

Planetary Health – Course number CHL5433H S
SYLLABUS – Winter 2024

Contact Information

- Lead Instructor: Ashley Aimone, Assistant Professor. Division of Epidemiology and Centre for Global Health, Dalla Lana School of Public Health, 155 College Street West.
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Best way to contact me is through email. I usually will be able to respond within 24 hours. I am also able to hold an open zoom time weekly as virtual “office hours”.

Course Meeting Information

This course will be entirely online with 2-3 hours of synchronous contact weekly, Tuesdays starting January 9th, 8:00am-11:00am EST for twelve weeks. Synchronous contact will be through Zoom, the link to be provided.

A maximum of forty students will be enrolled.

Synchronous contact will include lectures, discussion, and group work. Asynchronous contact will entail a combination of course material review (reading/viewing/listening), assignments, and online discussion.

Acknowledgment of Territory

We wish to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.

We would also like to acknowledge the land where the Kenyan learners and facilitators live, on the edge of the Great Rift Valley of Africa, the originating region of humankind, and particularly in the part of western Kenya that is now predominantly inhabited by the Kalenjin people.

Prerequisites:

There are no prerequisites for this course. Eligible students will be enrolled in a graduate level program (Masters or PhD level) at DLSPH (PHS, IHPME) or elsewhere, with priority given to University of Toronto students.

Course description:

The world is changing fast. Globally, mean temperatures are rising, forests are disappearing, oceans are rising, and droughts and floods are becoming more common, and more severe. Ever more people are moving to cities, many living in coastal regions are expected to be flooded out in the next several decades due to rising ocean levels. It is estimated that at least a billion people may become malnourished by 2050 as a result of the desertification and food shortages expected to result from global climate change, mostly in low-income settings. A high-level

commission of the Rockefeller Foundation and *The Lancet* has drawn attention to the fact that the public health community in general is woefully unprepared for tackling the challenges of a dramatically changing environment on human health, including impacts on nutrition, food security, and access to freshwater. Planetary health is about the relationship between the health of the planet, and the health of people, who ultimately depend on the planet for survival of our species.

Course Goal: This 12-week, half credit course will provide learners with a big picture perspective of planetary health, and the research, policy and practice issues related to it; as well as the implications and opportunities for public and population health globally. A key theme throughout will be consideration of health and social equity issues and the differential impacts of climate and other environmental changes on populations in light of these issues. Core concepts to be covered throughout the course are listed in Appendix A.

Course Objectives - Relevant competencies to build during course

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

1. Broadly understand the concept of planetary health, its distinguishing characteristics relative to the ecological determinants of health, global health, and One Health.
2. Articulate the nature of the Anthropocene and discuss current trends in knowledge and thinking about the impacts of anthropogenic factors on human societies.
3. Identify key human health effects and indicators across the lifespan related to climate and environmental change.
4. Identify both public-facing and academic resources for current evidence or data on climate and environmental changes, human health and development - nationally, regionally, and globally.
5. Understand the challenges and complexities of studying planetary health, as well as the potential opportunities or avenues for action or advocacy.
6. Expand thinking about implications for public health policy and practice in this field.

Evaluation

Additional information about each assignment (including grading rubrics) will be posted on Quercus.

Item	Description	Weight	Date Due
Class participation	It is critical that learners engage with the material and each other in class and online. Participation (orally or written) in regular session discussions in-class (synchronously) and online (asynchronously) will be assessed in terms of frequency,	20% (See Appendix B for evaluation rubric)	Throughout.

	timeliness, continuity and quality of contributions.		
Small individual assignments	Reflection assignments: 1-page reflection on learnings from last week and new topic for upcoming week	2.5% each (total of 30%)	Due weekly by Sunday @ 11:59 pm EST
Winter break			February 20-23
	3-day food diary	5% (based on completion of the diary plus online discussion)	February 27
	3-day water diary	5% (based on completion of the diary plus online discussion)	February 27
Final group assignment	In groups of 3-4 produce the following two outputs: <ol style="list-style-type: none"> 1. 2-page policy brief (25%) 2. 5-minute presentation (15%) 	40% (based on relevance of issue, incorporation of key principles of the Anthropocene, thoughtfulness of analysis and approach)	Presentation: March 26 Policy brief: April 9

How to hand in assignments:

- *Filenames should be formatted: lastnamefirstname_planetaryhealth_Assignment#.*
- *Assignments can be submitted through the Quercus course or via email to the instructor.*

Course/departmental/divisional policies

Learners are expected to participate in >80% of the scheduled classes. Please respect deadlines.

Penalties for Late Submission: 5% of the mark will be deducted for each day late for any given assignment. *Extensions will only be granted in circumstances that are unavoidable and unpredictable (e.g., illness, emergency). Late assignments will not be accepted after marked assignments have been returned.*

Recordings of Webinar Sessions

Recordings of webinar lecture sessions held within the context of this course will be archived and posted to Quercus to support access to course content by all students. These resources are intended to be used as a student study aid and are not a substitute for participation.

Video recordings will primarily capture the instructor and onscreen content. Students will not be visible on video recordings unless their webcam is enabled. Your voice, however, may be captured as an audio recording if you ask a question in class. The same holds true for questions

posted in the chat tool. Please speak to the course instructor(s) if you have any concern about your image, voice or text being recorded, to determine if alternative means of participating are possible.

Course videos may not be reproduced, posted, or shared anywhere other than the official course Quercus site and should only be used by students currently registered in the course. Recordings may be saved to students' laptop for personal use.

Students may not create additional audio or video recordings without written permission from the instructor since recordings will be provided for all lectures. Permission for such recordings will not be withheld for students with accommodation needs.

Respect for classmates

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

Academic integrity

Students must adhere to the [Code of Behaviour on Academic Matters](#). **It is your responsibility to know what constitutes appropriate academic behaviour.** You are responsible for ensuring that you do not act in such a way that would constitute cheating, misrepresentation, or unfairness, including but not limited to, using unauthorized aids and assistance, personating another person, and committing plagiarism. For more information see [U of T Academic Integrity](#) website.

Academic integrity includes understanding appropriate research and citation methods. If you are uncertain about this, please seek out additional information from the instructors or from other institutional resources including the following:

- This tip sheet provides clear and helpful information about appropriate academic citation: <http://guides.library.utoronto.ca/citing>
- This site offers a series of scenarios to help students understand how to prevent themselves from being subject to academic offence allegations <https://www.utm.utoronto.ca/academic-integrity/students/scenarios>
- Before handing in assignments students can also review this [academic integrity checklist](#) provided by the UofT Centre of Teaching Support & Innovation:
 - I have acknowledged the use of another's ideas with accurate citations.
 - If I used the words of another (e.g., author, instructor, information source), I have acknowledged this with quotation marks (or appropriate indentation) and proper citation.
 - When paraphrasing the work of others, I put the idea into my own words and did not just change a few words or rearrange the sentence structure

- o I have checked my work against my notes to be sure I have correctly referenced all direct quotes or borrowed ideas.
- o My references include only the sources used to complete this assignment.
- o This is the first time I have submitted this assignment (in whole or in part) for credit.
- o Any proofreading by another was limited to indicating areas of concern which I then corrected myself.
- o This is the final version of my assignment and not a draft.
- o I have kept my work to myself and did not share answers/content with others, unless otherwise directed by my instructor.
- o I understand the consequences of violating the University's Academic Integrity policies as outlined in the [Code of Behaviour on Academic Matters](#).

Plagiarism Detection

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (<https://uoft.me/pdt-faq>).

Accessibility

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability or health consideration that may require accommodations, please feel free to approach me/us and/or the Accessibility Services Office as soon as possible. The Accessibility Services staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. The sooner you let them and me know your needs, the quicker we can assist you in achieving your learning goals in this course. For more information, or to register with Accessibility Services, please visit: <http://studentlife.utoronto.ca/as>.

Required texts or readings

- *There are recommended resources for each class. Please try to read/view/listen to the ones listed in the syllabus before each class, and refer to the accompanying [matrix](#) for additional resources to expand and deepen your knowledge on a particular topic. The matrix is a reviewable document that learners can add comments and suggestions to if they come across something interesting and relevant through their own research/experience.*
- *Resources may also be occasionally added/changed during the course depending on current events or guest speaker recommendation.*

Assignment descriptions

1. Reflection assignments:
 - a. Week 1: Learner profile. What is your educational background and current area of study? What drew you to take this course? Please describe any previous

interactions with “planetary health” – this could be through formal education, the media, your own lived experience, etc. What do you like to do for fun or leisure outside of “class” time? Responses to be posted on the course [LinkedIn group](#) page along with a recent selfie. Maximum length 250 words.

- b. Weeks 1-12: Land-based learning and reflection. While in a space that is connected to nature (can always be the same one), reflect on the past week’s learnings as well as the upcoming topic (can read/watch/listen to at least one of the recommended resources in preparation for this). may be accompanied by video, poetry, song, etc. Maximum length 700 words, to be submitted via Quercus. One text excerpt or accompanying art piece from each reflection to be posted on the course [LinkedIn group](#) page.
2. Food and water diaries: Maintain a food and water diary for three days (templates to be provided). Submit your diaries via Quercus and post at least one comment and one reply on the course [LinkedIn group](#) page. What is your primary food and water sources, and what have you observed or learned about your own consumption patterns, or those of others?
 3. Final group assignment:
 - a. Part 1: Choose a planetary health issue affecting your country or community (or browse the PHA case study anthology for inspiration) and prepare a policy brief using [this resource](#) from IDRC as a guide. Preparing the brief will require a thoughtful approach including identifying the audience, conducting research to determine the state of evidence on the topic, and likely basic analyses of available sources of data (qualitative or quantitative) to provide an evidence-based synthesis and relevant policy recommendations. The brief should be no longer than 1500 words (around 2 pages) excluding references, tables, or figures.
 - b. Part 2: Prepare a 5-minute presentation of the brief, using an audio-visual medium of your choice (e.g. recorded power point presentation, video or photo compilation (with narration); podcast-style storytelling or interview, etc.). Again, be sure to think about your target audience when choosing the presentation medium and delivery of the content. The presentation file or link will be uploaded to the course [LinkedIn group](#) page for others to view/listen to and comment on.

Deadlines and evaluation for final project:

- i. February 6, 2024 (11:59pm EST) - Topic proposal, including proposed target audience
- ii. March 5, 2024 (11:59pm EST) - Outline of proposed research methods, including source(s) of evidence/data
- iii. March 26, 2024 (11:59pm EST) - 5-minute presentation
- iv. April 9, 2024 (11:59pm EST) - Final co-authored policy brief

Week-by-week breakdown of in-class activities

Class 1 – January 9, 2024: Overview and introduction to planetary health: What is planetary health?

- a. Pre-session (15 mins): introductions and reflections on the planetary health concept
- b. 1-hour lecture by Dr. Aimone
- c. 1-2 hour tutorial with Dr. Aimone
 - i. Overview of assignments
 - ii. Unpacking climate emotions

Recommended readings/viewings:

- [Planetary Health: the future is now](#) (Planetary Health alliance, YouTube video)
- Consolo et al. (2020) [Ecological grief and anxiety: the start of a healthy response to climate change?](#)

Class 2 – January 16, 2023: Indigenous perspective on planetary health

- a. Pre-session (15 mins): reflections from last week and on new topic
- b. 1 hour lecture by Dr. Tiina Wikström (Laurea University of Applied Sciences)
- c. 1-2 hour tutorial with Dr. Aimone
 - i. Tools and tips for finding relevant sources of evidence/data related to planetary health

Recommended readings/viewings:

- [Holding the Fire: Indigenous Voices on the Great Unravelling](#) - Episode 1 (resilience.org, podcast)
- Redvers et al. (2022) [The determinants of planetary health: an Indigenous consensus perspective](#)

Class 3 – January 23, 2024: Overview of drivers and human health impacts of climate and environmental change (CEC)

- a. Pre-session (15 mins): reflections from last week and on new topic
- b. 1 hour lecture by Dr. Aimone
- c. 1-2 hour tutorial with Dr. Aimone
 - i. Group work
 - ii. Optional case study: Coastal Conservation Takes Root: Education and Economic Agency as a Way to Protect Sri Lanka's Mangroves

Recommended readings/viewings:

- [Climate change impacts on health](#) (WHO factsheet, 2023)
- Myers (2017) [Planetary health: protecting human health on a rapidly changing planet](#) (see accompanying [recording of lecture](#))

Class 4 – January 30, 2024: Selected topics on drivers and impacts of CEC

- a. Pre-session (15 mins): reflections from last week and on new topic
- b. 1 hour lecture by Dr. Carol Munini (School of Public Health, Moi University)
- c. 1-2 hour tutorial with Janna Mohammed and the Capstone Project Team (DLSPH, University of Toronto)
 - i. Case study: Health and wellbeing of wildland firefighters

Recommended readings/viewings:

- [Healthy Cities in the SDG Era – Episode 10: Climate Action](#) (first interview with Dr. Paula Braitstein, Dalla Lana School of Public Health, Podcast)

Class 5 – February 6, 2024: Food and nutrition systems

- a. Pre-session (15 mins): reflections from last week and on new topic
- b. 1 hour co-lecture by Dr. Susan Keino and Dr. Caroline Sawe (School of Public Health, Moi University)
- c. 1-2 hour tutorial with Dr. Susan Keino and Dr. Caroline Sawe
 - i. Group work
 - ii. Optional case study: Today's Solutions for the Future of Food

Recommended readings/viewings:

- [The 10 Elements of Agroecology: Enabling transitions to sustainable agriculture and food systems](#) (FAO, YouTube video)
- [The diet that helps fight climate change](#) (University of California Climate Lab, YouTube video)

Class 6 – February 13, 2024: Water security

- a. 1 hour lecture by Dr. Ikal Angelei (founder of NGO “Friends of Lake Turkana”)
- b. 1-2 hour tutorial
 - i. Group work
 - ii. Optional case study: Dams and disease: An Ecological Solution to Schistosomiasis in Senegal

Recommended reading/viewing:

- [Explained | World's Water Crisis](#) (Netflix and Vox Media documentary, YouTube video)
- [Friends of Lake Turkana](#) - “Grassroots indigenous organization that works with and on behalf of communities within the greater Turkana basin to demand collective social, economic, cultural, environmental, and territorial justice.”

Class 7 - February 27, 2024: Climate, migration, and health

- a. Pre-session (15 mins): reflections from last week and on new topic
- b. 1 hour lecture on human migration in the context of climate and environmental change, by Dr. Andrea Cortinois (DLSPH, University of Toronto)
- c. 1 hour tutorial with Drs. Cortinois and Aimone
- d. 1 hour group work

Recommended reading/viewing:

- [What is climate migration?](#) (C40 Cities, YouTube video)
- [Global Migration and Health Initiative \(GloMHI\)](#) - "Health for all, regardless of birthplace"

Class 8 – March 5, 2024: One Health

- b. Pre-session (15 mins): reflections from last week and on new topic
- b. 1 hour lecture by Samuel Wanjohi (Country Manager, Africa One Health University Network)
- c. 1-2 hour tutorial
 - i. Group work
 - ii. Optional case study: Putting food needs first: How alternative proteins could save Madagascar's endangered biodiversity

Recommended reading/viewing:

- [COVID-19: Rethinking Our Relationships with Wild Animals & Wild Places](#) (Centre for Global Health, University of Oslo, webinar 2020)
- [Africa One Health University Network \(AFROHUN\)](#)

Class 9 – March 12, 2024: Health policy and knowledge translation

- a. Pre-session (15 mins): reflections from last week and on new topic
- b. 1 hour lecture by Dr. Srikanth Kondreddy (School of Epidemiology and Public Health, University of Ottawa)
- c. 1-2 hour tutorial
 - i. Group work
 - ii. Optional case study: Health and Haze: A Science-Driven Policy Approach to Southeast Asia's Annual Occurrence

Recommended readings/viewings:

- [National Adaptation Plans](#) (UN Environment Program, website)

Class 10 – March 19, 2024: Eco-social approaches and resilient health systems globally

- a. Pre-session (15 mins): reflections from last week and on new topic

- b. 1 hour lecture by Prof. Emeritus Donald Cole (Professor Emeritus, DLSPH and Occupational, Environmental, & Public Health Medical Consultant)
- c. 1-2 hour tutorial with Prof. Cole and Dr. Eileen Nicolle
 - i. Case study: Canada's PaRx Program – Greening Physical Activity

Recommended reading/viewing:

- [Change Cannot Wait: Building Resilient Health Systems in the Shadow of COVID-19](#) (Official view of a big funder, The World Bank)
- [Building climate resilient and sustainable health systems](#) (Neeraj Jain, NGO lead in India, LinkedIn article)

Class 11 – March 26, 2024: Community resilience

- a. Pre-session (15 mins): reflections from last week and on new topic
- b. 1 hour lecture by Prof. Blake Poland (DLSPH, University of Toronto)
- c. 1-2 hour tutorial with Prof. Poland
 - i. Asset mapping for resilience allies in neighbourhoods

Recommended readings/viewings:

- [About Resilience](#) (various resources from resilience.org in support of building community resilience in a world of multiple emerging challenges)

Class 12 – April 2, 2024: Regenerative sustainability, de-growth, and health equity

- a. Pre-session (15 mins): reflections from last week and on new topic
- b. 1 hour lecture by Garrett Morgan (PhD Candidate, Department of Geography and Planning, University of Toronto)
- c. 1-2 hour tutorial)
 - i. Group work
 - ii. Optional case study: Going Circular: How Restoring a River Ecosystem in Chile's Capital City has Benefited Human Health and Economics
 - iii. Optional activity: tree-planting ceremony

Recommended reading/viewing:

- [The circular economy: A new way to design, make, and use things](#) (Ellen MacArthur Foundation, YouTube video)
- [Circular Economy Principles for Achieving Net Zero in the Built Environment](#) (Arup and Ellen MacArthur Foundation, YouTube video)

Student Support Services

Student Mental Health Resources

- [U of T's Central Hub for Student Mental Health Resources](#)
- [SGS Graduate Wellness Services](#)
- [Student Life Health and Wellness](#)
- MySSP: 1-844-451-9700 (or use the app)
- Good2Talk: Call: 1-866-925-5454 or Text: GOODTOTALKON to 686868

Tri-Campus Sexual Violence Prevention and Support Centre (“The Centre”).

- The Centre has a location on all three campuses to help students who disclose to access supports and, in cases where the student chooses to formally make a report, the Centre will explain the process, and facilitate the making of the report to the University and/or to the Police. The Centre can be contacted through its confidential phone at 416-978-2266 or thesvpcentre@utoronto.ca.
- Students are encouraged to call or email for an appointment, which will be booked as soon as possible. **Students in crisis or in need of immediate support related to sexual violence can contact Women’s College Hospital Sexual Assault Care Centre at 416-323-6040.**

Office of the Ombudsperson

- As part of the University’s commitment to ensuring that the rights of its individual members are protected, the University Ombudsperson is devoted to ensuring procedural fairness and just and reasonable outcomes.
- The Ombudsperson offers confidential advice and assistance for complaints and concerns and can recommend changes in academic or administrative procedures where this seems justified. For information, see <https://governingcouncil.utoronto.ca/ombudsperson>.

Other Resources and Supports for DSLPH Graduate Students

Resource	Summary Description
The Office of Graduate Affairs	Provides a variety of services, including academic, program and personal advising. DSLPH students that require any assistance or information regarding coursework extension, program requirements, etc..
Graduate Department of Public Health Sciences Student (GDPHS) Handbook	This resource provides comprehensive information on getting started, enrolment, policies and procedures, financial matters, awards and funding opportunities, student services and more.
DLSPH Student Resources	This resource site includes information for incoming students, the GDPHS Student Handbook, program requirements, policies and forms, online learning resources, timetables, course database, information for international students, professional opportunities,

Resource	Summary Description
	mentorship program, health & well-being, public health students' association, and PhD Final Oral Exams.
U of T Graduate Student Union	The UTGSU is a voice for over 18 500 students as well as a platform for community building and services. UTGSU supports and advocates on behalf of graduate students.
Health Sciences Writing Centre (for DLSPH PhD students)	<p>The Health Sciences Writing Centre provides free individualized, confidential writing instruction to:</p> <ul style="list-style-type: none"> ● Develop your writing skills ● Improve your capacity to plan, organize, write, and revise academic papers (in any subject!) ● Manage ESL/EFL language challenges <p>The Centre works with all students, for all assignments, at all stages of the writing process. Visit the website to book an appointment or for more information.</p>
UofT Academic Success Centre	Offers group workshops and individual counselling to develop strategies for a range of learning challenges such as time management, stress and anxiety, memory, exams, note taking, textbook reading, concentration.
UofT Career Services	Provides opportunities to meet employers, industry experts and alumni; strategies to Identify goals and navigate career decisions; and resources: Improve your resume, interviews, and online presence.

Appendix A

Core concepts to be covered throughout the course

- Planetary Health vs. OneHealth vs. EcoHealth vs. Global Health
- Indigenous perspectives on planetary health
- Planetary Boundaries and the Safe Operating Space for humans
- the Anthropocene
- the Great Acceleration
- Sustainable Development Goals
- Ecosystem Services
- Tipping Point
- State Shift
- Tragedy of the Commons
- Primary drivers of climate and environmental change
- Human health impacts of climate and environmental change
- The scale, types, and scope of environmental and land use change
- Human consumption patterns (material and non-material)
- Direct health effects vs. ecosystem mediated effects vs. indirect effects
- Global food and agricultural systems and trends influencing patterns of food consumption globally
- Aligning food, nutrition, agricultural systems for planetary health
- Food and water security vs. food and water sovereignty
- Climate-smart agriculture
- Indigenous food systems, sustainable food systems
- Agribusiness and the role of digital technology
- Solutions for the Future of Food
- Impact of urbanization and industrial development on water security
- Water use vs. water requirements
- Water stress, water grabbing, water privatization, and water efficient technologies
- Ecosystem management for food and water and food security
- Impacts of natural disasters on migration and displacement of human population
- Sustainable and unsustainable cities, sustainability and affordable housing
- Zoonotic epidemics and One Health in the context of ecology, globalization, and global pandemics
- Policy challenges in the context of planetary health
- Sources of data related to planetary health
- Health care and public health responsiveness in the context of planetary health
- Community resilience and regenerative sustainability
- Circular, relocalized and other alternative economic models

Appendix B

Class Engagement and Participation Rubric*

	Exemplary (A+)	Accomplished (A-to A)	Developing (B- to B+)	Beginning (F)
Attendance/promptness	Student arrives on time and remains for duration of class for all classes.	Student misses, arrives late, or leaves early from 1-2 classes.	Student misses, arrives late, or leaves early from 3-4 classes.	Student misses, arrives late, or leaves early from 5 or more classes.
Preparation	Arrives fully prepared for every class with all assignments complete, prepared to answer and ask questions on readings. Fully engages in all online discussions.	Arrives fully prepared for most classes with all assignments complete, prepared to answer and ask questions on readings. No more than 2 unprepared classes or no more 2 online discussions.	Sometimes prepared or with only superficial preparation. No more than 4 unprepared classes or no more 4 online discussions.	Exhibits little evidence of having read or thought about assigned materials.
Frequency of participation: Includes (1) class discussions and (2) on-line discussions (i.e. leading group discussions in-class; responding to discussion threads online)	Student freely volunteers/initiates participation more than once per class and more than once per online discussion without dominating discussion.	Student freely volunteers/initiates participation once per class and once per online discussion without dominating discussion.	Student freely volunteers/initiates participation in at least half of the classes and online discussions, without dominating discussion.	Student participates only after solicited from instructor. Student participates but dominates discussions and does not allow others to contribute.
Quality of comments (in-class and online)	Provides comments that advance level and depth of dialogue reflecting an understanding of the topic.	Provides relevant comments that are focused on assigned material. Comments are constructive, and	Provides relevant comments occasionally. Sometimes going off topic. Comments are	Provides few uninformative/relevant comments, often going off topic. Heavy reliance on opinion and personal

	Comments are constructive, scientifically accurate, insightful, and balanced between knowledge and opinions.	mostly accurate and balanced.	occasionally not constructive, accurate or balanced.	preference. Comments are often not constructive or accurate.
Professional Conduct Includes general behavior during class, and online, including interactions between peers, guests, and teacher.	Student is careful not to distract others (eg. Socializing, sleeping, leaving during class), never uses unapproved electronic devices in class; and is respectful towards peers, guest speakers, and teacher.	Student exhibits behavior that distracts others once or twice in the semester, rarely uses unapproved electronic devices in class, and is respectful towards peers and the learning environment.	Student exhibits recurring behavior that distracts others, often uses unapproved electronic devices in class, and is sometimes not respectful towards peers and the learning environment.	Student is frequently disruptive, distracts others, frequently uses unapproved electronic devices, and is disrespectful of peers or the learning environment.

*Rubric entries adapted and modified from Class Participation, Engagement, and Professionalism Rubrics by: Professor Daniel C. Moos, Eberly Center for Teaching Excellence, and Brown University