

What's the difference between environmental *studies* and environmental *science*?

Environmental studies programs all across the country, including ours, have been created by faculty and students because the world needs civically engaged, interdisciplinary thinkers trained in both the social and natural sciences to address environmental problems.

Environmental *science* programs provide understanding of things like the biology of endangered species populations and the chemistry of pollutant breakdown, whereas interdisciplinary environmental *studies* programs can help to explain how problems like pollution are rooted in social systems—for example, when the atmosphere is treated as a free “sink” because no one owns it. Environmental *studies* programs also address the political, economic, and social dimensions of solutions to environmental problems.

A hypothetical toxicant spill into a river can help to illustrate these differences. Students in environmental science will study questions such as:

- How far and where will the pollutant travel in the watershed?
- How long will the pollutant persist and what will be its breakdown products?
- How will the pollution affect wildlife and human health?

Environmental studies students would study those same questions because a major part of environmental studies is environmental science, but they would also study an additional set of questions not addressed by environmental science, such as:

- What regulations exist to prevent such spills and how well are the regulations enforced?
- Who pays for the environmental and/or health damage caused by the spill?
- Which communities are affected by the spill? Are there patterns of injustice, such as unequal enforcement of environmental regulations, or in the location of polluting industries?
- What policies and political strategies can be used to reduce the chance of future spills?

A number of campuses have both environmental science and environmental studies programs; careers are available to graduates with either degree. For many careers in the environmental field, environmental studies is more appropriate training than environmental science. This is true for many careers focused on policies or programs to address environmental problems—for instance, sustainability managers for cities and businesses, state and federal government careers in environmental policy, and careers with NGOs working on environmental advocacy. While these jobs require sufficient science to understand environmental issues, the work is not focused on scientific investigations, but rather on advocating, developing or implementing policies or programs.