



Student Program

Climate Action & Sustainability

LENGTH OF COURSE: 14 WEEKS

Course Overview

The course explores the critical issues of climate change and its profound impacts through the lenses of equity and sustainability. In an ever-changing world, we'll delve into the interconnected challenges of climate justice, agriculture, wildfires, renewable energy sources, sea level rise, and the consequences of invasive species. Students will engage in comprehensive studies to interrogate the causes and effects of climate change, investigate public policy debates, and, most importantly, examine how these issues affect the diverse populations of our planet through hands-on activities. The course culminates with GOA's Global Capstone Summit, as students share projects to spark change in local communities through well-informed activism.

Pre-requisites

There are no prerequisites required for this course.

Competency-Based Learning

GOA courses use a competency-based learning approach in which students build both GOA core competencies and course-specific ones. Throughout the semester, we assess outcomes tied to each competency to track student progress with the goal of students leaving the course able to use and apply these competencies well beyond the final day of the semester.

Course Competencies & Outcomes

GOA students learn in practical, hands-on ways, which include the following core competencies:

Collaborate with people who don't share your location.

- *Communication:* You articulate and support your ideas with relevant information, research, and/or experiences.

- *Interaction*: You actively listen to group members, ask questions in response to their ideas, and respond respectfully.
- *Networking*: You identify and connect with allies that support sustainability efforts in diverse communities.

Curate and create content relevant to real-world issues.

- *Appraisal*: You demonstrate fluency in the science, economics, and politics of sustainability initiatives and climate change.
- *Compare and Contrast*: You identify and analyze the differential impacts of climate change on diverse populations.
- *Evaluation*: You identify and assess past and current efforts to mitigate and adapt to climate change and the resultant outcomes.
- *Addressing a Global Issue*: You conceive and/or implement response(s) to climate change issues.

Reflect on and take responsibility for your learning and that of others.

- *Construct a Community of Inquiry*: You contribute thought-provoking questions and ideas that encourage deeper thinking about climate change and sustainability.
- *Perspective Taking*: You distinguish among opposing views, models, and theories on the causes and impacts of climate change.
- *Critique*: You assess sources of information for purpose, credibility, and bias.

Course Outline

Week 1	GOA Orientation
Weeks 2-3	Module 1: The Fundamentals of Sustainability
COMPETENCIES: <ul style="list-style-type: none"> • Reflect on and take responsibility for your learning and that of others. • Curate and create content relevant to real-world issues. 	
DESCRIPTION: In this engaging module, we embark on a journey to understand the fundamental concepts of sustainability and climate action. We'll start by understanding the concept of sustainability and its three pillars. Ever wondered about your environmental impact? Get ready to explore it using the EcoFootprint and Fashion Calculator. Then, we'll roll up our sleeves and learn what climate action is all about. From sustainable farming to renewable energy and waste reduction, we'll uncover the secrets of making our world greener. Plus, we'll explore the power of sustainable communities.	
EXAMPLE ASSESSMENT:	

In the "Calculate Ecological and Fashion Footprints" assessment during Week 2, students embark on a revealing journey to quantify their personal impact on the environment through their lifestyle choices. By utilizing the Footprint Calculator and Ethical Clothing Calculator, students assess their ecological footprint and the environmental cost of their fashion habits, culminating in a detailed report of their consumption and waste generation patterns. Through this process, learners not only gain a deeper understanding of their individual roles in global sustainability but also reflect on actionable changes they can implement in their daily lives. This assessment encourages critical thinking about personal responsibility for climate change and sustainability, fostering a mindset geared towards actionable improvement and conscious living.

Weeks 4-5	Module 2: Unraveling Global Warming
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COMPETENCIES:

- Curate and create content relevant to real-world issues.
- Collaborate with people who don't share your location.
- Reflect on and take responsibility for your learning and that of others.

DESCRIPTION:

Looking ahead, we will continue to build on these foundations, focusing on more specific aspects of climate change and sustainability. Students will be engaged in learning activities that combine theory with real-world application, further developing their skills in curating relevant content and addressing global environmental issues. We'll explore advanced topics in sustainability and climate change, enabling students to deepen their understanding and apply their knowledge to real-world scenarios. This will include critically assessing different strategies for environmental advocacy and understanding the complex interplay of scientific, economic, and political factors in sustainability initiatives.

EXAMPLE ASSESSMENT:

In the "Navigating the Challenges and Solutions of Global Warming" discussion, students critically engage with the impacts of global warming, including wildfires and food supply disruptions, through a structured Connect-Extend-Challenge framework. They begin by distilling their initial reactions into five keywords and then delve deeper by connecting personal experiences to broader concepts, extending their understanding with new insights, and challenging themselves with unresolved questions. This dynamic exchange fosters a comprehensive understanding of global warming's complexities, encouraging students to explore innovative global responses and reflect on the importance of both adaptation and mitigation in addressing climate change.

Weeks 6-7	Module 3: Climate Action Heroes
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COMPETENCIES:

- Reflect on and take responsibility for your learning and that of others.
- Collaborate with people who don't share your location.

- Curate and create content relevant to real-world issues.

DESCRIPTION:

In Module 3, we dive into youth activism's role in climate change, the transformation of climate protests, and effective communication strategies for climate action. You'll learn about the impact of young activists, understand the evolution of climate protests, and discover how to communicate complex climate issues effectively. The module aligns with essential competencies like perspective-taking, respectful interaction, and critical evaluation of climate action efforts. These topics challenge you to think deeply about activism, policy, and communication in the fight against climate change, preparing you to actively engage in these global discussions.

EXAMPLE ASSESSMENT:

In the "Research Allies in the Sustainability and Climate Action Movement" assignment, students embark on a global exploration to identify three climate activists from different regions, analyzing their contributions and methodologies within the climate action movement. This assignment encourages students to delve into the diverse strategies employed in climate activism, ranging from policy advocacy to grassroots organizing. By preparing a narrated video presentation, students critically reflect on the effectiveness of these strategies and their potential application in personal climate action efforts. This process enhances students' understanding of global climate action and inspires them to consider their role within the movement, highlighting the importance of networking and collaboration in driving sustainable change.

Weeks 8 - 10

Module 4: Climate Change Impacts (Week 9 is break)

COMPETENCIES:

- Reflect on and take responsibility for your learning and that of others.
- Curate and create content relevant to real-world issues.

DESCRIPTION:

Module 4 immerses us in the intricate dynamics of climate vulnerability, sea level rise, and migration. We'll start by examining the susceptibility of different regions and communities to climate change's adverse effects, uncovering the factors that drive this vulnerability. This sets the foundation for a deeper dive into the phenomenon of sea level rise, exploring its scientific underpinnings and real-world impacts, particularly on coastal ecosystems and communities. The module culminates with a focus on migration, highlighting the growing issue of displacement induced by climate change. Through these topics, we'll strengthen our understanding of the complex interplay between environmental changes and human adaptation, while aligning with our course competencies in critical appraisal, perspective-taking, and effective communication. The week promises a blend of insightful readings, engaging discussions, and a hands-on case study project, all aimed at deepening our grasp of these pressing global challenges.

EXAMPLE ASSESSMENT:

In the "Zoom Call" engagement, students convene to share and discuss the innovative climate change mitigation strategies employed by women-led companies. This interactive session allows participants to present their research findings, shedding light on the pioneering efforts of female entrepreneurs in the climate action sphere. By preparing and delivering presentations on the founders and their companies, students not only disseminate crucial information but also foster a dialogue that enriches understanding and appreciation of these contributions to sustainability. The call emphasizes active participation, critical reflection, and the exchange of insights, aiming to deepen the collective knowledge on diverse approaches to combating climate change. Through this collaborative learning experience, students are encouraged to critically assess and reflect upon the impactful roles that individuals and businesses play in driving forward global climate action initiatives.

Weeks 11 -12**Module 5: Innovating for a Sustainable Future****COMPETENCIES:**

- Reflect on and take responsibility for your learning and that of others.
- Curate and create content relevant to real-world issues.
- Collaborate with people who don't share your location.

DESCRIPTION:

In Module 5, you'll explore the crucial relationship between climate education, groundbreaking climate solutions, and the emergence of green technologies. The module begins by highlighting the significance of climate education and public awareness in addressing climate change comprehensively. It then examines various innovative climate solutions, including wave energy, floating wind farms, and artificial glaciers, illustrating their potential in combating global warming. Lastly, the module shifts focus to green technologies, showcasing developments in solar energy, electric vehicles, and carbon capture, underscoring their vital contribution to a sustainable future.

EXAMPLE ASSESSMENT:

In the "Personal Application Project: Implementing a Drawdown Solution," students actively engage with the practical side of climate change solutions by integrating a chosen Project Drawdown solution into their daily lives. Over a week, students devise and execute a plan that incorporates sustainable practices, whether through modifying personal habits or participating in community initiatives. Through daily journaling, they document the journey, capturing both the challenges and the positive impacts of their efforts. This exercise culminates in a multimedia presentation where students reflect on their experiences, sharing insights on the adaptability, effectiveness, and broader implications of their chosen solution. This project not only fosters personal accountability and awareness regarding climate action but also encourages students to consider the long-term viability and scalability of sustainability efforts. By submitting their presentations, students contribute to a shared learning environment, showcasing their

commitment to and reflections on mitigating climate change through practical actions.

Weeks 13-14	Module 6: Making an Impact
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COMPETENCIES:

- Reflect on and take responsibility for your learning and that of others.
- Collaborate with people who don't share your location.
- Curate and create content relevant to real-world issues.

DESCRIPTION:

Module 6 offers an immersive exploration into Sustainable Consumption and Production, Food Sustainability, and Sustainable Travel and Recreation, urging students to reevaluate the sustainability of their daily actions. Through readings, engaging discussions, and assignments such as designing a digital brochure for a sustainable travel experience, this module seeks to highlight the critical role of individual and collective efforts in mitigating environmental impact. It emphasizes the importance of transitioning towards sustainable practices in personal and community life, aligning with competencies in responsible citizenship and environmental stewardship. Students are challenged to think creatively about minimizing waste and promoting sustainability, underlining the module's goal of fostering informed, responsible choices that contribute to a sustainable future. The journey through this module is both enlightening and demanding, as it pushes students to confront and overcome the complexities of implementing sustainable solutions in everyday life.

EXAMPLE ASSESSMENT:

In the "Digital Brochure" assignment, students create a digital brochure that showcases an eco-friendly travel opportunity in their hometown. They select a local site, event, or activity, gather information on its significance and sustainability practices, and use digital design tools to craft a brochure that educates potential travelers on engaging responsibly with the location. This project encourages students to share their work with peers, promoting sustainable tourism and the importance of local engagement in global sustainability efforts, thus contributing to a dialogue on mitigating climate change through thoughtful travel choices.

Weeks 15-16	Module 7: Final Reflection and Action
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COMPETENCIES:

- Reflect on and take responsibility for your learning and that of others.
- Collaborate with people who don't share your location.
- Curate and create content relevant to real-world issues.

DESCRIPTION:

In Module 7, we explore the essence of sustainable living and the critical importance of carrying our climate action efforts into the wider world. This module is designed to synthesize the knowledge we've accumulated, highlighting personal

sustainability practices that can significantly impact our planet. Through readings, discussions, and the Global Capstone presentations, you'll be encouraged to consider how each choice we make contributes to a sustainable future. Moreover, this module emphasizes the role of individual initiative and community engagement in driving change, inspiring you to identify how you can utilize your passions and insights for real-world impact. As we reflect on our journey and look forward to our next steps, Module 7 serves as both a conclusion and a launching pad for continued action in sustainability and climate advocacy.

EXAMPLE ASSESSMENT:

In the "Wrapping Up: Next Steps Flipgrid" assignment, students conclude their course journey by creating a personal video reflection shared on Flipgrid. This reflective piece allows students to articulate key learnings, and changes in their views on sustainability and climate action, and outline their future commitments to these crucial issues. They also have the opportunity to express gratitude and say goodbye to classmates and the instructor. Through this exercise, students not only summarize their course experience but also set forth their intentions to apply their newfound knowledge and insights in real-world contexts, thereby continuing their path toward meaningful climate action and sustainability efforts.