

## SUSTAINABLE DEVELOPMENT POLICY, ECONOMICS, AND GOVERNANCE

### OVERVIEW

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The Sustainable Development Policy, Economics, and Governance (SDPEG) Ph.D. program offers a transdisciplinary doctoral education in the policies, practices and theories of sustainable development. By offering a core curriculum that includes applied policy and economic analysis, governance and process design, social science methods, and professional skills development, the program produces graduates capable of conducting original, applied research that is designed to support sustainability and resiliency across social, ecological, and technical systems.

This degree will prepare students to assume positions as policy leaders in government, higher education, public and private sector organizations, non-governmental organizations, and research institutes with the expertise and vision to inform local, state, national, and international policy.

### DEGREES

- Sustainable Development Policy, Economics, and Governance Ph.D. (<http://catalogue.uvm.edu/graduate/sustainabledevelopmentpolicyeconomicsgovernance/sustaindevpolecongophd/>)

### FACULTY

**Baker, Daniel H.;** Associate Professor, Department of Community Development and Applied Economics; PHD, University of Vermont

**Bartlett, Robert V.;** Professor, Department of Political Science; PHD, Indiana University

**Bose, Pablo;** Associate Professor, Department of Geography; PHD, York University

**Conner, David S.;** Professor, Department of Community Development and Applied Economics; PHD, Cornell University

**Farley, Joshua C.;** Professor, Department of Community Development and Applied Economics; PHD, Cornell University

**Heiss, Sarah Noel;** Associate Professor, Department of Community Development and Applied Economics; PHD, Ohio University

**Koliba, Christopher J.;** Professor, Department of Community Development and Applied Economics; PHD, Syracuse University

**Kolodinsky, Jane Marie;** Professor, Department of Community Development and Applied Economics; PHD, Cornell University

**McMahon, Edward;** Adjunct Associate Professor, Department of Community Development and Applied Economics; EDD, University of Vermont

**Reynolds, Travis;** Assistant Professor, Department of Community Development and Applied Economics; PHD, University of Washington

**Seguino, Stephanie;** Professor, Department of Economics; PHD, American University

**Shrum, Trisha R.;** Assistant Professor; Department of Community Development and Applied Economics; PHD, Harvard University – John F. Kennedy School of Government

**Tobin, Daniel;** Assistant Professor, Department of Community Development and Applied Economics; PHD, Pennsylvania State University

**Wang, Qingbin;** Professor, Department of Community Development and Applied Economics; PHD, Iowa State University

**Zia, Asim;** Professor, Department of Community Development and Applied Economics; PHD, Georgia Institute of Technology

### Community Development Applied Economics Courses

#### CDAE 205. Rural Comm in Modern Society. 3 Credits.

The changing structure and dynamics of rural social organization in context of modernization and urbanization. Emphasis on rural communities in the U.S. Prerequisite: Six hours of Sociology.

#### CDAE 207. The Real Cost of Food. 3 Credits.

Learn how producers, processors, wholesalers, cooperatives, retailers, consumers, and governments affect the movement of food and fiber products through the production-marketing chain. Prerequisite: CDAE 061 or equivalent.

#### CDAE 208. Agricultural Policy and Ethics. 3 Credits.

An examination of American agriculture and policies from various perspectives - historical, political, ecological, technological, social, economic, and ethical. Emphasis on contemporary issues, policy options, and future development. Prerequisites: CDAE 102 or PSS 212 or equivalent. Cross-listed with: PSS 218.

#### CDAE 218. Community Org & Development. 3 Credits.

The roles of forms of community capital, civic engagement, leadership, social and political institutions, and communities of place and interest in a community development context. Pre/co-requisites: Junior standing; CDAE 102 or Instructor permission.

#### CDAE 237. Economics of Sustainability. 3 Credits.

Economic analysis that integrates natural resource and community planning for sustainable development at local, national, and international levels. Examples include land use, sustainable agriculture, and green business. Prerequisites: CDAE 102 or Instructor permission.

#### CDAE 253. Macroeconomics for Appl Econ. 3 Credits.

Explore macroeconomic principles and concepts as they affect individuals and businesses in local, regional, national, and global economics. Prerequisites: CDAE 102 or equivalent.

#### CDAE 254. Microeconomics for Appl Econ. 3 Credits.

The study of economic choices of individuals and firms, and the analysis of competitive and noncompetitive markets. Emphasis on application of intermediate microeconomic theory. Prerequisites: CDAE 102 or equivalent.

**CDAE 260. Smart Resilient Communities. 3 Credits.**

Focus on social ecological systems integration framework to determine community resilience, enable smart design processes at the nexus of food, energy and water systems and learn practical skills, such as early warning systems, ubiquitous computing and interactive scenario planning techniques. Prerequisite: CDAE 102 or Graduate standing. Cross-listed with: PA 260.

**CDAE 266. Dec Making:Comm Entrepreneurs. 3 Credits.**

Quantitative decision-making methods and applications for community entrepreneurs. Major topics include linear programming, risk and uncertainty, inventory decisions, and e-commerce. Prerequisites: CDAE 166, MATH 019, and CALS 085 or CALS 002.

**CDAE 267. Strat Plan:Comm Entrepreneurs. 4 Credits.**

Applications of marketing, finance, and management strategies. Drafting a real working business plan for community entrepreneurs and economic development. Prerequisites: One of the following: CDAE 166, CDAE 167, CDAE 168, or equivalent course; Senior standing only.

**CDAE 272. Int'l Economic Development. 3 Credits.**

International trade, finance, investment, and development theories and policies for community development. Prerequisite: CDAE 102 or EC 100-172.

**CDAE 273. Project Development & Planning. 3 Credits.**

National, community, and private sector project development. Focus on planning methods and policy instruments, sectoral linkages, and contributions to the economy as a whole. Pre/co-requisites: CDAE 102 or Instructor permission.

**CDAE 276. Community Design Studio. 3 Credits.**

Problem-based community design studio course with research on existing conditions, needs assessment, sense of place, and development of sustainable and integrative design solutions and processes. Prerequisites: CDAE 015, CDAE 001, or equivalent.

**CDAE 286. Adv Sust Dev Sm Island States. 4 Credits.**

This course is an advanced course in problems of sustainable development on small island developing states utilizing a case study of St. Lucia, West Indies. Prerequisites: CDAE 186 and Instructor permission required.

**CDAE 321. Econ of Sustainable Food Syst. 3 Credits.**

Utilizes common economic tools, ideas and applications to analyze issues concerning the sustainability of food using a combination of readings, lectures and discussions. Prerequisite: Graduate standing. Cross-listed with: FS 321.

**CDAE 326. Community Economic Development. 3 Credits.**

Examines how rural and urban communities address poverty, unemployment and other economic problems through job creation and retention, workforce training and support, and other development strategies. Cross-listed with: PA 326.

**CDAE 335. Qualitative Research Methods. 3 Credits.**

Provides an overview of qualitative research methods and an opportunity to apply such research methods for topics focusing on food systems and health. Prerequisite: Graduate Student standing. Cross-listed with: FS 335.

**CDAE 351. Research & Evaluation Methods. 0 or 3 Credits.**

Conceptualization, collection and analysis of primary and secondary data; interpretation, and communication of results of applied research and/or evaluation studies for decision makers. Separate lab required. Prerequisite: Three hours of Statistics.

**CDAE 354. Advanced Microeconomics. 3 Credits.**

Principles and applications of advanced microeconomics: consumer and market demand, firm and market supply, perfect and imperfect markets, partial and general equilibrium, and policy analysis. Prerequisite: Graduate student standing.

**CDAE 359. Applied Econometrics. 3 Credits.**

Presents common econometric methods to perform regression analysis on empirical data. Upon completion, students will understand and apply econometric methods to conduct rigorous regression analysis. Students will also better read, interpret and discern research papers' quality using econometric methods.

**CDAE 370. Political Econ of Sustain Dev. 3 Credits.**

Introduction to the political economy of sustainable development from the theoretical perspective of complex adaptive socio-ecological systems. Political economy assesses relationships between the state, market, and civil society to understand how humans satisfy their material needs (human provisioning) through interaction with their social+natural environments. Prerequisite: Graduate standing.

**CDAE 371. Sustain Dev Policy & Gov. 3 Credits.**

History, evolution and foundations of sustainable development policy at multiple levels of governance, ranging from the UN to local communities/cities. Learn about analyzing/evaluating wide range of sustainable development policies. Emphasis on understanding complex system dynamics modeling and adaptive management approaches to address sustainable development challenges. Prerequisite: Graduate standing.

**CDAE 376. Communicating Science. 3 Credits.**

Advanced exploration, application of science communication theories, contexts, practices. Examine the relationship between science & society while learning communication skills that promote respect and shared understandings of science among researchers, extension professionals, journalists, public relations specialists, policy officials, and public. Prerequisite: Graduate standing.

**CDAE 377. Practicum in Extension Educ. 1-12 Credits.****CDAE 391. Master's Thesis Research. 1-18 Credits.****CDAE 392. Graduate Seminars. 1 Credit.**

Report and discuss research projects and findings of graduate students and faculty, and offer workshops on selected topics in community development and applied economics. May enroll more than once for up to three credits. Prerequisite: Graduate standing.

**CDAE 393. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

**CDAE 395. Advanced Special Topics. 1-18 Credits.**

Lectures or readings on contemporary issues in Community Development and Applied Economics at the graduate level. Prerequisite: Graduate standing.

**CDAE 400. Sustainable Dev PEG Doc Sem. 1 Credit.**

Focus will rotate among three main themes: project resource development skills and techniques (e.g. grant writing and management); stakeholder engagement; and dissertation proposal preparation. Prerequisite: Enrollment in the Sustainable Development Policy, Economics, and Governance PhD program.

**CDAE 491. Dissertation Research. 1-18 Credits.**

Doctoral Dissertation Research.

**Public Administration Courses****PA 206. Intro Cont Public Affairs. 3 Credits.**

Contemporary policy issues including government and the economy, the role of leadership, ethical and moral issues in public policy, and other contemporary issues impacting society. Prerequisites: CDAE 100 level course.

**PA 260. Smart Resilient Communities. 3 Credits.**

Focus on social ecological systems integration framework to determine community resilience, enable smart design processes at the nexus of food, energy and water systems and learn practical skills, such as early warning systems, ubiquitous computing and interactive scenario planning techniques. Prerequisites: CDAE 102 or Graduate standing. Cross-listed with: CDAE 260.

**PA 301. Foundations of Public Admin. 3 Credits.**

Survey of major elements of management in the public and nonprofit sectors with special attention given to problems arising from political imperatives generated by a democratic society.

**PA 302. Org Theory & Behavior. 3 Credits.**

Examination of basic classical and contemporary theory, research on human relations, internal structures, environments, types, diverse workplaces, general properties of complex organizations and bureaucracies.

**PA 303. Research & Evaluation Methods. 0 or 3 Credits.**

Conceptualization, collection and analysis of primary and secondary data; interpretation, and communication of results of applied research and/or evaluation studies for decision makers. Separate lab required.

**PA 305. Public and Nonprofit Budgeting. 3 Credits.**

A focus on the budget as the primary policy and planning document in public and nonprofit organizations.

**PA 306. Policy Systems. 3 Credits.**

The study and application of system-level public policy frameworks, theories and models to contemporary policy problems and solutions.

**PA 308. Decision Making Models. 3 Credits.**

Explores and analyzes normative, descriptive and prescriptive decision making models. Focuses on systems-level thinking to impart problem-solving skills in complex decision-making contexts. Emphasis placed on imparting cutting edge skills, enabling students to design and implement multiple criteria decision analysis models.

**PA 311. Policy Analysis & Program Eval. 3 Credits.**

A seminar providing hands-on knowledge in policy analysis and program evaluation using case studies of current analysis projects and problems. Specific techniques include planning, survey administration, forecasting, cost benefit analysis, and impact assessment.

**PA 317. Systems Anly & Strategic Mgmt. 3 Credits.**

Students will be introduced to systems thinking and network dynamics with a particular focus on managing across organizational and sectoral boundaries, including public-private partnerships, intergovernmental arrangements, and strategic alliances. Tools to undertake strategic analysis and planning will be explored.

**PA 323. Non-Profit Administration. 3 Credits.**

Course reviews the history of, and managerial challenges inherent to, the non-profit sector in the United States and explores sector's relationship to the governmental and business sectors.

**PA 326. Community Economic Development. 3 Credits.**

Examines how rural and urban communities address poverty, unemployment and other economic problems through job creation and retention, workforce training and support, and other development strategies. Cross-listed with: CDAE 326.

**PA 375. Public Administration Capstone. 3 Credits.**

The Capstone is designed to provide MPA students with a summative experience that ties learning competencies to evidence drawn from their course of study. Pre/co-requisites: Core MPA courses either prior to Spring semester or simultaneously.

**PA 380. Internship. 3-6 Credits.**

Supervised administrative experience culminating in a written report.

**PA 391. Master's Thesis Research. 1-6 Credits.**

Thesis topic must be approved by faculty advisor.

**PA 395. Advanced Special Topics. 1-18 Credits.**

For advanced students within areas of expertise of the faculty. Varied course offerings. Contemporary topics. Instructor Permission.

**PA 397. Readings & Research. 1-6 Credits.**

Readings, with conferences, term paper, to provide graduate students with specialized knowledge in an area in which an appropriate course is not offered.