GRADUATE RESEARCH AREAS

Research by our faculty and graduate students spans a number of topics that broadly fit into five primary themes. Please use this page to get a sense of the research possibilities available to graduate students in the UW Department of Geography.

CRITICAL DEVELOPMENT AND GLOBAL HEALTH

An integrated program of study addressing political-economic, social, environmental, and global health dimensions of development in both urban and rural realms. Students may specialize in Latin America, Africa, China, Russia, South Asia, or on the challenges facing poor communities in rich countries. Students study theoretical perspectives and case study materials addressing the ways in which political, economic and social processes relate to the geographical dynamics shaping development and health, including the intersections of these processes with gender, sexuality, ethnic and race relations, and class structures. They also examine the health effects and environmental consequences of development, and the developmental experiences of inequality, dispossession and exploitation that account for poor health outcomes.

ECONOMIC GEOGRAPHY

Particular concentrations include:

- globalization
- neoliberalism
- regional economic development and underdevelopment, with an emphasis on the United States, Latin America, Russia, Canada, East Asia
- cross-border regionalism
- location theory
- labor markets and labor migration (including migrant worker mistreatment and rights)
- resource distribution
- technological change
- the relationship between geoeconomics and geopolitics
- the economic lessons of the global justice movement

GEOGRAPHIC INFORMATION SYSTEMS

Students focus on concepts, techniques and software/hardware tools involved in computer-assisted cartography and geographic information system design, use and social meaning. Particular emphasis is on participatory and critical GIS, analytical methods and their use in practical circumstances, including recent innovations in Web 2.0 and neo-geo mapping online. Research may include:

- analytical cartography
- geographic information representation
- map error analysis
- social construction of GIS technology
- spatial database design
- data management approaches and systems configurations
- urban applications
- geographic knowledge structures
- transportation
- environmental analysis
- natural resources
- user cognition and user interface design
- sustainability science
- spatial model coupling to GIS
- collaborative spatial decision making.

**SOCIETY AND ENVIRONMENT**

Examination, analysis and interpretation of the complex inter-relationships between social dynamics and environments. The areas of focus include:

- cultural and political ecology
- health and the environment
- global environmental modeling and GIS methods and applications

Research themes primarily involve:

- questions of scale in analyzing social and environmental change at the local, regional, and global levels
- analyzing, understanding and explaining the interactions among ecological processes, environmental transformation, and social processes and transformations in affluent and impoverished societies.

Related aspects of medical geography include such topics as the ties between global environmental change and the (re)emergence and spread of contagious disease, as well as how political, social, environmental, and biological factors come together to both create and structure health vulnerability and risk management.

**URBAN, SOCIAL AND POLITICAL GEOGRAPHY**

Emphasis is on both the theory and empirical investigation of the geography of power, the biopolitics and governance of population and movement, both in terms of global relations and local patterns of policing and social activism. Particular emphasis is given to: the relation of social, political and economic structure to spatial organization and social justice, and on issues of race, gender, sexuality, ethnicity, inequality, health and disease, policing, power and social justice as they have been theorized in critical social theories.

Attention is also paid to how political-economic geographies combine in relations of dominance, governance and resistance at a range of scales, from the urban, to the regional, to the transnational.