



Feasibility of Beneficial Re-use of Green Waste and Food Waste to Restore Undeveloped Campus Land

The Project:

- Create an interdisciplinary course for undergraduates in Environmental Science, Environmental Studies, Biology, Recreation, etc.
- Assess the feasibility of ecological restoration on the CSUEB Hayward Campus using green/food waste-derived compost and other on-campus resources.

The Details:

- Students will assess potential end-uses of restored land, including curriculum and passive recreation.
- The creation of an outdoor, on-campus resource for interdisciplinary and cross-disciplinary field learning would be of potential benefit to many academic programs.
- Restoration of historical, drought-tolerant native oak woodlands would have multiple benefits for Facilities Operations and the local environment, including: decreasing waste management costs by using organic wastes on-campus, decreasing waste transportation, sequestering carbon dioxide, decreasing erosion, and improving air quality.

The first step of this long-term vision is a feasibility study, performed by students, with faculty guidance. Initially, the project will focus on four areas:

1. Identifying and quantifying waste sources, treatment, and re-use (as compost);
2. Quantifying waste re-use impacts (e.g., decreased carbon footprint);
3. Conducting an ecological restoration needs assessment (current needs);
4. Examining maintenance, expansion, and end-use needs (future needs, end-use potential).

The **long-term vision** includes a **student internship program** for monitoring and maintenance of the eventual **waste reduction system**, with interns drawn from successful participants in **ongoing interdisciplinary courses**.

OUR TEAM



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STUDENT LEARNING OUTCOMES (SLOs)

Proposed SLOs for the course:

- 1) Explain in detail the process and benefits of beneficial re-use of waste products, as applied to on-campus re-use of food waste and green wastes; and,
- 2) Critically examine one aspect of beneficial re-use for restoration in depth, and will present their findings in an appropriate format.

