CIEE Gaborone, Botswana

Course name: Public and Environmental Health Issues in Botswana
Course number: PUBH 3001 GCPH
Programs offering course: Community Public Health
Language of instruction: English
U.S. Semester Credits: 3
Contact Hours: 45
Term: Spring 2020

Course Description

This course offers an introduction to public and environmental health practice in Botswana. The course will cover local issues with a focus on the Primary Health Care (PHC) approach. The PHC aspects will include among other functions: infectious diseases, health promotion, safe drinking water supply, food safety, and basic environmental sanitation. The topics covered will allow students to appreciate the different health challenges facing Botswana, its population as well as the root causes (social and biological) of these challenges. Additionally, historical examples of important health challenges will be used to illustrate the nature, role, and organization of public and environmental health. The course will also cover the aspect of sustainable development regarding health issues/concerns in Botswana.

Learning Objectives

- Analyze basic public health and environmental health concepts. Understand public and environmental health principles and the connection between health and development;
- Understand social, cultural and environmental determinants of health and disease;
- Explore and analyze current legislations and regulations regarding public and environmental health issues in Botswana;
- Recognize the role of different stakeholders such as government, non-governmental and international partners on Botswana’s health policies.

Methods of Instruction

This course is taught through a combination of approaches: i.e. direct instruction, field trips and students will also actively engage course material through in-class discussions and review of public health related current events. The set of assigned readings and written assignments will broaden the student’s understanding of topics covered in class and reinforce the concept of multidisciplinary integration in public health. Regular class attendance and active participation in class discussions are essential for achieving a meaningful learning experience.
Assessment and Final Grade

1. Two Report/research briefs (40%)
2. Review of Public health Policy (20%).
3. Presentation of the Public Health policy paper (10%).
4. Group Work- Public Health in Practice (30%)

Course Requirements

Unless otherwise indicated, all assignments are due during class on the date indicated.

A. Report/Research Briefs (40%) (Individual work)

Students will write two (2) research briefs each worth 20% The briefs should be three (3) pages each covering public or environmental health issues facing Botswana today. Each paper should be types with font 12 points, Times New Roman, double spaced. The format of each brief should be as follows:
1. Title page: Title of the paper, your name and student number and the name of the course and course code.
2. Abstract: Your abstract should be only 200 words giving the background of the paper, the objective of the paper, the methods of collecting the information, your findings and your recommendations
3. Introduction: This section should give an overview of the issue you are discussing and the expanded objectives of the paper (recognizing that in your abstract you were only summarizing) This should be one page long only
4. Methods of collection of information (journals, books, newspapers, etc), the key words that you used to search the information (200 words only)
5. Results (what did you find in your search, how many newspapers, how many books, etc). summarize the findings in a table as follows:

<table>
<thead>
<tr>
<th>Source of information (author) e.g. Journal article, author... Or, Newspaper article (author...)</th>
<th>Where was the study/report written</th>
<th>Objectives of article or paper or chapter in a book</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Discussion: discuss in detail (one page only) the finding in the table you just created above. Your duty is to expand the findings in terms of what was the cause of such a finding, who did or did not do what. Why do you think this is
a public or environmental health problem in Botswana, how is this different from or compares with other countries (provide facts)

7. Recommendations. Give only three recommendations how you think the current challenge can be solved Your opinion should be backed up with facts and citations but write your opinion as a thesis (“Health is a fundamental critical right because…..”) rather than, “I feel this” or “I think that”. Research briefs should have a minimum of two professional references (journal articles, reports from national or international agencies NOT blogs, NGOs or Wikis).

8. References

B. Review of the Botswana health policy of 2011 (20%) Individual work

Students will write a five (3) page report reviewing/critiquing the health policy of 2011 in Botswana in terms of how it facilitates and/or impedes local health. (Group assignment). The Policy may be accessed at: http://www.nationalplanningcycles.org/sites/default/files/country_docs/Botswana/nhp_no_v_2011_parliament.pdf

The format for review should be as follows:
1. Title of the Policy
2. Introduction: Write a short introduction on the policy overview, what it seeks to achieve, what are the objectives of your review
3. Key Policy issues: Discuss the key issues in policy and what they seek to achieve
4. Strengths of the policy: Discuss what you see as the strengths of the policy, how does this policy compare with others in terms of its strength elsewhere, why do you feel it is better (Please quote such policies)
5. Weaknesses of the policy: what are the areas that should be covered in the policy and why. What examples can you give that justify its strengthening (factual)
6. Key recommendations on the policy
7. References
8. Give the contribution of each member in writing this review (groups will be allocated in class based on the number of students

C. Presentation of the Health Policy Review paper (10%) Each group will present for 10 minutes (Power point). The structure of the presentation should be as follows:
   a. Introduction (description of policy you are reviewing)
   b. What the review seeks to achieve
   c. Key policy issues
   d. Strengths and weaknesses of the policy
   e. Recommendations
   f. References
NB. Each group member should have a role in the presentation

D. Public Health in Practice-30% (Group Work 20 % and Presentation 10%)

Students will engage in a research of the following environmental health issues in Botswana.

Group 1: Food Safety concerns; Compare food safety practices in the formal and informal sector in Botswana in line with the food control Act and other best practices.

Group 2: Health care waste management- Observe the Management of health care waste management in clinics that you will be visiting, critique based on WHO recommended practices and the waste management Act of Botswana (Clinical was Management code of practice)

The format of the presentation should be as follows:

a. Title of the presentation
b. Presentation outline
c. Introduction
d. Objectives of the presentation
e. The methods used to collect the data
f. The results
g. Discussion of the results
h. Conclusions and recommendations
i. References

Class Attendance and Participation

All students are required to attend all classes on time, and valid reasons should be given for absenteeism. If you miss more than 3 classes, you will lose half a letter grade.

Group Assignments: Failure for a group member to actively participate will result in the loss of marks. All group members are expected to present their paper in class.

Academic Dishonesty

Cheating and plagiarism in any course assignment or exam will not be tolerated and may result in a student failing the course or being expelled from the class and/or university.

Please read the following university documents that facilitate learning:

- Revised Academic Honesty Policy for students (2006)
- Learning and Teaching policy (2008)
Weekly Schedule

Week 1

Introduction
Clinic visits start for CPH Students An introduction to basic public health and environmental health concepts. Background of the historical practice of public and environmental health in Botswana with an emphasis on the Primary Health Care (PHC) concepts:

- Historical developments
- Causes of health problems
- Ministry of Health role, background/structure
- Health profile Botswana
- Primary health care concept

Readings:

- “30 years after Alma-Ata: has primary health care worked in countries?” www.thelancet.com Vol 372 September 13, 2008
- Commonwealth online: Health in Botswana: http://www.commonwealthhealth.org/africa/botswana

Week 2

Public and Environmental Health Laws
An introduction to Public and Environmental Health laws, legislations and protocols in Botswana.

Readings:

- Botswana Public Health Act 1981
- Botswana Public Health Bill 2012
- Accelerated Child Survival & Development Strategy- Botswana
- Botswana National Roadmap for Reduction of Maternal and Newborn Mortality
- Botswana Malaria Elimination Strategic Plan

Week 3

Public and Environmental Health Laws Continued

CPH Students leave for Kanye

Week 4

Overview of Food Safety Issues in Botswana
Quality issues and food outbreaks in Botswana

Readings:
Week 5  
**Overview of Food Safety Issues in Botswana**  
Quality issues and food outbreaks in Botswana  
Readings:  

Week 6  
**Mid-Semester Break – No Classes**

Week 7  
**Water Quality in Botswana**  
Treatment and water quality in Botswana  
Readings:  
  Water Quality Assessment and Modeling of an Effluent-Dominated Stream, the Notwane River, Botswana  
  Environmental Monitoring and Assessment ; 109, 1-3, 97-121

Week 8  
**Overview of Water-related Diseases in Botswana**  
Readings:
• Botswana: Diarrhea epidemic kills 470 children
• Botswana Accelerated Child Survival & Development Strategy
• Botswana National Roadmap for Reduction of Maternal and Newborn Mortality Strategy

Research Brief 2 Due

Week 9  Water and HIV and AIDS in Botswana
Readings:
• Arvelo W1, Kim A, Creek T, Legwaila K, Puhr N, Johnston S, Masunge J, Davis M, Mintz E, Bowen A. “Case-control study to determine risk factors for diarrhea among children during a large outbreak in a country with a high prevalence of HIV infection” Int J Infect Dis. 2010 Nov; 14(11)
• Case-control study to determine risk factors for diarrhea among children during a large outbreak in a country with a high prevalence of HIV infection

Week 10  Solid and Hazardous Waste Management in Botswana
Readings:
• Site Visit to Gamadubu: To establish the waste management hierarchy
Week 11

Waste Management Continued
Evaluation of waste management hierarchy concepts in Botswana; waste management strategy of Reuse, Recycle and Reduce

Readings:
- Botswana Strategy for Waste Management

Week 12

Housing and Health in Botswana

The effects of housing conditions on health, housing inspection, and sick building syndrome.

Readings:

Review of public health policy Due

Week 13

Last CPH visits to clinics

Readings:
- Kathleen A. et al., (2013). Climate change is likely to worsen the Public health threat of diarrheal disease in Botswana. http://www.caracal.info/CARACAL/Our_publications_files/Alex
ander%20et%20al%202013%20Climate%20change%20in%20Botswana.pdf

Week 14

Students’ Presentations: Presentation of group submissions & discussions

Week 15

Final Examination Period begins
Week 16 Final Examination Period ends and Semester ends

Readings


Accelerated Child Survival & Development Strategy- Botswana


Botswana: Diarrhea epidemic kills 470 children


Botswana Malaria Elimination Strategic Plan

Botswana National Roadmap for Reduction of Maternal and Newborn Mortality

Botswana Public Health Act 1981

Botswana Public Health Bill 2012

Botswana Strategy for Waste Management

Case-control study to determine risk factors for diarrhea among children during a large outbreak in a country with a high prevalence of HIV infection

Commonwealthonline: Health in Botswana:
http://www.commonwealthhealth.org/africa/botswana


