GEOGRAPHY AND PLANNING (3350)

3350:100 Introduction to Geography (3 Credits)
Analysis of world patterns of population characteristics, economic
activities, settlement features, landforms, climate as interrelated factors.
Ohio Transfer 36: Yes
Gen Ed: - Social Science

3350:250 World Regional Geography (3 Credits)
Survey of world regions with focus on both physical and human
landscapes; emphasis on world patterns and issues from a regional
perspective.

3350:275 Geography of Cultural Diversity (2 Credits)
Prerequisites: 32 credit hours including English Composition I and II
(3300:111, 3300:112) or equivalent. Evaluation of cultural elements
unique to various geographical regions to explain why different people
utilize resources differently, and how cultural diversity affects regional
conflicts.
Gen Ed: - Global Diversity

3350:305 Maps & Map Reading (3 Credits)
Introduction to use and interpretation of maps. Study of basic map
types, elements, symbolism, and historical and cultural context of maps.
(Laboratory.)

3350:310 Physical & Environmental Geography (3 Credits)
Landforms, weather and climate, soils and vegetation and natural
hazards. Nature and distribution of these environmental elements and
their significance to society. Laboratory.

3350:314 Climatology (3 Credits)
Prerequisite: 3350:310 or permission. Analysis and classification of
climates, with emphasis on regional distribution. Basic techniques in
handling climate data.

3350:320 Economic Geography (3 Credits)
Geographical basis for production, exchange, consumption of goods.
Effect of economic patterns on culture and politics.

3350:350 Geography of the United States & Canada (3 Credits)
Regional and topical study of United States and Canada, with
emphasis on environmental, economic and cultural patterns and their
interrelationships.
Gen Ed: - Domestic Diversity

3350:351 Ohio: Environment & Society (3 Credits)
Regional and topical analysis of cultural, economic and environmental
patterns; also in comparison with other states.

3350:353 Latin America (3 Credits)
Analysis of relationship of cultural and economic patterns to physical
environment in Mexico, Central America, the Caribbean and South
America.

3350:356 Europe (3 Credits)
Regional and topical analysis of cultural, economic and environmental
patterns.

3350:360 Asia (3 Credits)
Environmental, cultural and economic geography of East, Southeast,
South Asia and Middle East with emphasis on the contemporary.

3350:363 Africa South of the Sahara (3 Credits)
Environmental and human bases of regional contrasts. Emphasis on
tropical environmental systems and changing patterns of resource
utilization.

3350:397 Special Problems in Geography and Planning (1-3 Credits)
(May be repeated for a total of five credits) Prerequisite: Permission of
instructor. Directed reading and research in special field of interest.

3350:405 Geographic Information Systems (3 Credits)
Prerequisites: 3350:305. Introduction to the principles and concepts
underlying geographic information systems (GIS) and their application in
professional practice and academic research. Laboratory.

3350:407 Advanced Geographic Information Systems (3 Credits)
Prerequisite: 3350:405. Advanced instruction in the theory and
application of geographic information systems (GIS) including hands-on
experience with both raster and vector GIS. Laboratory.

3350:409 Archaeogeophysical Survey (3 Credits)
Prerequisites: 3240:250 or 3370:101 or 3350:310. Advanced instruction
in subsurface geophysical survey techniques in archaeology. Emphasis
on magnetic gradiometry and electrical resistivity techniques, image
processing and geological and archaeological interpretation.

3350:415 Environmental Planning (3 Credits)
Scientific and technical principles for decision-making in planning, with
emphasis on soils, land use, and water quality issues. Data sources and
methods of site evaluation.

3350:420 Urban Geography (3 Credits)
Spatial structure of urban systems; interaction between cities; internal
structure of cities. Perspectives on urban change; contemporary urban
graphic problems; urban and regional planning issues.

3350:422 Transportation Systems Planning (3 Credits)
Study and analysis of transportation systems from a geographic
perspective. Emphasis on transportation problems and issues, elements
of transportation planning.

3350:424 Military Geography (3 Credits)
Influence of physical and human geography on military operations and
military history. Role played by geography in international conflicts.

3350:432 Land Use Planning Law (3 Credits)
Acquaint student with past and present approaches to land use control
in the United States and examine the political, economic, social and legal
forces that have shaped existing land-use legislation.

3350:433 Practical Approaches to Planning (3 Credits)
Introduction to the history, theories and forms of urban planning.

3350:437 Planning Analysis & Projection Methods (3 Credits)
Introduction to the primary analytic techniques for small-area
demographic and economic analysis and projection.

3350:438 Land Use Planning Methods (3 Credits)
Application of GIS and other computer-based tools to the preparation,
implementation and evaluation of comprehensive land use plans.

3350:439 History of Urban Design & Planning (3 Credits)
Origins of human settlements and planning from the perspective of urban
design and related societal trends. Comparison of world regional and
historical urban forms. Experience in "reading" settlements as visual
landscapes.

3350:440 Cartography (3 Credits)
Use of graphic/cartographic principles and techniques as a means of
presenting geographical information on maps and producing maps.
Laboratory.
3350:441 Global Positioning Systems (GPS) (1 Credit)
Fundamentals of Global Positioning System (GPS), with emphasis on geographic and planning activities. Includes hands-on exercises.

3350:442 Cartographic Theory and Design (3 Credits)
Prerequisite: 3350:440 or permission of instructor. Principles and techniques of thematic mapping. Stresses maps as communications tools. Examines principle thematic mapping techniques and means of presenting qualitative and quantitative data. Laboratory.

3350:443 Urban Applications in GIS (3 Credits)
Prerequisite: 3350:405 or permission of instructor. Applications of GIS in the urban context, including methods used for analysis of population density gradients, migration, and accessibility.

Gen Ed: - Domestic Diversity

3350:444 Applications in Cartography & Geographic Information Systems (3 Credits)
Prerequisite: 3350:340 and 3350:405. Application of analytic and presentation techniques from cartography and geographic information systems to practical problems in geography and planning. Laboratory.

3350:445 GIS Database Design (3 Credits)
Prerequisite: 3350:405. Introduction to theory and concepts of geographic data modeling, geodatabase design, and topology. Emphasis on current practices and methodologies in geography and planning.

3350:446 GIS Programming and Customization (3 Credits)
Prerequisite: 3350:405. Introduction to use of scripting languages for customizing the interface and extending the functionality of desktop GIS software.

3350:447 Remote Sensing (3 Credits)
Prerequisite: 3350:305. Concepts, systems, and methods of applying aerial photography, satellite imagery, and other remote-sensing data for analyzing geographic, geological, and other earth phenomena.

3350:449 Advanced Remote Sensing (3 Credits)
Prerequisite: 3350:447. Current research in remote sensing. Applications in study of human cultural and biophysical environment. Practice in planning, design, execution and interpretation of remote sensing studies. (Laboratory.)

3350:450 Development Planning (3 Credits)
A study of planning concepts and techniques for developing countries, including growth and development, planning agencies, regional inequities and alternative approaches.

3350:460 Political Geography (3 Credits)
Principles and theory in contemporary domestic and international political geographies. Emphasis on the changing local and global patterns of electoral politics, security, and diplomacy.

3350:481 Research Methods in Geography & Planning (3 Credits)
Prerequisites: Completed a minimum of 12 credits in Geography and Planning. Investigation of library and archive resources. Emphasis on development of professional writing skills.

3350:483 Spatial Analysis (3 Credits)
Prerequisite: Completed a minimum of 12 credits in Geography and Planning. Analysis of mapped statistical surfaces. Principles for use of map as model for statistical evidence, prediction, hypothesis testing.

3350:485 Internship in Geography & Planning (1-3 Credits)
Prerequisite: Permission. (May be repeated for a total of six credits.) Supervised professional experience in planning agencies or related settings. Only three credits can be used toward a degree in Geography and Planning.