Addressing the Standards.

The following National Science Education Standards (NRC 1996) are addressed in the field ecology course:

- **Content Standard A: Science as Inquiry:** “Students should…”
  - develop abilities necessary to do scientific inquiry, and
  - develop understandings about scientific inquiry.

  Our long-term field experiments in forestry and water quality, and the use of tools such as global-positioning systems (GPS) units, computer graphing, debates, and simulations, fall under this standard.

- **Content Standard C: Life Science**
  - Interdependence of organisms
  - Matter, energy, and organization in living systems
  - Behavior of organisms

  The bulk of content covered falls under this Standard.

- **Content Standard D: Earth and Space Science**
  - Energy in the Earth System
  - Geochemical cycles

  Our soil studies and studies of carbon and nitrogen cycles, as well as energy transfer in ecosystems, work for this standard.

- **Content Standard E: Science and Technology**
  - Abilities of technological design
  - Understandings about science and technology

  Use of tools such as GPS units, computer graphing, web research, and the class website, as well as reporting data online, align with this Standard.

- **Content Standard F: Science in Personal and Social Perspectives**
  - Personal and community health
  - Population growth
  - Natural resources
  - Environmental quality
  - Natural and human-induced hazards
  - Science and technology in local, national, and global challenges

  The management-based topics, pollution studies, and service-learning goals of this course align directly with this Standard.

Reference