

COURSE INFORMATION

Location: Great Rift Valley, Kenya

Dates: May 7 – May 27, 2016

Website: Information for this course will be available on OWL (<https://owl.uwo.ca/portal>)

COURSE DESCRIPTION

There is an increasing recognition that problems of human health are embedded in socio-ecological systems and in order to address them, one must investigate the interplay between the environment, social systems and human health. This 3-week course will focus on solving complex problems by developing leadership skills at the interface of different disciplines through applied system analysis and embedded experiences. This Field School will be designed to provide innovative “feet-on-the-ground” learning experiences that embrace the intersection of cultural, social, economic, environmental and health studies on present-day communities-at-risk in Africa. There are many inter-related problems facing communities-at-risk. Humans are having a significant impact on the functioning of social-ecological systems. The extent of our influence has evoked the notion of Global Health Systems – a concept that involve several disciplines.

Similar to what oil was for the 20th Century, water will be the commodity that determines both the wealth and health of nations. One of the United Nations’ Sustainable Development Goals (2015-2030) – 17 goals to transform our world – is to ‘ensure access to water and sanitation for all’, highlighting the timely importance of investigating the intersect between water and health. Throughout this Field School, we will look at the relationships between changing freshwater resources and community health in Kenya’s Rift Valley lakes. These lakes extend from Lake Magadi in the south to Lake Baringo in the central and represent about 10% of the total surface area of lakes in Africa, including 7 lakes of remarkable biodiversity.

Each of the lakes contains cyanobacteria (our marker for lake eutrophication and potential toxin transfer that places the communities at risk). Yet the salinities of the lakes vary from water suitable for drinking (Lakes Naivasha) to lakes having 2-times the salt level as the ocean (Lake Logipi). Equally important is the fact that the broad geographical range will take our students along a transect of different ecologies, economies, and cultural exposures. This is ideally suited for our focus on water availability, water use and community assessments. Field trips include, among others, community excursions (schools, markets, farms) to explore sources of water and food and possible transmission pathways. ABATE and GHS will come together to discuss the inextricable links between water and health in order to foster the transdisciplinary approach.

This 3-week intensive Field School is the second in an annual series that will be rotated among North America, Europe, Asia and Africa. This Field School will be based at Elsamere Conservation Centre. Situated on the south shore of Lake Naivasha in Kenya’s Rift Valley, it is the former home of Joy and George Adamson. The area is a haven for wildlife, with black and white colobus monkeys living in the acacia trees, fish eagles call from the lakeshore and hippos, eland and zebra graze on the lawns at night. At the course end, students will be able to apply Global Health Systems concept in order to make important decisions on water and health that support economic growth, social systems, human health and sustainability.

Learning Outcomes

By the end of this course you will be able to:

1. Engage in critical thinking and writing about the core questions that underlie scholarship in the field of Global Health Systems;
2. Review and critique socio-ecological determinants of health, with an emphasis on those that lead to human illness or community health issues;
3. Develop the tools to assess and implement the principles of Global Health Systems;

4. Work effectively in an interdisciplinary team to identify and address a Global Health Systems problem.

INSTRUCTOR(S) INFORMATION
FOR CREATE ABATE

Name: Charles Trick, PhD

Email: cyano@uwo.ca

Biography: Dr. Trick is a Professor of Biology, Public Health at Western University, Canada. He is a harmful algal bloom expert in physiology and biochemistry, environmental regulation of toxin production and ecosystem health. In addition to his work on harmful algal blooms in Canadian and African lakes, he is co-leader of an international training program on harmful algae and toxin analysis that focuses on capacity building of communities in Guatemala, Philippines, Indonesia, Cook Islands and Vietnam.

FOR GLOBAL HEALTH SYSTEMS IN AFRICA

Name: Irena Creed, PhD

Email: icreed@uwo.ca

Biography: Dr. Creed is Canada Research Chair in Watershed Sciences, Professor of Biology, Geography, Earth Sciences, Western University. Her expertise is in hydrology, biogeochemistry and ecology. She studies the hydrological and biogeochemical triggers leading to the development of algal blooms in freshwater lakes. *Creed is Director of the NSERC Create Algal Bloom Abatement through Technology and Education (ABATE) Training Program.*

Name: Phaedra Henley, PhD

Email: dhenley@uwo.ca

Biography: Dr. Henley is a Postdoctoral Research Fellow in the Department of Biology, Western University, Canada. She completed her PhD in the Department of Pathology's Ecosystem Health program looking at exposure to contaminants and stress as determinants of health in three communities at risk including two First Nations in Canada and in Naivasha, Kenya. She is the coordinator of the Master's Global Health Systems in Africa specialty field and is an advocate of a systems approach to health.

GUEST LECTURERS

Name: Eric Enanga, PhD

Email: eenanga@uwo.ca

Biography: Dr. Enanga is a Postdoctoral Research Fellow in the Department of Biology, Western University, Canada.

Name: Francis Wegulo, PhD

Email: mununi1993@gmail.com

Biography: Dr. Wegulo is a Professor in the Department of Geography, Egerton University, Kenya.

Email is the best way to contact us. Please include the course number in your subject line.
Before you email with a question, please check the syllabus and OWL, where the most common questions are answered.

COURSE MATERIAL

Reading list provided on OWL (no textbook for this course).

METHOD OF EVALUATION

This course is a combination of lecture, discussion, personal essays and a multidisciplinary group project. This course will have evaluations of individual effort (50% of final grade) and evaluations of group efforts (50% of final grade), broken down as follows:

- (1) Individual Participation – 15%
- (2) Field Notebook – 35%
- (3) Group Participation (Blog) – 10%
- (4) Group Project – 40%

(1) Individual Participation – 15%

In this type of course you are expected to contribute to the collective learning of the class. During the Field School, you must be an enthusiastic participant in group meetings and outings. It will be important to listen actively to the group conversation, ask questions of your classmates, offer insights, and contribute meaningfully. It also means that you are respectful of your classmates and their opinions, are punctual, and do not engage in negative or disruptive behaviour. *It is important to discriminate between class participation and contribution.* Class participation focuses on the benefits of your comments to you, whereas class contributions focus on the benefits to the class. It is only by deeply engaging in the process will you be able to contribute to the collective learning of the class.

(2) Field Notebook – 35%

You will be given a Field Notebook to keep through the course. Instructions on the content and the manner of maintaining a field book will be provided early in the course. Field books will be submitted at the end of the course and returned to you after evaluation.

(2) Group Participation (Blog) – 10%

At the end of each day, we will gather as a class and create content for a blog post including major discoveries and insights of the day, and photos to accompany.

(3) Group Research Project – 40%

Students will work in a small group to identify, review and address a Global Health problem as it applies to Kenya. To avoid duplication of topics, groups must have their topic selection approved by the course instructors. Throughout your project, you will address these three questions:

“What is the problem?”

Identify and review the Global Health problem from a transdisciplinary, systems approach.

“How did we get there?”

What factors have contributed to the Global Health Systems problem?

“What can we do?”

Using an influence diagram, identify and present a framework to address the Global Health Systems problem.

Deliverables:

Two oral presentations during the Field School.

SUPPORT SERVICES

Students who would like to improve their academic skills should visit UWO Student Services (studentservices.uwo.ca) where they can access many excellent resources on learning skills, planning, effective writing, and dealing with personal challenges. Consultation with the Instructor and Teaching Assistant is also possible.

Students who are in emotional/mental distress should refer to Mental Health@Western <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help.

SPECIAL ACCOMMODATION

Students requiring special accommodation to fulfill any element of this course on the basis of a disability should contact Student Development Services (www.sdc.uwo.ca/ssd/), and the course instructor, as early as possible so that arrangements can be made.

LATE ASSIGNMENTS

Late assignments will be assigned a mark of 0. All other assignments that are late will be subject to a late penalty of 10% per day. Assignments must be submitted at the beginning of class (8:30 AM) to OWL to be considered 'on time'. All requests to not be penalized for late assignments, missed deadlines etc. must go through the Faculty of Science's academic counsellor. Do not delay contacting a counsellor if you are ill, and be sure to visit a doctor as soon as possible for confirmation of illness. In order to ensure fairness and consistency for all students, academic accommodation shall be granted only in those cases where there is documentation indicating that the student was seriously affected by illness and could not reasonably be expected to meet his/her academic responsibilities. Accommodation on medical grounds can only be granted with the support of a UWO Student Medical Certificate (available at studentservices.uwo.ca; see UWO Policy on Accommodation for Medical Illness at same site). Please note that mental health concerns are valid medical reasons. Other acceptable reasons for not meeting academic obligations include car accidents, or a death in the immediate family etc., for which acceptable documentation is provided (police accident report, funeral notice). Notify the course Instructor about late/missed assignments. Accommodation will not be made for holidays, changes to travel plans, weather (unless as part of an university-wide action), or other non-critical circumstances. If you plan to be away during long weekends etc., and an assignment is due the following week, bring your work with you while away in case of travel delays so that you can still submit remotely.

Questions about grades may be addressed to the instructors by email, once at least 24 hours has passed after getting the assignment back. That is, you should have reviewed your assignment before you ask about the grade. You can continue to ask about an assignment or test for two weeks after it has been returned to you. After two weeks it is expected that any concerns you may have should already have been addressed. Re-grades will not be considered after two weeks except under extenuating circumstances. If the Teaching Assistant is not able to address your concerns, then you can email the Instructor to consult with them directly.

STATEMENT ON USE OF ELECTRONIC DEVICES

There is an expectation that while you are in class, your attention should be on the class lecture or activity. Mobile phones and other electronic devices should be turned off (or in non-transmitting/receiving mode) during lectures and tutorials. Laptop computers or other devices used exclusively for note-taking or course-related research are allowed during lectures.

STATEMENT ON ACADEMIC OFFENCES

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes Scholastic Offences, at the following website: www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_undergrad.pdf.

PLAGIARISM

Students must write assignments in their own words. Simply finding synonyms for the words of others, or changing the order in which ideas are expressed, does not mean that one has developed an original written response. Whenever students re-express the ideas of another person, they must acknowledge this by always properly referencing using citations, and by using quotation marks when using the exact words of the author. The same standards apply to journal articles and less-traditional sources like newspapers, blog entries, etc. If you have questions about plagiarism or other academic offences, please refer to the UWO calendar for definitions or see the UWO Ombudsman site (www.uwo.ca/ombuds) where you can find a guide to these issues.

COURSE SCHEDULE

Day	Date	Location	Accommodation	Activities
Sat	7-May	Mombasa	Nyali International Beach Hotel & Spa	Arrive, rest & relax
Sun	8-May	Mombasa	Nyali International Beach Hotel & Spa	Fort Jesus
Mon	9-May	Mombasa	Nyali International Beach Hotel & Spa	Mombasa Marine National Park & Reserve
Tues	10-May	Mombasa/ Naivasha	Elsamere	AM: Mombasa PM: Rest and get settled at Naivasha
Wed	11-May	Naivasha	Elsamere	Lectures
Thurs	12-May	Naivasha	Elsamere	Lectures
Fri	13-May	Naivasha/ Nakuru	ARC	Egerton University Workshop, led by Dr. Wegulo
Sat	14-May	Nakuru	ARC	Lake Nakuru National Park, Menengai Crater
Sun	15-May	Nakuru/ Naivasha	Elsamere	Lake Bogoria
Mon	16-May	Naivasha	Elsamere	Lake Naivasha Tour
Tues	17-May	Naivasha	Elsamere	Lake Naivasha Tour (including Hell's Gate National Park)
Wed	18-May	Naivasha	Elsamere	Lake Naivasha Tour
Thurs	19-May	Naivasha/ Magadi	Lake Magadi Adventures	Lake Magadi Tour
Fri	20-May	Magadi/ Naivasha	Elsamere	Lake Magadi Tour
Sat	21-May	Naivasha	Elsamere	Group Project Day
Sun	22-May	Naivasha	Elsamere	AM: Mount Longonot hike PM: Group Project
Mon	23-May	Naivasha	Elsamere	Group Project Day
Tues	24-May	Naivasha	Elsamere	Group Project Day
Wed	25-May	Naivasha	End	End