BLY 427 Biotechnology in Sustainable Energy 3 Units

Department of Biological Sciences

Covenant University
1. BLY427
1.1. BLY 427 Biotechnology in Sustainable Energy 3 Units

The objective is to introduce students to one of the most dominating and compelling areas of human existence and endeavor: energy; with focus on the Technology, Ecology, Economics, Sustainability of the energy issue as well as the place of biotechnology in the future of energy technologies. Overview of the global demand for energy, and the resource availability and technology used in its current and future supply; Concepts of Alternative, Renewable and Sustainable Energy; Sustainable energy and C-skeleton cycles; Biotechnology augmentations and creations for the Exploitation of plants for cellulosic-, and of algae for hydrocarbon-based fuels; Chemical feed stocks; plants and plant cells as factories for high value products; animal and human as prospects for future energy systems in power generation for localized, general as well as use in space.