

NEW GRADUATE CONCENTRATION PROPOSALS ARIZONA STATE UNIVERSITY GRADUATE COLLEGE

This form should be used for academic units wishing to propose a new concentration for existing graduate degrees.

A concentration is a subspecialty within a degree and major, which reflects that the student has fulfilled a designated, specialized course of study, which qualifies the student as having distinctive skills and training in one highly concentrated area of the major. Concentrations are formally-recognized educational designations (including the assignment of a university plan code for reporting/record-keeping purposes and appearance on the ASU transcript). Concentrations are to be distinguished from not formally recognized academic distinctions frequently referred to as "emphases," "tracks," "foci," "options," etc.

Submit the completed and signed (chairs, unit deans) proposal to the **Office of Graduate Academic Programs**. Mail code 1003 and electronic copies to Joan.Brett@asu.edu or Denise.Campbell@asu.edu

Please type.

Contact Name(s): Erik Johnston	Contact Phone(s): 602-496-1103			
College/School/Division Name: College of Public Progr	rams (COPP)			
Academic Unit Name: School of Public Affairs				
(or proposing faculty group for interdisciplinary proposals)				
Existing Graduate Degree and Major under which this concentration will be established: Master of Public Policy (MPP) in Public Policy				
Proposed Concentration Name: Policy Informatics				
Requested Effective Term and Year: Fall 2012 (e.g. Spring 2012)				
Do Not Fill in this information: Office Use Only	CIP Code:			

1. Overview

A. Provide a brief description (*not to exceed 250 words*) of the new concentration (including the specific focus of the new concentration, relationship to other concentrations in this degree program, etc).

The MPP in Public Policy Concentration in Policy Informatics provides knowledge and skills for students seeking careers that will use informatics tools, models, and simulations to help individuals and groups deliberate and evaluate policy decisions as well as explore new governance infrastructures. This concentration emphasizes theories and research concerning decision-making, complexity theory and visualization of quantitative and qualitative information, collective intelligence, behavioral economics, and persuasive technologies.

2. Impact Assessment

A. Explain the unit's need for the new concentration (e.g., market demand, research base, direction of the discipline, and interdisciplinary considerations). How will the new concentration complement the existing degree program, including enrollment, national ranking, etc?

The ASU School of Public Affairs is engaged in teaching and scholarship in public administration, public policy, urban affairs, participatory governance, and informatics studies. Solving complex public policy problems, dilemmas, and challenges requires deliberate and sophisticated information analysis. Policymakers often are faced with conflicting solutions to complex problems, thus making it necessary for them to test out their assumptions, interventions, and resolutions. Towards this end, it becomes critical for a policymaker to have an information-rich, interactive environment in which complex problems can be modeled, simulated, visualized, and studied.

Informatics tools incorporate ideas from computer science, public administration, cognitive psychology, information science, geographical science, and other fields. The interdisciplinary approach ensures that students receiving a Graduate Concentration in Policy Informatics understand discipline-specific research problems and methods as well as principles

underlying technologies that can be used to support people in their work. Importantly, informatics specialists also know how to design, implement, and evaluate systems to make them most useful.

Policy Informatics helps us advance evidence-driven policy design, wherein scientific models and analyses drive decision-making for resolution of complex policy challenges, dilemmas, and problems. Policy Informatics is both an emerging field of research and a community of practice focusing on 1) advancing decision-making in the public sector through information-centric analysis of evidence that leverages computational and technological advances; and 2) designing, managing, and evaluating information systems and infrastructures for policy construction, analysis, and implementation. Policy Informatics advances the multi-disciplinary nature of the public administration discipline by infusing it with the advances of information technology, management of information systems, and computational and informational science perspectives.

Three key features of ASU's transformation into the New American University are the university's trans-disciplinary character, its recognition of the value of people, and its acknowledgement that technology plays a central role in society. The proposed Graduate Concentration in Policy Informatics has similar thrusts, making it emblematic of the university's mission and strategic direction. Moreover, the program's emphasis on project-oriented courses and problem-driven science make it closely aligned with ASU's commitment to use-inspired research.

According to the Bureau of Labor Statistics many of the fastest-growing occupations outside academia are computer-related. While their categories are more traditionally computer-science-based, the reality of the workplace is that many of these positions require or benefit from additional domain expertise. Their report points out that "The increasing demand for computer-related occupations reflects the rapid advances in computer technology and the continuing development of new computer applications, including the Internet. Overall, the [national] demand for computer specialists is projected to grow 68.6 percent, and that for computer and information systems managers anticipates growth of 47.9 percent through 2010." Applicants with both domain and technology expertise have an edge in the workplace. Technology built with the benefit of domain expertise tends to be more useful and thus more successful.

B. Please identify other <u>related</u> ASU programs and outline how the new concentration will complement these existing ASU programs? (If applicable, statements of support from potentially-affected academic unit administrators need to be included with this proposal submission.)

The Graduate Concentration in Policy Informatics combines mastery of advanced methods for processing information with domain expertise that will help humans understand complex social phenomena and achieve goals within public and governance applications. The program's design responds to the need for professionals with domain knowledge that can take a problem-driven, system-level, user-oriented perspective in developing and applying informatics systems to address societal and governance needs. These goals are closely aligned with the aims of ASU's New American University and are largely unaddressed by public administration and public policy programs at other universities.

The proposed Graduate Concentration in Policy Informatics fill this gap by formalizing what individuals have done on their own and by realizing a vision of what will be essential for the future. The concentration responds to a need for researchers who take a problem-driven, human-centered approach to supporting research through technology. While technology-focused disciplines like computer science seek answers to problems of technology (e.g., algorithm development, optimization techniques, programming language development, protocols, etc.), informatics explores problems of interest to other disciplines (e.g., science, geography, education, sustainability, etc.) that technology can help address. Examples of informatics challenges include designing, developing and applying computational tools that model, aid or automate sophisticated decision-making.

The proposed program will not compete with other ASU programs for students. We expect to attract students with a different focus than those that enroll in existing programs. The goal is to differentiate the MPP in Public Policy, Concentration in Policy Informatics program from others around the nation and to enhance the opportunities for students currently enrolled in the MPP in Public Policy degree program.

We also believe the proposed program will enhance other academic units in at least two ways. One, the proposed program enables students to take courses in particular subjects from other academic units, such that demand for those units' courses should see a small increase. Two, the proposed program's outwardly-focused, interdisciplinary, problem-driven research perspective will create synergies with and enhance the exposure of existing academic units.

C. Is this an interdisciplinary concentration? If yes, please address the relationship of the proposed concentration to other existing degree programs and any parallel or similar concentrations in these degree programs. (Please include relevant Memoranda of Understanding regarding this interdisciplinary concentration from all applicable academic units.)

N/A

3. Academic Requirements and Curriculum

A. What are the total minimum hours required for the major and degree under which the proposed concentration will be established?

42 credit hours

B. Please provide the admissions criteria for the proposed concentration. If they are identical to the admission criteria for the existing major and degree program under which this concentration will be established, you may attach a copy of these criteria as they appear on the departmental website, or other source (please indicate source). Please also list all undergraduate and graduate degrees and/or related disciplines that are required for admission to this concentration program.

Applicants to the concentration will be accepted year-round. Students may be granted admission for Fall, Spring, or Summer semesters. Students must meet all Graduate College admissions requirements. Potential applicants who hold a bachelor's degree from a regionally accredited institution in a related field are eligible to apply to the program. Related fields include political science, planning, business, urban and metropolitan studies, as well as other social science degrees. Although the target students for the graduate concentration in Policy Informatics would most likely come from the aforementioned degree fields, there is no specific undergraduate degree required for admission – the department will accept applicants with undergraduate degrees from all educational backgrounds.

The following entry level competencies are needed for admission the program: an undergraduate social statistics course (such as **PAF 301 Applied Statistics**) along with undergraduate course work in American National Government. Regular admission may be granted to applicants who have achieved a grade point average of 3.0 (on a 4.0 scale) or better in the last two years of work leading to a bachelor's degree. GRE verbal, quantitative, and analytical scores will be used as one of the indicators to see how competitive an applicant is within the applicant pool. Applicants will be required to submit an official ASU graduate application, official GRE scores, official transcripts of all undergraduate and graduate course work, a statement of career and educational goals, and three letters of recommendation (two of which should be academic recommendations).

Computer competency is expected for all incoming students. Students can meet this competency through undergraduate coursework (such as CSE 180 Computer Literacy), through *online* course delivery (PAF 301 is an online class), or through the listing of relevant computer skills on a resume. The department expects basic computing skills, knowledge of word processing, and e-mail software.

C. If the proposed concentration is part of a larger, interdisciplinary agenda, please provide additional admission information related to students who may enter with various academic backgrounds, including expected entry-level competencies. As applicable, please also address the courses that must be taken to remedy any relevant deficiencies for incoming students.

Please see section 3B for entry-level computer competency skills.

D. What knowledge, competencies, and skills (learning outcomes) should students have when they graduate from this proposed concentration program? Examples of program learning outcomes can be found at (http://www.asu.edu/oue/assessment.html).

At the conclusion of the concentration, students will be able to:

- 1) Advance decision-making in the public sector through information-centric analysis of evidence that leverages computational and technological advances.
- 2) Design, manage, and evaluate information systems and infrastructures for policy construction, analysis, and implementation.

OUTCOME 1	Graduates from this concentration will critically analyze policy problems, articulate relevant decision making criteria for policy analysis, and evaluate alternative policy options.
Measure 1.1	PAF 505 Public Policy Analysis
Performance Criterion 1.1	80% of students will earn a rating of 80% or higher on final public policy paper.
Measure 1.2	PAF 591 Introduction to Policy Informatics
Performance Criterion 1.2	80% of students will earn a rating of 80% or higher on final paper.

OUTCOME 2	Graduates from this concentration will design and evaluate information systems and infrastructures.	
Measure 2.1	PAF 591 Introduction to Policy Informatics	
Performance Criterion 2.1	80% of students will earn a rating of 80% or higher on final paper.	
Measure 2.2	2 PAF 591 e-Public Administration	
Performance Criterion 2.2	80% of students will earn a rating of 80% or higher on final project.	

E. How will students be assessed and evaluated in achieving the knowledge, competencies, and skills outlined in 3.D. above? Examples of assessment methods can be found at (http://www.asu.edu/oue/assessment.html).

A successful student must earn a minimum of 3.0 or better over the courses eligible to be counted toward completion of the certificate. In addition, students will be expected to achieve a mastery level or above in outcomes outlined for each of the required concentration classes (PAF 591 Introduction to Policy Informatics, PAF 591 e-Public Administration and PAF 591: Complexity in Public Policy & Management).

F. The Policy Informatics concentration under the MPP in Public Policy will consist of a minimum of 42-semester hours.

Students will be required to take 27 hours of the required core courses for the MPP degree and 9 hours of the required concentration courses.

As part of the required MPP classes, students will complete a 3-semester hour (PAF 509 or PAF 579) Capstone course that will be an integrative, client-based applied project course with a Policy Informatics focus. Students will take the Capstone course in their final semester after completing all other required MPP core courses. For the 9 hours of required concentration courses, students must take PAF 591 Introduction to Policy Informatics, PAF 591 e-Public Administration and PAF 591: Complexity in Public Policy & Management.

Students will also select 3 hours of elective course work with those hours being be restricted to courses with a Policy Informatics emphasis (either those courses designated as appropriate electives below or with approval of faculty within the department).

Semester 2

PAF 509 Public Affairs Capstone OR PAF

579 Public Policy Capstone

A sample Plan of Study for a student in the Policy Informatics concentration is shown below:

Semester 1

Public Change

PAF 501 Public Service Research I PAF 503 Public Affairs PAF 505 Public Policy Analysis PAF 591 Topic: e-Public Administration		PAF 502 Public Service Research II PAF 541 Program Evaluation PAF 591 Introduction to Policy Informatics Elective
	Semester 3	Semester 4
	PAF 571 Geographic Information Systems GIS & Analysis PAF 540 Advanced Policy Analysis PAF 573 Advanced Regression	PAF 570 Urban Economics & Public Fin. PAF 591 Complexity in Public Policy and Management

A successful student must earn a minimum of 3.0 or better over the courses eligible to be counted toward completion of the concentration. Additional assessment is provided in the supplemental plan.

PAF 574 Diversity Ethics and Leading

G. Please provide the curricular structure for the proposed concentration.

Additionally, please ensure that all <u>new</u> required course proposals have been submitted to the Provost's office through
the Curriculum ChangeMaker online course proposal submission system for approval before this concentration is put on
the University Graduate Council and CAPC agendas.

	Credit Hours		
(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(Insert Section Sub-total)
			27
PAF 501	Public Service Research I	No	3
PAF 502	Public Service Research II	No	3
PAF 503	Public Affairs	No	3
PAF 505	Public Policy Analysis	No	3
PAF 540	Advanced Policy Analysis	No	3
PAF 541	Program Evaluation	No	3
PAF 571	Urban Economics & Public Finance	No	3
PAF 573	Advanced Regression	No	3
PAF 574	Diversity, Ethics & Leading Public Change	No	3
	Required Concentration Courses		Credit Hours
(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(Insert Section Sub-total)
			9
PAF 591	591 Introduction to Policy Informatics		3
PAF 591	e-Public Administration	No	3
PAF 591	Complexity in Public Policy & Management	N0	3
(ourses must be s	Credit Hours		
(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(Insert Section Sub-total)
			3
AML 591	Topic: Agent Based Modeling	No	3
ASB 533/SOS 532	Sustainable Urban Dynamics	No	3
ASB 555	Complex Societies	No	3
ASM 591	Dynamic Modeling in Social and Ecological Systems	No	3
ASM 591/BIO 591	Readings in Complexity	No	3
CSE 561			3
CBS 520	Modeling and Computational Biology	No	3
ASM 570	Fundamentals of CASS	No	3
PUP 598	Modeling and Simulating Urban Environments	No	3

E.g Capstone proje	Credit Hours (Insert Section Sub-total) 3	
PAF 509	Public Affairs Capstone	3
PAF 579	Public Policy Capstone	3
	Total required credit hours	42

H. Please describe the primary course delivery mode, (e.g., online, face-to-face, off-site etc.). **Please note:** If this proposed initiative will be offered **completely** online, clearly state that in this section.

The concentration will be delivered in person, although individual courses may be offered in an online format.

I. Please <u>describe</u> the culminating experience(s) required for completion of the existing degree and major, and the proposed concentration (e.g., thesis, dissertation, comprehensive exams, capstone course(s), practicum, applied projects, etc.).

The MPP in Public Policy degree requires students to demonstrate competency for public service by synthesizing and applying core knowledge, skills, and abilities to public service problems. Students demonstrate their public service competency by earning an **A** or a **B** in the required capstone course, **PAF 509 Public Affairs Capstone or PAF 579 Public Policy Capstone**. Either PAF 509 or PAF 579 is taken after completion of all required MPP core courses. The purpose of this course is to serve as the culminating experience for students enrolled in the MPP in Public Policy program. The expectation is that students will integrate and apply core knowledge, skills, and values of public administration and learn the following:

- Create public value. Learn to identify and enhance public value in communities and organizations.
- Act ethically and professionally. Learn to address ethical issues; understand and apply professional codes of conduct; demonstrate fairness, honesty, integrity, and ethical and legal awareness; and inspire public trust and confidence in public administration.
- Enhance democratic governance. Learn to understand and value differences among individuals, democratic and representative principles, and active citizen involvement in governance.
- Improve leadership skills. Enhance ability to speak, listen, write, analyze, think creatively and strategically, collaborate, take risks, and make and implement decisions.
- Conduct research on public problems. Enhance ability to investigate, analyze, and address public policy and administration problems.

The Capstone course is a forum in which students have the opportunity to bring together the skills and knowledge acquired in the MPP in Public Policy program, polish their skills, and further develop their sense of professional personal identity. Capstone instructors use a combination of a wide variety of projects and tasks, aimed at practice in skills targeted in the objectives above. Instructors use speakers, research projects, role playing, oral presentations, case analyses, class participation, and team taskforce work to address these skills. Topics for class coverage might include:

Public management Ethics in public leadership

Policy analysis

Managerial decision-making Organizational effectiveness

Case analysis Reengineering Professional development

Program evaluation Strategic management

Public value

Administrative management

Political management
Organizational design
Leadership development

J. Please <u>describe</u> any other requirements for completion of the existing degree and major, and the proposed concentration (e.g., internships, foreign language skills, etc.).

Many of our students are currently working in local government management, so an internship is not required for the concentration. However, a public service internship is recommended for those students without previous administrative

experience in government. The purpose of the internship is to provide students with practical and professional experience in a specific career area. Students work in and for public organizations applying the knowledge, skills, and abilities acquired in their plan of study. During the internship experience, students can develop a professional network that will aid them in their pursuit of a career in local government organizations. Students can apply three credit hours of internship credit to the degree program as an elective.

The School of Public Affairs serves as a link between ASU and governmental agencies. The School is are active in developing governmental internships and placing graduates, and already have an established internship program with many local governments, including City of Phoenix, Tempe, Avondale, Maricopa, and Scottsdale. The internship program operates on a year-round basis. This enables the School of Public Affairs to be responsive to the needs of various agencies whenever they experience heavy workload periods, demands for special projects, and needs for additional personnel. It also allows students to schedule an internship at a time most convenient to them during their academic program. The internship is coordinated by participating concentration faculty and professional staff within the department.

K. For interdisciplinary programs, additional sample curricular structures must be included as appendix items to this proposal relating to students with various academic backgrounds who may pursue the proposed concentration, including expected mastery of core competencies (e.g., course work, skills, and/or knowledge).

We expect limited number of students taking electives outside the School of Public Affairs, so impact is other departments as negligible.

4. Administration and Resources

A. How will the proposed concentration be administered (including recommendations for admissions, student advisement, retention etc.)? Describe the administering body in detail, especially if the proposed concentration is part of a larger interdisciplinary agenda. How will the graduate support staff for this proposed concentration program be met?

The concentration will be administered by the School of Public Affairs' graduate director who, along with the Master's Committee, is responsible for the overseeing and implementing all masters-level programs in the department.

The graduate director is responsible for evaluating all admission applications and any issues relating to the curriculum. Any exceptions to program policy and curriculum are at the discretion of the director. Curriculum changes to core course requirements, as well as the culminating experience course must be submitted to and approved by the Graduate College. Each student is assigned a faculty advisor with an area of specialization in Policy Informatics (see #4. D. below for a complete listing of Faculty). Each advisor is responsible for any initial advising on the program, electives, and career information.

In addition, the department's full-time administrative staff will be responsible for monitoring student progress, providing information regarding internship/job placement opportunities, processing petitions, plans of study, graduation applications, and other relevant graduate forms and procedures.

B. How many students will be admitted immediately following final approval of the concentration? What are enrollment projections for the next three years?

Currently, there are many students enrolled in the MPP in Public Policy program. Since so many MPP students work in local government, it is likely that many would be interested in this concentration. In addition, approximately 10-15% of the incoming applicants for Fall 2012, so it is probable to expect as many (if not more) to apply for the MPP in Public Policy, Policy Informatics concentration.

Anticipated enrollment in the MPP in Public Policy, Policy Informatics concentration is 20 students by Year 3.

3-YEAR PROJECTED ANNUAL ENROLLMENT						
	1 st Year	2 nd Year.	3 rd Year.			
# Students	5	10	20			

C. What are the resource implications for the proposed concentration, including any projected budget needs? For Doctoral students, how will the students be supported financially? Will new books, library holdings, equipment, laboratory space and/or personnel be required now or in the future? If multiple units/programs will collaborate in offering this concentration

please discuss the resource contribution of each participating program. Letters of support must be included from all academic units that will commit resources to this concentration.

Current Library Relevant Holdings: Current library resources are sufficient to support this program.

Additional Library Acquisitions Needed: None. Current library resources are sufficient to support this program. **Existing Physical Facilities:** Current classroom facilities on the Downtown Phoenix campus are adequate to support this program.

Additional Facilities Required or Anticipated: Current classroom facilities on the Downtown Phoenix campus are adequate to support this program for the first three years.

Other Support Now Available: The School's support staff includes an Executive Assistant, Public Policy Liaison, Academic Support Specialist, Senior Specialist, Career Services Manager and Senior Office Assistant.

Other Support Needed, Next Three Years: Current department staff is sufficient to support the faculty and student service resources required for this program.

We expect limited number of students taking electives outside the School of Public Affairs, so impact is other departments as negligible.

D. Please list the primary faculty participants regarding this proposed concentration. For interdisciplinary concentrations, please include the relevant names of faculty members from across the University.

The following faculty will be primarily responsible for teaching the concentration core courses (e-Public Adminstration, Introduction to Policy Informatics, GIS & Analysis, and Complexity in Public Policy and Management) and electives (3 hours). MPP core courses are offered each Fall and Spring semester, while concentration elective coursework is expected to be offered once a year. For a sample Program of Study, see **3.A. Academic Requirements and Curriculum**.

A full listing of the School's faculty members can be found at: http://spa.asu.edu/faculty/default.htm.

Name	Title	Area(s) of Specialization as they relate to proposed concentration
R. F. Shangraw Jr.	Professor of Practice	Policy informatics, large-scale project risk and uncertainty, research policy, and managerial decision-making.
Erik Johnston	Assistant Professor	Policy informatics, collaborative process management, complexity, modeling.
Yushim Kim	Assistant Professor	Policy informatics, public policy analysis, health/welfare policy.
Spiro Maroulis	Assistant Professor	Policy informatics, individual and collective behavior. Why strategic initiatives and change efforts provoke resistance and unanticipated responses inside organizations. Modeling the emergence and evolution of markets and institutions.
Megan Jehn	Assistant Professor	Clinical epidemiology, health services research and emergency preparedness.
Randy Booze	Adjunct Instructor	Geographic information systems, virtual ethnographic research mechanism and systems.
Marco Janssen	Associate Professor	Collective problems at different levels of scale, especially those problems related to the sustainability of our environment.
Ajay Vinze	Professor	IT enablement for emergency preparedness and response, information supply chain, collaborative computing and security/privacy issues for e-health.

E. Is there a graduate faculty structure for this concentration program that will differ from the original degree program graduate faculty structure (*for PhD programs only*)? If yes, please include the name of the graduate faculty group and whether they

will participate in offering this concentration	will	participate	in e	offering	this	concentration
---	------	-------------	------	----------	------	---------------

Not applicable

5. Additional Material — Please attach any additional information that you feel relates to the proposed concentration. (Please label accordingly, i.e., Appendix or Attachment A, B, etc.)

DEPARTMENT CHAIR or SCHOOL DIRECTOR	
Jonathan Koppell (Please see next page)	
SIGNATURE	DATE
DEAN (Please print or type)	
Jonathan Koppell	
SIGNATURE	DATE
e following section will be completed by the GC following the recommendations of faculty	

<u>Please note:</u> Proposals for new concentrations also require the review and recommendation of approval from the University Graduate Council, Curriculum and Academic Programs Committee (CAPC), the Academic Senate (Information item only), and the Office of the Provost before they can be put into operation.

The final approval notification will come from the Office of the Provost.

GF0311E-92

Policy Informatics Concentration: Dean's Approval

7. APPROVALS - If the proposal submission involves multiple units, please units.	e include letters of support from those
DEPARTMENT CHAIR or SCHOOL DIRECTOR (PRINT/TYPE)	
Jonathan Koppell	
SIGNATURE	2/24/12
())0	
DEAN (PRINT/TYPE)	
Jonathan Koppeli	
SIGNATURE ON LO BY	1 /24/12
The following section will be completed by GC following the recomme	ndations of faculty governance bodies
EXECUTIVE VICE PROVOST FOR ACADEMIC AFFAIRS AND DEAN OF THE GRADUATE COLLEGE	E
SIGNATURE	DATE
	11

<u>Please note:</u> Proposals for new certificates also require the review and recommendation of approval from the University Graduate Council, Curriculum and Academic Programs Committee (CAPC), the Academic Senate, and the Office of the Provost before they can be put into operation.

The final approval notification will come from the Office of the Provost. GF0311G-89



February 3, 2012

To:

Jonathan Koppell, Dean

Nancy Rodriguez, Associate Dean

College of Public Programs

From: Jeffrey Chapman, Associate Directo

School of Public Affairs

Attached is the proposal to establish a graduate concentration in Policy Informatics for the Master of Public Policy (M.P.P.) degree. The M.P.P. concentration in Policy Informatics provides knowledge and skills for students seeking careers that will use informatics tools, models, and simulations to help individuals and groups deliberate and evaluate policy decisions as well as explore new governance infrastructures.

The concentration has been reviewed and approved by the School of Public Affairs graduate committee and by the School's faculty as a whole.

The concentration relies on existing courses that are regularly offered as part of the graduate curriculum in the School of Public Affairs. Many of these courses are undersubscribed and therefore have the capacity for additional enrollment. No additional faculty or staff will be needed to implement this concentration.