Ent 7940: Interdisciplinary Research, Teamwork, and Leadership

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Course Description: Interdisciplinary research, teamwork and leadership are essential to addressing contemporary global challenges facing human societies. This course will examine the theory and practice of interdisciplinary research, collaborative teamwork, communication across learning and discourse communities, and personal leadership styles and the various roles they play in addressing real world, complex, societal problems. It is motivated by a recognition that interdisciplinary research, teamwork and leadership will be required at various times throughout each of our students careers, that leadership and teamwork skills can be taught, and that our students should be prepared for success in their contributions to and leadership of interdisciplinary teams. The focus of the course is an understanding of the history and current status of disciplinary and interdisciplinary research process, students’ personal leadership styles, the key elements of teamwork and team productivity, and practice in the application of each of these elements of interdisciplinary research to complex societal problems.

Credit Hours: 2
Lectures: 1/week  
Laboratory: 1/week

Course grading:
Literature review (10 papers): 10%  
Laboratory exercises in teamwork and leadership (5): 25%  
Interdisciplinary team research proposal: 25%  
Team project and presentation: 25%

Prerequisites: None

Learning Objectives:

Students will demonstrate the following:

- Ability to assess and understand the variation in approaches, philosophy, and discourse in disciplines associated with agriculture and life sciences.
- A broad understanding and familiarity with scholarly work on interdisciplinary challenges, opportunities, and process.
- Capacity to work and contribute effectively in collaborative interdisciplinary teams.
- Understanding significant leadership concepts, personal leadership style, and how to apply their own leadership skills and abilities in collaborative interdisciplinary teams.
Example Reading Material:

Interdisciplinary Research Process


Leadership and teamwork


Lecture Topics by Week (approx.)

1. 8/21, 26  Know thyself
   Meiers-Briggs, measures of personalities and how they interact
   http://pstypes.blogspot.com/2009/03/free-jungian-type-tests.html
   http://pstypes.blogspot.com/2009/05/jung-test-type-evaluator.html
   http://webspace.ship.edu/cgboer/jungiantypestest.html

2. 8/29, 9/4 Inter-, Cross-, Multi-, Trans- disciplinary
   huh? Getting into the lingo
   natural history of disciplines

3. 9/4, 9/9 The many languages of Science, and Society
   Discourse communities in disciplines
   How do the meanings vary?

4. 9/11, 16 Appreciative inquiry – getting past language barriers

5. 9/18, 23 Characteristics of leaders

6. 9/25,30 To lead or not to lead, that is the question
   When to lead and when to follow
7. 10/2,7 Implicit bias

8. 10/9, 14 Community engagement
   Ripples From the Zambezi, Ernesto Sirolli

9. 10/16, 21 Research brainstorming
   Grant proposal management

10. 10/23, 28 Network weaving
    Readings from June Holley, Network Weaver Handbook,
    http://www.networkweaver.com

11. 10/30, 11/4 Practical work, team building

12. 11/6,11 Practical work, interdisciplinary research planning

13. 11/13, 18 Practical work, community engagement

14. 11/20, 25 Practical work, interdisciplinary team leadership

12/3, review or final exam
Course Policies

Academic Integrity:
Please note that the university policy will serve as the basis for dealing with any such issues in this course. http://studentaffairs.osu.edu/pdfs/csc_12-31-07.pdf

Special Needs and Accommodations:
Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Office for Disability Services at 614-292-3307 (Fax: 614-292-4190; TDD: 614-292-0901) in room 150 Pomerene Hall, 1760 Neil Ave, Columbus, Ohio 43210 to coordinate reasonable accommodations for students with documented disabilities. http://www.ods.ohio-state.edu/

Incomplete Grade Policy:
Incomplete grades will be given only in special circumstances as outlined in university policy. http://trustees.osu.edu/rules8/ru8-21.php

General Information:
Additional information on general Ohio State University Policies can be found at: http://trustees.osu.edu/ChapIndex/index.php

Late Policy:
A report that is handed in late will be reduced in value 10 percent per day that it is late.