

INDS 330 Ways of Knowing Fall 2007
Writing Intensive (WI) Version: Revised 11-02-07
Syllabus for Section 0201
Wednesdays 4:30pm – 7pm
Fine Arts 529 (INDS Conference Room)

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Course Description

How do insights from various academic disciplines inform our understanding of complex issues? This course examines the methods utilized by different academic disciplines and their contributions to integrative understanding. Beginning with the question "Why interdisciplinary?" the class will then proceed to an examination of the history of interdisciplinary studies as an academic field, an exploration of the elements of the academic disciplines and their importance to the interdisciplinary process, and, finally, an introduction to different models of integration. Students will develop skills in interdisciplinary research and problem solving, in oral and written communication, and in the synthesis of diverse perspectives.

Writing Intensive (WI) designation

In accordance with the criteria established by the UMBC General Education Committee for writing intensive (WI) courses, students in INDS 330 will learn writing as:

1. A method of critical inquiry and documentation of scholarly ideas.
2. A regular (weekly) practice of making connections across a wide variety of perspectives. Students will complete weekly writing assignments (two pages in length each) and a final take home exam (six pages in length).
3. A tool for learning to develop one's ideas through multiple drafts and revisions with feedback from peers and the instructor. Students will have four opportunities for guided revisions, two with instructor feedback and two with peer feedback. Use of the Writing Center is required for all revisions and recommended for all writing assignments. Some class time will focus on examples of exemplary student essays and how they meet the criteria of the following writing guidelines:

- An exemplary essay contains the following qualities:
 - Clearly stated topic sentence or sentences (*thesis*)
 - Well constructed sentences and paragraphs
 - Specific examples and references to the readings
 - Original ideas with evidence to support your claims
 - Acknowledgement of counterarguments to your claims (*antithesis*)
 - Discussion of various disciplinary perspectives on a topic
 - A clear conclusion and *synthesis* of perspectives
 - No spelling or grammatical errors

- In terms of your writing process:
 - Show a draft of your paper to the Writing Center for feedback and clarification
 - Review, Revise, and Refine your ideas
 - Proofread!

- Let your writing be purpose-driven. What point do you want to make, and how will you teach me to understand your bold new concept? In a metaphorical sense, draw a map for me of your world: How are the issues laid out? How will we walk through your ideas together? What is our destination?

A Note on Written Work

All written work should be typed, double spaced, 1-inch margins, 12 point font, adequately cited and on time. Papers are due at the beginning of each class. No electronic submissions of any writing will be accepted without permission from the instructor.

UMBC ACADEMIC INTEGRITY STATEMENT

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.

[Quoted from <http://www.umbc.edu/provost/integrity/faculty.html>]

Learning Objectives

Upon completion of INDS 330, students will:

1. Be able to define "interdisciplinarity" and why it matters.
2. Demonstrate understanding of the elements (as defined in Repko) in at least two academic disciplines.
3. Develop a "meta-disciplinary" explanation of how disciplines differ (as well as overlap) in their epistemologies, disciplinary contributions (and limitations) in addressing complex problems, and seeing disciplines as "tools" or "lenses."
4. Be familiar with at least one model and three strategies of interdisciplinary integration.
5. Know how to apply interdisciplinary methods to case studies on a range of issues.
6. Be able to identify the "drivers" of interdisciplinary work at the professional and college levels (i.e. funding, societal need, etc.).
7. Be able to design a concept map.
8. Have developed the ability to synthesize multiple perspectives in a variety of modes, including written assignments, collaboration in a group environment, and oral presentations.
9. Demonstrate a critical awareness of the content of various forms of media (image, text, sound) as active (rather than passive) viewers.

Grading

Weekly assignments...40%
Class presentations.... 10%
Midterm exam.....20%
Final exam..... 30%

Course Textbook

Repko, Allen (2005). *INTERDISCIPLINARY PRACTICE: A Student Guide to Research and Writing*. Boston: Pearson Custom Publishing. In stock at the UMBC bookstore.

Course Readings

1. **On e-reserve** at AOK Library: <http://aok.lib.umbc.edu/circ/ereserves/Student/eresindex.php>. Select INDS 330 from the drop down menu. You will be prompted for a username and password:
username = inds330f07
password = doorbell
[Questions? Call e-reserves desk at 455-2354]

2. On INDS 330 **Blackboard** site: log in to myUMBC and select Blackboard tab. Select INDS 330 and click on “Course Documents.”

Content Overview (from Repko 2005, p. 9):

“Over time, complexity became a widely cited reason for interdisciplinary practice in a remarkable range of contexts, from literary studies, physics, and biology to education, public policy, and environmental studies. The starting point varied – the knowledge explosion, cultural diversity, social and technological problems, or multi-faceted concepts such as the ‘body,’ the ‘mind,’ or ‘life.’”

- Julie Thompson Klein (2001). *Interdisciplinarity and the Prospect of Complexity: The Tests of Theory*. *Issues in Integrative Studies*, 19, 43-57.

CURRICULUM

Week 1 08-29

What is Interdisciplinary Studies and why does it matter?

- Description of course, syllabus, assessment, Blackboard site, and e-reserves
 - Announcements and Introductions
1. Interdisciplinary Studies Program at UMBC
 - a. Timeline/History (see handout)
 - b. INDS sample major: Murteza Shahkolahi, “*Issues in Emergency Healthcare*”
 - c. INDS Council of Majors
 2. Contemporary Issues: multidisciplinary perspectives

- *United Nations Millennium Development Goals* – an international framework for complex problem definition (handout; also on Blackboard)
 - Why do these problems persist? Why is there so much disagreement as to what the problems and solutions are? How might perspectives on the problem be integrated into a more comprehensive view?
 - Class brainstorms a list of pressing issues that they care about
3. Interdisciplinarity in the professions
 - Guiding question: what will my profession be, and how is this profession interdisciplinary?
 4. Interdisciplinary Practice
 - Overview of course textbook (Repko)

- Assignments for next week
 - Repko Chapters 1&2 *What Interdisciplinary Studies Is and Why it Matters* (28 pp.)
 - Badaracco, Joseph. Introduction. *Questions of Character*. p. 1 - 9. Boston, MA. Harvard Business School Press. 2006. **On e-reserves:** <http://www.umbc.edu/ereserves/pdf/fall07/inds330/e11.pdf>.
 - Badaracco, Joseph. Do I Have a Good Dream? *Questions of Character*. p. 11- 29. Boston, MA. Harvard Business School Press. 2006. **On e-reserves:** <http://www.umbc.edu/ereserves/pdf/fall07/inds330/e12.pdf>.
 - The Writing Center at UMBC. **On Blackboard.**

- **Writing Assignment #1 (2 pp.):**

1A: Come up with a metaphor to describe interdisciplinary studies (Repko uses “boundary crossing” and “bridge building,” for example). Explain why your idea is an appropriate metaphor.

1B: Why does interdisciplinary studies matter to you? How will INDS prepare you to work in your chosen field?

1C: Use the definition of interdisciplinary studies in Repko (p. 10) to explain how Professor Badaracco’s class at Harvard is interdisciplinary.

Week 2 09-05

Do I have a good dream? How will I reach my career goals?

1. Interdisciplinary Studies Program at UMBC
 - a. The INDS proposal process
 - b. Example of proposal – *DeLeon Gray, “ Psychological Foundations of Education”*
 - c. Writing tips: Writing resources at UMBC (The Writing Center, Learning Resources Center, writing courses)
2. Contemporary Issues: multidisciplinary perspectives
 - a. Discussion of Badaracco readings: To quote Badaracco, “Do I have a good dream?” Reflect on your own career goals and vision for the future.

3. Interdisciplinarity in the professions
 - a. Examples of the evolution of certain professions by “cross pollination”
 - i. scientific advance aided by the influence of visual art (Jeremy Swan)
 - ii. economic policy influenced by medical diagnosis (Jeffrey Sachs)
 - iii. philosophers using economics to make a moral argument (Peter Singer).
 4. Interdisciplinary Practice
 - a. Discussion of Repko Chapters 1&2
 - b. Traits of an Interdisciplinary Practitioner
 - c. Activity: rate yourself as an interdisciplinary practitioner
- Assignments for next week:
 - Repko Chapter 3 *The Origin of the Disciplines* (14 pp.)
 - Kelly, Kevin. 2004. *We Are the Web* (7 pp.) **On Blackboard.**
 - Henig, Robin Marantz. *The Real Transformers* (14 pp.). **On Blackboard.**
 - McCarthy, John. *What Is Artificial Intelligence?* (pp. 1-6). **On Blackboard.**
 - **Writing Assignment #2 (2 pp.):**

After reviewing your instructor’s comments on Assignment #1 as well as the writing guidelines on pages one and two of this syllabus, revise your paper. Bring your revised paper to the Writing Center at UMBC. Revise your paper based on feedback from the WC and hand in BOTH your revised paper and the comment form given to you by your WC tutor.

We will review an exemplary student essay in the next class, and discuss how this essay meets the writing guidelines.

Week 3 09-12

How have the World Wide Web and Artificial Intelligence changed the way we organize and utilize knowledge?

1. Interdisciplinary Studies Program at UMBC
 - a. Petrovich Lectures: Jonathan Pevsner and Leonardo Da Vinci
 - b. Writing tips: an example of an exemplary student essay
 2. Contemporary Issues: multidisciplinary perspectives
 - a. Discussion of articles on the web and AI
 3. Interdisciplinarity in the professions
 - a. Show video: Dr. Howard Gardner, *MI: Intelligence, Understanding, and the Mind*
 4. Interdisciplinary Practice
 - a. Discussion of Repko Chapter 3
 - i. Disciplinary perspectives on plagiarism: philosophy, law
- Assignments for next week
 - Repko Chapter 4, *The Role of the Disciplines* (24 pp.)
 - Readings on Evolution versus Intelligent Design: Views from science, religion and constitutional law:
 1. Richard Milner and Vittorio Maestro, ed. “*Evolution: science and belief*”. On Blackboard.

2. Faculty, University of Missouri-Kansas City School of Law: “*The Evolution Controversy*” On Blackboard.

- Lamott, Anne. *Short Assignments*. In Bird by bird: some instructions on writing and life. New York: Doubleday, 1994. (5 pp.) Handout

- **Writing Assignment #3 (2 pp.):**

3: Using Repko’s description of the disciplines, assess whether Intelligent Design is or is not a science. If you argue that ID is *not* a science, then choose a discipline (or combination of disciplines) that ID most closely resembles and explain why. In your opinion, why has the theory of evolution been controversial for so long? Include in your analysis at least one additional reference (from outside the class readings).

Week 4 09-19

What is an academic discipline? How can we utilize disciplines as “tools” with which to solve complex problems?

1. Interdisciplinary Studies Program at UMBC
 - a. Example of proposal: Samuel Min, “*Religious Studies*”
 - b. Writing Tips: discussion of Lamott chapter
 2. Contemporary Issues: multidisciplinary perspectives
 - a. Discussion: *Should Intelligent Design be taught in U.S. public schools?*
 3. Interdisciplinarity in the professions
 4. Interdisciplinary Practice
 - a. Discuss Repko Chapter 4 “The Role of the Disciplines”
- Assignments for next week
 - Repko Chapter 5 Integration (12 pp.)
 - Sachs, Jeffrey. *Development Economics as Clinical Economics* (5 pp.). On Blackboard.
 - Singer, Peter, *The Singer Solution to World Poverty* (6 pp.). On Blackboard.
 - Smith, Steven. 2006. *Poverty Traps and Global Development* (4 pp). On Blackboard.
 - Smith, Steven. 2006. *How to Help the Poor Out of Poverty* (3 pp.). On Blackboard.

- **Writing Assignment #4 (2 pp.):**

4A: Which disciplinary areas of expertise do Sachs, Singer, and Smith represent? How are they integrating insights from other disciplines or professions and why is this integration important to the solutions they propose? Which models of integration (Repko pp. 73-75) do they demonstrate?

4B: Why does the problem of poverty persist in our modern age? Include in your analysis at least one additional reference (from outside the class readings).

Week 5 09-26

Why are complex problems such as poverty and hunger so challenging in our modern age of wealth and technology?

1. Interdisciplinary Studies Program at UMBC
 - a. Example of proposal: Carla Mike, "*International and Global Studies: Sustainability in the Developing World*"
 - b. Writing workshop: peer review of Writing Assignment #4 (a rubric will be provided)
 2. Contemporary Issues: multidisciplinary perspectives
 - a. The Earth Institute at Columbia
 - b. Sustainable design and development
 - c. Microloans/Grameen Bank
 - d. Local initiatives in Balt/DC
 - e. Students bring and present recent article on *poverty*
 3. Interdisciplinarity in the professions
 4. Interdisciplinary Practice
- Assignments for next week
 - Repko Chapter 6: *How the Interdisciplinary Process is Achieved* (13 pp.)
 - Power, Samantha. Conclusion. *A Problem From Hell*. Power, Samantha. p. 503 - 516. New York. Basic Books. 2002. **On e-reserves:**
<http://www.umbc.edu/ereserves/pdf/fall07/inds330/e1.pdf>.
 - Goldberg, Natalie. *Writing Down The Bones: Freeing The Writer Within* (1986). "First Thoughts" chapter. **On Blackboard.**
 - **Writing Assignment #5 (2 pp.):**

5A: Revise Writing Assignment #4 based on your peer feedback comments and Writing Center comments. Please hand in your original paper with comments, Writing Center comments, and your revised essay.

5B: (short essay, 1 page, pass/fail) Why does the problem of genocide persist in our modern age?

Week 6 10-03

What are the causes of genocide and how should we respond?

1. Interdisciplinary Studies Program at UMBC
 - a. Capstone projects
 - b. Example of capstone: *Jakana Thomas*
 - c. Writing tips: An in-class writing exercise from Natalie Goldberg's *Writing Down the Bones: Freeing the Writer Within* (1986).
2. Contemporary Issues: multidisciplinary perspectives
 - a. View "Advocating for Darfur" (IOP discussion 10/3/2006)
 - b. View SaveDarfur.org
 - c. Discuss "A Problem from Hell" by Samantha Powers
 - d. Discuss IOP Darfur

3. Interdisciplinarity in the professions
 - a. Conflict Resolution/International Law
 - b. War memorials, Holocaust memorials
4. Interdisciplinary Practice
 - a. Discussion of Repko Chapter 5
- Assignments for next week
 - Repko Chapter 7: *Identifying relevant disciplines* (16 pp.)
 - Negroponte, John. "Global Security Challenges Facing the Intelligence Community" (14 pp.). **On Blackboard.**
 - Patel, Eboo. The Crossroads of the Identity Crisis. *Acts of Faith*. Eboo Patel. p. 1 - 17. Boston, MA 02108-2892. Beacon Press. 2007. **On e-reserves:**
<http://www.umbc.edu/ereserves/pdf/fall07/inds330/e5.pdf>.
 - **Assignment #6 (1 pp.):**

(Pass/fail) Reflecting on Negroponte's and Patel's perspectives, comment on whether we can co-exist in a global, culturally diverse world.

Week 7 10-10

Can we co-exist in a global, culturally diverse world?

1. Interdisciplinary Studies Program at UMBC
 - a. Example of proposal: *Tzveil Blankschtein, "International Security and Counterterrorism"*
 - b. Writing tips: *example of student essay #5*
1. Contemporary Issues: multidisciplinary perspectives
 - a. (In class) Draw a concept map of the problem as described by Negroponte or Patel.
2. Interdisciplinarity in the professions
 - a. CIA, NSA, intelligence analysis
3. Interdisciplinary Practice
 - a. Midterm review of Repko chapters 1- 7
 - b. Midterm review of important concepts from readings
- Assignments for next week
 - Review Repko Chapters 1- 7
 - Prepare to apply Repko to three of the case studies we have reviewed so far

Week 8 10-17 MIDTERM EXAM

- Announcements
- Midterm exam (Repko Chapters 1-7)
- Assignments for next week
 - Repko Chapter 8: *Developing a Command of Each Discipline* (12 pp.)
 - Harvard Project Zero: *Dimensions of Understanding*. **On Blackboard.**
 - Deutschman Alan . *Change or Die: All leadership comes down to this: changing people's behavior. Why is that so damn hard? Science offers some surprising new answers -- and ways to do better.* (8 pp.) **On Blackboard.**

- Gardner, Howard. *Changing Minds: The Art and Science of Changing Our Own and Other People's Minds* **On Blackboard.**


- **Writing Assignment #7 (2 pp.):**

7A: Reflect on changes that you would like to make in your own life. Do you find these changes challenging to make? Why or why not?

7B: Reflect on the changes that you would like to inspire as a leader in the future. Why might these changes be a challenge to effect? What insights did you gain from the readings?

Week 9 10-24

Why is change so difficult? What does it mean to be a leader?

1. Interdisciplinary Studies Program at UMBC
 - Writing tips: *The Elements of Style*
2. Contemporary Issues: multidisciplinary perspectives
 - Show media:
 - [Martin Luther King "I have a dream"](#)
 - 17 min - Sep 6, 2006 -  (4614 ratings)
 - The full version of **Martin Luther King's** famous "I have a dream" speech
 - http://www.youtube.com/watch?v=PbUtL_0vAJk
3. Interdisciplinarity in the professions
 - Discussion of Deutschman and Gardner articles
4. Interdisciplinary Practice
 - a. Review midterm exam and Dimensions of Understanding framework
 - Readings for next week:
 - Repko Chapter 9: Studying the Problem and Generating Insights Into It (10 pp.)
 - Miller & Boix Mansilla, (2004), Thinking Across Perspectives and Disciplines (15 pp.) **On Blackboard.**
 - Finkel, Michael. Bedlam in the Blood Malaria. *National Geographic*. vol. 212. no. 1. p. 40 - 67. July 2007. **On e-reserves:**
<http://www.umbc.edu/ereserves/pdf/fall07/inds330/e2.pdf>.
 - Mendel, Gideon. Living with Aids. *National Geographic*. vol. 208. no. 3. p. 66 - 73. Sept. 2005. **On e-reserves:**
<http://www.umbc.edu/ereserves/pdf/fall07/inds330/e3.pdf>.
 - Optional: "Pandemic: Facing AIDS" (IOP transcript). **On Blackboard.**

- **Writing Assignment #8 (2 pp.):**

Apply Steps 5 & 6 from Repko ("Develop a command of each relevant discipline" & "Study the problem and generate insights into the problem") to either AIDS or malaria. Are these strictly medical problems? How can insights from other disciplines help us to understand why these diseases are spreading and what the challenges are for adequate treatment? Include in your analysis at least one additional reference (from outside the class readings).

Week 10 10-31

Are we winning the battle against TB, AIDS, and Malaria? How are we tracking the spread of disease in a globalized world?

**REMINDER: students must sign up to represent one perspective for the Climate Change panel discussion in Week 11.*

1. Interdisciplinary Studies Program at UMBC
 - a. Example of proposal: Maansi Raswant *capstone on pandemics*
 - b. INDS 330 Spring 2006: Understanding AIDS
 - c. Writing Tips: peer review of Assignment #8
2. Contemporary Issues: multidisciplinary perspectives
 - a. **Show video:** [Homeland Security Hearing on TB Incident: Thompson's Opening](#)
7 min - Jun 6, 2007
Tuberculosis Incident: A Poorly Coordinated Federal Response to an Incident with Homeland Security Implications. Chairman Bennie Thompson gives opening remarks....Democrats Congress Oversight **TB**
<http://www.youtube.com/watch?v=lafrilQp6es>
 - o **Show video:** "Pandemic: Facing AIDS" (IOP discussion)
 - b. Discussion of Spread of disease
 - i. Disciplinary perspectives: photojournalism, geography, science
 - c. Discussion of AIDS and Malaria articles
3. Interdisciplinarity in the professions
 - a. AIDS research: Michael Summers
 - b. Dr. Paul Farmer
 - c. Jeremy Swan/NIH
4. Interdisciplinary Practice
 - a. Discussion of Repko Chapters 8 & 9
 - b. Discussion of Miller & Boix Mansilla
- Assignments for next week
 - o Repko Chapter 10: Identifying Conflicts in Insights (13 pp.)
 - o Prepare to engage in a panel discussion on climate change by selecting one perspective from the following (see sign up sheet in class):
 - o The Scientists:
 1. A report of Working Group I of the Intergovernmental Panel on Climate Change (2007). Summary for Policymakers. (15 pp.) **On Blackboard.**
 - o The Economists:
 1. Mendelsohn. Robert, 2005. An Economist's View of the Kyoto Climate Treaty. (2 pp.) **On Blackboard.**
 - o The Policymakers:
 - o (International) The Kyoto protocol - A brief summary (2 pp.) **On Blackboard.**
 - o The Bush Administration: "President Bush Discusses Global Climate Change" 2001. (3 pp.) **On Blackboard.**

- U.S. Environmental Protection Agency. Climate Change: Basic Information. Retrieved from <http://www.epa.gov/climatechange/> on 08-21-07. **On Blackboard.**
- The Journalists:
 1. Appenzeller, Tim. The Big Thaw. *National Geographic*. vol. 211. no. 6. p. 56 - 71. June 2007. **On e-reserves:**
<http://www.umbc.edu/ereserves/pdf/fall07/inds330/e4.pdf>.
 2. Vergano, Dan. 2007. "Water shortages will leave world in dire straits" (2 pp.) **On Blackboard.**
 3. "Watching The World Melt Away" (CBS/60 minutes August 2007). **View in class.**
- The Activists:
 1. Gore, Al. 2006. "The Politicization of Climate Change" from *An Inconvenient Truth*. (3 pp.)
- The Skeptics:
 1. Lomborg, Bjørn, "Global warming – are we doing the right thing?" (6 pp.)
 2. Begley, Sharon; THE TRUTH ABOUT DENIAL. *Newsweek*, 8/13/2007, Vol. 150 Issue 7, p20-29. **On e-reserves:**
- The Industry
 1. American Petroleum Institute
 2. Ethanol
- At UMBC:
 1. President Hrabowski signs *Presidents Climate Commitment*
- **Writing Assignment #9 (2 pp.):**

Revise Writing Assignment #8 based on peer comments AND bring your revised draft to the Writing Center. Please hand in your original paper with comments, Writing Center comment form and final draft.

Week 11 11-07

How can we work towards environmental sustainability?

1. Interdisciplinary Studies Program at UMBC
 - a. MOSAIC 2007 on climate Change
 - b. Campus climate Initiative (<http://orgs.umbc.edu/cci/v1/index.php>)
 - c. President Hrabowski signs *Presidents Climate Commitment* (see handout and on Blackboard).
2. Contemporary Issues: multidisciplinary perspectives
 - a. Show media: Watching The World Melt Away (CBS/60 minutes August 2007) Scott Pelley looks for - and finds - evidence of global warming in Antarctica where the bottom of the world is literally melting away.
http://www.cbsnews.com/sections/i_video/main500251.shtml?id=2624589n
 - b. PANEL DISCUSSION on climate change
3. Interdisciplinarity in the professions

- a. Climate Change/AIT/MOSAIC
- b. View MOSAIC 2007 If Now, What then...
- 4. Interdisciplinary Practice
 - a. Discussion of Repko Chapter 10
- Assignments for next week
 - Repko Chapter 11: *Creating Common Ground* (15 pp.)
 - Hoffman, Carl, 2007. *New Tech to Tap North America's Vast Oil Reserves* (6 pp.)
 - EPA report, 2007. *Managing Radioactive Materials & Waste* (2 pp.)
 - Judge, Peter. (2007). *Study: Laser printers may pose health risks*. (1 p.) On Blackboard.

- **Writing Assignment #10 (2 pp.):**

10A: Comment on the various perspectives on climate change from the panel discussion using Step 7 “Identify Conflicts in Insights” and Step 8 “Create Common Ground” from Repko.

10B: Describe how one of the “bridging strategies” from Miller & Boix Mansilla would apply to the issue of climate change.

Week 12 11-14

What are some of our technological challenges?

1. Interdisciplinary Studies Program at UMBC
 - a. Example of proposal: *Eric Montgomery, “Optical engineering”*
2. Contemporary Issues: multidisciplinary perspectives
 - [Accelerating Radioactive Nuclear Waste Cleanup in Washington](#)
15 min - Jun 19, 2007
The highly radioactive nuclear waste at the Hanford Nuclear Reservation on the Columbia River in southcentral Washington state could be cleaned up at least 35 years faster than originally estimated
<http://www.youtube.com/watch?v=Lw0q6-4xmzM>
3. Interdisciplinarity in the professions
 - a. Energy Management
 - b. Environmental Engineering
 - c. Biological Engineering
 - d. IPCC research
4. Interdisciplinary Practice
 - a. Discussion of Repko Chapter 11
 - b. Discussion of Miller and Boix Mansilla
- Assignments for next week
 - Repko Chapter 12: *Integrating Disciplinary Insights* (13 pp.)
 - David Bornstein. *A Very Significant Force. How to Change the World*. David Bornstein. p. 47 - 60. New York, New York 10016. Oxford University Press.

2004. **On e-reserves:**

<http://www.umbc.edu/ereserves/pdf/fall07/inds330/e6.pdf>.

- David Bornstein. Six Qualities of Successful Social Entrepreneurs. *How to Change the World*. David Bornstein. p. 233 - 241. New York, NY 10016. Oxford University Press. 2004. **On e-reserves:**

<http://www.umbc.edu/ereserves/pdf/fall07/inds330/e7.pdf>.

- Simon Peyton Jones and Alan Bundy. *Writing a good grant proposal*. (5 pp.) **On Blackboard**.
- (optional) “Planting the Future” interview with Green Belt Movement founder Wangari Maathai and Krista Tippett from “Speaking of Faith” (9 pp.) On Blackboard.

- **Writing Assignment #11 (2 pp.):**

Write a grant proposal to propose an entrepreneurial venture for social change. What is the social problem? What changes need to be made? How will you make them? How would you fund this venture (grant money, etc.)?

Week 13 11-21

How do we integrate social needs with business models? The work of social entrepreneurs.

1. Interdisciplinary Studies Program at UMBC
 - a. Capstone presentations: INDS 490 students will practice presentations
 2. Contemporary Issues: multidisciplinary perspectives
 - a. Show media “New Heroes” DVD
 - b. Discuss “New Heroes”
 - c. Discuss student initiatives at UMBC (Climate Action, Artists for Change) and in class
 3. Interdisciplinarity in the professions
 - a. Social entrepreneurship
 - b. The Ashoka foundation
 4. Interdisciplinary Practice
 - a. Repko Chapter 12
- Assignments for next week
 - Newell, William H. 2006. Interdisciplinary Integration By Undergraduates. (12 pp.). On Blackboard.
 - Deluty, Robert. *Connecting, Unburdening, and Enlightening: Reflections on Poetry and Psychotherapy*. In Observed and Imagined. Baltimore: Gateway Press, 2004. (10 pp.) **On Blackboard**.
 - Mollica, Richard. “*Striking Out on a New Pathway*.” *Healing Invisible Wounds*. Richard Mollica. p. 7 - 33. Orlando, FL 32887-6777. Harcourt Books. 2006. **On e-reserves:**
<http://www.umbc.edu/ereserves/pdf/fall07/inds330/e8.pdf>.

- Robert Coles. Interlude: Bringing poems to medical school teaching. *The Call of Stories*. p. 92- 101. Boston. Houghton Mifflin. 1989. **On e-reserves:** <http://www.umbc.edu/ereserves/pdf/fall07/inds330/e9.pdf>.
- **Writing Assignment #12 (please turn in to INDS office, FA 546, by 11-28 at 4pm)**

12A: Select one example of integration from the Newell article and explain why this is an effective integration. What is the “added value” of the integration? How does it deepen the student’s understanding?

12B: (Select one of the following):

- Why does Dr. Deluty write poetry? Why do you write?
- According to Mollica, why is telling one’s story such an important part of therapy?
- Why does Dr. Coles use poetry in his medical school class?

12C: Pick one example from Deluty, Mollica, or Coles and explain how it is interdisciplinary.

Week 14 11-28 MOSAIC ROUNDTABLE DISCUSSION:

“Mental Illness and the Campus Community”

4- 6:30PM, UC BALLROOM, ATTENDANCE MANDATORY

*NOTE: There are two writing assignments for next week (Writing revision, Capstone)

- **Writing assignment #13**

13A: Revise Assignment #12 based on instructor feedback, Writing Center comments, and ALSO include one paragraph about what you have learned from the feedback/revision process.

- **Readings for next week**

- Gardner, Howard. Minds Viewed Globally. *Five Minds for the Future*. Gardner, Howard. p. 1 - 19. Boston, MA. Harvard Business School Press. 2006. On e-reserves: <http://www.umbc.edu/ereserves/pdf/fall07/inds330/e10.pdf>.

- INDS 490 Capstone Presentations, AOK Library 7th floor (attend at least one)

12-04-07 1pm to 4pm

12-05-07 12 noon – 3pm

13B: Briefly describe one Capstone presentation that you attended and explain how two or more disciplines were integrated in the capstone project. Why did the capstone call for an interdisciplinary approach? Draw upon what you have learned about integration from Repko, Newell, and/or Miller & Boix Mansilla.

Week 15 12-05 LAST CLASS

What have we learned about interdisciplinary practice? What have we learned about ourselves?

- Discussion of MOSAIC
- Discussion of Week 13 readings (Deluty, Mollica, Coles)
- Discussion of Newell

- Discussion of Gardner
- Review of Repko

FINAL EXAM (Take Home, 10 pp.):

Choose any complex problem or topic, either from the class readings or another topic in which you are interested, and apply all nine of Repko's "Steps in the Interdisciplinary Process" to the topic. Be specific and include new references in your literature review. In conclusion, apply one or more of the bridging techniques from the Miller&Boix Mansilla article and explain how this bridging technique helps us to understand the issue or to come up with solutions to a complex problem.

SM 11-02-07