In Partial Fulfillment of the Requirements for the Degree of
Doctor of Philosophy
Edgar Cardenas

Will defend his prospectus

Humanistic Science: Using ArtScience Approaches to Enhance Problem Solving for Sustainability.

Sustainability’s complex scientific and societal challenges have been best addressed through interdisciplinary collaboration. These collaborations, however, typically occur between natural, technical, and quantitative social scientists; the humanities, and especially the arts, are often underrepresented in these efforts. Yet when properly facilitated, artist-scientist teams can work at the interstices of these domains and generate creative products and ideas that would not have otherwise been available to them. This research will investigate art-science integration at both the individual and collaborative level. It will combine aesthetic and normative analysis of sustainability thought, especially the work of Aldo Leopold; the realm of art practice; and an empirical inquiry into the social factors that foster or hinder creativity in art-science teams.

The purpose of this research is to understand how the arts and sciences can move beyond formative dialogue and into a reflexive and productive working relationship that allows scientists and artists to collaborate in a truly integrative and effective manner, addressing both the human experience of place and the scientific knowledge necessary for a better understanding of sustainability challenges. In effect, it is an effort to study and incorporate the epistemic spaces of both the arts and sciences in order to provide a more holistic picture of sustainability inquiry, with the goal of improving our ability to envision and solve emerging problems at the nexus of science and society.

Monday, January 7, 2013
4:30 p.m.
Wrigley Hall, Room 401

Faculty, students, and the general public are invited.

Supervisory Committee:
Ben Minteer (Co-Chair)
Mark Klett (Co-Chair)
Dan Childers
Ed Hackett