

Syllabus NCLC 275
Community Health & Research
4 Credits NCLC 275
Wednesday 3:30-7:10
Prince William Campus of George Mason University
Room PW 1 230

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This four credit Learning Community will provide the foundations for a study into the new relevant community health issues facing area residents. The course has three important and integrated components. First as a collaborative participatory Learning Community we will study, read and discuss in seminar fashion a variety of topics and subjects related to community health, environmental health and research practices. Topics to be discussed are listed on the week-by-week schedule. Secondly, we will develop, investigate and conduct a community based research project mentored by the faculty or a business/agency partner. Lastly we will synthesize the results and implications of the research into a final public and poster presentation. This component of the Learning Community stresses both oral and written communications on issues of science and public policy. (Content, process and competency).

Course Objectives

- To engage students in an understanding of the community and public health issues facing area residence
- To introduce students to the research process as practices by scientists and engineers from the observation phase to the construction of a hypothesis, testing and implementation phases
- To provide an active, collaborative environment in which students will ask questions, think scientifically and develop competencies in research as well as oral and written presentation skills

This learning Community emphasizes Science and Civic Engagement

Text

Introduction to Community Health by James McKenzie and Robert Pinger

Logistics

Class meets one day a week for a total of three and a half hours at the PWC campus of George Mason University. Class time will most often be dedicated to seminar discussions of the readings, guest speakers and collaborative activities. It will not be a traditional lecture format. Research is conducted at various times throughout the semester depending on the specific projects chosen.

Schedule: Week by Week

Week 1: Introduction, icebreakers, syllabus review, expectation reviews and over view- Status Report, what do we know about our communities health? How to use/study the course text. Assign readings from text chapters 1 & 2; pages 2-56

Week 2: Seminar Discussion of Readings. Discussion of local area and statewide agencies responsible for responding to health needs. Assign chapters 3-4; pages 57-105

Week 3: The research seminar discussion of readings process and your role. Brainstorm ideas and your tools for access health and epidemiology. Assign chapters 5 & 6; pages 107-163. Science in the News due.

Week 4: Quiz – Seminar discussion of readings. Begin Major Environmental Health issues. Assign chapters 7 & 8; pages 164-249

Week 5: Seminar discussion of readings. Continue on issues. Discuss research projects- form research teams and write objectives, protocols and timetables. Assign chapter 9; pages 249-297 Groups to make contact w/ research mentors. Science in the News due.

Week 6: Seminar Discussion of readings. Students team presentations on research project – group critiques and report from mentor contacts. Begin research. Assign chapters 10 & 11; pages 297-364

Week 7: Seminar discussion of readings assign case studies for homework and presentation on week 9. Students continue research investigation. Mid-course correction time and Science in the News.

Week 8: Quiz – Discussion in seminar of readings. Continue with community health topics. Assign Chapter 12; pages 369-406. Science in the News due.

Week 9: Present case studies. Discuss readings of case studies.

Week 10: Seminar discussion of Readings. How to make a scientific poster presentation. Group updates on research. Assign advocacy letter (models provided).

Week 11: Quiz – Reading and critique of advocacy letters (faculty, peer and self).
Review research progress.

Week 12: Oral presentation & poster; drafts and outlines due. Discuss “Science in the News”

Week 13: Oral presentations

* Chapters 13-18 will be assigned throughout the semester as needed for research projects related to these areas are developed. Public poster presentations will be scheduled during this time.

Research

Students along with their community mentors will engage in a community based research project. A number of community partners will be identified to mentor students through the research process; the class instructor will work with each group side by side with the community partner. The GMU Human Subjects Review Board will be notified of each research plan prior to beginning the work.

The following is an example of the type of projects students might decide to engage in. A full list of community resources will be developed prior to the start of class, specifically for this class. Students will be encouraged to develop a community based, service learning research project in which the students performing a service to a local business and institution as they investigate a community issue of both scientific importance and public policy.

The following is a preliminary list of partners and research projects
To serve as an example only

Community Partner	
PWCPW	West Nile/Nursing Homes Survey and Remediation
Aerobiology, Inc.	Analysis of mold/spores and biological in buildings
PWC – Watershed Monitoring Committee	Occoquan watershed health analysis/repair & restoration
Dr. Doug Mose	Radon survey and mapping
Health Dept.*	Survey of needs and access to health services

Means of Assessment

Assessment of student learning will be diverse and include the following:

Quizzes	30%
Science in the News	10%
Advocacy Letter	15%
Research Project	25%
Poster & Oral Presentations	20%
TOTAL	100%

Advocacy Letter

Your goal is to find a scientific issue in the community that concerns you and needs to be brought to the attention of someone specific (private individuals, congressional members, industry, state agencies, churches, campus community, etc.) for action. This assignment is designed to help you:

- Continue your investigation into a scientific problem with social consequences.
- Illuminate and communicate science issues to a defined audience.
- Create an evidence-based advocacy letter that persuades a target audience of a particular science issue.

Everyone has a connection to the health of the community whether through the environment, disease, natural resources, and the food we eat or the water we drink. The purpose of this assignment is to discover how you relate to the health of the community and find an issue you would advocate. In order to develop a convincing argument that these issues influenced the lives of many, you must present quantitative information that supports your position. Examples include, but are not limited to, the health of rivers and lakes, statistics on eating habits, rates of disease and air quality. Your challenge is to identify a significant issue of personal interest and convince your audience that it is an issue of pressing social importance.

Objectives Include:

- 1) Construct a persuasive scientific argument.
- 2) Communicate to a specific audience how science based issues are related to public policy and social importance.
- 3) Understand proper methods of identifying and discriminating relevant information, and using that information to support your argument.

Supporting Evidence: Graphs, Charts, Tables, or Models

As part of your research in preparing your letter of advocacy, you will need to represent information or data for visual interpretation. This analysis will require you to find two or more data sets (i.e. statistics) supporting the issue you are writing about. This must be included as an additional page to your advocacy letter.

Requirements:

You are to prepare a one-two page word-processed letter (single spaced, times New Roman 12 font) addressed to a specific audience as discussed in the overview (above). The letter should incorporate the following:

- o A persuasive argument supported by evidence and reason
- o A formal write style free of grammar or spelling errors
- o At least two addendum, quantitative in nature (chart, graph, table,) that is (a) referred to in the text of your letter and (b) supports your letter's overall purpose

A draft of your advocacy letter, completed with sources is due on week 11. Two copies of the final, signed letter are due on week 13. The letters should be turned in with a professionally addressed, stamped envelope addressed to the specific audience you have elected to write to. Your instructor will mail one copy, and return the other copy to you.

Poster Presentation

Prepare a poster that represents the three main aspects of this Learning Community: science, communication, and quantitative analysis research. Keep in mind the following requirements as you prepare your presentation:

1. Prepare a professional quality poster with a typeface easily read from 5-7 feet. The text of the poster should inform the audience as to the title of your research, the people involved, your thesis or hypothesis, findings, and conclusions.
2. Pictures, graphics, the use of color and charts will gain the audience's attention and make the presentation more understandable, more immediately comprehensible and more convincing. Keep in mind that your poster is not just a collage of images it should be as carefully prepared as an essay and should not waste space. Prepare your poster on a display board.
3. If you are planning to show video to complement your poster, you will need to make the arrangements for equipment with the instructor.
4. Provide a one-page synopsis of your study. It should include the references you used. You will need 25 copies of this summary for distribution to faculty and interested students.
5. Be prepared to engage in numerous conversations that will hopefully allow for more exchange of your ideas. Audience members will wander and engage you in direct dialogue about your research. Faculty will visit your poster and expect your group to professionally present an overview.

Science and Mathematics "In the News"

Everyday matters of scientific importance are found in local, regional and national newspapers. These reports influence public perception of scientific advancements that greatly impact our society. An understanding of the language of science and mathematics is also essential to evaluate the data and information cited. Our goal is that through a daily exposure to items of scientific importance, which are "in the news", you will learn to think scientifically and connect science to issues of public and personal importance.

As responsible community members you will be asked throughout your life to vote on issues related to science and the impact of science and technology in society. In our learning community we begin preparing ourselves for our civic responsibility through reading newspapers and journals for stories of scientific interest and engaging in discussions of the article.

Individual or Group Assignments:

Each individual or study group will lead a seminar discussion of a recent “Science in the News “ article. As seminar leader(s), you will provide members of the entire seminar copies of a recent article (recent means it was published within the last 2 months). We encourage you to look for your topic in popular journals and journals your faculty will make available for you. The Tuesday section of the Washington Post is also a very rich source of information. *Only websites from science journals or newspapers* are acceptable.

Each member of our learning community will participate. Each person is responsible for an understanding of the article she/he chose. Everyone in seminar is responsible to have read and come prepared for an engaging and challenging discussion. Have fun with this!

The GRADE for this aspect of our learning Community will be based on the richness of discussion and class participation. In addition for each “Science in the News” the following format is to be used for the written portion of the assignment..

This is one page in length TOTAL

Title/author/date/ source

Summary of the article

WOW factor

New Vocabulary words with definition (minimum 2)

Honor Code (<http://www.gmu.edu/facstaff/handbook/aD.html>)

Please familiarize yourself with the Honor System and Code, as stated in the George Mason University Undergraduate Catalog. When you are given an assignment as an individual, the work must be your own. Some of your work may be collaborative; source material for group projects and work of individual group members must be carefully documented for individual contributions. For an overview of the Honor Code, see the explanation below:

To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of George Mason University, and with the desire for greater academic and personal achievement, we, the members of George Mason University, have set forth the following code of honor.

I. The Honor Committee

The Honor Committee is a group of students elected from the student body whose primary and indispensable duty is to instill the concept and spirit of the Honor Code within the student body. The secondary function of this group is to sit as a hearing committee on all alleged violations of the code.

II. Extent of the Honor Code

The Honor Code of George Mason University deals specifically with *cheating* and *attempted cheating*, *plagiarism*, *lying*, and *stealing*.

- A.** Cheating encompasses the following:
 - 1.** The willful giving or receiving of an unauthorized, unfair, dishonest, or unscrupulous advantage in academic work over other students.
 - 2.** The above may be accomplished by any means whatsoever, including but not limited to the following: fraud; duress; deception; theft; trick; talking; signs; gestures; copying from another student; and the unauthorized use of study aids, memoranda, books, data, or other information.
 - 3.** Attempted cheating.

- B.** Plagiarism encompasses the following:
 - 1.** Presenting as one's own the words, the work, or the opinions of someone else without proper acknowledgment.
 - 2.** Borrowing the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgment.

- C.** Lying encompasses the following:

The willful and knowledgeable telling of an untruth, as well as any form of deceit, attempted deceit, or fraud in an oral or written statement relating to academic work. This includes but is not limited to the following:

 - 1.** Lying to administration and faculty members.
 - 2.** Falsifying any university document by mutilation, addition, or deletion.
 - 3.** Lying to Honor Committee members and counsels during investigation and hearing. This may constitute a second charge, with the committee members who acted as judges during that specific hearing acting as accusers.

- D.** Stealing encompasses the following:

Taking or appropriating without the permission to do so, and with the intent

to keep or to make use of wrongfully, property belonging to any member of the George Mason University community or any property located on the university campus. This includes misuse of university computer resources (see the Responsible Use of Computing Policy section in the "General Policies" chapter). This section is relevant only to academic work and related materials.

Information on Learning Communities
(<http://www.ncc.gmu.edu/learncomm.html>)

In New Century College's Integrative Studies program, students and faculty collaborate as learners and teachers in specially designed courses called learning communities. The teacher Peter Senge defined a learning community as:

A diverse group of people working together to nurture and sustain a knowledge-creating system...The members of a learning community are thus stewards of a knowledge-creating process, helping one another enhance their capacity for effective action and reflecting on and conceptualizing their evolving understanding.

In NCC, learning communities are:

- o Interdisciplinary - they combine subjects generally taught as individual courses into one integrated course
- o Team-taught - they integrate two or more faculty and their disciplinary perspectives
- o Theme-based - they tackle a complex contemporary intellectual inquiry from several different perspectives
- o Collaborative - they offer both faculty and students the chance to learn from, and teach, each other

NCC learning communities structure the fragmented learning many students acquire while working their way through a series of unconnected courses. They promote the active participation of students in their own learning. And they foster intellectual and practical interaction between students, faculty and the wider local community.

Finally, many NCC Integrative Studies students build on learning community collaborations to work individually with faculty and community mentors, to rewrite their definitions of education through internships and other experiential learning and to explore potential post-graduation careers.

I encourage you to get information on the writing center at GMU if you need assistance on matters of composition beyond what your instructor might be able to help you with.

Writing Center (<http://writingcenter.gmu.edu/>)