# Honors Environmental Systems and Societies Course Description

**Course Name:** Honors Environmental Systems and Societies

**Course Number:** Year 1: SCI XXXX

## Brief Course Overview

This one year lab/field science course will explore topical environmental problems from a global perspective. The goal is to provide students with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will come to face in their lifetimes. It is recommended that students entering this multidisciplinary course are internally motivated. This Honors level course will require students to utilize skills from many other disciplines involving: Lab skills; math application; Research; and Essay Writing

Questions that will guide learning throughout the year include:

- Which strengths and weaknesses of the systems approach and the use of models have been revealed through this topic?
- What value systems are at play in the causes and approaches to resolving the issues addressed in this topic?
- How are the issues addressed in this topic relevant to sustainability or sustainable development?

## Main Topics of Study

- Systems and Models
- Ecosystem structure and function
- Human populations
- carrying capacity and resource use
- Conservation and biodiversity
- Pollution management

- Global warming
- Environmental value systems

**What are the Enduring Understandings of the course? (Bullet points)**

The specific aims of this course are to:

- promote understanding of environmental processes at a variety of scales, from local to global
- provide a body of knowledge, methodologies and skills that can be used in the analysis of environmental issues at local and global levels
- enable students to apply the knowledge, methodologies and skills gained
- promote critical awareness of a diversity of cultural perspectives
- recognize the extent to which technology plays a role in both causing and solving environmental problems
- appreciate the role value of local as well as international collaboration in resolving environmental problems
- appreciate that environmental issues may be controversial, and may provoke a variety of responses
- appreciate that human society is both directly and indirectly linked to the environment at a number of levels and at a variety of scales

**Pre-requisites (Is there specific background/course work/grade needed to succeed in this course?)**

Strong reading comprehension and writing skills (ESOL III or above) are required for this course and B or better in an honors-level science course and science teacher's recommendation.

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| Course Length | 1 years | Included in NBPS GPA? | Yes |
| Meets NBPS Graduation Requirement? | Elective | NCAA Core Class? | Yes |
| Included in Bright Futures GPA calculation? | Yes | State University Core Class? | Yes |