SEMESTER AT SEA COURSE SYLLABUS

Colorado State University, Academic Partner

Voyage: Fall 2018
Discipline: Health + Exercise Science
Course Number and Title: HES 345 Population Health and Disease Prevention
Division: Upper
Faculty Name: Brian D. Butki, Ph.D.
Semester Credit Hours: 3

Prerequisites: One (1) health course

COURSE DESCRIPTION

This course will acquaint the student with a basic understanding of individual health concerns, behaviors, and potential solutions across all six dimensions of wellness.

This course is designed to acquaint the student with the variables associated with population and public health and to provide ideas about how to address these issues. The health of populations has an intimately reciprocal relationship with human history and cultural development. When we study population health and disease prevention, we are studying patterns of disease in order to better understand the causes of disease as well as methods of prevention for these diseases. We know that the causes of disease vary throughout the world and across the life span, and we also know that we must adapt our disease prevention interventions to the demography and culture of the target populations. These interventions will vary at the individual, community and population levels. This class will help students explore different cultural influences, including psychological, sociological, political, religious, and economical factors that influence population and public health. We’ll conclude with a practical project that includes programmatic and theoretical steps to “solving” a population health issue.

LEARNING OBJECTIVES

Upon completion of this course, students should be able to:

1. Define public health, demography, epidemiology, health promotion, disease prevention, health protection, health education, health, and wellness.
2. Understand the foundations of community and population health including its history, demography, and epidemiology.
3. Understand the basic measurements used in studying populations including prevalence, incidence, crude and age-adjusted rates, relative risk.
4. Understand study designs used in epidemiology and the strengths and weaknesses of each.
5. Understand the three levels of prevention used in public health.
6. Understand similarities and differences between individual, community & population disease prevention.
7. Understand community and population health issues across the life span including
   Reproductive, infant and child health
   Adolescent health
   Adult health
   Aging and health of older populations
8. Understand interventions aimed at
   Social and mental health
   Physical activity and recreation
   Communicable disease control
   Lifestyle including tobacco, obesity, alcohol misuse, drug abuse
9. Understand the importance of environmental health protection

**REQUIRED TEXTBOOK**

AUTHOR: McKenzie, J.F., & Pinger, R.R.
TITLE: An Introduction to Community Health
PUBLISHER: Jones and Bartlett
ISBN #: 978-1284036596
DATE/EDITION: 8th Edition

**TOPICAL OUTLINE OF COURSE**

Depart Bremerhaven, Germany — September 9

A1—September 11: **Foundations of Health** Chapter 1

A2—September 13: **US Health Care System**
                    **Socialized Medicine** Chapter 1

Barcelona and Valencia, Spain — September 15-18

A3—September 19: **US Health Care System**
                    **Socialized Medicine** Chapter 1

A4—September 21: **Demography and Epidemiology** Chapter 2

Study Day — September 23: No Class

A5—September 24: **Epidemiology and Health**

A6—September 26: **Disease Transmission** Chapter 3

Tema, Ghana — September 27-30
Study Day — October 2: No Class

A7—October 3: Communicable Diseases Chapter 4

A8—October 5: EXAM 1

Cape Town, South Africa — October 7-12

A9—October 13: Lifestyle Diseases "Idontcareitis" Chapter 4

A10—October 15: Cardiovascular Disease / Cancer

Study Day —October 16: No Class

A11—October 18: Mental Health Chapter 11

Port Louis, Mauritius — October 19

A12—October 21: Mental Health Chapters 5 & 2

Study Day —October 22: No Class

A13—October 24: Minorities and other populations Chapter 10

Cochin, India — October 25-30

Study Day —October 31: No Class

A14—November 2: Global Health

Yangon, Myanmar — November 4-8

A15—November 9: Global Health Chapter 8

Study Day — November 11: No Class

A16—November 12: Environmental Health Chapter 12

Ho Chi Minh City, Vietnam — November 14-18

A17—November 19: Environmental Health Chapters 14-16

Study Day — November 21: No Class

A18—November 22: EXAM 2

Shanghai, China — November 24-29
FIELD WORK

OPTION 1: PUBLIC HEALTH IN GHANA

As we examine the importance of public health practices, we will visit the Ghanian Ministry of Health and Ghana Health Service headquarters in Accra. While there, we will meet with administrators to examine the practices and objectives of their offices, focusing on maternal and sexual health, prenatal and infant health, nutrition, and communicable disease prevention. We’ll discuss financing and budgeting, prioritization of health concerns, needs assessments, and future directions. We’ll also discuss successful and failed previous efforts to gain a better understanding of the difficulties and strategies of implementing a public health effort. (Note: I have already made contact with several academic experts from Dartmouth University who will be in Ghana during our visit to assist with the delivery of this experience). Finally, we’ll contrast this with the current health system in the US, which is reactive and focuses mainly on lifestyle diseases such as cancer and CVD. The experience will conclude with a student project, wherein the student will develop and describe a future public health project for Ghana, using past projects as models of success and failure.

OPTION 2: PUBLIC HEALTH IN MYANMAR (BURMA)

As we examine the importance of public health practices, we will visit the Ministry of Health and Sports (Myanmar) and University of Medicine and Health in Yangon. While there, we will
meet with administrators to examine the practices and objectives of their offices, focusing on nutrition, emergency preparation (flooding), maternal and sexual health, prenatal and infant health and communicable disease prevention. We'll discuss financing and budgeting, prioritization of health concerns, needs assessments, and future directions. We’ll also discuss successful and failed previous efforts to gain a better understanding of the difficulties and strategies of implementing a public health effort. Finally, we’ll contrast this with the current health system in the US, which is reactive and focuses mainly on lifestyle diseases such as cancer and CVD. The experience will conclude with a student project, wherein the student will develop and describe a future public health project for Myanmar (Burma), using past projects as models of success and failure.

Independent Field Assignments

Field assignments will center on the built environment. The term “built environment” refers to the design and construction of a community, specifically focusing on promotion of health behaviors (i.e., parks, bike paths, accessibility of clean water and healthy food). The design of a community has a very powerful influence on the health behaviors and choices of a population. Throughout the voyage, students will be encouraged to examine and journal about their perceptions and thoughts about the built environment in the communities that they visit. Students will choose 2-3 health focus areas (e.g., fitness, nutrition, nature, spirituality, mental health), and discuss how the community design is promoting or hindering the development of these wellness areas.

METHODS OF EVALUATION / GRADING SCALE

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>3 exams including the final (100 pts * 3)</td>
<td>300 pts</td>
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<tr>
<td>Quizzes (20 pts * 5)</td>
<td>100 pts</td>
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<tr>
<td>Field Experience</td>
<td>125 pts</td>
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<tr>
<td>Independent Field Assignment Journal</td>
<td>50 pts</td>
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<tr>
<td>Project</td>
<td>25 pts</td>
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<tr>
<td>Total</td>
<td>600 pts</td>
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A 90-100%     B 80-89.99%     C 70-79.99%     D 60-69.99%     F 59.99% and below

Exams. Exams will address the learning objectives, and will be derived from the notes as well as the textbook and any supplemental readings. Format will be determined by class members at a later date.

Quizzes/Activities. Throughout the semester, periodic “pop” quizzes will be administered. These quizzes will cover class material from lectures and readings. At least eight quizzes will be administered, only your best five will count.

Assignments: Out-of-class readings, activities, and other assignments may be given throughout the semester.

Project: Choose a community health problem that you believe is relevant and important. Research prevalence, incidence, and other important statistics, and discuss why this problem
is important (using one of the justifications discussed in class). Review previous efforts to solve the problem, and explain why they did not work. Suggest a better solution. Maximum of five pages. Project will be graded on topic selection, justification methods, theoretical design and application, as well as description of evaluation and overall assessment. See grading rubric. Proper spelling and grammar are also important.

Note: Please remember – this is your class. I have developed a tentative schedule (see below), but I am always open to discussion about other important topics, including current events or happenings in the real world related to exercise science/kinesiology, sport/exercise psychology, or related topics.

ATTENDANCE/ENGAGEMENT IN THE ACADEMIC PROGRAM

Attendance in all Semester at Sea classes, including the Field Class, is mandatory. Students must inform their instructors prior to any unanticipated absence and take the initiative to make up missed work in a timely fashion. Instructors must make reasonable efforts to enable students to make up work which must be accomplished under the instructor’s supervision (e.g., examinations, laboratories). In the event of a conflict in regard to this policy, individuals may appeal using established CSU procedures.

LEARNING ACCOMMODATIONS

Semester at Sea provides academic accommodations for students with diagnosed learning disabilities, in accordance with ADA guidelines. Students who will need accommodations in a class, should contact ISE to discuss their individual needs. Any accommodation must be discussed in a timely manner prior to implementation.

A letter from the student’s home institution verifying the accommodations received on their home campus (dated within the last three years) is required before any accommodation is provided on the ship. Students must submit this verification of accommodations to academic@isevoyages.org as soon as possible, but no later than two months prior to the voyage.

STUDENT CONDUCT CODE

The foundation of a university is truth and knowledge, each of which relies in a fundamental manner upon academic integrity and is diminished significantly by academic misconduct. Academic integrity is conceptualized as doing and taking credit for one’s own work. A pervasive attitude promoting academic integrity enhances the sense of community and adds value to the educational process. All within the University are affected by the cooperative commitment to academic integrity. All Semester at Sea courses adhere to this Academic Integrity Policy and Student Conduct Code.

Depending on the nature of the assignment or exam, the faculty member may require a written declaration of the following honor pledge: “I have not given, received, or used any unauthorized assistance on this exam/assignment.”
FILM REQUESTS
Title of Film: Food, Inc  
Distributor: Magnolia Home Entertainment

Title of Film: Fast Food Nation  
Distributor: Fox Searchlight

Title of Film: Sicko  
Distributor: Dog Eat Dog Films, Inc.

ELECTRONIC COURSE MATERIALS
NONE

ADDITIONAL RESOURCES
NONE