Course Syllabus

Department: Environmental Conservation and Horticulture

Date: February 2012

I. Course Prefix and Number: CON 229

Course Name: Stream Ecology and Monitoring

Credit Hours and Contact Hours: 3 credit hours 3 contact hours

Catalog Description including pre- and co-requisites:

This course provides students with an introduction to hydrology, stream ecology and sampling design. Students will intensively study aquatic macro-invertebrate identification. The students will learn through field and laboratory experiences with data collected, analysis, and production of a final professional report. Prerequisites: MAT 121, CSC 134 CSC 135.

II. Course Outcomes and Objectives

Student Learning Outcomes:

The students will:

- Demonstrate knowledge of hydrology and stream ecology (professional competency).
- Design and implement a sampling plan (professional competency).
- Identify aquatic organisms (professional competency).
- Demonstrate proper use of stream sampling equipment (professional competency).
- Analyze and interpret data (mathematics, critical thinking).
- Write a professional report (writing, reading, information resources, computer literacy). Comprehend, interpret, analyze and evaluate college level materials (reading).

Relationship to Academic Programs and Curriculum:

Stream monitoring is a required course for students matriculated in the AAS Fisheries Science degree program. This course is designed for students in their second year. It builds upon concepts and skills acquired in required courses taken during the first three semesters.

III. Instructional Materials and Methods

Types of Course Materials:

Texts: