Syllabus: Introduction to Environmental Health (EHS 100) UCLA Fall 2018

Room and Time: CHS 43-105 T & Th 1:00-3:00 pm

Instructor: Dr. Kevin Njabo **Office hours:** After every class or by appointment.

Teaching Assistants: Lamar Hayes lhayes17@g.ucla.edu; Evelyn Alvarez

Texts & Individual Response Devices
Required text: Essentials of Environmental Health (either paperback or electronic)
by Robert H., Ph.D. Friis
Publisher: Jones & Bartlett Publishers; 3rd edition (2017)
ISBN-10: 9781284026337

Prerequisites
Preparation in biology and chemistry necessary to understand basic concepts underlying health and disease and modern concepts of public health surveillance. The biology and chemistry prerequisites for undergraduate admission to the UC System are adequate for most students to understand the concepts.

Required Individual Response Devices:
Students are required to bring their clickers starting the first day of class in Week 1. You can use the iClicker+, iClicker or iClicker2 for participation. The web-based app (REEF Polling by i>clicker) can also be used if you have a compatible device and a sufficient WIFI connection. For iPhone and iPad users, search for REEF Polling in the Apple app store. For Android and laptop users, go to reef-education.com on your web browser and sign in. After you purchase a clicker OR the app then you need to register your iClicker ID on the CCLE course website before the start of class. There is a link on the right panel of the course webpage for iClicker registration. We will show you where to register on the first day of class if you cannot find it on your own, or are not clear about what you need to do

Recommended text:
A Community Guide to Environmental Health by Jeff Conant and Pam Fadem Publisher: Hersperian Health Guides (2008, 2012) ISBN-10: 9780942364569 Free download available at: http://en.hesperian.org/hhg/A_Community_Guide_to_Environmental_Health

Website:
All homework assignments are posted on the course website which uses the Moodle platform (https://ccle.ucla.edu/course/view/18F-ENVHLT100-1). In addition, copies of the lecture (PowerPoint presentations) and any case studies/handouts will be posted on the course website AFTER each class. You should also check to make sure that you are able to access Turnitin.com for this course through my.ucla.edu as soon as possible. If you are unable to access either of these sites, please contact the instructor (kynjabo@ucla.edu). Students are highly encouraged to post questions to the course website discussion forum. This will allow your classmates to benefit from your questions and the responses from the TAs and Professors.

Design of Course
This ten week course is designed to provide a foundation for understanding how the environment influences human health. Lectures and book chapters are coordinated and provide sufficient background so the topic is accessible to all student majors. Lectures are given from 1:00 to 3:00 pm each

Tuesday and Thursday. Each lecture covers a different topic and begins with a presentation of the scientific background required for understanding the health problems associated with the topic and the strategies used to prevent those problems. Lectures provide an opportunity for students to ask questions, class discussions and present material not in the book. Students are required to read all required readings prior to coming to each class. Reading Assignments are listed in the tentative course schedule found at the end of this syllabus; any updates will be posted on the course website (https://ccle.ucla.edu/course/view/18F-ENVHLT100-1)

Course grading

There are five primary sources of evaluation for this class:
(1) Homework Assignments (4) 20% of total grade
(2) Class participation (based on individual 20% response units)
(3) Quizzes (Best 2 out of 3) 20%
(4) Group Presentations 20%
(5) Final Written Report 20%

Homework Assignments

There will be 4 homework assignments. (See course website for assignment details.) You must submit your assignments electronically via the course website (https://ccle.ucla.edu/course/view/18F-ENVHLT100-1). Do NOT submit your assignments via email. All assignments must be submitted electronically prior to the beginning of class on Tuesday of the week that they are due. A 10% penalty (of the total possible points) will be deducted from late assignments for every day or partial day that the assignment is late. Late assignments will not be accepted after 3 days. All homework must be your own individual work (see **Academic Integrity**, below) and may NOT be completed in groups.

Class Participation

For each topic covered in the course, there is a related case study, which you will work on in class in your assigned groups. Class participation points are based on your individual active participation on answering questions in class (usually related to the case studies) – you do not need to get the "correct" answer to get credit for participating on a given item, but you do need to "click in"/participate using your individual response unit (either iClicker or REEF) on at least one of the response questions on each day in order to receive credit for participation that day. You will be given two "free" days of participation points. This should account for any technical difficulties, absences, or forgetting your clicker. Each student is responsible for both bringing their response unit to class each day and making sure that it is working and appropriately registered.

Quizzes

There will be 3 quizzes given during the quarter, which cover material covered in your textbook. (See the Learning Objectives at the beginning of chapters 1-8 of Essentials of Environmental Health, by Robert H. Friis for material that will be covered on the quizzes). Quizzes are individual work and are closed book/closed notes. Your grade for this portion of the class will be based on your best 2 out of 3 quiz scores. If you are unable to attend class on one of the dates that a quiz is being held, that will count as your quiz grade that is dropped.

Group Presentation

Group presentations are designed to demonstrate your ability to work as a team and explore a case study on how a particular community is impacted by and has coped with an environmental stressor. Groups are assigned by the instructor. We will talk more about the goals of and tips for working in groups in class on Thursday, September 27th. Your group will prepare a "Group Resume" and a "Group Contract"; you will need to submit these online before the beginning of class on Thursday, October 18th. Please see the "Assignments" tab of the course website for more details. The area in which your group should choose their case study depends on the day on which your group is assigned to present. (For instance, if your group is assigned to present on Thursday, November 1st, then your group should make a presentation about a case study on a community that was or is affected by poor water quality and how that community has responded or could build resiliency to these impacts.) (See "Assignments" tab on the course website for assignment details, including examples of case studies that you may wish to examine.) **PLEASE NOTE THAT ALL STUDENTS ARE EXPECTED TO ATTEND ALL GROUP PRESENTATIONS AND TO CLICK IN ON ANY QUESTIONS POSED BY THE GROUPS THAT ARE PRESENTING**. In addition to the groups assigned to present on a particular day, there will be ~four groups assigned to review presentations on a particular day; members of the "reviewing groups" will be responsible for completing written evaluations for each of the groups that presents on the day that they are assigned as reviewers and turning in their written evaluations at the end of that class. The grade for this portion of the course will be based on all of the following:

- Submission/completion of "Group Resume" and "Group Contract" (must be submitted online via the course website by Thursday, October 18th)
- Instructor and TA evaluations of group presentation
- Submission/completion of your written evaluations of the groups that you are assigned to review (due at the end of class on the date you are assigned to do reviews).
- Submission/completion of your peer-evaluations and self-evaluation form for group work.
- Peer evaluations of your contributions to group work from your other group members.

Final Written Report – Environmental Health Assessment

The Final Written Report is an Environmental Health Assessment for a community or site of your choice. (See course website for assignment details.) The Final Written Report builds upon Homework Assignments 2-4 and, like the Homework Assignments, must be written individually. All written reports must be submitted electronically to both Turnitin.com (see link from our course in my.ucla.edu or the block at the right side of the course website) AND the course website (https://ccle.ucla.edu/course/view/18F-ENVHLT100-1) prior to the beginning of class on Thursday, December 6th, regardless of the day on which your group is presenting. A 10% penalty (of the total possible points).

Students Requiring Accommodations

Students needing academic accommodations based on a disability should contact the Center for Accessible Education (CAE) at (310) 825-1501 or in person at Murphy Hall A255. When possible, students should contact the CAE within the first two weeks of the term as reasonable notice is needed to coordinate accommodations. For more information visit www.cae.ucla.edu.

Academic Integrity

All submitted work MUST BE YOUR OWN. Although you are encouraged to work on your final project in groups and may study in groups, all work submitted for a grade (Homework Assignments and Final Report) must be IN YOUR OWN WORDS AND PROPERLY CITED where appropriate. In addition, all examinations must be performed individually and are closed book. You are expected to read and follow

the UCLA Student Conduct Code (http://www.deanofstudents.ucla.edu/conduct.html) and the guidelines from the Registrar's office on avoiding plagiarism (see (http://www.registrar.ucla.edu/soc/notices.htm#Anchor-Plagiarism-6296 and also http://www.library.ucla.edu/bruinsuccess/). If you are not sure whether a particular action is in violation of UCLA's standards of academic integrity or constitutes plagiarism, please contact the instructor and error on the side of caution. Ignorance of the University's policies is not a legitimate excuse for violating them. ALL VIOLATIONS OF THESE POLICIES WILL BE REFERRED IMMEDIATELY TO THE DEAN OF STUDENTS FOR REVIEW AND DISCIPLINARY ACTION.

Other Material

As earlier indicated, a final PowerPoint will be posted after the lecture. **URLs:** The course website has links to websites on specific topics, government agencies and programs to supplement the course material.

Course Outline				
Date	**Lecture Topic/Case Study**	**Required Reading (Read before class)**	**Recommended Reading**	**Homework Due (Must be submitted electronically before the beginning of class on day indicated)**
Thursday September 27	Introduction to Environmental Health Sciences; Overview of Course Format and Learning Objectives	Friis: Chapter 1	A Community Guide to Environmental Health: Conant and Fadem: Appendix A	
Tuesday October 02	Environmental Epidemiology Case Study: Epidemiology as a Tool for Promoting Environmental Justice	Friis: Chapter 2	Conant and Fadem: Chapters 1, 2 and 4	
Thursday October 04	Environmental Toxicology (2 pm) Talk to the class about Group Work, followed by "Group Resume" activity	Friis: Chapter 3	Conant and Fadem: Chapters 16 & 20	
Tuesday October 09	Environmental Policy and Regulation Case Study: Climate Change and Health: A Comparison of Projected Impacts in Southern California and Sub Saharan Africa	Friis: Chapter 4	Conant and Fadem: Chapter 3, 9, 10, 11 and Appendix B	Homework Assignment 1: Developing a Personal Emergency Plan
Thursday October 11	Agents of Environmental Disease: Toxic Metals and Elements Case Study: Lead Poisoning in Rural Communities in Nigeria and Peru	Friis: Chapter 6	Conant and Fadem: Chapter 21	Homework Assignment 2: Selection of Community/Site for

				Environmental Health Action Plan and Initial Survey of Site
Tuesday October 16	Agents of Environmental Disease: Pesticides and Other Organic Chemicals Case Study: Fighting to End Use of Methyl Iodide in California	Friis: Chapter 7	Conant and Fadem: Chapter 14	
Thursday October 18	Agents of Environmental Disease: Ionizing and Nonionizing Radiation Case Study: Fukishima and the Future of Nuclear Power	Friis: Chapter 8	Conant and Fadem: Chapters 12 & 13	
Tuesday October 23	Quiz #2 (Chapters 5-8 of Friis) and How to Give An Effective Oral Presentation Using PowerPoint			Group Resumes and Team Contracts due Online
Thursday October 25	Applications of Environmental Health: Water Quality Case Studies: Arsenic in Tube Wells in Bangladesh; Lead in Water in Flint	Friis: Chapter 9	Conant and Fadem: Chapters 5 & 9	Homework Assignment 3: Listing Environmental Problems in your Community and Collecting Data and Information
Tuesday October 30	Group Presentations: Water Quality and Health of Communities		Conant and Fadem: Chapter 6	
Thursday November 01	Applications of Environmental Health: Air Quality Case Study: Indoor Air Quality & Cookstove Interventions	Friis: Chapter 10;		
Tuesday November 06	Group Presentations: Air Quality and Health of Communities		Conant and Fadem: Chapter 17 & 23	
Thursday November 08	Applications of Environmental Health: Food Safety & Food Security Case Study: Agroforestry non-profits and interventions in Western and Central Africa	Friis: Chapter 11	Conant and Fadem: Chapters 8, 9 & 11	Homework Assignment 4: Establishing Priorities for Environmental Action
Tuesday November 13	Group Presentations: Food Safety and Food Security		Conant and Fadem: Chapters 12, 13 & 15	

Thursday November 15	Quiz #3 (Review of Chapters 1-8 of Friis)			
Tuesday November 20	Applications of Environmental Health: Solid and Liquid Wastes Case study: Different Challenges in Achieving Sustainable Development Goal 6 in Urban vs Rural Settings	Friis: Chapter 12		Homework Assignment 5: Establishing Environmental Health Goals and Potential Strategies for Action
Thursday November 22	NO LECTURE – THANKSGIVING HOLIDAY			
Tuesday November 27	Group Presentations: Waste and Health of Communities		Conant and Fadem: Chapters 7, 18 & 19	
Thursday November 29	Applications of Environmental Health: Occupational Health and Injuries Case Study: Work and Stress	Friis: Chapters 13 & 14		
Tuesday December 04	Group Presentations: Worker Health; Unintentional Injuries and Deaths and their Impacts on Health of Communities		Conant and Fadem: Chapters 21 & 22	
Thursday December 06	Group Presentations: Worker Health; Unintentional Injuries and Deaths and their Impacts on Health of Communities			Final Written Reports Due