

**University of Ghana**  
**Department of Geography & Resource Development**  
**Sample Spring Courses**

**GEOG 302 Introduction to Resource Analysis**

The growing concern about natural resources, development and the environment within the broad context of the ecology of resource processes. Analyses of socio-economic and environmental implications of natural resources use.

**GEOG 304 Regional Geography of West Africa, with Special reference to Ghana**

West Africa as a region. Physical environmental challenges and the human responses. The patterns of economic activity with emphasis on Ghana. The prospects of access.

**GEOG 306 Research Methods**

The design and formulation of research projects and the methods and procedures for handling data. Questionnaire design, data collection and report writing. Inferential statistics and introduction to multivariate techniques.

**GEOG 308 Geography of Gender and Development in Africa**

Gender and the dynamics of socio-economic change within the context of spatial systems. The gender-neutral development theory and the concept of feminism in geography as applied to regional patterns of development as countries become more industrialized. Africa provides the basis for the course, though spatial aspects of development from other countries will be used for comparative purposes

**GEOG 312 Climatology**

Regional climates and anomalies with particular emphasis on the temperate and tropical regions. Evapotranspiration, water balance concepts and Koeppen's classification system.

**GEOG 314 Geographic Information Systems**

Geographic Information Systems (GIS) has become an important integrating component of Geography. The purpose of this course is to further expose student to the theory and applications of Geographic Information Systems (GIS). The course will build on knowledge gained in Geog. 307 (Introduction to Remote Sensing and GIS), which will be a pre-requisite. The Remote Sensing component of the course will comprise "information extraction" from remotely sensed data for incorporation into the GIS database. The course will cover theory and practicals involving laboratory sessions with the objective of giving students deeper insight into defining and implementing GIS problems in natural and socio-economic resources management. GIS software will be introduced for input, analysis and display of spatial data.

**GEOG 402 Techniques of Regional Science**

Some techniques for analyzing the structure and functions of regions; methods of measuring phenomena of particular interest to regional development.

### **GEOG 406 Rural Development Experiences**

Analysis of the experiences of the experiences of Developed and Developing Worlds in rural resources utilization for better rural development planning especially in sub-Saharan Africa.

### **GEOG 408 Population and Development**

The course provides an overview of the spatial dynamics of human populations with regard to the environment they occupy. An analysis of the inter-relationships between population, resources, environment and development will be addressed. The main focus is on Africa and the Developing World in general. The population-development interrelationships will be examined against the view that development must be for the benefit and enhancement of the quality of life of people. Consequently, the numbers, spatial distribution and characteristics of the population at any point in time should have an immeasurable impact on the magnitude, trend and pace of development

### **GEOG 412 Transportation and the Space Economy**

Transport and economic development within the regional settings of Africa and North America with special emphasis on Ghanaian and Nigerian situations.

### **GEOG 414 Cities in Economic Development and Problems of Urban Management**

This section of the Urban Studies Programme focus on city systems, rural-urban linkages, regional economic role of cities and problems of urban management. The relevance of the themes for urban and regional planning is underscored.

### **GEOG 416 Historical Geography of North Western Europe**

The course is concerned mainly with environmental, population and socio-economic inter-relationships within North-Western Europe through spatial and historical analysis.

### **GEOG 418 Agricultural Land Use Systems in the Developing World**

Agricultural land use systems with special reference to their relative sustainability, effects upon the physical environment, an efficiency in food production in the developing world, most especially sub-Saharan Africa.

### **GEOG 422 Spatio-Temporal Analysis of Health and Development**

Development, entailing as it does modifications of existing circumstances, often affects sectors other than those intended by the planner. The course focuses on aspects of the improvement of health levels through the instrument of development. Thus the interrelationships among health, population and socio-economic development are examined with examples drawn from both developed and developing countries with special emphasis on Africa.

### **GEOG 424 Industrialization in the Developing World**

The process of industrialization in the developing countries of Africa, Asia and Latin America. A comparison with the industrialization process in the advanced countries will be made. Special emphasis is on the structure, pattern and processes of industrialization in Africa in general and West Africa and Ghana in particular.

**GEOG 428 Tropical Biogeography**

Biogeography processes and vegetation development and distribution. The soil – vegetation system as a basis for land resource utilization and conservation in the tropics.

**GEOG 432 Tourism Development in the Third World**

The purpose of this course is to introduce students to the various concepts and theories that underlie tourism development in developing countries. The course also provides insights into some case studies in the various geographical regions within the third world.

**GEOG 436 Applied Geomorphology**

Definition of applied geomorphology; drainage basin morphometry; calculation of stream frequency; circuitry ratio; elongation ratio; basin relief; ruggedness number; bifurcation ratio; drainage density; graded river; environment and development; dynamics of beach erosion and deposition; wetland management; deep weathering and development issues in hot, humid areas: fadama cultivation in savanna, sahel and desert areas. Atterberg limits and the behaviour of clay minerals; particle shape and its application to coastal engineering; field studies.

**GEOG 442 Environmental Hydrology**

The study focuses on the impact of hydrological processes on the environment.