PORTLAND STATE UNIVERSITY – in partnership with the Gap Year Association study abroad

ESM 199: Climate Change and Its Impacts

COURSE SYLLABUS

CREDITS: 4 quarter-credits – Continuous Enrollment Course Students who plan to use this course to fulfill specific curriculum areas should discuss transfer options and obtain written approval from a counselor or study abroad advisor at their own college/ university PRIOR to enrollment in this course.

PREREQUISITES: There are NO prerequisites for this course.

METHOD OF INSTRUCTION: This course is field-based. The course instructor will be available via email.

INSTRUCTOR OF RECORD:

PSU has approved the following Instructors of Record, one of whom will be assigned to you typically two+ weeks prior to the beginning of your program:

- Britt Basel, MS <u>brittbasel@ecothropic.com</u>
- Dianna Hahn, MA <u>dianna.hahn@gmail.com</u>
- Alexander Papouchis, MS <u>alexpapouchis@gmail.com</u> Address: PO Box 17427, Portland, OR 97217
- Cam Sylvester, MA <u>camsylvester@gmail.com</u>

COURSE DESCRIPTION:

This course will provide hands-on learning opportunities for undergraduate students who undertake study away opportunities. It offers the student an opportunity to learn outside of the classroom and affords an opportunity to learn first-hand about how climate change affects local ecosystems and the people that depend on them. Through travel and service-learning, the course will equip students with an awareness about global impacts of climate change; students will be able to identify specific impacts local to their travels that result from rising CO2 emissions; and students will research how multiple issues of climate change can compound for great effect.

COURSE EXPECTATIONS:

- Environment of Respect: Disagreement and diversity of opinions are encouraged. You will be challenged to think critically about the impact of cultural differences, which may include gender, race, the roles environment has in business and market development, socioeconomic status, physical and cognitive ability, sexuality and other forms of diversity. You are encouraged to ask difficult questions and engage in discussion and critical reflection. Please be respectful of others, listen, and try to understand differences.
- **Experiential Learning:** In this course, learning is an experiential process in which you have the opportunity to engage in and reflect on a variety of different experiences throughout the term. The richness of this class will depend on the questions, insights, and active participation that you bring.
- **Personal Responsibility:** You are expected to engage fully in this class and take action if you need help. Please communicate any concerns about assignments, deadlines, or classroom activities.
- Academic Integrity: Please adhere to university policies. Please take special note of policies regarding plagiarism and course withdrawal. It is expected that each student will prepare his or her own assignments and that any assignments submitted will be the sole work of the student. Academic dishonesty, including cheating, plagiarism, or knowingly furnishing false information,

Office: 503-206-7336 Web: <u>https://gapyearassociation.org</u> Address: PO Box 17427 Portland OR 97217 will not be tolerated. The University's Code of Student Conduct may be found at <u>https://www.pdx.edu/dos/psu-student-code-conduct</u>.

STUDENT OUTCOMES:

Upon completion of this course, participants will be able to:

- Understand more fully issues of sustainability and climate change in the developing world.
- Relate the importance of climate change to the survival of global ecosystems.
- Build, take part in building, and learn about alternative carbon-conscious practices (ie, greenhouse gases, carbon offsets, alternative energy sources, ecosystem management, climate adaptation strategies, climate mitigation strategies, etc.).
- Interview first-hand, people who have been impacted by climate change related impacts, and/or environmental managers, to learn about current impacts and strategies.
- Experience and learn about the inherent tensions between local populations and their needs, balanced with issues of environmental conservation and climate change.
- Select articles and journals related to the travel/study experience and analyze them critically.

CONTACT HOURS, EXCURSIONS, AND METHODS OF INSTRUCTION:

A total of **40 contact hours** will be facilitated. These hours will come in the forms of:

- On-site instruction with local guides, group field trips, independent travel, and guest speakers.
- Books, periodicals, and videos provided by on-site organization/tour operator/field instructors.
- Volunteering with environmental conservation projects (ie, reforestation, solar, wind, and other carbon-neutral energy strategies, censusing of local fauna and flora, etc.).
- Introduction to, and volunteering on alternative energy projects and methods with a focus on understanding local impacts, as well as mitigation and adaptation strategies.
- Interviews with local inhabitants.
- Optional: Students will use the Internet to access resources and evaluate information sources according to the external criteria, such as the author's credentials, the timeliness of the information, the genre of the source, etc.

STUDENT ASSIGNMENTS:

REQUIRED HOURS – must complete 40 hours of volunteering and instruction. The Gap Year Association will provide verification of hours

A DAILY JOURNAL in English will be a descriptive study/journal of your semester. Use it to keep brief narratives of your daily experiences. It should contain notes on places visited, interviews, daily purchases, oral language activities, student observations of different and unique cultural traits, etc. Self-reflection is important and will be a significant part of your journal grade. Self-reflection will involve answering questions that force you to think critically about your experiences. When writing journals consider questions like:

- How is this experience different from my expectations?
- What challenges have I faced throughout this experience? How am I overcoming them?
- Explore differences, similarities to your home culture.
- What have been the most poignant learning experiences? How has that impacted my world-view?

A 15-MINUTE PRESENTATION must be made during your semester presenting on an environmental issue that your volunteer service is addressing. Interviewing local contacts and organizations is the best way to do research for this presentation.

REQUIRED READING – must read at least 1 book from the Reading list and demonstrate knowledge learned and/or perspectives expressed (with citations) in your FINAL REPORT.

FINAL REPORT of insights gained from this international service experience. Our expectation is that the papers you submit will reflect college-level writing. Your report will be 8-10 pages in length.

Reports must be typed (double spaced) with a cover page that includes your name, the quarter (e.g. fall 2021), the international program attended, and course number.

Submit a comprehensive report and analysis about how climate change is impacting the location in which you were immersed. You may write about one particular service learning or volunteer opportunity (sustainable agriculture, animal conservation, eco-system protection, alternative energy, resource conservation and material recycling, etc.) and how rising CO2 emissions compound to create challenges for the organization. Or you may write broadly about the local context and the challenges facing the community due to direct results of climate change. As you write your report, you should consider a variety of factors including economy, land use, agriculture, land development, conservation efforts and other factors that speak to the urgency of climate change and their impacts on communities at large.

Final Report will be graded as follows:

- Description of organization and mission—10%
- Research and analysis of climate change impacts—30%
- Analysis of how rising CO2 emissions directly impacts this location/organization -20%
- Clarity and Organization of Ideas—20%
- Grammar and Punctuation—10%
- Ability to Demonstrate Knowledge from the Required Readings—10%

DUE DATES, SUBMITTING JOURNAL AND FINAL REPORT: Calendar/Schedule:

All course requirements must be submitted by: Fall Semester: January 20th Spring Semester: June 20th

Submitting Journals & Final Reports:

Please email your final report to the instructor, and post any necessary journals or supportive documents to:

Gap Year Association PSU Grading Instructor PO Box 17427 Portland, OR 97217

*** Purchase tracking for anything you post as some materials have gotten lost in the past.

COURSE EVALUATION CRITERIA:

Daily Journal (30% of total criteria): Evaluation criteria include, but are not limited to, clearly presented ideas and observations, creative thought and appropriateness.

Final Paper (70% of total criteria): Evaluation criteria include, but are not limited to, complexity of grammar and verb use, format, content appropriateness, organization, analysis, originality and summarization skills.

Presentation: Successful completion of the presentation is required for this course.

Required Hours: Gap Year Association will provide verification of these hours.

Grading: This course is graded with letter grades; A - F. See more details about PSU's grading system <u>here</u>.

READING LIST

Students must read and cite at minimum ONE book from this reading list. The following books have been approved for this course and are listed by program region. Any other books not a part of this list must first be approved by the Instructors of Record.

All Regions:

Cradle to Cradle. Authors: William McDonough and Michael Braungart A manifesto for a radically different philosophy and practice of manufacture and environmentalism.

Manifestos on the Future of Food and Seed. Authors: Vadana Shiva A short collection of essays about what we eat and how we grow it.

Water Wars: Privatization, Pollution, and Profit. Authors: Vandana Shiva The story of activists who are fighting corporate maneuvers to control access to water.

The Sixth Extinction: an Unnatural Extinction. Authors: Elizabeth Kolbert *A book about the future of the world, and the mass extinction unfolding before our eyes.*

The Lexus and the Olive Tree. Author: Thomas L. Friedman

An exploration of how technology, capital, and information are transforming the global marketplace and erasing old geographic and geopolitical boundaries.

The World Without Us. Authors: Alan Weisman

If human beings disappeared instantaneously from the Earth, what would happen? Alan Weisman draws on every field of science to present an environmental assessment of a world without humans.

(Fiction) Ecotopia. Authors: Ernest Callenbach

William Weston, a young journalist, visits Ecotopia, an energy-efficient mini city with no urban sprawl, pollution, and a female dominated government and is determined to report his findings objectively.

Merchants of Doubt. Authors: Naomi Oreskes, Erik Conway

It tells the controversial story of how a loose-knit group of high-level scientists and scientific advisers, with deep connections in politics and industry, ran effective campaigns to mislead the public and deny well-established scientific knowledge over four decades.

The New Geography of Jobs. Author: Enrico Morretti

Brain Hubs, Manufacturing Hubs, and the Rest of America: for the past thirty years, the three Americas have been growing apart at an accelerating rate. This divergence is one the most important developments in the history of the United States and is reshaping the very fabric of our society, affecting all aspects of our lives, from health and education to family stability and political engagement

Principles of Environmental Justice. Publisher: National Resource Defense Council: Delegates to the First National People of Color Environmental Leadership Summit A one-page Bill of Rights for Environmental Justice

Climate Justice & Energy Democracy: A Platform Vision. Publisher: Center for Earth, Energy and Democracy (CEED), Dr. Cecilia Martinez, Shalini Gupta

This Energy Democracy Platform Vision was commissioned by the Climate Justice Alliance (CJA) as a guide and unifying platform of principles for the social movement transition from an extractive energy

economy to a sustainable regenerative economy – one that is rooted in social, economic and environmental justice.

Drawdown. Author: Paul Hawken

Drawdown maps, measures, models, and describes the 100 most substantive solutions to global warming. For each solution, we describe its history, the carbon impact it provides, the relative cost and savings, the path to adoption, and how it works.

The Omnivore's Dilemma: Michael Pollan

Through an analysis that interlaces history, science, and sociology, Pollan explores how America has shifted priorities around the economics of a single crop and the implications this has on production and consumption of many products.

This Changes Everything: Capitalism vs.the Climate: Naomi Klein

Klein argues that our addiction to carbon is fueling our inability to radically tackle the biggest problem of our time. Climate change is a wake-up call delivered through severe weather events. Klein further explores how it is interwoven through poverty and development.

China:

Central America:

Fire In The Turtle House: The Green Sea Turtle and the Fate of the Ocean: Osha Gray Davidson Sea turtles have existed since the time of the dinosaurs. But now, suddenly, the turtles are dying, due to mysterious plague.

Savage Shore: Life and Death with Nicaragua's Last Shark Hunters: Edward Marriott The true story of Edward Marriott's journeys with the last surviving shark fishermen-a fierce ethnic brew of black Caribs, Nicaraguan Indians, and the descants of seventeenth-century English pirates.

Jaguar: One Man's Struggle To Establish The World's First Jaguar Preserve: Alan Rabinowitz In 1983, zoologist Alan Rabinowitz ventured into the rainforest of Belize, determined to study the littleknown jaguar in its natural habitat and to establish the world's first jaguar preserve.

South America:

One River: Wade Davis The story of two generations of scientific explorers in South America

Mother of God: An Extraordinary Journey into the Uncharted Tributaries of the Western Amazon: Paul Rosolie

Explorer Paul Rosolie's adventure in the uncharted tributaries of the Western Amazon.

Walking the Amazon: Ed Stafford

The story of Ed Stafford who set off to become the first man ever to walk the entire length of the Amazon.

India:

Jungle Lore: Jim Corbett Corbett's autobiography of his life and career as a conservationist in India.

Ecology and Equity: The Use and Abuse of Nature in Contemporary India: Madhav Gadgil and Ramachandra Guha

An exploration of the most ecologically complex country in the world. India's peoples range from technocrats to hunter-gathers and its environments from dense forest to wasteland.