

AGR 125: Principles of Sustainable Agriculture Lecture

Food production ranks among the most environmentally significant of human activities. Agriculture is practiced in every corner of the planet and in all but the most extreme of ecosystems. Life-sustaining agricultural practices are, however, often linked to habitat and biodiversity loss, deforestation, greenhouse gas emissions, and increasingly to the extensive use of chemicals and non-point source pollution. Producing food uses twice as much water as all other human activities combined. In this context, and given new challenges posed by climate change, rapid urbanization, and shifts in the balance of the global economy, how will we be able to sustain or increase food production to meet the needs of 9 billion people while ensuring the ecological health of our agricultural systems and the green infrastructure our communities rely on? In this course, students will learn about the origins, major concepts, and current issues of sustainability in agriculture. Our society's agricultural history has unfolded in such a way that we are just now trying to understand and create sustainability where it does not currently exist. Students will explore environmental, economic, and social considerations of sustainability in agriculture; and, at the conclusion of the course, be able to understand and explain the characteristics of the current agricultural system, the many components of sustainable agriculture and how they relate to each other, and ways that society is moving or could move toward a sustainable agricultural system.

Credits: 3

Co-Requisites:

AGR 126

Subject: Agriculture