1. **Name of Course:** Introduction to Sustainable Agriculture AGMG 1070

2. **Number of Clock Hours:** 24

3. **Course Description:** This course is designed as an introduction to the concepts and principles associated with sustainable agriculture. The economic, environmental and social aspects of sustainability in agroecosystems will be addressed. This course includes case studies and field trips to connect principles of sustainable agriculture to local farming systems. The students’ interests and goals in sustainable agriculture will also be explored.

4. **Course Objectives:** Students will be able to compare and contrast the properties of natural ecosystems, sustainable agroecosystems, and conventional agroecosystems. Students will be able to discuss the principles and strategies of sustainable agriculture as well as describe ecological farming production methods. By the end of the course students should be able to identify potential career opportunities in sustainable agriculture.

5. **Rational: State the reason for offering the course:** It is imperative for future agriculturalists to have a realistic understanding of the requirements and demands of modern agricultural systems in order for them to identify the type and structure of farm that is sustainable for them.

6. **Recommended Materials:**
casfs.ucsc.edu/about/publications/Teaching-Organic-Farming
7. **Course Outline:** What topics and sub-topics will be covered in this course?

I. Social and Environmental Issues in Agriculture
   A. History & Large-scale changes
      i. Capital, politics, & overproduction
      ii. Current U.S. Food and agriculture system

II. Social Issues in Current U.S. Agriculture
   A. Labor
   B. Concentration and health

III. Environmental Issues in Modern Agriculture
   A. Technical Innovations
   B. Alternatives to conventional agriculture

IV. Sustainable agriculture and sustainable food systems
   A. Soil health
   B. Crop Production
   C. Pest & disease management
   D. Weed management
   E. Livestock care & planning
   F. Farm Business Design
   G. Marketing
   H. Labor management