



## AGR 124: Permaculture: Design for Regeneration

The course integrates both research and practical applications to design food systems that have the resiliency of natural ecosystems. The essential components of diverse garden systems will be discussed in detail, including edible ecosystem gardens, perennial cropping and mini orchards, soil fertility, water management, tools and techniques and planting strategies. Three lecture hours per week.

### Course Student Learning Outcomes

Students who successfully complete this course will be able to: 1. Describe and apply the scientific method to analyze patterns in the natural world and apply solutions to design challenges. 2. Recognize and describe the principles of scientific inquiry. 3. Describe ecological systems, their functions and the ecosystem services that they provide. 4. Discuss and analyze perennial aggro-forestry systems of diverse tree crops and livestock animals. 5. Discuss and apply the principles of ecological relationships to the design sustainable plant and food production. 6. Discuss and analyze the issues of world food productions systems and food sovereignty principles.

**Credits:** 3

**Program:** Sustainable Agriculture