I. Description of Course:
   1. Department/Course: ENVS - 107
   2. Title: Introduction to Sustainable Agriculture.
   3. Cross Reference:
   4. Units: 3
      Lec Hrs: 3
      Lab Hrs:
      Tot Hrs: 54.00
   5. Repeatability: No
   6. Grade Options: Letter Grade, May Petition for Pass/No Pass (GP)
   7. Degree/Applicability: Credit, Degree Applicable, Not Transferable (D)
   8. General Education: District General Education (Plan A)
      I. Natural Science
   9. Field Trips: May be Required
   10. Requisites:

12. Catalog Description:
    This course examines how changes in the way we eat and farm impact the environment and how traditional and evolving methods of farming can reduce our environmental impact and feed our populations sustainably.

13. Class Schedule Description:
    The environmental impact of farming and how we can minimize our environmental impact and feed our populations.

14. Counselor Information:
    This course is one of the electives as part of the upcoming certificate in Alternative Energy.

II. Student Learning Outcomes
The student will:
   1. Recognize the major issues related to sustainable agriculture and food systems.
   2. Summarize how agriculture interacts with environmental, economic, and cultural issues.
   3. Design and develop problem solving skills for seeking alternatives in agricultural practices.
   4. Compare and contrast scientific and cultural issues in sustainable food systems.
   5. Evaluate personal values related to sustainable food systems.

III. Course Outline:
   A. Introduction to Agroecology.
      1. The need for sustainable food production.
   B. Plants and environmental factors.
      1. Biotic and abiotic factors.
      2. The Environmental Complex.
   C. System level interactions.
2. Genetic resources.
3. Species interactions.
4. Diversity and stability
5. Agrosystem management.
6. Animals and energetics of agroecosystems.

D. Transition to sustainability.
   1. Converting to ecologically based management.
   2. Indicators of sustainability.
   3. Landscape/agrosystem management.
   4. Culture, community, and sustainability.

IV. Course Assignments:
   A. Reading Assignments
      1. Assigned textbook readings.
      2. Assigned non-textbook readings.
   B. Projects, Activities, and other Assignments
      1. Field trips to local organic market, organic food stores, and/or sustainable farm.
      2. Oral presentations.
   C. Writing Assignments
      1. Social commentary on assigned readings.
      2. Research paper.

V. Methods of Evaluation:
   A. Examinations covering assigned readings, class lectures, discussions, videos, and handouts.
   B. Commentary on assigned readings.
   C. Oral presentation.
   D. Research paper.

VI. Methods of Instruction:
   A. Lecture
   B. Discussion
   C. Demonstration
   D. Audiovisual
   E. Computer Assisted Instruction

VII. Textbooks:
   Recommended

   Supplemental

VIII. Supplies:

CID 3533