University of Ghana
Department of Zoology
Sample Spring Courses

ZOOL 302 General Entomology
The morphology, physiology, classification and ethonology of insects and drelated terrestrial arthropods.

ZOOL 304 Parasitology and Public Health
Basic principles of paratitsm, survey of important parasitic groups; detailed discussion of some parasites with emphasis on those of medical and economic importance; parasistic arthropods; bacterial and viral diseases (including leprosy) and their spread in the community; food hygiene; environmental hygiene, cancers and AIDS; organization of Public Health Laboratory services.

BIOL 3I6 Environmental Zones of West Africa
General distribution of vegetation types in relation to climate and soils. Forest and savanna and their inter-relationships. Strand, mangrove, lagoon and montane vegetation. Human ecology. The vegetation of the Accra Plains.

BIOL 318 Introductory Oceanography & Limnology
Origins of seas, lakes and streams. Water – properties of biological importance. Factors determining water circulation; effects of water circulation upon productivity. Water pollustion, utilization and conservation. Biotic communities: adaptation and distribution. Phytoplankton: distribution, including temporal and spatial changes in relation to physio-chemical and biological factors in the environment. Characteristics of fresh and estuiarine water, life in freshwater and estuaries.

ZOOL 402 Applied Entomology
Beneficial and harmful insects; principles and ecological basis of insect pest control; control methods; use of resistance and semiochamicals in control; integrated pest management; biology, control and management of insects of field crops, vegetable crops, tree crops and stored produce.

ZOOL 406 Vertebrate Biology
Structural and physiological adaptations of vertebrates sto their environments; snakes evolution, biology and toxicology; structural adaptations of birds for flight; mechanics of flight; migration; mammalian characteristics and their functional integration, social behaviour, nervous system; evolution of teeth, jaw and skull in vertebrates.

ZOOL 408 Epidemiology of Parasitic Diseases
History of epidemiology; the dynamic nature of scciencetific knowledge as a basis for the practice of epidemiology, objectives, method/tools; introduction to mkodelling, basic definitions; major parasitic disease systems of the tropics – their control and eradication; problems of control.

ZOOL 414 Oceanography
The sea as an environment; water circulation and movement physics and chemistry of sea water; the sea bottom – intertidal, continental and deep sea bottom environments; estuaries – origins, types and characteristis; special inshore environments – lagoons, mangroves, coral reefs; resources of the sea – living and non-living from sea water and sea floor.

ZOOL 416 Fishery Biology
Biological parameters of fish populations; gonadal maturation stages; ecology of fish species in Ghanaian waters; theory of fishing; fishery management methods; fishery aspect of water pollution; acquaculture; principles and culture techniques.

ZOOL 418 Limnology
Hydrology: measurement of stream flows and river channels, stream order; lake morphology; types of estuaries; physical aspects of the aquatic environment; thermal properties, light, water movements; chemical aspects of the aquatic environment; global geochemistry; ionic composition of rainwater, rivers, etc.; dissolved gasses; nutrients and nutrient cycling; eutrophication; metals in the aquatic environment; environmental effects of dams.

ZOOL 422 Wildlife Management
Ecology of African game animals; methods of study; ecology of pastures cropped by game; habitat and harvest management; management techniques; population studies of wildlife animals: game census, wild animal population regulation; capture techniques; threatened species management; protected area system; wildlife conservation within and outside protected areas; wildlife utilization, domestication and ranching; Ghana's wildlife conservation policy; International Wildlife Laws.

ZOOL 424 Advanced Genetics
Molecular genetics; chromosome organization; variety of genetic systems as illustrated by micro-organisms;**Drosphila, Musca**, Lepidoptera, mosquitos, mammals including man; hydrocarbons for parasites and vector identification.