Leadership Skills

Course Outline

Module 5.2: Demonstrate critical reasoning in the application of professional judgement

Standard 5 - Leadership Skills: Communication and Critical Reasoning
Demonstrable Competency: 2) Demonstrate critical reasoning in the application of professional judgement

Course Description

Module 5.2 will enhance students' leadership skills through learning activities that focus on critical reasoning and the related application of professional judgment. Key topics include critical reasoning, professional and technical report writing, and interpreting complex information to arrive at defensible positions when required. This course makes use of a case study approach to contextualize these themes using a real world example of a forest management planning process for which forest resource modeling outcomes failed to achieve the maintenance of wildlife habitat according to the regulatory standards of the time, and focuses on how this challenged stakeholders to arrive at a compromise to balance conflicting resource values.

Specific objectives are to enable participants to: Evaluate documents and computer models that pertain to complex plans; Analyze a problem or issue that includes qualitative/quantitative data collection, evaluation, and analysis; Develop logical arguments and apply judgement in providing solutions in a formal written report; and Construct a logical argument through group participation and discussion.

Course Schedule

This course involves a combination of recorded lectures, readings, assignments and participation in semi-synchronous online discussion forums and synchronous tutorials with instructors and other participants over an **8-week period:**

- **Week 1**
  - **Introductory lecture**
    - "Introduction to the Module"
  - **Core readings**

- Chapter 27 - Making Decisions in a Complex and Dynamic World 1997. Creating a Forestry for the 21st Century: The Science of Ecosystem Management. Edited by K.A. Kohm and J.F. Franklin. Island Press, Washington, D.C., 475 p.
- Defining Critical Thinking. Foundation for Critical Thinking
- Holmes, Thomas P.; McNulty, Steve; Vose, James M.; Prestemon, Jeffrey P.; Li, Harbin. 2014. A conceptual framework for adaptive forest management under climate change. In: Climate change adaptation and mitigation management options. *A guide for natural resource managers in southern forest ecosystems*. CRC Press - Taylor and Francis. (pp 45 - 60) 16 p

- **Week 2**
  - **Core lectures**
    - "Ethics and the Forest Professional"
    - "Writing data papers-basic order, know your audience, titles (good & bad), Introduction section, Methods section, presenting complex statistics, Results section, Discussion, Acknowledgments, Literature cited, tables, figures, error bars, figure legends"
  - **Core readings**
    - 2009 Forest Management Plan Summary for the Dog River Matawin Forest
    - Report of an Independent Audit of Forest Management on the Dog River Matawin Forest for the Period 2005-2010
  - **Online discussion forum**

- **Week 3**
  - **Online tutorial with instructor**
    - Discuss content to-date and assignment 1
  - **Introduction to assignment #1**
    - Discuss how elements of critical thinking and analysis and Adaptive Forest Management were applied in the following paper: *A Conceptual Framework for Adaptive Forest Management under Climate Change*

- **Week 4**
  - **Online discussion Forum**
  - **Continue to work on Assignment #1**

- **Week 5**
  - **Assignment #1 due (submit online)**
  - **Online tutorial with instructor**
    - Discuss content to date and assignment #2
  - **Introduction to assignment #2 - Consultant Report**
    - Using the Dog Rover Matawin Forest 2009 FMP Summary and 2010 DRMF Independent Forest Audit Report Summary case study materials

and related content presented in the introductory core lecture for Module 5.2 for reference, complete a consultant's report with particular attention to the following:

- Demonstrate your critical reasoning skills in the analysis of the primary natural resource management compliance issues arising from the Dog River Matawin SFL management plan.
- Develop logical arguments for alternatives to mitigate the potential compliance issues identified above.
- Identify the interaction processes involving key stakeholders that you would recommend to increase the probability that your preferred alternatives would be successful and reduce conflict in the long term.

- **Week 6**
  - **Submit proposal for final paper**

- **Week 7-8**
  - **Continue to work on Assignment #2**
  - **Assignment #2 due end of week 8 (submit online)**

Grading
- Discussion forum posts: 20%
- Participation in tutorials: 10%
- Assignment 1 - short essay: 20%
- Final paper proposal: 5%
- Assignment 2 - final paper: 45%

Bridge Training Program for Foresters

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