

ADSB 1904 - Planetary Health 4 Credits

Woods College of Advancing Studies, Boston College

Fall 2022 Semester,

August 29 – December 21, 2022

Instructor Names: Mark Chandler

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Best way to contact

Office Hours: *by appointment and virtual*

Class Location: *Canvas*

Class Meeting Time(s): *None*

Course Description

Planetary health is a rapidly emerging transdisciplinary field that provides a unifying framework for many of the most urgent challenges facing planet Earth. Planetary health generates the scientific evidence-base and knowledge that forms the understanding and quantifying of the human health impacts of global environmental disruptions, including climate change, food-systems collapse, rapid biodiversity loss, and widespread pollution. Students will use a case study approach to learn the underlying ecosystem science feedback loops that underpin climate change, biodiversity loss, nutrition, deforestation, and their resultant human disease burden. Planetary health also advances the development of solutions that will allow humanity and nature to thrive into the future. Building the scientific knowledge base that connects environmental change with human health is the core course theme. Governance, urgency and scale, equity and ethics, bias, and trade-offs will be discussed as the class examines solutions and policy needs at the core of sound planetary health.

Course Delivery: *online, asynchronous*

Textbooks (with ISBN) & Readings (Required)

All articles/handouts will be available in Canvas unless otherwise noted.

- Myers and Frumkin. 2020. *Planetary Health: Protecting Nature to Protect Ourselves*. Island Press, ISBN: 9781610919661

Other equipment / material requirements (optional)

None.

Textbooks & Readings (Recommended)

All additional materials are located in the Canvas Course.

Canvas

Canvas is the Learning Management System (LMS) at Boston College, designed to help faculty and students share ideas, collaborate on assignments, discuss course readings and materials, submit assignments, and much more - all online. Your course will make significant use of Canvas this semester;

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you should familiarize yourself with this important tool. For more information and training resources for using Canvas, click [here](#).

In the case of any technical difficulties or concerns, please contact canvas@bc.edu or 617-552-HELP (4357) for immediate assistance. Canvas requires [particular computer specifications](#) and wifi access. It is important that you plan accordingly.

NOTE: If a face-to-face class session is cancelled, please go to Canvas to learn how that session will be taught.

Course Outcomes

By the end of this course, students will:

- a. Analyze **drivers and consequences of increasing human activity** that leads to global environmental change, including climate change, land conversion (e.g. deforestation, land conversion, irrigation), biodiversity extinction crisis, air, land, and water pollution, among others.
- b. Evaluate and describe the **linkages between global environmental change and human health** (e.g. nutrition status, infectious disease, non-communicable disease, displacement and conflict, and mental health).
- c. Determine the **inequity of impacts** of global environmental change and human health effects.
- d. Apply **systems thinking** to identify pathways and linkages among global environmental change, human health effects, and solutions that promote equitable outcomes, including principles of good governance, equity, and evidence-informed policy.
- e. Evaluate **knowledge and belief systems** about the relationship of humans and nature including western science and indigenous knowledge systems to understand the human relationship with nature.
- f. **Create solutions** that address planetary health and inequity.

Assessments and Grading Policy

Typically, each week will require readings and watching of videos to acquire the basic content and ideas for each module. For each module (i.e. each week), the student will be expected to engage in and submit "assignments" in each of four different ways:

1. Weekly **short answer** responses on that week's module content
2. Student interactions using a "**discussion**" format or annotation of a paper using the **Perusall** annotation tool.
3. **Practical application** or demonstration to engage students in the field of planetary health in some way.
4. A short **reflection** on week's content

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Two larger assessments will also occur:

1. **Mid-term on Week 9** to assess familiarity with the core course content.
2. **Final project** due end of term - where students explore a case study of their interest, applying foundational concepts from the course.

These sections represent the following amounts as a proportion of your final grade:

<i>Short answer responses and assignments</i>	19 %
<i>Perusall annotations - student interaction</i>	19 %
<i>Practical applications</i>	14 %
<i>Student discussions/Voicethreads</i>	8 %
<i>Mid-term exam</i>	15 %
<i>End of module reflections</i>	10%
<i>End of term project</i>	15 %
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Total	100%

The undergraduate grading system for Woods College is as follows:

A (4.00), A- (3.67)
B+ (3.33), B (3.00), B- (2.67)
C+ (2.33), C (2.00), C- (1.67)
D+ (1.33), D (1.00), D- (.67)
F (.00)

All students can access final grades through Agora after the grading deadline each semester. Students who complete course evaluations can access grades earlier, as they are posted.

Due Dates and Extensions

Due dates are important. However, there's a certain amount of flexibility with them. If you need a day or two longer on an assignment, you can email me to ask for an extension on an assignment, and that's usually fine. If you ask for lots of extensions, we'll work together to find ways to help you keep up with the work in the course. Note that you may not get timely feedback if you get an extension on something.

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Late Work

All assignments are accepted late after the due date. For each day late, a 4% grade deduction penalty is applied to the final assignment grade. I can give a waiver on the late penalty for a few days (see extensions policy above) and for a small (2-3) number of assignments - see above - but not for more than a few assignments.

Course Assignments

Each week will contain 4 to 8 hours of reading and/or watching other media - particularly videos. Typically, we will try to provide both video and reading for most core course content.

It is expected that you will spend 8 hours per week on out-of-class assignments and exercises. Please note that some weeks will require more time and some weeks less time, but the average is approximately 8 hours per week over the semester.

Participation is important to this course - participation will occur primarily through the Discussion and Perusall assignments.

Typical Course Assignment Schedule:

DAY OF THE WEEK	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
ASSIGNMENT DUE				Short Answer Assignment due	Perusall Initial Posts due		Final Perusall/Discussion Summary Posts due Appy Assignment due Reflection due

Course Calendar

Important Dates to Remember

For the Fall sessions - some important dates to remember

- Add/Drop deadline: Sept. 7, 2022
- Withdraw deadline: Sept. 30, 2022
- December Dec. 21, 2022- Final grades are submitted to Woods by noon!

Course calendar - some changes may happen

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Week	Dates	Topics
1	8/29 - 9/04	<ul style="list-style-type: none"> • Introduction to planetary health, and course structure and goals. • Community Agreement
2	9/05- 9/11	<ul style="list-style-type: none"> • Great Acceleration • Demographic transition • Ecological Footprint
3	9/12 - 9/18	<ul style="list-style-type: none"> • Foundational Concepts: Complex systems - and emergent properties • Concept maps
4	9/19 - 9/25	<ul style="list-style-type: none"> • Disease • Social, economic and environmental determinants of health • Jamboards
5	9/26 - 10/02	<p>Global Environmental Change (Part 1)</p> <ul style="list-style-type: none"> • Climate Change • Biodiversity and Habitat Conversion
6	10/03 - 10/09	<p>Global Environmental Change (Part 2):</p> <ul style="list-style-type: none"> • Pollution and plastics
7	10/10 - 10/16	<p>Health - PH Interactions:</p> <ul style="list-style-type: none"> • Food & Nutrition
8	10/17 - 10/23	<p>Human health - PH interactions:</p> <ul style="list-style-type: none"> • Mental Health, • Migration and Displacement
9	10/24- 10/30	Review and mid-term

Week	Dates	Topics
10	10/31 - 11/06	<ul style="list-style-type: none"> Solutions: Our relationship with nature - belief systems and ethical dimensions <ul style="list-style-type: none"> Two-eyed seeing
11	11/07 - 11/13	<ul style="list-style-type: none"> Solutions: Solutions: Wicked problems and transdisciplinarity
12	11/14 - 11/20	<ul style="list-style-type: none"> Solutions: Equity based priorities for action
11/21-1127 --- Thanksgiving week		
13	11/28 - 12/04	<ul style="list-style-type: none"> Pathways to Action: Movement building, strategies and alternative scenarios
14	12/05 - 12/11	<ul style="list-style-type: none"> Pathways to Action: Policies, governance - Global agendas and goal setting/Interventions and making change

Participation/Attendance

Participating in class is an important component of learning. Students are expected to participate in and complete all discussions, assignments, and assessments.

Consistent with BC's commitment to creating a learning environment that is respectful of persons of differing backgrounds, we believe that every reasonable effort should be made to allow members of the university community to observe their religious holidays without jeopardizing their academic status. Students are responsible for reviewing course syllabi as soon as possible, and for communicating with the instructor promptly regarding any possible conflicts with observed religious holidays. Students are responsible for completing all class requirements for days missed due to conflicts with religious holidays.

Accommodation and Accessibility

Boston College is committed to providing accommodations to students, faculty, staff and visitors with disabilities. Specific documentation from the appropriate office is required for students seeking accommodation in Woods College courses. Advanced notice and formal registration with the appropriate office is required to facilitate this process. There are two separate offices at BC that coordinate services for students with disabilities:

- [The Connors Family Learning Center \(CFLC\)](#) coordinates services for students with LD and ADHD.
- [The Disabilities Services Office \(DSO\)](#) coordinates services for all other disabilities.

Find out more about BC's commitment to accessibility at www.bc.edu/sites/accessibility.

Scholarship and Academic Integrity

Students in Woods College courses must produce original work and cite references appropriately. Failure to cite references is plagiarism. Academic dishonesty includes, but is not necessarily limited to, plagiarism, fabrication, facilitating academic dishonesty, cheating on exams or assignments, or submitting the same material or substantially similar material to meet the requirements of more than one course without seeking permission of all instructors concerned. Scholastic misconduct may also involve, but is not necessarily limited to, acts that violate the rights of other students, such as depriving another student of course materials or interfering with another student's work. Please see the [Boston College policy on academic integrity](#) for more information.

Health Integrity Policy

Particularly during this time of the COVID-19 pandemic, we must take even greater measures to care for ourselves, for each other and for our community. Therefore, we are asking that all Woods College students care for themselves by monitoring their health and washing their hands thoroughly before class.