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

The course provides and overview of the spatial dynamics of human populations with regard to the environment they occupy. An analysis of the inter-relationships between population, 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 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; circuity 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.