SCHOOL OF PUBLIC AND INTERNATIONAL AFFAIRS

Our Website (https://www.spia.vt.edu/undergrad/)

Overview

School of Public and International Affairs (SPIA) provides opportunities for students interested in public issues to gain perspectives and skills from several related disciplines. SPIA is a school within the College of Liberal Arts and Human Sciences, and is comprised of the Center for Public Administration and Policy (CPAP), the Government and International Affairs (GIA) Program, the Urban Affairs and Planning (UAP) Program, and the SPIA Undergraduate Program that offers a B.A. in Public and Urban Affairs (PUA) and two majors in Smart and Sustainable Cities (SSC) and Environmental Policy and Planning (EPP).

SPIA also provides a Washington, D.C. Semester in Global Engagement (during the Spring semester) and a Washington, D.C. Semester in Leadership through Policy and Governance (during the summer session). Information on the SPIA Undergraduate Program can be obtained from the SPIA website. Information on graduate degrees may be obtained from the Center for Public Administration and Policy, and from the Government and International Affairs and Urban Affairs and Planning programs.

B.A. in Public and Urban Affairs

Smart and Sustainable Cities Major (SSC)

The Smart and Sustainable Cities (SSC) major is one of the first majors of its kind in the United States. In the major, students will learn the dynamics of urban change across time, space, and place. Students will gain a deep understanding of sustainable urban development and how smart technology and urban analytics can be combined to create solutions for the cities of the future.

The core of the major consists of two parallel tracks. The first track focuses on urban analytics and decision-making. In this track, students will develop modeling and data visualization skills that can be applied to understand urban and regional systems in data-driven, quantitative, and computational ways.

The second track focuses on sustainable urbanization and the future of cities. Students in this track will study the process of urbanization. Specific attention is given to the interdependence of social, economic, environmental, and technological factors and how these evolve over time.

Both of these tracks are then integrated through a course on data and the art of decision-making and a degree capstone studio where students apply their knowledge to real problems.

Environmental Policy and Planning Major (EPP)

Promoting sustainable human interaction with the natural environment continues to be one of the critical challenges facing societies around the world. While science and technology are critical to meeting this challenge, they must be supported by policies and plans responsive to diverse political, economic, sociocultural, institutional, and regulatory contexts.

The Environmental Policy and Planning (EPP) major provides students with an interdisciplinary framework to view environmental problems. Students will obtain the knowledge and skills needed to function as policymakers and planners who can understand complex environmental issues and develop enduring solutions.

The EPP major builds on the Public and Urban Affairs (PUA) degree core that provides students with foundational knowledge in policy, planning, governance, and international affairs. The EPP major extends this knowledge through an interconnected sequence of courses that explore environmental policy and planning, land use, and environmental law. EPP students will also develop their expertise by selecting one more elective from three subject areas: Policy; Planning; and Environment and Conservation.

Satisfactory Progress

University policy requires that students who are making satisfactory progress toward a degree meet minimum criteria toward the General Education (Pathways) (see "Academics (https://catalog.vt.edu/undergraduate/academic-policies/)") and toward the degree in Public and Urban Affairs.

Satisfactory progress requirements toward the B.A. in Public and Urban Affairs can be found on the major checksheet by visiting the University Registrar website at https://www.registrar.vt.edu/graduation-multi-brief/checksheets.html.

- Environmental Policy and Planning Major (https://catalog.vt.edu/undergraduate/liberal-arts-human-sciences/school-public-international-affairs/environmental-policy-planning-ba/)
- Smart and Sustainable Cities Major (https://catalog.vt.edu/undergraduate/liberal-arts-human-sciences/school-public-international-affairs/smart-sustainable-cities-ba/)
- Urban Affairs and Planning (https://catalog.vt.edu/undergraduate/liberal-arts-human-sciences/school-public-international-affairs/urban-affairs-planning/)

Undergraduate Program Director: Steven Hankey
Professors: A. Ahram, R. Buehler, R. Hall, and M. Stephenson
Associate Professors: D. Bieri, M. Cowell, S. Davis, D. Giselle, S. Hankey, S. Misra, T. Schenk, D. Zahm, and Y. Zhang
Assistant Professors: C. Levinson, T. Lim, P. Wagle
Adjunct Professors: B. Anderson, S. Mastran, J. Provo, and M. E. Ridenour

Undergraduate Course Descriptions (SPIA)

SPIA 1024 - Community Service Learning (3 credits)
An introduction to community service learning with emphasis on the development of civic agency. Critical perspectives on community, ethical community engagement, service and volunteerism, servant leadership, and social change. Exposure to the socio-political dynamics inherent in community development and problem solving. Includes significant community engagement and service-learning experiences, reflection, and the development of a personal community engagement action plan.
Pathway Concept Area(s): 3 Reasoning in Social Sciences, 10 Ethical Reasoning, 11 Intercultural&Global Aware.
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 1044 - Life in the Built Environment (3 credits)
Development of the human-made environment has shaped our social relations, culture, and identity. Discussion of how the imposition of built form has served both to define a shared culture and as a means of exclusion and injustice. Study of equity and ethics as evidenced and continued in planning, construction, and public space. Learn how the knowledge of these past structures might shape the future of the built environment in the United States in ways that are more equitable, inclusive, and sustainable.
Pathway Concept Area(s): 3 Reasoning in Social Sciences, 7 Identity & Equity in U.S., 11 Intercultural&Global Aware.
Instructional Contact Hours: (3 Lec, 3 Crd)
Course Crosslist: ARCH 1044

SPIA 1044H - Life in the Built Environment (3 credits)
Development of the human-made environment has shaped our social relations, culture, and identity. Discussion of how the imposition of built form has served both to define a shared culture and as a means of exclusion and injustice. Study of equity and ethics as evidenced and continued in planning, construction, and public space. Learn how the knowledge of these past structures might shape the future of the built environment in the United States in ways that are more equitable, inclusive, and sustainable.
Pathway Concept Area(s): 3 Reasoning in Social Sciences, 7 Identity & Equity in U.S., 11 Intercultural&Global Aware.
Instructional Contact Hours: (3 Lec, 3 Crd)
Course Crosslist: ARCH 1044H

SPIA 2004 - Introduction to Urban Analytics (3 credits)
Computational and quantitative thinking applied to urban problems. Multiple data sources and tools for urban analysis. Application of computational and quantitative thinking in decision making and policy processes. Data cleaning, joining/merging, and summarizing. Evaluation of computational and quantitative thinking in urban planning and policy. Ethical and other issues related to computing, analysis and problem solving.
Pathway Concept Area(s): 5A Quant & Comp Thnk Adv., 10 Ethical Reasoning
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 2024 - Community Systems Thinking (3 credits)
Introduction to systems thinking concepts and their application to community-based problem solving and decision making. Emphasis on identifying interactions between technical and contextual dimensions of persistent, complex global problems. Introduces systemic frameworks for defining problems, identifying and engaging stakeholders, ideating interventions, selecting and employing criteria for decision making, and creating feedback mechanisms for iterative design. Ethics of community engagement is considered. Includes problem- based service-learning projects.
Pathway Concept Area(s): 3 Reasoning in Social Sciences, 11 Intercultural&Global Aware.
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 2114 - Public Service Leadership (1 credit)
Definition and practice of leadership in the public and nonprofit sectors, and its relationship to democratic governance. Decision-making under varying degrees of certainty and ambiguity. Exploring the relationship between public values and the public interest. Evidence for decisions. Case study engagement and presentation.
Instructional Contact Hours: (1 Lec, 1 Crd)

SPIA 2124 - The Art & Science of Negotiation (3 credits)
Practical negotiation techniques and tactics. Tools to systematically assess and prepare for negotiations, including option evaluation and understanding counterparts. Interpersonal skills for effective engagement. Multiparty negotiations. Ethical and moral issues in negotiations. Representation and principle-agent issues. Negotiation process design. Facilitation and mediation. Tackling scientifically and technically complex disputes. Various models, with an emphasis on the mutual gains approach to negotiation.
Pathway Concept Area(s): 1A Discourse Advanced, 10 Ethical Reasoning
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 2244 - Sustainable Urbanization (3 credits)
Process of urbanization and theories and approaches of urban development. Debates on the meanings of sustainable urbanization and development in cities and how they are measured. Urban sustainability initiatives in the context of urban political economies, land-use practices, urban inequality and diversity, urban nature, and urban policy and politics. Programs and policies designed to enhance sustainable urbanization. Comparative approach and global perspective. Fee $30.
Pathway Concept Area(s): 3 Reasoning in Social Sciences, 11 Intercultural&Global Aware.
Instructional Contact Hours: (3 Lec, 3 Crd)
Course Crosslist: GEOG 2244

SPIA 2314 - Active Transportation for a Healthy, Sustainable Planet (3 credits)
Connections among active transportation (e.g., bicycling, walking) and significant global challenges such as physical inactivity, health, the environment, and the economy on local to global scales. Methods to assess walkability among communities with different worldviews and the influence of the built environment on rates of active transportation. Approaches to evaluate demographic and psychosocial predictors and physical and policy barriers to use of active transportation. Successful strategies to increase active transportation through community design guidelines, behavior change tools, transportation planning, and policy.
Pathway Concept Area(s): 3 Reasoning in Social Sciences, 11 Intercultural&Global Aware.
Instructional Contact Hours: (3 Lec, 3 Crd)
Course Crosslist: HNFE 2314

SPIA 2544 - Policy Dynamics in Global Health (3 credits)
Overview of global health problems and policy. Key actors and socio-political dynamics that shape knowledge and action on global health issues. Roles and responsibilities in global health policymaking.
Pathway Concept Area(s): 3 Reasoning in Social Sciences, 11 Intercultural&Global Aware.
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 2554 - Collaborative Policy-Making and Planning (3 credits)
Introduction to multi-stakeholder collaboration and public participation in planning, policy-making and public administration. Tools and approaches for engagement and effective collaboration. Deliberative and participatory democracy, and transparency in society. Information sharing and access. Civil society, the media and citizen activism. Ethical and moral issues in collaboration. Barriers to participation, and diversity and inclusion.
Pathway Concept Area(s): 3 Reasoning in Social Sciences, 7 Identity & Equity in U.S., 10 Ethical Reasoning
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 2984 - Special Study (1-19 credits)
Instructional Contact Hours: Variable credit course

SPIA 3554 - Transdisciplinary Problem Solving for Social Issues (3 credits)
Strategies and skills for transdisciplinary problem solving. Emphasis on integrative thinking strategies and cognitive and interpersonal skills required to bridge scientific discipline-based, non-scientific discipline-based and cultural knowledge. Strategies to identify important disciplinary, non-scientific, ethical, cultural, and structural elements of a problem. Problem-based learning, ethics, team work, and effective communication skills.
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 3704 - Urban Contention and Mobilization (3 credits)
Analyzes the emergence and impact of contentious mobilization in the U.S. and global cities. Includes civil and labor rights, religious freedom, democratization, and other movements for equity and inclusion. Explores social scientific approaches to mobilization, countermobilization, and collective action. Impact of contentious mobilization on governance and planning in urban sites and spaces worldwide. Examines how movements manage and address internal diversity, including variation in members' diverse experiences and objectives.
Pathway Concept Area(s): 7 Identity & Equity in U.S., 11 Intercultural&Global Aware.
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 3900 - Bridge Experience (0 credits)
Application of academic knowledge and skills to in a work-based experience aligned with post-graduation goals using research-based learning processes. Satisfactory completion of work-based experience often in the form of internship, undergraduate research, co-op, or study abroad; self-evaluation; reflection; and showcase of learning. Pre: Departmental approval of 3900 plan.
Instructional Contact Hours: (0 Crd)

SPIA 3954 - Study Abroad (1-19 credits)
Instructional Contact Hours: Variable credit course

SPIA 3984 - Special Study (1-19 credits)
Instructional Contact Hours: Variable credit course

SPIA 4374 - Federal Cybersecurity Policy and Regulation (3 credits)
This course seeks to give students an understanding of how the government develops new cybersecurity regulations and policies that balance consumer interest in personal protection with industry attitudes towards oversight. The course also covers the policies that government entities take in the interest of national security to maintain state secrets in the face of threats from hackers and other hostile actors.
Prerequisite(s): FIN 4014
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 4454 - Future of Cities (3 credits)
Cities as complex systems. Interdependence of social, economic, environmental, and technological components and how these change over time. Theories about city formation, structure, and change, with implications for sustainability, resilience, and globalization.
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 4464 - Data and the Art of Policy-Making and Planning (3 credits)
Critical examination of use of scientific and technical information in planning and policy-making, exploring issues and challenges through social science lens. Investigation of appropriate and responsible use of data within collaborative and deliberative policy-making and planning processes. Presentation of data and underlying models in accessible and understandable formats. Integrating all forms of knowledge into decision-making, including local and traditional knowledge.
Pathway Concept Area(s): 5A Quant & Comp Thnk Adv., 10 Ethical Reasoning
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 4554 - Creating the Ecological City (3 credits)
Multidisciplinary, team oriented, problem-solving approaches to creating cities that foster healthy interconnections between human and ecological systems. Analysis of problems from practical and ethical perspectives in the context of the diverse knowledge bases and values of decision-makers. Formation and utilization of integrated design teams to solve complex urban design and planning problems at a variety of scales. Senior standing.
Prerequisite(s): HORT 2134 or FREC 2134
Pathway Concept Area(s): 3 Reasoning in Social Sciences, 6A Critique & Practice in Arts, 6D Critique & Prac in Design, 10 Ethical Reasoning
Instructional Contact Hours: (3 Lec, 3 Crd)
Course Crosslist: BSE 4554, FREC 4554, HORT 4554, LAR 4554

SPIA 4724 - CyberLeaders Capstone (6 credits)
Interdisciplinary research and analysis from technical and policy standpoints of regulation and industry standards, leading to the development and communication of possible solutions for specific cybersecurity problems related to critical systems. Previous topics include cellphone encryption and Internet of Things security.
Corequisite(s): SPIA 4374
Instructional Contact Hours: (2 Lec, 12 Lab, 6 Crd)

SPIA 4784 - Community Systems Capstone (3 credits)
Collaborative community problem solving in team environments Data collection, interpretation, and presentation augment community-based, iterative design and planning processes. Consideration of ethical engagement and community goals related to social justice, resilience, and sustainability. Discourse-based project culminating in presentation of intervention proposals to stakeholders. Pre: 3 credits in Discourse.
Prerequisite(s): (SPIA 1024 or SOC 2034) and SPIA 2024
Pathway Concept Area(s): 1A Discourse Advanced, 10 Ethical Reasoning, 11 Intercultural&Global Aware.
Instructional Contact Hours: (3 Lec, 3 Crd)

SPIA 4954 - Study Abroad (1-19 credits)
Instructional Contact Hours: Variable credit course

SPIA 4964 - Field Work/Practicum (1-19 credits)
Instructional Contact Hours: Variable credit course

SPIA 4984 - Special Study (1-19 credits)
Instructional Contact Hours: Variable credit course

SPIA 4994 - Undergraduate Research (1-19 credits)
Instructional Contact Hours: Variable credit course