

**Hum 903: Ecology and Sustainable Development**  
**2 Credit Hours**  
**2 hrs. per week**

Definition and Concepts of Ecosystems. Ecosystem Structure: Order in nature, Food chain and webs; Decomposition and Ecological Pyramids. Ecosystem dynamics: Energy flows, material re-cycling, nutrients, productivity, ecosystem boundaries. Demographic factors and processes: Population distribution: growth and change, regional differences; Basic concepts for sustainable urban development; Urban eco-systems: ecological means of community and settlement formation, Industrial ecology, urban environmental pollution, ecological management of cities. Rural settlements and environmental control. Definition, concepts and strategies of sustainable development.