Graduate School of Public Health
PUBHLT 0350: Public Health Threats in Suriname: From Ecosystem to Human Health

05/09/2022 – 06/27/2022: Tuesdays, 12 PM – 12:50 AM, Class Location: TBD
07/18/2022 – 07/30/2022: Daily 8 AM-5PM, Class Location: Suriname
08/01/2022-08/13/2022: Tuesdays, 12 PM – 12:50 AM, Class Location: TBD

Credit Hours: 3
Summer Term AY2021/2022

Contact Information

Course Director/Instructor: Maureen Lichtveld
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Office hours: TBD

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Office: A414 Crabtree Hall, Pitt Public Health
Office hours: TBD

Teaching Assistant: TBD

Course Rationale
This course is being offered to provide students a learning opportunity regarding global public health and environmental health threats in a developing country. The course is particularly relevant, because students will experience how public health threats, opportunities and health systems differ, and how local public health and global health are interconnected.

Course Description
This course features trans-disciplinary science, practice, and policy approaches to addressing public health issues affecting environmental and human health. We will examine key public health issues affecting the health of Suriname’s ecosystem and its population, including the leading causes of morbidity and mortality. Through a series of lectures and fieldtrips, students will learn about the role of the ecosystem as a vital component of community health. Each lecture is accompanied by required reading as designated in the syllabus and grading requirements are specified for the course. Fieldtrips and service learning are an integral part of the course to facilitate application on the public health practice frontline. A special area of focus will be the medicinal characteristics of plants. The course will also focus on the risks posed by environmental contamination, specifically those risks related to mercury released from some small-scale gold mining operations. Students will employ community-based participatory research strategies to assess, manage, and communicate those risks.

As natives of Suriname and a graduates of the Anton De Kom University of Suriname (AdeKUS), Faculty of Medical Sciences, the instructors have first-hand knowledge of the overall environmental and public health issues of the Suriname population. The instructors responsible
for this course will be joined by leading professors from the Faculty of Medical Sciences of AdeKUS, local experts in areas such as toxicology, pharmacology, and ecosystem science, and governmental officials. In addition, the students will learn of traditional healing from local community experts.

Public Health Threats in Suriname: From Ecosystem to Human Health has a total of 64 hours of contact time including 58 contact hours in Suriname. There is an additional 20 hours of service learning available for undergraduate students.

**BSPH Competencies**

Pitt Public Health is accredited by the Council on Education in Public Health (CEPH) as a school authorized to offer the Bachelor of Public Health (BS) degree. Part of that accreditation requires us to provide instruction in a variety of core public health competencies to all our students. CEPH has identified a variety of competencies, which it expects all BSPH graduates to demonstrate.

This course reinforces and assesses the following CEPH competency/competencies:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Assessment</th>
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<tr>
<td>the history and philosophy of public health as well as its core values,</td>
<td>Daily reflections during the study abroad time</td>
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<td>concepts and functions across the globe and in society</td>
<td></td>
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<tr>
<td>the concepts of population health, and the basic processes, approaches</td>
<td>Daily reflections during the study abroad time, field study reports, case</td>
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<td>and interventions that identify and address the major health-related</td>
<td>study presentation and report.</td>
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<td>needs and concerns of populations</td>
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<tr>
<td>the socioeconomic, behavioral, biological, environmental and other factors</td>
<td>Daily reflections during the study abroad time, field study reports, case</td>
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<tr>
<td>that impact human health and contribute to health disparities</td>
<td>study presentation and report.</td>
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<tr>
<td>the fundamental characteristics and organizational structures of the US</td>
<td>Fieldtrips and lectures by local experts and authorities</td>
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<tr>
<td>health system as well as the differences between systems in other countries</td>
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<tr>
<td>basic concepts of legal, ethical, economic and regulatory dimensions of</td>
<td>Fieldtrips and lectures by local experts and authorities</td>
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<tr>
<td>health care and public health policy and the roles, influences and</td>
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<td>responsibilities of the different agencies and branches of government</td>
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<tr>
<td>basic concepts of public health-specific communication, including</td>
<td>Risk communication lectures and guidance on how to present properly using</td>
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<td>technical and professional writing and the use of mass media and</td>
<td>PowerPoint, case study presentation and report.</td>
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<td>electronic technology</td>
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<tr>
<td>the ability to communicate public health information, in both oral and</td>
<td>Lecture on risk communication, lectures by local experts and authorities,</td>
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<td>written forms, through a variety of media and to diverse audiences</td>
<td>field study reports</td>
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<tr>
<td>the ability to locate, use, evaluate and synthesize public health</td>
<td>Lecture on risk communication, lectures by local experts and authorities,</td>
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<tr>
<td>information</td>
<td>field study reports, case study presentation and report.</td>
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Learning Objectives

By the end of the course, students will be able to:

1. Characterize risks posed by environmental contamination to ecosystem and population health
2. Describe community-based participatory research strategies to assess, manage and communicate environmental public health risks
3. Identify environmental factors influencing the public health in Suriname
4. Discuss the leading causes of morbidity and mortality in Suriname
5. Evaluate the relationship between gold mining and related mercury contamination of Tribal and Indigenous Peoples’ food sources, specifically fish
6. Examine the access and use of pesticides in large and small-scale agriculture in Suriname
7. Discuss climate change and possible effects on public health in Suriname
8. Describe the public health relevance of medicinal plants and nutraceuticals

Teaching Philosophy

Our style of teaching is student-centered, highly inter-active and one of cross-fertilization and mutual respect. We believe that teaching is bidirectional; students taking ownership and working with us to identify, discuss, and evaluate the subject material. We consider creating a safe space and mutual respect a prerequisite for teaching.

To cater for the differing needs of students, we use a variety of tools and methods for both teaching and grading. We use a combination of PowerPoints, videos, (group) discussions, case-study presentations, interactive quizzing and field trips. Grading includes the level of interaction, effort and creativity the student displays. While we acknowledge that addressing the subject material is important in teaching, we also aim to inspire and awaken our students to open up themselves for new possibilities and bright futures in public health.

Required Textbooks/Articles/Readings

*Tales of a Shaman’s Apprentice* by Mark Plotkin (1994). This can be purchased at your local bookstore or through Amazon.com.

Supplemental Readings/Bibliography

Readings will be retrievable from open source and public domain resources. These sources will be made available on the course Canvas page as appropriate, and copies of the literature or links to websites will be provided.

Canvas Instructions

This course will use the University's Canvas site. Lectures and fieldtrips will be accompanied by supporting material and further reading, all of which will be made available via Canvas. The instructors will use the Canvas site and Pitt email as the primary means of online communicating with the students, who are expected to check these on a regular basis throughout the semester.

Required or Recommended Software

There are no software programs needed for this course other than commonly used word processors.

Required or Recommended Equipment

Access to a computer or laptop is necessary to to complete assignments.

Class Expectations/ Behavior and Ground Rules

Attendance in class and on fieldtrips is expected. Cellphones may not be used during class. Laptops may be used for the sole purpose of note-taking within class. Because each Surinamese
lecturer will have his/hers/their own policy, recording and taking pictures will only be allowed under strict permission of the instructors of this course. This restriction on recording and photographing will especially relate to the fieldtrips we will undertake. It is important to realize that we will be guests in Suriname, and that we will need to be culturally respectful. This will be elaborated upon during the classes preceding the study abroad.

All writing produced for this class must be your own work. Any unacknowledged or falsely acknowledged presentation of another person's ideas, expressions, or original research as one's own work will be considered plagiarism. Any paraphrasing or quotation must be appropriately acknowledged, and all sources used must be properly cited.

**Grading Scale**

<table>
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<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>95-100%</td>
<td>A</td>
</tr>
<tr>
<td>90-94%</td>
<td>A-</td>
</tr>
<tr>
<td>85-89%</td>
<td>B</td>
</tr>
<tr>
<td>80-84%</td>
<td>B-</td>
</tr>
<tr>
<td>70-79%</td>
<td>C</td>
</tr>
<tr>
<td>60-69%</td>
<td>D</td>
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<tr>
<td>&lt; 60%</td>
<td>F</td>
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**Student Performance Evaluation (Assessments and Weights)**

There will be no exams in this course. Students will be evaluated by the specific learning deliverables. The overall grade will be the total points earned. Students will be graded in five (5) categories: daily reflections; field trip reports; in-class case study development and presentation; and case study report.

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<tr>
<th>Requirement</th>
<th>% Grade</th>
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<tr>
<td>Daily reflections (independent daily journal entries)</td>
<td>10%</td>
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<td>Group field trip reports (4 @ 10% each)</td>
<td>40%</td>
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<tr>
<td>Case study presentation</td>
<td>15%</td>
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<tr>
<td>Case Study report: Analysis of an environmental public health risk in Suriname</td>
<td>35%</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
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**Assignments and Descriptions**

The first four weeks of the course will comprise of discussions based on provided readings, and preparations for the study abroad part. Selected readings should be completed before the class abroad component, as part of the class discussion will be based on those readings. The readings for the class are noted for the individual class sessions. Copies of the literature or links to websites will be provided. The following two weeks of the course will be the study abroad part, and these will include lectures, fieldtrips and case study presentations.

**Schedule of Sessions and Assignments (required)**

05/09/2022 – 06/27/2022: Tuesdays 12 PM – 12:50 PM.
Weekly discussions based on readings and information sessions regarding international travel, cultural respect and appropriate behavior.
Location: TBD

07/18/2022 – 07/30/2022:
Study abroad part as outlined in the table below:
<table>
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<tr>
<th>Course Outline Study Abroad Component</th>
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<tr>
<td><strong>Arrive Paramaribo by Monday July 4</strong></td>
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</table>
| **Monday July 18**  
12p – 2p  
- Course orientation- Torarica hotel |
| **Tuesday July 19**  
Class will be held at the FMeW, ADEKUS |
| **Morning Session will be held from 8:30a – 12.00p**  
- Welcome: Faculty of Medical Sciences, University of Suriname, Dean E. Irving  
- Introductions of course: Dr. Maureen Lichtveld  
- Public Health in Suriname: Dr. G. Sukul  
- Environmental Health in Context, Ecology and Health: Dr. Lichtveld  
- Mining in Suriname (P. Simmons, G. Gemerts)  
- CCREOH research (Dr. Lichtveld)  
2 pm: visit US ambassador (leaving MWI at 12.45 pm) Note: subject to change |
| **Wednesday July 20**  
Morning Session will begin at 9.00a- 12p  
Lectures by Prof. Dr. Dennis Mans  
- Plant-based traditional medicine in Suriname  
- Angiogenesis and clinical applications of angiogenesis-interfering compounds (with special emphasis on naturally-derived compounds)  
- Regulatory and public health issues regarding traditional medicine (in Suriname)  
Afternoon sessions from 1.30p – 4.00p  
- Suriname Conservation Foundation 1.30-2.30p  
- Pan American Health Organization 3.00-4.00p |
**Thursday July 21**

Class will be held at the Suriname Bureau of Public Health (BOG) and Sanatorium

**Morning Session will be held at the BOG from 9:30a – 12:00p**
- Suriname Bureau of Public Health (A. Warner; H. Cairo)
- Suriname Bureau of Public Health laboratory and facility tour

**Afternoon Session will be held at Perisur from 1:00 – 3:00p Note: this location may be subject to change**
- Perinatal Interventions Suriname – Mr. Hindoori/Dr. Ashna Hindori-Mohangoo
- Maternal and Child Health – Dr. Wilco Zijlmans

**Friday 22 – Sunday July 24**

**Brokopondo Field Trip**

- Travel to Tonka Island from Paramaribo
- Depart Afobaka to Tonka Island in dugouts
- “The extent and implications of Mercury contamination in Suriname”
  - Dr. Paul Ouboter PhD, Director National Zoological Collection and the Environmental Research Center, Anton de Kom University of Suriname
- Guided tour on Tonka Island with Mr. Frits van Troon on medicinal plants
- Visit to active artisanal gold mine
- Rainforest hike in Brownsberg Nature Reserve
- Environmental sampling (Water, Fish, etc.)
- Service learning
- Return to Paramaribo
Monday July 25  
Intro class will be held at the FMeW, ADEKUS
- Green Heritage Fund (Monique Pool) 9.00a - 10.00a
Fieldtrip
- Sloth service learning day 10.00a – 5.00p

Tuesday July 26  
Staatsolie Fieldtrip 7.00a – mid afternoon
- Oil at glance- pre-briefing Staatsolie field trip (Dr. Lichtveld): on the way to Staatsolie
- The National StaatsOlie Maatschappij (Saramacca operations)

Wednesday July 27  
Dolphin and Estuary Tour on the Suriname River 8.00a – 11.00a

Thursday July 28  
Class will be held at the FMeW, ADEKUS  
Session will begin at 9.00a - 12.00p
- Hg research in monkeys (Arioene Vreedzaam PhD)  
- Pesticide use in agriculture in Suriname (A. van Sauers)  
- Community Based Participatory Research approaches to environmental health intervention  
- Risk Communication (Prof. Dr. Lichtveld)

Friday July 29- Saturday July 30  
Nickerie/ Bigi PanPhotovoice research project
- Friday: Bigi Pan
- Saturday:
  - Pesticides and Suicides in Suriname – Dr. Radha Ramjatan  
  - Case study- & photovoice research project presentations

08/01/2022 – 08/13/2022:  Tuesdays 12 PM – 12:50 PM.  
Preparation of final case study report and final case study presentation to Pitt Public Health audience.  
Location: TBD

Assignment Submission / Late Work Policy
Our policy is to work as much as possible with the students to meet deadlines. Late work will be accepted with point deductions.

Accommodation for Students with Disabilities
If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services, 140 William Pitt Union, 412-648-7890 as early as possible in the term.

Academic Integrity Statement
All students are expected to adhere to the school’s standards of academic honesty. Cheating/plagiarism will not be tolerated. The Graduate School of Public Health’s policy on academic integrity, which is based on the University policy, is available online in the Pitt Public
Sexual Misconduct, Required Reporting and Title IX Statement

The University is committed to combatting sexual misconduct. As a result, you should know that University faculty and staff members are required to report any instances of sexual misconduct, including harassment and sexual violence, to the University’s Title IX office so that the victim may be provided appropriate resources and support options. What this means is that as your professor, I am required to report any incidents of sexual misconduct that are directly reported to me, or of which I am somehow made aware.

There are two important exceptions to this requirement about which you should be aware:

A list of the designated University employees who, as counselors and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: https://www.diversity.pitt.edu/civil-rights-title-ix/make-report/report-form

An important exception to the reporting requirement exists for academic work. Disclosures about sexual misconduct that are shared as part of an academic project, classroom discussion, or course assignment, are not required to be disclosed to the University’s Title IX office.

If you are the victim of sexual misconduct, Pitt encourages you to reach out to these resources:

Title IX Office: 412-648-7860
SHARE @ the University Counseling Center: 412-648-7930 (8:30 A.M. TO 5 P.M. M-F) and 412-648-7856 (AFTER BUSINESS HOURS)

If you have a safety concern, please contact the University of Pittsburgh Police, 412-624-2121.

Other reporting information is available here: https://www.diversity.pitt.edu/civil-rights-title-ix-compliance/make-report

Diversity Statement

Pitt Public Health Diversity Statement | Effective Academic Year 2021 - 22

The University of Pittsburgh Graduate School of Public Health considers the diversity of its students, faculty, and staff to be a strength and critical to its educational mission. Pitt Public Health is committed to creating and fostering inclusive learning environments that value human dignity and equity and promote social justice. Every member of our community is expected to be respectful of the individual perspectives, experiences, behaviors, worldviews, and backgrounds of others. While intellectual disagreement may be constructive, no derogatory statements, or demeaning or discriminatory behavior will be permitted.

If you feel uncomfortable or would like to discuss a situation, please contact any of the following: the course director or course instructor;

- the Pitt Public Health Associate Dean responsible for diversity and inclusion;
- the University’s Office of Diversity and Inclusion at 412-648-7860 or https://www.diversity.pitt.edu/civil-rights-title-ix/make-report/report-form (anonymous reporting form)
Gender Inclusive Language Statement
Language is gender-inclusive and non-sexist when we use words that affirm and respect how people describe, express, and experience their gender. Just as sexist language excludes women’s experiences, non-gender-inclusive language excludes the experiences of individuals whose identities may not fit the gender binary, and/or who may not identify with the sex they were assigned at birth. Identities including trans, intersex, and genderqueer reflect personal descriptions, expressions, and experiences. Gender-inclusive/non-sexist language acknowledges people of any gender (for example, first year student versus freshman, chair versus chairman, humankind versus mankind, etc.). It also affirms non-binary gender identifications, and recognizes the difference between biological sex and gender expression. Students, faculty, and staff may share their preferred pronouns and names, and these gender identities and gender expressions should be honored.

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