

**Syllabus (Fall 2009)**  
**Introduction to Graduate Study in Natural Resources: NTRES 6000 (2 credits)**  
**Tuesday, 4:30-6:00 PM (Fernow G14)**  
**Instructor: Cliff Kraft**

This seminar includes discussions of the role of science in natural resource management & conservation, with a particular focus on how scientists pursue career paths towards effective participation in this realm of human activity. Our weekly discussions will focus on the practices of scientists and institutions that provide a framework for scientific endeavors.

I consider it increasingly important that scientists – whether in the social or natural sciences – pursue their endeavors while reflecting on how and why they pursue these activities. By that I mean that historical, cultural and institutional traditions influence these efforts, as do many aspects of human behavior that are worth considering. I am also inclined to suggest that such introspection is rare or becoming less common in academia, though that can be an ongoing topic for consideration during our Fall 2009 discussions. In any event, I am confident that it's useful to reflect upon these issues at the outset of one's graduate studies, as well as throughout one's professional career. This course is my attempt to foster this type of discussion within our graduate program.

**Class Schedule (Fall 2009)**  
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1 September (4:30 p.m.)	<b>Introduction to the Field of Natural Resources</b> Focus: Introduction to GSA & Graduate Studies in Natural Resources
8 September (4:30 p.m.)	<b>Pursuing Collaborative Natural &amp; Social Science in DNR</b> Focus: Integrating Theory and Practice
15 September (4:30 p.m.)	<b>The Scientific Method in Practice (Part I)</b> Examples: (1) “Nature, Not Human Activity, Rules the Climate” or (2) “Drop Water Method” of diagnosing water quality
22 September (4:30 p.m.)	<b>The Scientific Method in Practice (Part II)</b> Example: “Four Bold Claims” Guest: Hugh Gauch (proposed)
29 September (4:30 p.m.)	<b>Funding Science</b> Sources of funding in Natural Resources; Grants, gifts, & contracts; Facilities and administrative costs, cost sharing Guest: Sarah Gould
6 October (4:30 p.m.)	<b>A Case Study in “Integrated Natural and Social Science”</b> Guest: To be determined
20 October (4:30 p.m.)	<b>How to write a scientific paper (Part I)</b>
27 October (4:30 p.m.)	<b>How to write a scientific paper (Part II); Authorship</b>
3 November (4:30 p.m.)	<b>Visual Displays of Information</b> The work of Edwin Tufte; evaluating evidence using visual displays; complexity and clarity
10 November (4:30 p.m.)	<b>Techniques for Effective Professional Presentations</b>
17 November (4:30 p.m.)	<b>Techniques for Effective Personal Web Pages</b>
24 November (4:30 p.m.)	<b>Student Presentations</b> Short presentations regarding proposed research
1 December (4:30 p.m.)	<b>Student Presentations</b> Short presentations regarding proposed research