



In Partial Fulfillment of the Requirements for the Degree of

**Doctor of Philosophy**  
**Scott McClintock**

Will defend his prospectus:

**Communication for Sustainability:  
How can Science Influence Social will to Transform Society to a  
Sustainable Path?**

**Abstract**

Over the last sixty years, scientific inquiry has increasingly discovered important risks to humanity and scientists have endeavored to convey the perceived dangers, and influence society to take action to mitigate the risks. This effort has gradually coalesced into sustainability where scholars posit an unambiguous intent to not just determine how social-ecological systems *have* developed, but to determine how they *should* develop. Philosophers of science hold that scientific credibility and authority are related to scientific objectivity, neutrality, and disinterestedness. Research shows that this perception impacts the posture of scientists and the expectations of their publics. Scientific communication in this convention has been essentially linear; from scientists, the voice of knowledge, to publics who presume scientific discovery exposes some level of objective truth. The normative intent in sustainability effectively waives objectivity and neutrality but sustainability communication largely continues to assume traditional scientific authority and credibility, which notably has been challenged by publics. This is visible in climate change communication where the scientific assessment of risk and related advocacy for recommended outcomes has met with public resistance, sufficient in some cases to prevent action, particularly in the United States. Sustainability scientists are, in effect, selling their assessments and recommendations, and the linear model of scientific communication, based in traditional scientific credibility and authority, has produced mixed results. In this research, I propose to document these assertions via the literature and via a methodological examination of climate change communication in the United States and will generalize those findings to sustainability theory. In addition, I will examine boundary structures, science journalism, and business communication to see how these disciplines use information, and how they structure communication to build credibility, saliency, and legitimacy.

Friday, April 12, 2013  
3:00pm  
WGHL, 323

Faculty, students, and the general public are invited.

Supervisory Committee:

Dean Sander van der Leeuw, Chair  
Dr. Nalini Chhetri, Member  
Dr. Sonja Klinsky, Member  
Dr. Mark Hannah, Member