Foundations for Global & Community Health
GCH 1

Instructor: Matt Sparke (Politics) with fully-integrated pre-corded lectures also provided by
Nancy N. Chen (Anthro), Grant Hartzog (MCD Biology), & Bill Sullivan (MCD Biology)
nchen@ucsc.edu, hartzog@ucsc.edu, msparke@ucsc.edu, wtsulliv@ucsc.edu

Foundations for Global & Community Health is an interdisciplinary introduction to global and community health. It provides students with the foundational knowledge, vocabulary and analytical tools to enter the fast-evolving field of global health, along with an awareness of its wide-ranging community meanings and contextual conditions across local to global scales. Co-taught by faculty from the natural sciences and social sciences, the course creates opportunities for learning that involve collaboration and conversation between natural scientists and social scientists. The core content of the course is organized into the study of 6 major global disease challenges: Malaria, Tuberculosis, HIV/AIDS, Neglected Tropical Diseases, Diabetes and COVID. Each disease challenge is considered in terms of its microbiology, its global epidemiology, its environmental, economic and community contexts of emergence, and its amenability to diverse types of global health intervention. In each case attention is paid to how patient stories and other representations of disease relate to global health policy and program responses, including the ways in which such responses can learn from the communities most affected by the diseases.

There are two major projects in the course that are each scaffolded across multiple weeks of assignments across the summer session. The first is to develop a degree pathway learning plan and keyword definition to be included in your initial version of a 'GCH e-record'. Assignments in the first half of the course will help you set up this GCH e-record and add your learning plan and keyword definition, thereby also making

it available for you to update and add keywords as you make your onward journey to degree completion after the course. In the second half of the course, you will develop a short written report and oral/powerpoint presentation providing an update on a previously awarded Gates Foundation 'Grand Challenge' Global Health grant. This task is divided into 2 weekly assignments.

The World Health Organization's graphic featured above highlights how global and community health is about far more than just studying and curing diseases. Contexts for healthy living are crucial too, and these range from the scale of the global climate system, globalization and geopolitics down to local community concerns with the conditions and personal relations of everyday life. This is why *Foundations for Global and Community Health* pays such close attention to context alongside disease. Our hope is that if you fully engage in our contextualizing class discussions in the weekly synchronous sessions. By the end of the course we want you to be able come to terms with both the opportunities and challenges of making global health a lived reality and not just a name for curricula and credentials within the university.

Learning Objectives

By the end of this course, a student who has participated in all the lectures, and who has completed all the course readings and assignments satisfactorily will be able to:

1. Anticipate an educational pathway through the BA or BS in global and community health at UCSC
2. Define Global and Community Health
3. Describe the historical development of global health out of colonial health into today's complex mix of global public health, targeted humanitarian investment and culturally-varied traditions of clinical intervention in the community.
4. Outline the wide range of determinants of health from the global, social and political-economic to the environmental, biological and genomic.
5. Describe the molecular pathology (and host-pathogen interactions) of the world's most burdensome diseases along with evolving treatments and policies.
6. Put particular disease challenges into context: including both their microbiological and environmental contexts of emergence, and their social, cultural and political-economic contexts of spread and treatment.
7. Discuss the scope, practice, and limits or medicine as it relates to how disease is experienced unequally both globally and locally, including the contributions community health workers can make.
8. Recognize how patient stories and other disease representations (from genomic sequencing, to maps to graphic novels) relate to both policy-making and biomedical responses.
9. Explain the drug discovery, development and delivery process for particular diseases with both legal and microbiological understanding of how patents and licensing affect therapeutic access and benefits.
10. Describe how philanthropic funding shapes global or community health programming in an area you care about.

Readings

Required: Joia Mukherjee, *An introduction to global health delivery: practice, equity, human rights,* New York: Oxford University Press, 2018. Available free online as an e-book through the UCSC library.

Schedule of Lectures (for details please refer to Canvas)

Week 1: Assembling an interdisciplinary toolbox of skills

Week 2: Malaria and TB in global and community context

Week 3: HIV-AIDS and NTDs in global and community context

Week 4: Diabetes and COVID in global and community context

Week 5: The global and community health funding landscape and your future

Outline of student work and associated hours of work *per week*:

Please be prepared to devote time to the assigned readings and class assignments which sum up to about 15 hours per week (for details please refer to Canvas)

1. Watch all lectures and movies
2. Read all of the required readings and watch documentaries
3. Complete weekly assignments for *Learning Plan*
4. Prepare for quizzes, midterm and final exams
5. Research and complete *Gates Grand Challenge*

Assessment of student work:

 The overall class is graded on a 1000 point scale which is comprised of the following components:

1. Weekly discussions, **150 points (15%)**
2. Weekly online quizzes, **150 points (15%)**
3. Midterm Exam, multiple choice, online on Sunday evening at end of week 2, **150 points (15%)**
4. Final Exam, multiple choice & short answer, **150 points (15%)**
5. *Personal learning plan and GCH e-record*, **200 points (20%)**
6. *Gates Grand Challenge*, **200 points (20%)**

Exams

The Midterm exam will be online in Canvas on Friday 11th August for a period of 2 hours (more with accommodations) in the window between 9am and 5pm. It is an open-book exam, and you can refer to all course materials as needed. Unless you have DRC accommodations that add extra time, you have 2 hours to finish the exam as soon as you start. Please do not confuse the overall time window for the exam on Canvas with the time you have personally. There is plenty of time to answer the questions, so there is no need to rush or to get stressed!

The Final exam will be online in Canvas on Thursday August 31st for a period of 2 hours (more with accommodations) in the window between 9am and 5pm. It is an open-book exam, and you can refer to all course materials as needed. Unless you have DRC accommodations that add extra time, you have 2 hours to finish the exam as soon as you start. Please do not confuse the overall time window for the exam on Canvas with the time you have personally. There is plenty of time to answer the questions, so there is no need to rush or to get stressed!

Main Assignments

Regarding the two main writing assignments for the course – your personal learning plan and your investigation of a Gates Grand Challenge funded project – please note that they are organized into scaffolded sub-assignments that are detailed in Canvas with weekly guides and rubrics. However, for the purpose of giving you a sense of their overall design, each assignment is here also summarized below.

Writing Assignment 1: *Personal learning plan and GCH e-record pathway mapping*

Your first main writing assignment in the course is to develop a personal learning plan and GCH keyword definition that together are designed to orient and open your onward pathway towards completing a degree in Global and Community Health. This e-record work of pathway mapping will not end with this assignment. It is ongoing writing and reflective work that you will continue with the development of your personal GCH e-record throughout your education at UCSC. But here in this course the aim is to set you up for success by enabling you to build the foundation for your online GCH e-record, starting with writing-based reflections about why you are interested in global and community health and how you want to contribute to it in the future based on your learning in our GCH courses. You will also work on developing your first GCH keyword definition to add to your e-record. You will then share your first draft personal learning plan and keyword definition for peer review. Drawing on peer review feedback, you will finally revise and submit your initial GCH e-record entry with both your revised learning plan and revised GCH keyword definition. Your writing on all the component sub-assignments, including your finished application, will be graded out of **200 points for 20% of the overall class grade.**

Over time you will be using your GCH e-record for the following four distinct purposes. These are to:

  A. Document and analyze your learning through reflections on your learning plan;
  B. Collaborate with your peers to practice effective peer review and revision;
  C. Define your own GCH keywords for unlocking and navigating GCH scholarship; &
  D. Demonstrate your learning through the presentation of your GCH e-record materials.

Ultimately, you will come back to this work in our upper division GCH e-record writing course with a view to communicating all your learning to external audiences. By this time, your plans may have changed a great deal, but now is a great moment to take stock of where you want to go and what sort of pathway through what sorts of courses and scholarship will help you arrive at that destination!

The overall assignment work will be spread over the first half of the course and divided into 5 weekly sub-assignments as follows:

1. Describe your overall UCSC learning goals including whatever plans you currently may have for future work in fields related to Global and Community Health.
2. Watch our college advising video and then complete the course mapping table with close attention to how your course choices satisfy our degree requirements.
3. Write your first GCH keyword definition focusing on a term that is tied to your own future interests in GCH but which also seems challenging and inviting of deeper analysis.
4. Develop your first GCH e-record webpage using Google Sites, posting your draft learning plan and keyword definition for peer review.
5. Revise and submit the website (url) for your GCH e-record based on the feedback from the peer review.

Throughout the steps of this assignment you will be in charge of your learning and of the eventual structure and organization of your GCH e-record. The course materials will guide you in both thinking about your learning plans, reflecting on your learning, and learning the technology of e-record development at the same time. And key to this so-called meta-learning work, will be your ability to navigate the world of scholarly ideas and research in global and community health with keywords. Think of 'keywords' as 'keys' that are essential to 'unlocking' and 'opening' academic learning while also functioning as 'tags' for that learning when you want to communicate it to others. They include terms as varied as 'disease' and 'well-being', as complex as 'neoliberalism' and 'transcription elongation', and as big and all-encompassing as, well, 'global', 'community' and 'health'. Some keywords are discipline-specific, but many that we use in global and community health transcend boundaries of particular fields of study, often shifting meanings as they move. As you become more adept in understanding such keywords, their academic histories, and their contexts of development and deployment, the more they can help you better translate between different realms of expertise as well. Right from the start in GCH, we therefore want you to become adept in this interdisciplinary translational work so that you can find your own academic pathway with meta-learning savvy about the boundaries you are crossing and where you are going.

Writing Assignment 2: *Gates Grand Challenge presentation*

Summary of the Gates Grand Challenge Grant Assignment:

Developing a Progress Report on a Gates Funded Project

In 2003, the Bill and Melinda Gates Foundation (BMGF) launched a grant program designed to spur innovative solutions to unmet needs in Global and Community Health. Known as the Global Grand Challenges, a number of specific challenges are announced annually. For example, the titles of some recent proposal calls include: 'Smart farming innovations for small scale producers,'

'New approaches to integrating molecular surveillance into malaria control programs,' and 'Integrating tradition and technology for fermented foods for maternal transmission.'

The philosophy and slogan of the program is "Great Ideas come from everywhere". The idea is that innovations are likely to come from non-experts as well as experts, and so that means that BMGF would also likely welcome a proposal from YOU!

Each RFP (Request For Proposals) includes a summary of the problem to be addressed and kinds of innovation they are seeking. For example, the Smart Farming Initiative describes how farmers in impoverished regions suffer "1) low productivity driven by lack of access to information and services; climate change, weather variability and pest and disease outbreaks; 2) lack of access to tailored financial and insurance products, and 3) lack of access to and choice of market and off take options. Additionally, solutions will need to consider barriers to adoption of digital farmer services, such as low language and digital literacy, the high relative cost of services and devices and, in particular, gender gaps and other potential downsides of digital solutions (e.g. the growing digital divide)"

Since its inception, over 3000 Grand Challenge grants from 116 different countries have been awarded on a broad spectrum of global health issues. The original call is listed on the Global Challenge web page. Solutions can range from engineering, educational, digital (ideas for new app), financial to political reforms. The grants are short and are limited to a maximum of three pages in length.

The overall goal of the Grand Challenge Assignment is to provide a written and oral progress report on a Grand Challenge Grant awarded between 2008 and 2012. We have divided this task into three weekly assignments.

Office Hours:

Dr. Sparke: Thursdays from 3 – 4:30pm on zoom

https://ucsc.zoom.us/j/96760775569?pwd=VVdrYndjZmkvUE4xR25hWGwramM2UT09

Meeting ID: 967 6077 5569 Passcode: 428858;

Or write directly to Prof Sparke to request a good time for YOU! msparke@ucsc.edu

Credits and Grade Scale:

This is a 5 credit course. Since it is graded on a 1000 point scale, a 5 point quiz, for example, is worth 0.5% of your total % grade. This final total 1000 point grade is subsequently converted to the UCSC letter grade scale as follows.

>960=A+=4.0	900-929=A-=3.7	830-859=B=3.0
930-959=A=4.0	860-899=B+=3.3	800-829=B-=2.7

760-799=C+=2.3	660-699=D+=1.3	<600=F=0.0
730-759=C=2.0	630-659=D=1.0	
700-729=C-=1.7	600-629=D-=0.7	

Course Policies:

Student Well-Being: Please reach out to Professors Sparke and ask for help at any time, msparke@ucsc.edu It is especially important in the online learning environment to connect directly and early on any issue that either is puzzling you or getting you super excited about the course and Global and Community Health! The more you are proactive during a personal challenge or crisis, the more we can do to offer you support and accommodations. For additional resources for dealing with health and mental health crises please consult those listed on the Student Health Center. Other support resources are available through the campus offices of CARE, & Title IX. And for support with food, housing and other general needs consider going to Slug Support.

Diversity and Respect: Discrimination of any kind will not be tolerated. In this class we embrace diversity, equity and inclusion in order to actively learn from diverse perspectives of all kinds.

 Disabilities Resources: Your experience and full participation in this class is important. If you have already established accommodations with the university Disability Resource Center (DRC), please communicate your approved accommodations to your TA in order to discuss your needs in this course. If you have not yet established services through DRC, but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to; mental health, attention-related, learning, vision, hearing and physical impacts), you are welcome to contact DRC   at email: drc@ucsc.edu or by phone (831) 459-2089.

Home Work Policies: Assignments for this course will be due on a weekly basis. Plagiarism and cheating violates the Student Conduct Code and will be treated accordingly. We appreciate that you will often participate collaboratively in lectures, engaging actively in discussions with classmates and instructors over the course materials. This interactive work is an important aspect of learning in the course. It is equally important to note, however, that in your written homework we expect you to submit assignment writing that is your own and neither copied nor directly adapted from the work of other students. You can certainly consult online materials, including journal articles. But because all scholarly work builds on knowledge that precedes us, it is also critical for you to cite the sources of ideas that are not your own. This allows your readers to further investigate the background of your arguments while simultaneously enabling them to understand what ideas you have added yourself as a scholar with integrity. Therefore, whenever your written work uses the ideas, closely paraphrases or quotes the work or others, you will be expected to provide appropriate citations and quotation marks. Resources to support your academic integrity are all easily available on the UC Santa Cruz library webpage. These include guidelines for citing sources, citing and using data and statistics, and understanding plagiarism. If you have questions, please contact your instructor or a TA before turning in your assignment.

 Deadlines and Late Work: Please check in Canvas for all due dates and plan your schedule accordingly. All work is submitted via Canvas which will record the time of submission.

Assignments and sub-components that are late will be marked down 1 point for each day (1 min - 24 hours) that it is late unless prior arrangements have been made with your TA. In addition, an assignment that was turned in on time but had to be recalled and resubmitted because it was not submitted in the recommended PDF or Word format also counts as a late submission, and the penalty for late submission will apply.

Student Conduct: Instructors are responsible for maintaining a positive learning environment in the classroom and in the online learning space of a course. Students whose behavior is disruptive either to the instructor or to other students may be asked to leave the course and/or a discussion or assignment. Please consult this webpage, for more information on how UCSC defines and responds to misconduct.

Academic Integrity: Academic communities are founded on honesty, civility, and integrity. As members of our UCSC academic community, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity, professional honesty, and personal conduct. Plagiarism, cheating, and other misconduct are serious violations. We understand plagiarism to include any use of another person's language, ideas, or materials in a way that presents them as your own without properly acknowledging and citing their sources. We expect you to know and follow the university's policies on cheating and plagiarism. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not copy or mislead others about what is your work. Plagiarism is a serious matter, easy to detect, and violations of UCSC standards of academic integrity can result in serious penalties, including expulsion from the university. Resources to support your academic integrity are all easily available on the UC Santa Cruz library webpage. These include guidelines for citing sources, citing and using data and statistics, and understanding plagiarism. If you have questions, please contact your instructor or a TA before turning in your assignment.