YALI NETWORK

YALI NETWORK ONLINE COURSE

UNDERSTANDING CLIMATE CHANGE

GLOSSARY OF KEY TERMS

Atmosphere - the whole mass of air that surrounds the Earth; a mass of gases that surround a planet or star

Carbon dioxide - a colorless, odorless gas, CO_2, that is present in the atmosphere and is formed when any fuel containing carbon is burned; it is breathed out of a human's and animal's lungs during respiration, produced by the decay of organic matter, and used by plants in photosynthesis

Climate is the average weather in a place over many years. While weather can change in just a few hours, climate historically has taken hundreds, thousands, or millions of years to change

Deforestation - the permanent destruction of forests in order to make the land available for other uses

Drought - a deficiency in precipitation over an extended period, usually a season or more, resulting in a water shortage causing adverse impacts on vegetation, animals, and/or people

Fossil fuels - non-renewable resources including oil, coal and natural gas, that formed when prehistoric plants and animals died and were gradually buried by layers of rock; over millions of years, different types of fossil fuels formed -- depending on what combination of organic matter was present, how long it was buried and what temperature and pressure conditions existed as time passed

Geothermal Energy - heat derived from below the surface of the Earth

Global Warming - refers to climate change that causes an increase in the average temperature of the lower atmosphere, most commonly associated with the release of excessive amounts of greenhouse gases into the atmosphere

Greenhouse gas - gases that trap heat in the atmosphere

Heat stress (plants) - a period in which temperatures are hot enough for a sufficient period of time to cause irreversible damage to plant function or development

Hydroelectric power - captures the kinetic energy (resulting from motion) of flowing water and turns it into electricity, which is then fed into the electrical grid to be used in homes and businesses

Photovoltaic Technology - materials and devices that convert sunlight into electrical energy; PV cells are commonly known as solar cells. Photovoltaics can literally be translated as light-electricity

Pollutants - refers to gases, dust, fumes, or odor in amounts which could be harmful to the health or comfort of humans and animals or which could cause damage to plants and materials.

Precipitation - The liquid and solid water particles that fall from clouds and reach the ground. These particles include drizzle, rain, snow, snow pellets, ice crystals, and hail

Renewable energy refers to resources that rely on fuel sources that restore themselves over short periods of time and do not diminish. Such fuel sources include the sun, wind, moving water, some organic plant and waste material, and the earth's heat (geothermal)

Solar-thermal technology - involves generating electricity by concentrating solar energy to heat a fluid and produce steam that is then used to power a generator; solar energy systems do not produce air pollutants or carbon dioxide

Weather consists of the short-term changes in the atmosphere. Weather can change from minute-to-minute, hour-to-hour, day-to-day, and season-to-season

Wind turbines - wind turbines use wind to make electricity; the wind turns the blades, which spin a shaft, which connects to a generator and makes electricity