GEOG 371 Rural Water Supply, Sanitation and Hygiene Education
in the Developing Countries
Spring 2013
Monday and Thursday 14:45 to 16:00
HN 1022

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Email: mibrahim@hunter.cuny.edu. Please be sure to use GEOG. 371 in you subject line and sign your full name to any message you send me.

No textbook. See the reading list. All of these papers will be one-reserves.

Goals/ objectives and expected student outcome:

The main goal and objective of this class is to study and understand aspects of rural water supply, sanitation and hygiene education in the developing countries. The course will discuss the relationship between water, sanitation and hygiene education besides history, policies, management, gender, consumption, challenges and sustainability of rural water supply. It will also discuss the different types of sanitation facilities that are used by the rural people of the developing nations.

By the end of this course, you should have a better understanding of the complex and dynamic interrelations between and within water and sanitation systems in the developing countries with much emphasis on policies, sources, consumption, challenges, and sustainability of rural water supply on the one hand and the types of sanitation services and their problems in the rural areas on the other.

Learning Outcomes:
- A general and broad knowledge of the major issues of the rural water supply, sanitation and hygiene education in the developing countries.
- Knowledge of some of the key geographic, environmental and social justice issues facing our world today.
- Ability to think and write critically about these issues.

Lecture Schedule:

Week 1: Jan. 28 – 31
Availability of water in the world
Relationship between water, sanitation and hygiene

Readings:
Week 2: Feb. 4-7  
History of rural water and sanitation since 1960s

Readings:  

Week: 3: Feb.11- 14  
International and national water policies and their Problems

Readings:  

Thur. Feb. 14  
NO CLASS (Classes follow Tuesday schedule)

Week 4: Feb. 18 - 21  
Rural water approaches since 1960s

Reading:  

Week 5: Feb. 25- 28  
Sources of surface water

Reading:  

Week 6: March 4-7.  
Sources of ground water

Reading:  

Week 7: March 11-14  
Rural water collection, storage and consumption

Reading:  
Thompson, John et al. 2001. *Drawers of Water II: 30 years of change in domestic use & environmental health in east*
http://pubs.iied.org/pdfs/9049IIED.pdf

Week 8: March 18 -21  Water quality and perception

Reading: 

Thursday March 21  MID-TERM EXAMINATION

March 25 – April 2  Spring Recess

Week 9: April 4  Water-borne diseases

Reading: 

Week 10: April 8 -11 Challenges to rural water: population growth and water scarcity.

Readings: 

April 15  Submission of the first draft of the term paper (hard copy only)

Week 11: April 15-18 Challenges to rural water: Climate change and Corruption

Readings: 

Week 12: April 22-25 Types of sanitation services in the rural areas
Readings:


Week 13: April 29

Importance and application of hygiene education

Reading:


Week 14: May 2

Sustainability of rural water supply, sanitation and hygiene education

Reading:


Week 15: May 6-9

Sustainability of rural water supply, sanitation and hygiene education

Week 16: May 13-16

Summary and conclusions

Monday May 20, 2013

FINAL EXAMINATION (from 1:45 to 3:45 pm)

Grading system:

Mid-term examination---------------------- 40%
Final examination ------------------------ 40%
A term paper --------------------------- 20%

Mid-term Exam:

The midterm exam is a take-home examination consisting of four short essay questions. You need to support your writing with examples from peer-reviewed articles.

Final Exam:

Half of the final examination is a take-home exam consisting of two short essay questions. These essays should be supported with examples from peer-reviewed articles.
The other half (another two short essays) will completed in class

Please note the following guidelines for your term paper:
1. The professor must approve your topic. Choose one from the topics listed in the lecture schedule.
2. The paper must be double-spaced, one inch margins on all sides, 12 point font, and at least 14 pages long plus bibliography.
3. It should include a minimum of 10 cited references from books and peer-reviewed articles.
4. The paper should include tables, maps or graphs (notate the source).
5. In case of citation of references in the text, use APA format (parentheses) and NOT the MLA format (You will be given printout examples in the class).
6. There should be a cover page showing the title, your name, course number, instructor’s name and the semester (i.e. Spring 2013).
7. Sub-headings should be used in the paper along an introduction and a conclusion.
8. The bibliography should be written properly at the end of the paper.
9. The deadline for submission of the paper is April 15, 2013 (No email submissions).
10. If you have any question(s) come and see me.
11. Not following of any of these points will reduce your grade.

Attendance and Grading Policies:
1. There is a direct correlation between good grades and good attendance. Come to the class prepared, read the appropriate articles of the reading list, take notes, study for your exams and you will be successful. Attendance is taken at every class meeting.
2. I do not give incompletes (IN) except under the most extraordinary, and documented, circumstances.
3. The only students who will be eligible for CR/NC at the end of the semester are those who have completed all of the course requirements including all mid-term exam, term paper, and the final exam.
4. If miss an exam, you must (1) contact me within 48 hours of the missed exam, (2) present acceptable documentary evidence for your absence, and (3) arrange a make-up exam at a mutually convenient date and time. A make-up exam covers the same materials as the regular exam but will not be the same exam given as scheduled.
5. If you fail to take the final exam, you have the same 48 hours in which to contact me about a make-up exam and provide me with the appropriate documentation supporting your absence. If I do not hear from you within that time period, I will award you an exam grade of zero (0), and average that zero into your semester grade.

Please … do not hesitate to come and see me if you have any questions.

HUNTER COLLEGE’S STATEMENT ON ACADEMIC HONESTY:
Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the CUNY Policy
on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

And I might add that creative originality and integrity are essential if you want to develop the kind of knowledge that is going to do you any good in life. When you cheat at school, the one you are really cheating is ultimately your future self.

**ADA Policy**

In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical, and/or Learning) consult the Office of ACCESSABILITY, located in Room E1214B, to secure necessary academic accommodations. For further information and assistance, please call: (212) 772-4857 or (212) 650-3230.

**Reading list**


**Amounts of global water and history of rural water supply and sanitation**


*Natural Resources Forum* 32:239-251.


**Water Policies, approaches and management**


**People Participation and Gender**


**Water sources, collection, storage, consumption, water quality and perception**


**Challenges to rural water supply (population, water quality, water scarcity, climate change, and corruption and water mismanagement)**

Faruqui, N. I. 2004. Responding to the Water Crisis in Pakistan. Water Resources Development 20(2); 177-192

**Sustainable rural water supply and sanitation services**

