Dean for Student Services.

Indiana University-Bloomington is a member of the Big Ten Conference. Men's and women's varsity teams participate in 13 sports. A large intramural sports program provides recreation for all students. Tennis and squash courts, swimming pools, sports fields, running tracks, basketball courts, and an 18-hole golf course are available for individual use. Within a few miles of Bloomington are several thousand acres of state forest, wilderness trails, and lakes for swimming, boating, and fishing.

The Indianapolis Campus

Indiana University-Purdue University at Indianapolis is an innovative urban campus. I.U. and Purdue programs and facilities merged at Indianapolis in 1969, and the campus continues to

grow in both the range of academic offerings and the physical facilities. IUPUI also operates a branch campus at Columbus, Indiana.

The IUPUI library system consists of seven libraries serving the special interests of individual schools. In addition, the entire Indiana University system library is readily available through the interlibrary loan system.

Significant research in the medical sciences is carried out in ten specialized centers within the medical school. Research projects are conducted in numerous other fields, some in cooperation with city and state government and private industry.

Schools at IUPUI are deeply involved in service to citizens, working closely with public and private agencies, government, business, and industry in providing expertise to solve problems. Such service projects enable students to enrich their education with practical experience.

Lectures, theatre presentations, and other special events are available on campus, and the city provides many facilities for the arts, sports, and entertainment. IUPUI is a member of the National Association of Intercollegiate Athletics and the National Collegiate Athletics Association. Men's and women's varsity teams participate in six sports, and an intramural sports program offers recreation for all students.

IUPUI provides on-campus housing for a limited number of students. The Housing Office maintains a list of apartments available off campus in the Indianapolis area.

Services for students are described in the student handbook, available from the Dean for Student Services. They include special services for the handicapped, veterans, women, and foreign students; a day care center; personal counseling; career counseling and job placement; financial aid; and the Student/Employee Health Center.

Policies of the University

Nondiscrimination policy. Indiana University provides its services without regard to sex, age, race, religion, ethnic origin, veteran status, or handicap. An Affirmative Action Office on each campus monitors the University's policies and assists individuals who have questions or problems related to discrimination.

Confidentiality of Student Records. In accordance with federal statutes and regulations, student records are confidential and available for disclosure to persons other than the student only under stated conditions.

Student Rights and Responsibilities. Rights and responsibilities of students are included in the Student Handbook and provide for due process hearings in the event of disciplinary action.

Degree Requirements. Students are responsible for understanding all requirements for graduation and for completing them by the time they expect to graduate. Information about a specific school or division can be found in the front section of the bulletin for that school.

Fees

Fees are subject to change by action of the Trustees of Indiana University.

Bloomington Campus	**Indiana resident**	**Nonresident**
Undergraduate	$ 31/credit hour	$ 76/credit hour
Graduate and professional	40/credit hour	96/credit hour
Medical (flat fee)	660/semester	1600/semester
Indianapolis Campus		
Undergraduate	$ 26/credit hour	$ 59/credit hour
Graduate and professional	40/credit hour	96/credit hour
Medical (flat fee)	660/semester	1600/semester
Dentistry (flat fee)	580/semester	1450/semester

Special Fees: both campuses	
Auditing (no credit)	$ 5/credit hour
G900 or R900 (thesis in absentia)	40
Late enrollment	25
Late program change	10
Independent study (correspondence)	26/credit hour
Adult education (noncredit)	
School of Nursing	100/week
Student Health Service	20-30/semester

Fee Refund

Schedule

First and Second Semesters	**Refund for Withdrawal**
First week or through Class Change Day	100%
Second and third weeks	50% or all except $50, whichever is larger
Thereafter	None
Summer Sessions	
First week or through Class Change Day	100%
Second week	50% or all except $50, whichever is larger
Thereafter	None
Intensive Sessions	
Before second class meeting	100%
Before third class meeting	50%
Thereafter	None

Procedure

Students must apply to the Office of Records and Admissions for fee refunds when they withdraw from classes.

Residency Status

Prospective students from out of state should be aware that the criteria for establishing in-state residency and thus qualifying for in-state fee rates are very strict. Except under specific circumstances, persons who have moved to Indiana for the primary purpose of attending a college, university, or other institution of higher education will not be able to qualify for in-state fees during their academic career. Rules for determining residency are listed at the end of this section.

Fee Reductions and Financial Aid

Scholarships and Financial Aid. Students can find information about loans and part-time employment through the Office of Scholarships and Financial Aids and through their school or department.

Employment. The Office of Financial Aids on each campus lists openings for part-time jobs in various offices and organizations of the University.

Fee Courtesy. Fees for a full-time (100% F.T.E.) appointed employee of Indiana University enrolled in 1 to 6 credit hours per semester or summer session are assessed at one half the resident credit hour rate at the campus where the employee enrolls. Fees for credit hours beyond 6 in a semester or summer session are at the full resident rate.

The spouse of a full-time (100% F.T.E.) appointed employee of Indiana University is entitled to a fee credit of one half the resident undergraduate fee rate for each credit hour up to a maximum of 3 credit hours per semester or summer session. This fee credit will be deducted from the full fees of the student assessed at the appropriate resident or non-resident rate.

Veteran benefits. Students who are eligible for veteran benefits may enroll according to the following scales:

Benefits	**Fall & Spring**		**IUPUI**	**Bloomington**
Undergraduate	**Semesters**	**Summer I**	**Summer II**	**Summer II**
full	12 or more	4	4	6
¾	9-11	3	3	4-5
½	6-8	2	2	3
tuition only	fewer than 6	1	1	1-2
Graduate				
Benefits				
full	9 or more	4	4	5
¾	7-8	3	3	4
½	5-6	2	3	3
tuition only	fewer than 5	1	1	1-2

It is the responsibility of the veteran or veteran dependent to sign up for benefits each semester or summer session of enrollment. It is also the responsibility of the veteran or veteran dependent to notify the Veterans Affairs Office of any schedule change which may increase or decrease the number of benefits allowed.

Veterans with service connected disabilities may qualify for the V.A. Vocational Rehabilitation Program. They should contact their regional V.A. office for eligibility information.

Transfer to Other Indiana University Campuses.

Each year many Indiana University students transfer from one campus of the university to another to continue their studies toward a degree. These transfers are often necessitated by financial difficulties, illness, or other personal problems, but just as often they are a matter of personal preference. Few of the other multi-campus universities are organized to facilitate this volume of student migration. Indiana University credits transferred from one campus of Indiana University to another will be evaluated and accepted in terms at least as favorable as credits transferred from other accredited institutions in the United States. No review of the credits will be undertaken except in good faith terms of the same criteria used in evaluating external credits. In fact, students transferring within the Indiana University system are treated much more favorably because of the similarity of course work on the eight campuses.

Students who wish to transfer to another campus should follow these procedures:

1. Inform your academic adviser of your decision as soon as possible. Degree requirements may vary from one campus to another but if your adviser knows of your plan, your academic program can be designed to meet the requirements of the campus you will eventually attend.
2. Contact the department chairperson (or the designated adviser) at the campus you plan to attend. Discuss your plan and ask about any special procedures. For example, transfers in fine arts must submit portfolios of their work. Music transfer students must be auditioned.
3. As the date of transfer approaches, check with your campus Registrar to get information on Registration dates and procedures on the other campus. If there is a pre-registration or pre-enrollment procedure at the other campus, you should plan to take advantage of it. Contact the Registrar of the other campus to determine whether you can fulfill any of these responsibilities by phone. Your Registrar has a direct telephone line to all other Registrars.

4. When you arrive on the new campus, contact your assigned academic adviser or department chairperson as soon as possible. Discuss your academic progress to date and the additional course work required for your program.

Rules Determining Resident and Nonresident Student Status for Indiana University Fee Purposes

These Rules establish the policy under which students shall be classified as residents or nonresidents upon all campuses of Indiana University for University fee purposes. Nonresident students shall pay a nonresident fee in addition to fees paid by a resident student.

These Rules shall take effect February 1, 1974; provided, that no person properly classified as a resident student before February 1, 1974, shall be adversely affected by these Rules, if he or she attended the University before that date and while he or she remains continuously enrolled in the University.

1. "Residence" as the term, or any of its variations (*e.g.*, "resided"), as used in the context of these Rules, means the place where an individual has his or her permanent home, at which he or she remains when not called elsewhere for labor, studies, or other special or temporary purposes, and to which he or she returns in seasons of repose. It is the place a person has voluntarily fixed as a permanent habitation for himself or herself with an intent to remain in such place for an indefinite period. A person at any one time has but one residence, and a residence cannot be lost until another is gained.
   (a) A person entering the state from another state or country does not at that time acquire residence for the purpose of these Rules, but except as provided in Rule 2(c), such person must be a resident for twelve (12) months in order to qualify as a resident student for fee purposes.
   (b) Physical presence in Indiana *for the predominant purpose* of attending a college, university, or other institution of higher education, shall not be counted in determining the twelve (12) month period of residence, nor shall absence from Indiana for such purpose deprive a person of resident student status.
2. A person shall be classified as a "resident student" if he or she has continuously resided in Indiana for at least twelve (12) consecutive months immediately preceding the first scheduled day of classes of the semester or other session in which the individual registers in the University, subject to the exception in (c) below.
   (a) The residence of an unemancipated person under 21 years of age follows that of the parents or of a legal guardian who has actual custody of such person or administers the property of such person. In the case of divorce or separation, if either parent meets the residence requirements, such person will be considered a resident.
   (b) If such person comes from another state or country for the predominant purpose of attending the University, he or she shall not be admitted to resident student status upon the basis of the residence of a guardian in fact, except upon appeal to the Standing Committee on Residence in each case.
   (c) Such person may be classified as a resident student without meeting the twelve (12) month residence requirement within Indiana if his or her presence in Indiana results from the establishment by his or her parents of their residence within the state *and* if he or she proves that the move was predominantly for reasons other than to enable such person to become entitled to the status of "resident student."
   (d) When it shall appear that the parents of a person properly classified as a "resident student" under subparagraph (c) above have removed their residence from Indiana, such person shall then be reclassified to the status of nonresident; provided, that no such reclassification shall be effective until the beginning of a semester next following such removal.
   (e) A person once properly classified as a resident student shall be deemed to remain a resident student so long as remaining continuously enrolled in the University until such person's degree shall have been earned, subject to the provisions of subparagraph (d) above.
3. The foreign citizenship of a person shall not be a factor in determining resident student status if such person has legal capacity to remain permanently in the United States.
4. A person classified as a nonresident student may show that he or she is exempt from paying the nonresident fee by clear and convincing evidence that he or she has been a

resident (see Rule 1 above) of Indiana for the twelve (12) months prior to the first scheduled day of classes of the semester in which his or her fee status is to be changed. Such a student will be allowed to present his or her evidence only after the expiration of twelve (12) months from the Residence Qualifying Date, i.e., the date upon which the student commenced the twelve (12) month period for residence. The following factors will be considered relevant in evaluating a requested change in a student's nonresident status and in evaluating whether his or her physical presence in Indiana is for the predominant purpose of attending a college, university, or other institution of higher education. The existence of one or more of these factors will not require a finding of resident student status, nor shall the nonexistence of one or more require a finding of nonresident student status. All factors will be considered in combination, and ordinarily resident student status will not result from the doing of acts which are required or routinely done by sojourners in the state or which are merely auxiliary to the fulfillment of educational purposes.

(a) The residence of a student's parents or guardians.
(b) The situs of the source of the student's income.
(c) To whom a student pays his or her taxes, including property taxes.
(d) The state in which a student's automobile is registered.
(e) The state issuing the student's driver's license.
(f) Where the student is registered to vote.
(g) The marriage of the student to a resident of Indiana.
(h) Ownership of property in Indiana and outside of Indiana.
(i) The residence claimed by the student on loan applications, federal income tax returns, and other documents.
(j) The place of the student's summer employment, attendance at summer school, or vacation.
(k) The student's future plans including committed place of future employment or future studies.
(l) Admission to a licensed profession in Indiana.
(m) Membership in civic, community, and other organizations in Indiana or elsewhere.
(n) All present and intended future connections or contacts outside of Indiana.
(o) The facts and documents pertaining to the person's past and existing status as a student.
(p) Parents' tax returns and other information, particularly when emancipation is claimed.

5. The fact that a person pays taxes and votes in the state does not in itself establish residence, but will be considered as hereinbefore set forth.
6. The Registrar or the person fulfilling those duties on each campus shall classify each student as resident or nonresident and may require proof of all relevant facts. The burden of proof is upon the student making a claim to a resident student status.
7. A Standing Committee on Residence shall be appointed by the President of the University and shall include two (2) students from among such as may be nominated by the student body presidents of one or more of the campuses of the University. If fewer than four are nominated, the President may appoint from among students not nominated.
8. A student who is not satisfied by the determination of the Registrar has the right to lodge a written appeal with the Standing Committee on Residence within 30 days of receipt of written notice of the Registrar's determination which Committee shall review the appeal in a fair manner and shall afford to the student a personal hearing upon written request. A student may be represented by counsel at such hearing. The Committee shall report its determination to the student in writing. If no appeal is taken within the time provided herein, the decision of the Registrar shall be final and binding.
9. The Standing Committee on Residence is authorized to classify a student as a resident student, though not meeting the specific requirements herein set forth, if such student's situation presents unusual circumstances and the individual classification is within the general scope of these Rules. The decision of the Committee shall be final and shall be deemed equivalent to a decision of the Trustees of Indiana University.
10. A student or prospective student who shall knowingly provide false information or shall refuse to provide or shall conceal information for the purpose of improperly achieving resident student status shall be subject to the full range of penalties, including expulsion, provided for by the University, as well as to such other punishment which may be provided for by law.

11. A student who does not pay additional monies which may be due because of his or her classification as a nonresident student within 30 days after demand, shall thereupon be indefinitely suspended.
12. A student or prospective student who fails to request resident student status within a particular semester or session and to pursue a timely appeal (see Rule 8) to the Standing Committee on Residence shall be deemed to have waived any alleged overpayment of fees for that semester or session.
13. If any provision of these Rules or the application thereof to any person or circumstance is held invalid, the invalidity does not affect other provisions or applications of these Rules which can be given effect without the invalid provision or application, and to this end the provisions of these Rules are severable.

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