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 geographic 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.

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.