

SYLLABUS
Interdisciplinary Research in Health Sciences
CSHC 6380 (CRN 14984)
Fall 2014

Location: Health Sciences and Nursing Building (HSN), Room 215, Tuesdays, 2:30 – 4:50
Instructor: Christina Sobin, PhD
casobin@utep.edu

Textbook: *Interdisciplinary Research: Case Studies from Health and Social Science*, Kessel F., Rosenfield P. L., Anderson N. B. 2008, Oxford University Press, NY, NY.

COURSE DESCRIPTION AND GOALS:

As Kessel, Rosenfield and Anderson (2008) suggest, “*Interdisciplinary research has emerged as the defining feature of research in the 21st century.*” Scholars, researchers, policy experts, foundations and funding agencies recognize that complex global problems in human health and well-being cannot be solved by individual researchers working largely alone.

Interdisciplinary team science however is still in its infancy. As recommendations and demands for interdisciplinary research increase, the realities and challenges of conducting successful interdisciplinary research are beginning to be discussed. Interdisciplinary research is not simply the co-involvement of researchers from diverse areas, each of whom investigates a different aspect of a single problem. Instead, interdisciplinary research must begin with an intellectual exchange of ideas and perspectives among researchers, leading to novel hypotheses that emerge from an integration of perspectives – hypotheses that none of the individual researchers alone would have proposed.

The goal of this course is to introduce IHS PhD students to the complexities of interdisciplinary team science. Using a “case studies” approach, students will learn how to conceptualize interdisciplinary research by studying in-depth descriptions of ongoing interdisciplinary research programs provided in the textbook. Two research programs will be studied in-depth and students will work in teams as they read and develop presentations of the content studied. Classes will consist of review and discussion of major concepts and approaches, student presentations, student-led discussions, brain-storming and critical analysis of program components. Students will also be required to find, read, synthesize and summarize published research from each of the research programs studied, and published research from their designated “research area.”

As students complete the work required for this course they will also improve their professional skills in searching the literature, reading and synthesizing theoretical content and empirical reports, preparing presentations, and writing doctoral level papers.

LEARNING OBJECTIVES

When students finish the course, they will be able to:

1. **DESCRIBE** two ongoing interdisciplinary research programs.
2. **EXPLAIN** why it was necessary to develop interdisciplinary research programs as opposed to continuing to conduct only single-investigator research.
3. **EXPLAIN** the differences between single-investigator research, multi-disciplinary research, interdisciplinary research, and translational research.
4. **DISCUSS** what is required to conduct interdisciplinary research.
5. **DISCUSS** issues that are likely to arise among investigators working on an interdisciplinary program of research.
6. **SUMMARIZE** the key elements of an interdisciplinary program of research.
7. **RE-CONCEPTUALIZE** single-investigator research as interdisciplinary research.
8. Orally present, without PowerPoint slides, one plan for (their own) interdisciplinary research.

COURSE REQUIREMENTS

1. Attend and participate in every class.
2. Find, read and summarize research in the students designated “research area.”
3. Read and critically analyze case-study descriptions (provided in the textbook) of interdisciplinary research programs.
4. Write summaries of reading content in outline form and turn in at the beginning of class.
5. Work in teams that together develop PowerPoint presentations of reading assignment content.
6. Present to the class overviews of the content studied.
7. Working in small groups, complete one 20-page team paper. This simulates the experience of developing team-written manuscripts for publication. Each paper will review a research program studied (from textbook), and discuss research published by researchers. (Detailed requirements for the paper will be provided in class.)

GRADING RUBRIC

Class attendance, discussion participation, group presentations: 35%

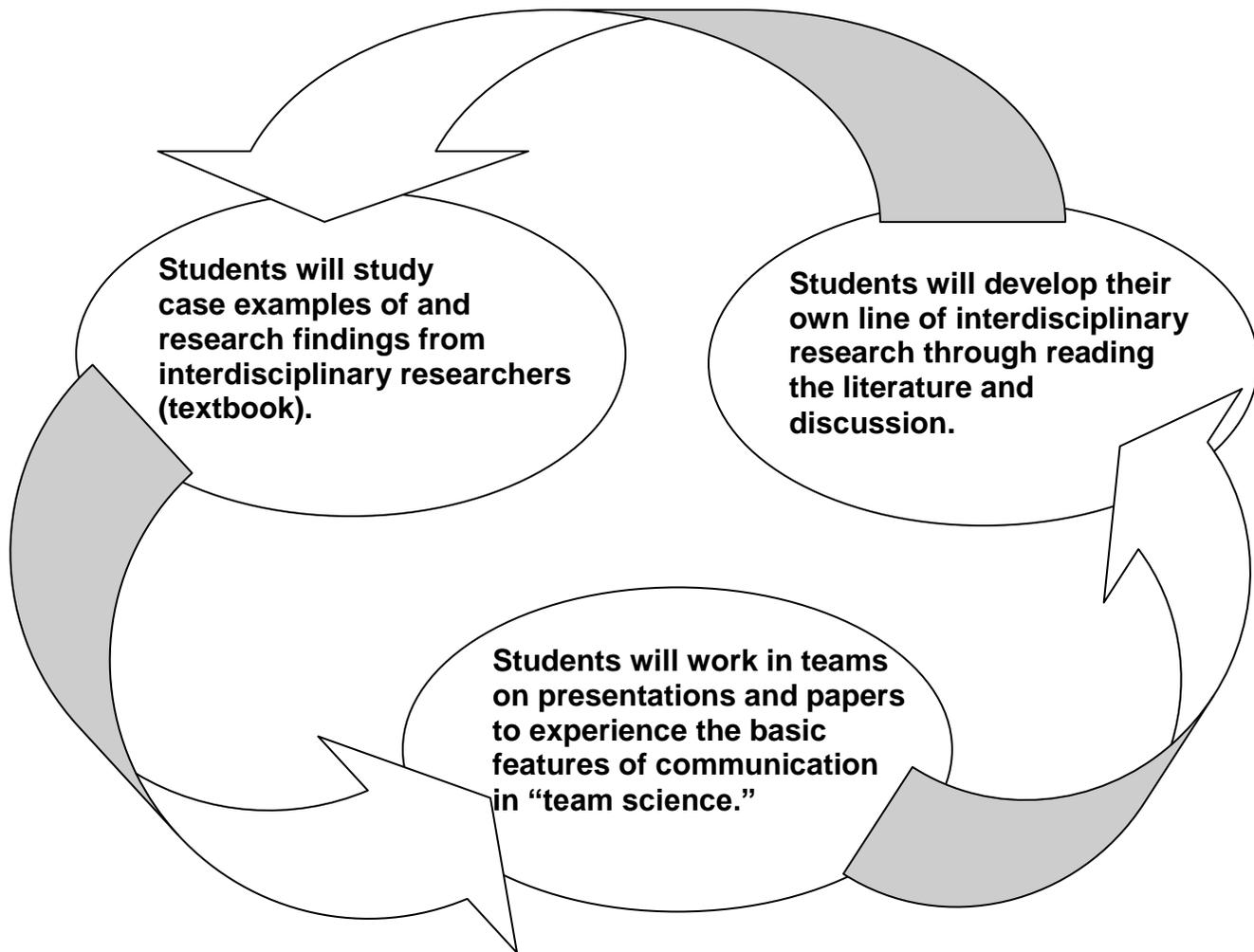
Weekly reviews of research articles from your field: 15%

Reading outlines: 25%

Final Team Paper: 25%

CLASS ACTIVITIES:

There are three primary activities that will take place during this course:



These activities work hand-in-hand to build students' understanding of interdisciplinary research, while helping students formulate their plans for interdisciplinary research. Weekly activities support these three main activities, while reinforcing skills that are critical for formulating a research plan, including reading, understanding, critically analyzing, synthesizing, incorporating and articulating (via oral presentation) your understanding of the current literature.

1. At the start of the semester, students will informally present and discuss with the class their current research focus; one “research area” per student to serve as a focus of study during the semester will be designated. Each week, students will be required to read at least one empirical research paper in their designated “research area.” The paper must be outlined following the guidelines provided in class and the student must post the pdf of the research paper(s) and a 1-page summary in the week’s Dropbox folder. **Bring your research paper summary to class.** Students may be asked to present and discuss the article content in class. Use the following formats for the article and summary file names.
Article: (studentlastname)_(authorlastnameyearofpub) e.g., sobin_seeman11
Summary: (studentlastname)_(authorlastnameyearofpub)summary
e.g., sobin_seeman11summary
2. Most weeks, students will be required to read and outline assigned chapter(s) from the textbook. **Bring two hard copies of the outline to class.** One copy will be given to the instructor, and one will be used for the group activity. After outlines are collected, the instructor will provide a completed outline as one example, and the class will consider and compare the students’ and instructor’s outlines. Students will then be given a 15-minute writing assignment in which they develop an answer to a question posed by the instructor. The content and meaning of the assigned reading will then be discussed. Students will then work in assigned small groups to create a PowerPoint presentation summarizing what they believe to be the most important contributions of the research or the most important issues addressed in the chapter, and why these contributions are significant. Groups will present and lead further discussion regarding the implications of the chapter content.
3. During the three weeks of the semester, working in small groups, students will write one 20-page (minimum) paper reviewing the content of one section studied from the textbook, or a different research program of their choosing. This simulates the experience of developing team-written manuscripts for publication. Each paper will review the research program studied (from textbook), and discuss research published by researchers. All papers must include a title page, abstract and references, and follow APA guidelines for formatting. Details will be given in class.
4. During the last three class sessions, each student will do a 10 – 15 minute “TED talk” for the class on the research plan that they developed over the course of the semester.

**INTERDISCIPLINARY RESEARCH IN THE HEALTH SCIENCES, CHSC 6380 (CRN 14984)
FALL 2013**

TUESDAYs 2:30pm – 4:50pm, HSN BLDG, RM 215

WEEK	TUESDAY
1	<p align="center">08/26 Introductions New Student Orientation Discussion of research topics and “interdisciplinarity” Designation of “research area” for each student Review of class activities and syllabus Discussion of how to access and read the literature Discussion of how to do a 1-page research article summary Discussion</p> <p>ASSIGNMENT FOR NEXT CLASS (9/02/2013): <u>Read and summarize one empirical research paper from your “research area”</u> <u>POST pdf of your article and the summary in the week’s folder in DROPBOX</u> Bring summary to class <u>Read Part III, Chapter 9 and Chapter 10</u> <u>Outline the content of the textbook reading assignment</u> <u>Prepare 2 hardcopies of your outline and bring to class</u></p>
2	<p align="center">9/02 Presentation at library on information access Brief discussion of review of articles Write answer to question (15 minutes) Turn in written answer Present summary of article reviewed and discuss with class Small groups prepare PowerPoint slide presentations of overlaps in research areas Small group presentations of research areas How to outline chapters Read and outline Introduction (in class activity) Concluding Discussion</p> <p>ASSIGNMENT FOR NEXT WEEK <u>Read and summarize one empirical research paper from your “research area”</u> <u>POST pdf of your article and the summary in the week’s folder in DROPBOX</u> Bring summary to class <u>Read Part III, Chapter 9 and Chapter 10</u> <u>Outline the content of the textbook reading assignment</u> <u>Prepare 2 hardcopies of your outline and bring to class</u></p>
3	<p align="center">09/09 Turn in hardcopy of outline at the beginning of class Review outlines and discuss Write answer to question (15 minutes) Turn in written answers Discuss content of reading – make notes on most significant points (in your view) Small groups prepare PowerPoint slide presentations of critical points Small group presentations of most important points Concluding Discussion Discussion of a selected research paper with summary presentation by student</p> <p>ASSIGNMENT FOR NEXT WEEK <u>Read and summarize one empirical research paper from your “research area”</u> <u>POST pdf of your article and 1-page summary in the week’s folder in DROPBOX</u> Bring summary to class <u>Read Part III, Chapter 11</u> <u>Outline the content of the textbook reading assignment</u> <u>Prepare 2 hardcopies of your outline and bring to class</u></p>

4	<p style="text-align: center;">09/16</p> <p style="text-align: center;"><i>Turn in hardcopy of outline at the beginning of class</i> Review outlines and discuss Write answer to question (15 minutes) Turn in written answers</p> <p>Discuss content of reading – make notes on most significant points (in your view) <i>Small groups prepare PowerPoint slide presentations of critical points</i> Small group presentations of most important points Concluding Discussion</p> <p>Discussion of a selected research paper with summary presentation by student</p> <p>ASSIGNMENT FOR NEXT WEEK <i>Read and summarize one empirical research paper from your “research area”</i> <i>POST pdf of your article and 1-page summary in the week’s folder in DROPBOX</i> <i>Bring summary to class</i> <i>Read Part III, Chapter 12</i> <i>Outline the content of the textbook reading assignment</i> <i>Prepare 2 hardcopies of your outline and bring to class</i></p>
5	<p style="text-align: center;">09/23</p> <p style="text-align: center;"><i>Turn in hardcopy of outline at the beginning of class</i> Review outlines and discuss Write answer to question (15 minutes) Turn in written answers</p> <p>Discuss content of reading – make notes on most significant points (in your view) <i>Small groups prepare PowerPoint slide presentations of critical points</i> Small group presentations of most important points Concluding Discussion</p> <p>Discussion of a selected research paper with summary presentation by student</p> <p>ASSIGNMENT FOR NEXT WEEK <i>Read and summarize one empirical research paper from your “research area”</i> <i>POST pdf of your article and 1-page summary in the week’s folder in DROPBOX</i> <i>Bring summary to class</i> <i>Small group activity: prepare 30-minute presentation exploring in depth one or related concepts from the reading that your group agrees are the most significant, or make the greatest contribution to health research. Find and summarize additional articles to help explain in greater detail the theory or concepts that underlie the idea.</i></p>
6	<p style="text-align: center;">09/30</p> <p style="text-align: center;"><i>Small Group Presentations</i> <i>(12 minute presentation with 8 minutes discussion per student)</i> Concluding Discussion</p> <p>ASSIGNMENT FOR NEXT WEEK <i>Prepare 12-minute oral presentation with PowerPoint slides of your current dissertation research plans. What will you research and how? How is your research interdisciplinary? Briefly discuss what concepts, ideas or approaches from the first set of readings might inform your plan.</i></p>
7	<p style="text-align: center;">10/07</p> <p style="text-align: center;"><i>Student presentations</i> <i>12 minutes each with 8 minutes of class discussion (20 minutes per student)</i></p> <p>ASSIGNMENT FOR NEXT WEEK <i>Read and summarize one empirical research paper from your “research area”</i> <i>POST pdf of your article and 1-page summary in the week’s folder in DROPBOX</i> <i>Bring summary to class</i> <i>Read Part IV, Chapter 13, and Chapter 14, pages 292 – 302</i> <i>Outline the content of the textbook reading assignment</i> <i>Prepare 2 hardcopies of your outline and bring to class</i></p>

8	<p style="text-align: center;">10/14</p> <p style="text-align: center;"><i>Turn in hardcopy of outline at the beginning of class</i></p> <p style="text-align: center;">Review outlines and discuss</p> <p style="text-align: center;">Write answer to question (15 minutes)</p> <p style="text-align: center;">Turn in written answers</p> <p>Discuss content of reading – make notes on most significant points (in your view)</p> <p style="text-align: center;"><i>Small groups prepare PowerPoint slide presentations of critical points</i></p> <p style="text-align: center;">Small group presentations of most important points</p> <p style="text-align: center;">Concluding Discussion</p> <p>Discussion of a selected research paper with summary presentation by student</p> <p>ASSIGNMENT FOR NEXT WEEK</p> <p><u>Read and summarize one empirical research paper from your “research area”</u></p> <p><u>POST pdf of your article and 1-page summary in the week’s folder in DROPBOX</u></p> <p><u>Bring summary to class</u></p> <p><u>Read Chapter 14, pages 302 – 321</u></p> <p><u>Outline the content of the textbook reading assignment</u></p> <p><u>Prepare 2 hardcopies of your outline and bring to class</u></p>
9	<p style="text-align: center;">10/21</p> <p style="text-align: center;"><i>Turn in hardcopy of outline at the beginning of class</i></p> <p style="text-align: center;">Review outlines and discuss</p> <p style="text-align: center;">Write answer to question (15 minutes)</p> <p style="text-align: center;">Turn in written answers</p> <p>Discuss content of reading – make notes on most significant points (in your view)</p> <p style="text-align: center;"><i>Small groups prepare PowerPoint slide presentations of critical points</i></p> <p style="text-align: center;">Small group presentations of most important points</p> <p style="text-align: center;">Concluding Discussion</p> <p>Discussion of a selected research paper with summary presentation by student</p> <p>ASSIGNMENT FOR NEXT WEEK</p> <p><u>Read and summarize one empirical research paper from your “research area”</u></p> <p><u>POST pdf of your article and 1-page summary in the week’s folder in DROPBOX</u></p> <p><u>Bring summary to class</u></p> <p><u>Read Chapter 15, pages 322 – 329</u></p> <p><u>Outline the content of the textbook reading assignment</u></p> <p><u>Prepare 2 hardcopies of your outline and bring to class</u></p>
10	<p style="text-align: center;">10/28</p> <p style="text-align: center;"><i>Turn in hardcopy of outline at the beginning of class</i></p> <p style="text-align: center;">Review outlines and discuss</p> <p style="text-align: center;">Write answer to question (15 minutes)</p> <p style="text-align: center;">Turn in written answers</p> <p>Discuss content of reading – make notes on most significant points (in your view)</p> <p style="text-align: center;"><i>Small groups prepare PowerPoint slide presentations of critical points</i></p> <p style="text-align: center;">Small group presentations of most important points</p> <p style="text-align: center;">Concluding Discussion</p> <p>Discussion of a selected research paper with summary presentation by student</p> <p>ASSIGNMENT FOR NEXT WEEK</p> <p><u>Read and summarize one empirical research paper from your “research area”</u></p> <p><u>POST pdf of your article and 1-page summary in the week’s folder in DROPBOX</u></p> <p><u>Bring summary to class</u></p> <p><u>Read Chapter 15, pages 330 - 347</u></p> <p><u>Outline the content of the textbook reading assignment</u></p> <p><u>Prepare 2 hardcopies of your outline and bring to class</u></p>

11	<p style="text-align: center;">11/04</p> <p style="text-align: center;"><i>Turn in hardcopy of outline at the beginning of class</i> Review outlines and discuss Write answer to question (15 minutes) Turn in written answers Discuss content of reading – make notes on most significant points (in your view) <i>Small groups prepare PowerPoint slide presentations of critical points</i> Small group presentations of most important points Concluding Discussion Presentation and discussion of a selected research paper (1 student)</p> <p>ASSIGNMENT FOR NEXT WEEK <u><i>Read and summarize one empirical research paper from your “research area”</i></u> <u><i>POST pdf of your article and 1-page summary in the week’s folder in DROPBOX</i></u> <u><i>Bring summary to class</i></u> <u><i>Small group activity: prepare 30-minute presentation exploring in depth one or related concepts from the reading that your group agrees are the most significant, or make the greatest contribution to health research. Find and summarize additional articles to help explain in greater detail the theory or concepts that underlie the idea.</i></u></p>
12	<p style="text-align: center;">11/11</p> <p style="text-align: center;"><i>Small Group Presentations</i> <i>(12 minute presentation with 8 minutes discussion per student)</i> Concluding Discussion Discussion of student TED talks (integrate literature you have reviewed) Discussion of team papers due in class (hardcopy) 12/02 (last day of class)</p> <p>ASSIGNMENT FOR NEXT WEEK <u><i>Prepare 20-minute “TED talk” presentation (no PowerPoint slides) of your chosen research topic. What problem do you hope to solve? Why is the problem you’ve selected critical to study? Why should we care about the problem? Why is your topic of great importance? What will you do in your research that is different from what has been done before? What knowledge gaps will you fill? BE SURE TO WATCH SEVERAL TED TALKS TO BECOME VERY FAMILIAR WITH THE FORMAT AND STYLE.</i></u></p> <p><u><i>Prepare small group paper, due in class (hardcopy) on 12/02 (last day of class)</i></u></p>
13	<p style="text-align: center;">11/18</p> <p style="text-align: center;"><i>Student TED talk presentations begin (2 students)</i> <i>20 minute presentation, 20 minute class discussion</i> Discussion of team papers due in class (hardcopy) 12/02 (last day of class)</p> <p>ASSIGNMENT FOR NEXT WEEK <u><i>Prepare 20-minute “TED talk” presentation (no PowerPoint slides) of your chosen research topic. What problem do you hope to solve? Why is the problem you’ve selected critical to study? Why should we care about the problem? Why is your topic of great importance? What will you do in your research that is different from what has been done before? What knowledge gaps will you fill? BE SURE TO WATCH SEVERAL TED TALKS TO BECOME VERY FAMILIAR WITH THE FORMAT AND STYLE.</i></u></p> <p><u><i>Prepare small group paper, due in class (hardcopy) on 12/02 (last day of class)</i></u></p>

14	<p style="text-align: center;">11/25</p> <p style="text-align: center;">Student TED talk presentations (3 students) 20 minute presentation, 20 minute class discussion Discussion of team papers</p> <p>ASSIGNMENT FOR NEXT WEEK</p> <p><u>Prepare</u> 20-minute “TED talk” presentation (no PowerPoint slides) of your chosen research topic. What problem do you hope to solve? Why is the problem you’ve selected critical to study? Why should we care about the problem? Why is your topic of great importance? What will you do in your research that is different from what has been done before? What knowledge gaps will you fill? BE SURE TO WATCH SEVERAL TED TALKS TO BECOME VERY FAMILIAR WITH THE FORMAT AND STYLE.</p> <p><u>Prepare</u> small group paper, due in class on 12/02 (last day of class)</p>
15	<p style="text-align: center;">12/02</p> <p style="text-align: center;">Turn in team papers at start of class Student TED talk presentations (2 students) 20 minute presentation, 20 minute class discussion Final wrap-up Discussion</p>