

1. Course title

Human Behavior and Ecology (BEH603)

2. Professor

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3. Course Description

This course explores the behavioral science of sustainability and environmentalism, with a focus on the interdisciplinary approaches of ecological anthropology, environmental psychology, human geography, and cross-cultural/cross-national variability. Students will examine the complex relationship between human behavior, culture, and the environment, and current arguments and theories about the environment and the concept of nature. From this background students will explore the policy implications related to behavior and ecology informed by contemporary behavioral science research.

4. Course Objectives and Learning Outcomes

The objectives of this course are to introduce the student to the behavioral science of environmentalism and link empirical findings to contemporary governance and policy-making issues. The student will gain knowledge of the methods, theories, and findings from across the behavioral sciences related to environmental issues, ecology, and sustainability. The student will also have to critically assess these scientific developments and develop an understanding of their potential implications for governance and policymaking.

5. Pedagogical Arrangement of the Course

The course starts with two lectures, where the themes, central issues, and structure of the course are discussed. Following these, each meeting will be organized in the form of student-led group discussions, where individual students or small groups of students will be prepared to provide an overview of the assigned readings, including a summary of the material, connections to other material previously introduced in the course, and critical reflections on assumptions, interpretations, and implications of the content, while also leading the group discussion with the assistance of the professor. Other students (not presenting) will be required to prepare and submit two discussion questions per week on Canvas ahead of class and be prepared to discuss their questions, the readings, and the presentation. The goal of these discussions are to develop an understanding of the subject of the readings and the implications of the content/theory presented, together with group critical assessment of the text and its content. Students will also give an oral presentation on a case-study related to behavior

and ecology, sustainability, or environmentalism and linkages to governance or public policy (Assessment 4).

6. Main Reference

Steg, L., & de Groot, J. I. M. (Eds.). (2019). Environmental psychology: An introduction (Second edition). Hoboken, NJ: John Wiley & Sons, Inc. (Referred to as EP text, in syllabus)

7. Complementary References:

Assigned readings delivered as PDF.

8. Assessment and Grading:

Evaluation	% of Total Course Grade
Participation and Attendance	30%
Presentations & Oral Work	20%
Projects & Other Assignments	0%
Mid-Term Assessment	20%
Final Exam	30%

Assessments	Details
Mid-Term Assessment	<p>Takes place on Week 7</p> <p>The Mid-Term assessment will consist of an in-class exam on content of all course before Week 7.</p> <p>It will take the form of open questions about the content discussed in class with the students. Students will be given a list of questions or prompts, from which they will be required to select a subset for their responses, using pen and paper.</p> <p>Each student will provide their own responses to their selected questions, which will be evaluated in terms of (1) quality of presentation, (2) reference to relevant notions and content, (3) demonstration of understanding, and (4) originality of analysis. These evaluation criteria will be discussed in more details in class.</p> <p>A review sheet will be distributed prior to the Mid-Term to assist the students in preparation.</p> <p>No paper or electronic documentation, notes, etc., is allowed.</p>
Final Exam	<p>3 Hours during the Finals period</p> <p>The Final Exam will cover all course content, including case-study discussions. It will consist of multiple choice questions as well as short-answer open response questions.</p> <p>Each student will provide their own responses to all multiple choice and short-answer questions. The short answer questions which will be evaluated in terms of (1) accuracy, (2) reference to relevant notions and content, and (3) demonstration</p>

	<p>of understanding. These evaluation criteria will be discussed in more details in class. A review sheet will be distributed prior to the Final Exam to assist the students in preparation.</p> <p>No paper or electronic documentation, notes, etc., is allowed.</p>
Assessment 3	<p>The students will be required to submit to the professor two discussion questions per assigned reading, each week. Questions should be constructive and appropriate for the level of the course (i.e., they should not always be purely definitional, but rather aimed at larger concepts). (15% of final grade)</p> <p>Students will also be randomly assigned at least one week where they will lead discussion in a small group of their peers. Students in such groups will take turns summarizing readings and facilitating discussion as they see fit. As a group, they will prepare a Handout, summarizing the readings and their interpretations, which will be delivered to the class before the course meeting. The Handouts should be no more than two pages and can be in the form of a bulleted list, tables, infographics, or any other form the students wish in order to easily and succulently summarize the content from the week's reading. The students should not prepare a slideshow for their week of leading discussion. (15% of final grade)</p>
Assessment 4	<p>Each student will present on a case-study of their choosing related to environmentalism, sustainability, or human behavior and ecology. The details of the case-study presentation will be further discussed in class.</p> <p>Objectives This exercise has the objective of motivating students to apply knowledge from course readings and discussions to another, real-world context.</p> <p>Format The case-study presentation will summarize the relevant background and make links to concepts presented encountered in readings and course materials. The presentation will explain how scientific theories and/or methods may be useful in better understanding the situation/case-study, and how relevant policies may be devised in order to produce pro-environmental outcomes.</p> <p>Mode Students will prepare a slideshow and 12-15 minute oral presentation of their case-study project.</p> <p>Scheduling Presentations and discussion will be conducted during the third TD session. Precise instructions on the format of the presentation and its evaluation will be given in class during the first or second week.</p>
Assessment 5	N/A
Further Assessments	N/A

9. Detailed Course Plan

Sessions	Contenu détaillé et évaluations
Session I (3 Hours)	Session Title Introduction to Human Behavior and Ecology

Session Details

Description

In this meeting, we will discuss interdisciplinary approaches to human behavior and ecology. After this introductory lecture students will have a broad understanding of the course's scope and objectives. They will grasp the interdisciplinary nature of studying human behavior and ecology, and recognize the major environmental challenges that require behavioral science insights for sustainable solutions.

Objectives

- Presentation of syllabus, course structure and assignments during semester
- Introduction of environmental psychology as the discipline that studies the interplay between individuals and the built and natural environment.
- History of the field
- 3 approaches in environmental psychology:
 - Interactive approach (i.e., interaction between humans and the built and natural environment)
 - Interdisciplinary collaboration (the environmental and human sciences)
 - Problem-focused approach (applied environmental psychology)
- Methods for environmental psychology
- Encouraging pro-environmental behavior and implications for governance and policy-making

Key Learning Outcomes

- The students will have a broad understanding of the course's scope and objectives.
- The students will gain an understanding of environmental psychology, as a field.
- They will grasp the interdisciplinary nature of studying human behavior and ecology, and recognize the major environmental challenges that require behavioral science insights for sustainable solutions.

Session Material

This is an induction meeting: no preparation is required.

Further reading (mandatory):

- EP text, chapter I.

Session 2
(2 Hours)

Session Title

Ecological Anthropology and Evolutionary Theory

Session Details

Description

This week aims to introduce students to the field of ecological anthropology and evolutionary theory, related to environmentalism. By the end of the week, students will understand the relevance of these approaches in studying human-environment interactions and will recognize the applied nature of evolutionary anthropology in addressing population change and development interventions.

Objectives

- Introduction to ecological anthropology and evolutionary theory.

	<ul style="list-style-type: none"> • Discussion of the applied aspects of evolutionary anthropology. • Case studies and discussions on the role of culture and evolution in human-environment interactions. <p>Key Learning Outcomes</p> <ul style="list-style-type: none"> • The students will gain familiarity with ecological anthropology and evolutionary theory. • Students will develop an awareness of the applied nature of evolutionary anthropology and implications for policy interventions. • The student will gain understanding of the complex relationship between culture, behavior, and the environment. <p>Session Material</p> <p>Mandatory reading:</p> <ul style="list-style-type: none"> • Moran, E. F. (2022). Human Adaptability: An Introduction to Ecological Anthropology. Routledge. Chapter 1: People in Ecosystems, Chapter 2: Theories of Human-Habitat Interactions. (pp. 1-56) PDF. <p>Supplementary readings:</p> <ul style="list-style-type: none"> • Gibson, M. A. (2014). How Development Intervention Drives Population Change in Rural Africa: A Case Study of Applied Evolutionary Anthropology. In M. A. Gibson & D. W. Lawson (Eds.), Applied Evolutionary Anthropology: Darwinian Approaches to Contemporary World Issues (pp. 59–81). New York, NY: Springer. PDF
<p>Session 3 (2 Hours)</p>	<p>Session Title Theoretical Foundations of Environmental Psychology</p> <p>Session Details</p> <p>Description The main objectives of our first discussion session are to provide students with a solid understanding of the theoretical foundations of environmental psychology, explore key theories and concepts in the field, and examine the psychological mechanisms influencing human behavior towards the environment. By the end of the session, students should be able to recognize the relevance of psychological theories in explaining and predicting environmental behavior, and understand the cognitive, affective, and motivational factors that shape individual and collective responses to environmental challenges. Additionally, students will develop critical thinking skills in evaluating the strengths and limitations of different theories and concepts within environmental psychology, and will be equipped with a foundational knowledge base to apply psychological principles in analyzing and addressing real-world sustainability issues.</p> <p>Objectives</p> <ul style="list-style-type: none"> • Overview of key theories and concepts in environmental psychology, such as the theory of planned behavior, value-belief-norm theory, and cognitive dissonance theory. • Exploration of the cognitive, affective, and motivational processes influencing human behavior towards the environment. • Discussion of research methods and approaches used in environmental psychology, such as surveys, experiments, and field studies.

	<ul style="list-style-type: none"> • Analysis of case studies and examples illustrating the application of theoretical frameworks in understanding and addressing environmental issues. <p>Key Learning Outcomes</p> <ul style="list-style-type: none"> • The students will gain knowledge of the theoretical foundations of environmental psychology, including key theories and concepts, • they will better understand of how cognitive, affective, and motivational processes influence human behavior towards the environment. • Students will be able to analyze and evaluate different theoretical frameworks within environmental psychology. • Think creatively about application of theoretical knowledge to real-world sustainability issues and challenges. • Development of critical thinking skills in assessing the strengths and limitations of different theories and concepts. • Capacity to integrate psychological principles into the analysis and design of interventions aimed at promoting sustainable behavior. <p>Session Material</p> <p>Mandatory reading:</p> <ul style="list-style-type: none"> • EP text, chapter 22 (pp. 217-227) • Stern, P. C. (2000). New Environmental Theories: Toward a Coherent Theory of Environmentally Significant Behavior. <i>Journal of Social Issues</i>, 56(3), 407-424. • Vining, J. and Ebreo, A. (2002). Emerging theoretical and methodological perspectives on conservation behaviour. In: <i>Handbook of Environmental Psychology</i> (ed. R.B. Bechtel and A. Churchman), 551–558. New York, NY: Wiley. PDF.
<p>Session 4 (3 Hours)</p>	<p>Session Title</p> <p>Cultural Perspectives on Sustainable Behavior</p> <p>Session Details</p> <p>Description</p> <p>In this session, the main objective is to explore the cultural dimensions of sustainable behavior and examine the influence of cultural values, norms, and practices on attitudes towards the environment. By the end of the week, students should be able to recognize the role of culture in shaping sustainable behavior, understand cultural variations in environmental values and practices, and critically analyze the impact of cultural norms and values on sustainability. Additionally, students will develop cross-cultural competency in addressing environmental challenges, and gain insights into designing culturally sensitive strategies for promoting sustainable behavior. Overall, this week aims to foster an appreciation for cultural diversity and inclusivity in promoting sustainable societies and developing effective policies and interventions.</p> <p>Objectives</p> <ul style="list-style-type: none"> • Introduction to the role of culture in shaping sustainable behavior. • Exploration of cultural variations in environmental values, norms, and practices.

- Analysis of case studies and examples highlighting the influence of cultural factors on sustainable behavior.
- Discussion of the interplay between cultural norms and values, social norms, and sustainable behavior.
- Examination of the implications of cultural diversity for policy and practice in sustainability.
- Identification of culturally sensitive strategies for promoting sustainable behavior.
- Engagement in cross-cultural discussions and activities to foster an appreciation for cultural diversity.
- Integration of cultural perspectives into the design and implementation of interventions for sustainable behavior change.
- Critical analysis of the interaction between culture, behavior, and the environment.

Key Outcomes

- Recognition of the role of culture in shaping sustainable behavior and attitudes towards the environment.
- Understanding of cultural variations in environmental values, norms, and practices.
- Ability to analyze and evaluate the influence of cultural norms and values on sustainable behavior.
- Appreciation of the diversity of cultural perspectives on sustainability and their implications for policy and practice.
- Knowledge of case studies and examples highlighting the cultural dimensions of sustainable behavior.
- Capacity to identify and apply culturally sensitive strategies for promoting sustainable behavior.
- Development of cross-cultural competency in addressing environmental challenges.
- Integration of cultural perspectives into the design and implementation of interventions for sustainable behavior change.
- Critical thinking skills in assessing the interaction between culture, behavior, and the environment.
- Awareness of the importance of cultural diversity and inclusivity in fostering sustainable societies.

Session Material

Mandatory readings:

- EP text, chapters 15 (pp. 144-154) and 23 (pp. 228-237).
- Milfont, T. L., & Schultz, P. W. (2016). Culture and the natural environment. *Current Opinion in Psychology*, 8, 194–199.
- Hames, R. (2007). The Ecologically Noble Savage Debate. *Annual Review of Anthropology*, 36, 177–190.

<p>Session 5 (2 Hours)</p>	<p>Session Title Perception and Cognition in Environmental Decision Making</p> <p>Session Details Description In this session, the main objectives are to explore the role of perception and cognition in environmental decision making, examine cognitive biases and heuristics that influence environmental judgments, and understand the influence of environmental information on decision-making processes. By the end of the week, students should be able to recognize how cognitive processes shape individuals' interpretations of environmental information, identify common biases and heuristics that impact environmental decision making, and critically analyze the effects of environmental information on choices and behaviors. Additionally, students will develop an awareness of the importance of promoting accurate perception and cognitive processing in fostering sustainable decision making, and gain insights into strategies for mitigating cognitive biases and enhancing informed environmental decision making.</p> <p>Objectives</p> <ul style="list-style-type: none"> • Introduction to the role of perception and cognition in environmental decision making. • Exploration of cognitive processes involved in interpreting environmental information. • Discussion of cognitive biases and heuristics that influence environmental judgments and decision making. • Analysis of case studies and examples illustrating the impact of cognitive biases on environmental behaviors. • Examination of the role of environmental information in shaping choices and behaviors. • Discussion on the importance of mitigating cognitive biases and enhancing informed decision making for sustainability. • Engaging in critical thinking exercises to evaluate the influence of cognitive processes on personal environmental choices and behaviors. • Identification of practical applications and interventions to promote sustainable decision making through effective information presentation and framing. <p>Key Outcomes</p> <ul style="list-style-type: none"> • Understanding of the role of perception and cognition in environmental decision making. • Recognition of cognitive processes involved in interpreting environmental information. • Awareness of common cognitive biases and heuristics that influence environmental judgments and decision making. • Ability to critically analyze the impact of cognitive biases on environmental behaviors. • Knowledge of the influence of environmental information on choices and behaviors. • Appreciation of the importance of promoting accurate perception and cognitive processing in fostering sustainable decision making. • Familiarity with strategies for mitigating cognitive biases and enhancing informed decision making for sustainability.
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	<ul style="list-style-type: none"> • Application of critical thinking skills to evaluate the influence of cognitive processes on personal environmental choices and behaviors. • Identification of practical applications and interventions to promote sustainable decision making through effective information presentation and framing. • Development of a mindset conducive to making informed and sustainable decisions in various environmental contexts. <p>Session Material</p> <p>Mandatory readings:</p> <ul style="list-style-type: none"> • EP text, chapters 2 (pp. 15-25). • Korteling, Johan. E. (Hans), Paradies, G. L., & Sassen-van Meer, J. P. (2023). Cognitive bias and how to improve sustainable decision making. <i>Frontiers in Psychology</i>, 14. PDF. • Wong-Parodi, G., Mach, K. J., Jagannathan, K., & Sjostrom, K. D. (2020). Insights for developing effective decision support tools for environmental sustainability. <i>Current Opinion in Environmental Sustainability</i>, 42, 52–59. PDF.
<p>Session 6 (2 Hours)</p>	<p>Session Title</p> <p>Factors influencing environmental Behavior</p> <p>Session Details</p> <p>Description</p> <p>In this session, we will explore the motivational factors that influence pro-environmental behavior, examine theories and frameworks explaining environmental motivation, and analyze strategies for fostering motivation towards sustainable behaviors. By the end of the class, students should be able to identify the key motivational factors driving pro-environmental behavior, understand the theoretical underpinnings of environmental motivation, and critically evaluate the effectiveness of different strategies for fostering motivation towards sustainable behaviors. Additionally, students will develop a toolkit of evidence-based approaches for promoting motivation and engagement in sustainability, and gain insights into the role of intrinsic and extrinsic motivation in sustainable behavior change.</p> <p>Objectives</p> <ul style="list-style-type: none"> • Introduction to the motivational factors influencing pro-environmental behavior. • Discussion of intrinsic and extrinsic motivation in the context of sustainable behavior change. • Analysis of case studies and examples highlighting effective strategies for fostering motivation towards sustainable behaviors. • Examination of behavior change techniques and interventions aimed at promoting motivation for sustainability. • Discussion on the ethical considerations in designing motivational interventions for sustainable behavior change.

	<ul style="list-style-type: none"> • Engagement in activities and discussions to identify personal and collective sources of motivation for sustainable actions. • Application of critical thinking skills to evaluate the effectiveness and appropriateness of different motivational strategies. • Identification of practical approaches for fostering motivation and engagement in sustainability at individual and community levels. • Integration of motivational principles in the design and implementation of sustainability initiatives and campaigns. <p>Key Learning Outcomes</p> <ul style="list-style-type: none"> • Recognition of the motivational factors influencing pro-environmental behavior. • Ability to critically evaluate the effectiveness of different strategies for fostering motivation towards sustainable behaviors. • Knowledge of the role of intrinsic and extrinsic motivation in sustainable behavior change. • Familiarity with behavior change techniques and interventions aimed at promoting motivation for sustainability. • Awareness of the ethical considerations in designing motivational interventions for sustainable behavior change. • Application of critical thinking skills to assess personal and collective sources of motivation for sustainable actions. • Identification of practical approaches for fostering motivation and engagement in sustainability at individual and community levels. • Integration of motivational principles in the design and implementation of sustainability initiatives and campaigns. <p>Session Material</p> <p>Mandatory reading:</p> <ul style="list-style-type: none"> • EP text chapters 16-19 (pp. 155-197)
<p>Session 7 (3 Hours)</p>	<p>Session Title</p> <p>Cultural ecology, human geography, and urban living</p> <p>Session Details</p> <p>Description</p> <p>In this session, the main objectives are to explore the dynamic relationship between culture, human geography, and urban environments. Students will examine the principles of cultural ecology and its influence on human-environment interactions, with a focus on urban settings. By the end of the course, students should be able to understand the concepts of cultural adaptation and place-making within urban environments, recognize the social and ecological implications of urban living, and critically analyze the impacts of urbanization on cultural practices and landscapes. Additionally, students will develop an awareness of the challenges and opportunities presented by cultural diversity in urban settings, and gain insights into designing sustainable and culturally sensitive urban development initiatives.</p> <p>Objectives</p> <ul style="list-style-type: none"> • Introduction to cultural ecology and its relevance to human geography and urban environments.

	<ul style="list-style-type: none"> • Exploration of cultural adaptation and place-making within urban settings. • Social and ecological implications of urban living, including sustainability and resource management. • Analysis of case studies illustrating the interactions between culture, human geography, and urban landscapes. • Impacts of urbanization on cultural practices, traditions, and identity. • Role of cultural diversity in shaping urban life and development. • Challenges and opportunities presented by cultural diversity in urban environments. <p>Key Learning Outcomes</p> <ul style="list-style-type: none"> • Understanding of cultural ecological principles and their application to urban environments. • Recognition of cultural adaptation and place-making's significance in shaping urban spaces. • Awareness of social and ecological implications of urban living and urbanization. • Knowledge of the impacts of urbanization on cultural practices and landscapes. • Appreciation of cultural diversity's role in shaping urban life and development. • Development of critical thinking skills to assess urban development initiatives culturally and ecologically. • Identification of strategies for promoting sustainable and culturally sensitive urban living. <p>Session Material</p> <p>Mandatory readings:</p> <ul style="list-style-type: none"> • Moran, E. F. (2022). Human Adaptability: An Introduction to Ecological Anthropology. Routledge. Chapter 10: Urban Ecology and Urban Sustainability (pp. 249-277). PDF • Hillier, B., & Hanson, J. (1989). The social logic of space. Cambridge university press. Chapter 1 (pp. 1-25). PDF.
<p>Session 8 (2 Hours)</p>	<p>Session Title</p> <p>Environmental Ethics and Justice</p> <p>Session Details</p> <p>Description</p> <p>During this course, the main objectives are to explore the ethical dimensions of human-environment interactions, examine different ethical frameworks and perspectives in environmental decision making, and analyze the concepts of environmental justice and equity. By the end of the course, students should be able to recognize the importance of ethical considerations in addressing environmental challenges, understand the diverse ethical perspectives on nature and the environment, and critically evaluate the implications of environmental injustices on vulnerable communities and ecosystems. Additionally, students will develop an awareness of the role of ethics in sustainable</p>

development and gain insights into designing equitable and just environmental policies and practices.

Objectives

- Introduction to environmental ethics and its relevance in sustainability.
- Exploration of ethical frameworks, such as anthropocentrism, ecocentrism, and biocentrism.
- Discussion on the role of ethics in guiding environmental decision making.
- Analysis of case studies illustrating the application of different ethical perspectives in environmental dilemmas.
- Examination of the principles and goals of environmental justice.
- Engagement in activities on environmental justice movements and their significance in advocating for marginalized communities.
- Identification of strategies for promoting environmental equity and inclusivity in sustainability initiatives.

Key Learning Outcomes

- Understanding of the ethical dimensions of human-environment interactions.
- Recognition of diverse ethical perspectives on nature and the environment.
- Awareness of the implications of environmental injustices on vulnerable communities and ecosystems.
- Knowledge of the principles and goals of environmental justice.
- Development of critical thinking skills to assess environmental policies and practices from an ethical and just standpoint.
- Identification of strategies for promoting environmental equity and inclusivity in sustainability initiatives.
- Application of ethical considerations in the design and implementation of environmentally responsible and just actions.

Session Material

Mandatory readings:

- EP text, chapters 28-29 (pp. 283-306).
- Palmer, C., McShane, K., & Sandler, R. (2014). Environmental Ethics. Annual Review of Environment and Resources, 39(1), 419–442. PDF.

Session 9
(2 Hours)

Session Title
Sustainable Communities and Social Movements

Session Details

Description

During this course, the main objectives are to explore the concept of sustainable communities, examine the role of social movements in advocating for environmental and social change, and analyze the principles and practices of community-based sustainability initiatives. By the end of the course, students should be able to understand the key components of sustainable communities, recognize the influence of social movements in

driving sustainability efforts, and critically evaluate the effectiveness of community-based approaches in promoting environmental and social well-being. Additionally, students will gain insights into the challenges and opportunities in fostering community-led sustainability projects and the potential for social movements to shape policy and behavioral change at larger scales.

Objectives

- Introduction to the concept of sustainable communities and its significance in addressing environmental challenges.
- Exploration of the principles and practices of community-based sustainability initiatives.
- Discussion on the role of social movements in advocating for sustainable development and environmental justice.
- Analysis of case studies and examples illustrating successful community-led sustainability projects.
- Examination of the challenges and opportunities in fostering community-driven sustainability efforts.
- Introduction to the potential for social movements to influence policy and drive behavioral change at larger scales.

Key Learning Outcomes

- Understanding of the concept of sustainable communities and its components.
- Recognition of the role of social movements in promoting environmental and social change.
- Knowledge of the principles and practices of community-based sustainability initiatives.
- Development of insights into the challenges and opportunities in fostering community-led sustainability projects.
- Awareness of the potential for social movements to shape policy and behavioral change.

Session Material

Mandatory reading:

- EP text, chapter 24 (pp. 238-250)
- Forno, F., & Graziano, P. R. (2014). Sustainable community movement organisations. *Journal of Consumer Culture*, 14(2), 139–157. PDF.
- Eizenberg, E., & Jabareen, Y. (2017). Social Sustainability: A New Conceptual Framework. *Sustainability*, 9(1), 68.

Session 10
(3 Hours)

Session Title

Encouraging Pro-Environmental Behavior

Session Details

Description

During this final course, the main objectives are to explore effective strategies for encouraging pro-environmental behavior, examine behavior change theories and techniques, and analyze the role of social norms, incentives, and communication in promoting sustainable actions. By the end of the course, students should be able to understand the psychology behind pro-environmental behavior, recognize the importance

of targeted interventions in fostering sustainable actions, and critically evaluate the impact of different behavior change approaches. Additionally, students will gain insights into designing evidence-based campaigns and programs to encourage pro-environmental behavior.

Objectives

- Introduction to the importance of encouraging pro-environmental behavior for sustainability.
- Exploration of behavior change theories and techniques, such as the Theory of Planned Behavior, Social Cognitive Theory, and Community-Based Social Marketing.
- Discussion on the role of social norms, incentives, and communication in influencing sustainable actions.
- Analysis of case studies and examples illustrating successful behavior change campaigns for environmental conservation.
- Examination of the challenges and opportunities in encouraging pro-environmental behavior at individual and community levels.
- Introduction to evidence-based approaches in designing campaigns and programs to promote sustainable actions.

Key Learning Outcomes

- Understanding of the psychology behind pro-environmental behavior.
- Recognition of behavior change theories and techniques in fostering sustainable actions.
- Knowledge of the role of social norms, incentives, and communication in promoting sustainable behavior.
- Development of insights into the challenges and opportunities in encouraging pro-environmental behavior.
- Awareness of evidence-based approaches in designing campaigns and programs for environmental conservation.

Session Material

Mandatory reading:

- EP text, chapters 26-27 (pp. 263-282)
- Steg, L., & Vlek, C. (2009). Encouraging pro-environmental behaviour: An integrative review and research agenda. *Journal of Environmental Psychology*, 29(3), 309–317. PDF.
- Grilli, G., & Curtis, J. (2021). Encouraging pro-environmental behaviours: A review of methods and approaches. *Renewable and Sustainable Energy Reviews*, 135, 110039. PDF

10. Lab Sessions ('Travaux Dirigés')

Sessions	Detailed Content
Preset Session (1) (Week 4)	<p>Case-Study Project: Applying Knowledge to Real-World Contexts in Sustainability and Environmentalism</p> <p>Description</p> <p>The case-study project is a significant component of the course. Each student will independently select a case study related to environmentalism, sustainability, or human behavior and ecology. The case-study presentation will serve as a platform for students to apply their knowledge gained from course readings and discussions to a real-world context. The exercise aims to motivate students to explore diverse sustainability challenges and propose evidence-based policies for pro-environmental outcomes. The project will enable students to demonstrate critical thinking and research and communication skills while fostering a deeper understanding of the complex interactions between human behavior, ecology, and sustainable governance.</p> <p>The objective of first TD Session is to guide students in selecting their case study, finding relevant data, and conducting background research. By the end of this session, students should have a clear understanding of their chosen case study, have access to necessary data, and have gathered sufficient background information to proceed.</p> <p>Objectives</p> <ol style="list-style-type: none"> 1. To apply course knowledge and concepts to real-world environmental and sustainability challenges. 2. To critically analyze the selected case study and identify relevant scientific theories and/or methods applicable to the situation. 3. To propose evidence-based policy recommendations for promoting pro-environmental outcomes in the context of the case study. 4. To enhance students' research, presentation, and analytical skills. <p>TD Session I Activities</p> <ol style="list-style-type: none"> 1. Introduction to Case Study Selection: Provide an overview of the case-study project and the importance of selecting a relevant and impactful case study related to environmentalism, sustainability, or human behavior and ecology. 2. Brainstorming and Case Study Selection: Facilitate a brainstorming session where students can share potential case study ideas and receive feedback from peers and the instructor. Students will select their case studies based on their interests and relevance to the course. 3. Data Gathering: Guide students in identifying and accessing data sources relevant to their chosen case study. Emphasize the importance of using reliable and credible sources. 4. Background Research: Instruct students to conduct thorough background research on their case studies, including historical context, previous research, and existing policies related to the topic. 5. One-on-One Support: Provide individualized support to students as they explore their case studies and gather data. Address any questions or challenges they encounter during the process. <p>Key Learning Outcomes</p> <p>By the end of the case-study project, students should be able to:</p> <ol style="list-style-type: none"> 1. Independently research and select a relevant case study related to environmentalism, sustainability, or human behavior and ecology. 2. Synthesize course readings and materials to make connections to the chosen case study and its context. 3. Demonstrate an understanding of scientific theories and/or methods applicable to

	<p>the case study and sustainability challenges.</p> <p>4. Develop evidence-based policy proposals aimed at fostering pro-environmental outcomes.</p> <p>Details</p> <ul style="list-style-type: none"> • Case Study Selection: Each student will independently select a case study related to environmentalism, sustainability, or human behavior and ecology. • Research and Analysis: Students will conduct thorough research on their chosen case study, integrating relevant course concepts and scientific theories. • Presentation Format: The presentation format will be further discussed in class during the first or second week. Students may use PowerPoint, Google Slides, or other suitable platforms. • Presentation Content: The case-study presentation will provide a comprehensive summary of the case study's background and context. It will make explicit links to relevant course readings and materials. Students will explain how scientific theories and/or methods can be applied to better understand the case study situation and propose pro-environmental policies. • Evaluation: The case-study project will be evaluated based on the following criteria: <ul style="list-style-type: none"> ○ Clear articulation of the case study's background and context. ○ Effective integration of course concepts and scientific theories to the case study. ○ Evidence-based policy recommendations for promoting pro-environmental outcomes. ○ Presentation skills, including clarity, coherence, and professionalism.
<p>Preset Session (2) (Week 8)</p>	<p>Description</p> <p>In the second TD Session students will work to connect the data and background information from their case studies to course theories and concepts. Additionally, students will develop evidence-based policy implications aimed at promoting pro-environmental outcomes.</p> <p>Objectives</p> <p>The objective of 2 is to guide students in connecting the data and background information from their chosen case studies to course theories and concepts. Through small group discussions and feedback, students will gain a deeper understanding of how behavioral science theories can be applied to better comprehend their case study situations. Moreover, students will develop evidence-based policy implications aimed at promoting pro-environmental outcomes. By the end of this session, students should be equipped with the skills to critically analyze their case studies within the framework of course concepts and propose feasible and effective policies for enhancing sustainability and environmentalism.</p> <p>Key Learning Outcomes</p> <p>By the end of TD Session 2, students will have achieved the following key learning outcomes:</p> <ol style="list-style-type: none"> 1. Ability to identify and articulate connections between data gathered from their case studies and relevant course theories and concepts related to behavior, ecology, and sustainability. 2. Enhanced critical thinking skills in analyzing and interpreting case study information within the context of behavioral science principles. 3. Development of evidence-based policy implications, demonstrating students' capacity to propose practical solutions for promoting pro-environmental outcomes within

	<p>governance and public policy settings.</p> <ol style="list-style-type: none"> Improved presentation preparation skills, ensuring students are equipped to effectively communicate their case study findings and policy recommendations to their peers and the instructor during the final week of the course. <p>Details</p> <ol style="list-style-type: none"> Recap of Lab Session 1: Begin by briefly recapping the case studies selected and the data gathered during TD Session 1. Connecting to Course Concepts: Facilitate a discussion where students can identify relevant course theories and concepts applicable to their case studies. Critically analyze how these theories can be utilized to better understand their case study situations. Small Group Discussions: In small groups students will discuss and share their insights on connecting data to course concepts, with feedback and guidance as they make these connections. Policy Implications: Instruct students to brainstorm evidence-based policy implications based on their data analysis and connections to course concepts. Focusing on the importance of feasible and effective recommendations. Presentation Preparation: Guide students in structuring their case-study presentations, ensuring they include background information, data analysis, theory connections, and policy implications.
<p>Preset Session (3) (Week 12)</p>	<p>TD Session 3: Case-Study Project Presentations and Discussion</p> <p>Description</p> <p>TD Session 3 marks the culmination of the case-study project, where each student will present their findings and policy implications related to their chosen case study. This session will be dedicated to showcasing the diverse applications of behavioral science and ecological knowledge to real-world sustainability challenges. The presentations will be followed by a class discussion, providing an opportunity for students to engage with their peers' work, make connections to other course concepts, and explore the broader implications of the presented policies within governance and public policy frameworks.</p> <p>Objectives</p> <ol style="list-style-type: none"> To provide students with a platform to present their case-study projects, sharing their research, data analysis, and policy recommendations with the class. To facilitate a collaborative discussion where students can critically analyze and reflect on the connections between the presented case studies and other course concepts encountered throughout the semester. To encourage constructive feedback and peer review, fostering a deeper understanding of the complexities of sustainability challenges and the potential for evidence-based policies to drive positive environmental and social change. <p>Key Learning Outcomes</p> <p>By the end of TD Session 3, students will have achieved the following key learning outcomes:</p> <ol style="list-style-type: none"> Enhanced presentation and communication skills, enabling students to effectively convey their case study findings and policy implications to a diverse audience. Strengthened critical thinking abilities, as students engage in discussions, make connections, and analyze the implications of the presented policies within a broader behavioral science and ecological context. Deeper understanding of the interdisciplinary nature of sustainability governance and the potential for evidence-based approaches to shape pro-environmental behaviors

and policies.

4. Appreciation for the diversity of sustainability challenges and solutions, as students learn from each other's case studies and engage in constructive discussions.

Details

- **Presentation Format:** Each student will have a designated time slot to present their case study and policy implications to the class. Presentations can be in PowerPoint or similar formats.
- **Presentation Order:** The presentation order will be determined in advance and communicated to the students.
- **Class Discussion:** Following each presentation, the class will engage in a discussion, providing feedback and asking questions to further explore the presented topics and policies.
- **Facilitation:** The instructor will moderate the discussions, encourage active participation, and make connections to other course concepts throughout the presentations.
- **Evaluation:** Students' case-study presentations and their contributions to the class discussion will be taken into account when assessing their performance in Lab Session 3.
- **Emphasis on Learning:** The atmosphere will be conducive to open and respectful discussions, fostering a supportive learning environment where students can share their knowledge and insights.

TD Session 3 will serve as a valuable platform for students to showcase their work and dedication throughout the case-study project. It will also enable the class to collectively reflect on the breadth and potential impact of evidence-based policies in addressing complex sustainability challenges within governance and public policy contexts.

II. Complementary Activities

Activities	Detailed Content
Activity I	Type: N/A
Activity I	Type: N/A
Activity I	Type: N/A
Further Activities	N/A