

PSY312S Environmental Psychology

Spring 2015, T/Th 1-4pm, lecture 1-2:30 SCCT 2048, lab 2:40-4 SCCT 3039

This course addresses how individuals think about and react to environmental problems from littering to climate change, with a focus on individual behaviors. The course also includes how natural and built environments affect mood, performance, and health. Topics include risk perceptions, group identity, social influence, and the interdisciplinary challenge of collective action problems. The laboratory component includes research project design, data collection, statistical analysis, APA-style papers, and oral and poster presentations. Writing-intensive. Oral presentations. Counts towards both the Environmental Studies major and minor.

Required textbook: [*Environmental psychology: an introduction*](#), Steg et al., 2013.

Prof. Cameron Brick, cbrick@hamilton.edu, Science Center 3038, x4882

Office hours M 9-10, 11-12 & Th 4-5, or drop by/email for appointments. I speak fluent Spanish.

Learning outcomes

1. Acquire facts (terminology, classifications, methods, history)
 - a. Learn about the situations, behaviors, and outcomes environmental psychologists study
 - b. Develop familiarity with the key concepts in ecology and environmental conservation
2. Learn fundamental principles and theories
 - a. Struggle with the definitions of environment, nature, and sustainability
 - b. Recognize the two-way interaction between humans and the natural and built environments
3. Analyze and evaluate ideas, arguments, and points of view using course knowledge
 - a. Critically evaluate environmental psychology research and public policy. This application will be done in class, assignments, and exams.
 - b. Develop novel empirical research on the human-nature relationship
4. Apply course knowledge to environmental problems
 - a. Demonstrate the application of theory and research in scientific interventions and public policy to improve sustainability, locally and globally. This application will be done in class, assignments, and exams.

Exams

Please focus on lecture, lab, and readings from the current section. Later exams are mostly not cumulative.

Disabilities

I will happily accommodate you. The process starts with Dean Allen Harrison, Elihu Root House, x4021.

Phones & laptops

Please turn off electronic devices in class, because recent studies show that devices interfere with our learning objectives. Multi-tasking hurts your learning and also your neighbors' ([Sana et al., 2013](#); [summary from APA](#)). Even when laptops are used for taking notes they impair conceptual understanding because writing by hand requires you to distill gist rather than just copy ([Mueller & Oppenheimer, 2014](#)). You may request an exception by writing a max 500-word argument that responds to this evidence and explains your situation.

Lead discussion

You will lead discussion of readings in lab. The length of time will vary, and thoroughly discussing the reading(s) and showing videos and/or doing group activities will likely take most of the session. You are required to meet with me at a week before you lead class. Please skim the readings and come prepared with a class plan. See handout 'class discussion instructions.'

Writing-intensive

This course fulfills the Hamilton writing-intensive guidelines. You will write several papers and have the opportunity for revision, and the course grade is heavily based on writing. I will provide timely and detailed written feedback and be available for writing conferences, and I will teach scientific writing in class.

Assignment: Novel research proposal

You will write a paper and give an solo oral presentation at the end of the course. Specify an environmental problem that interests you, local or global (for inspiration, see [1](#), [2](#), [3](#)). Consider psychological concepts like attitudes, values, personality, identity, intentions, etc. Describe and apply theories and findings from environmental psychology to help understand and address how psychology could be used to better understand or improve the problem. Instead of a broad literature review, please cite literature in service of the specific problem you are addressing, either ecological or theoretical. Propose a new research design to learn more about how people think about and react to the problem (basic science) or an intervention to help solve it (applied science), using either laboratory, survey, or a field study design. The measures should each serve specific, directional hypotheses. Focus more on theory, conceptual development, and design than on specific measure operationalization. You may use section headers if you prefer. Do not include a title page, abstract, or results section. The discussion should address the implications of the expected findings and could explore competing explanations, not restate the hypotheses. See grading rubric. We will work together through the revision and the final presentation. Max. 1000 words not including references in APA format.

Revision: you will revise this paper based on my feedback for an additional grade. In a separate section before your revision, please explain how you addressed my feedback. Max 1200 words.

Oral presentations. You will give a 10-minute presentation plus Q&A on your proposal.

1. Introduce the problem your research is designed to address
2. Present relevant earlier work
3. Define a clear research question and specific hypotheses
4. Propose a clean study design and specific planned analyses (stats tutors are available)
5. Consider alternative explanations
6. Discuss the implications of the expected findings

Appointments with the Oral Communication Center are **required** before your final course presentation. See the oral presentations grading rubric.

Assignment: Evaluate research

Browse environmental psychology articles in a peer-reviewed journal (suggested: *Journal of Environmental Psychology*, *Environment & Behavior*, *Nature Climate Change*, *Climatic Change*, *Proceedings of the National Academy of Sciences*, *Science*, *Nature*, *Ecopsychology* [less recommended]). Or pick from the set I uploaded. If you choose your own, pick an article relevant to the course topics, and don't hesitate to check the article with me first. Write a maximum 1000-word paper with the APA-style citation of the key work. Briefly outline the article goals, methods (if empirical), and findings. The bulk of your paper will provide analysis. For example, critically evaluate the methods and conclusions of the study; reflect on the societal meaning of the findings and how they could be applied; and/or propose additional areas of research and how they would advance understanding. **Peer review is required** prior to submission to me. See peer review handout. Often, students benefit from the experience of being an editor and seeing other writing techniques.

Assignment: Behavior change (thanks to [Dr. Sue Koger](#) for collaboration)

Identify an individual behavior or class of behaviors that has an environmental impact. The problem should be interesting and difficult enough to challenge you. Some examples are: 1) increase political engagement, e.g., writing to local elected officials; 2) reduce trash (e.g., avoid over-packaged goods; reduce consumption); 3) reduce indoor water use; 4) increase your use of public transportation, walking, and biking rather than driving; 5) reduce your consumption of meat and/or dairy. See [more behaviors here](#), and feel free to email me with another idea. Your grade will not be based on behavior change success, and instead will be

centered on your effort and analysis. You'll work for hours, so I *highly recommend* picking behavior(s) that you have genuine interest and intention about changing.

Stage I: sections 1-4 either as a bullet list or in essay format as you prefer.

Stage II: section 5, turn in scanned diary or spreadsheet, note any changes to the goals, and reflect on the ongoing progress, maximum 400 words. Please attach Stage I.

Stage III: sections 6-7 in essay format, maximum 1200 words. Notice section 7 requires an intervention and measured reaction that will take time. Please attach Stages I & II.

- 1) Specify goal
 - a) Specify a behavior and a specific goal of how much to increase or decrease.
 - b) List situations that may interfere with changing the behavior.
 - c) List short- and long-term pros and cons of changing the behavior.
 - d) Make plans for dealing with obstacles.
 - e) Establish concrete sub-goals and plans for reaching them.
- 2) Begin self-observation and reflect on the stimuli that govern your behavior
 - a) Record your behavior and relevant thoughts, feelings, and motivations using a physical or online diary or spreadsheet.
 - i) Record a baseline of when the behavior occurs (before the change).
 - ii) What is the intensity and frequency of the behavior? How will this impact your goals?
 - iii) Are you being influenced by the example of others' behaviors, perhaps close others who perform (or avoid) this behavior?
 - iv) Does your goal involve changing behaviors that are very difficult to modify? In what way?
 - b) Identify antecedents
 - i) In what situations does the behavior occur?
 - ii) Does part of the behavior feel automatic?
 - iii) Do you have any internal verbal dialogue before/during the behavior?
 - iv) Can you identify any other causes of the behavior?
 - c) What are the consequences of your behavior?
 - i) Are your desired behaviors positively reinforced (reward)?
 - ii) Are undesirable behaviors being reinforced?
 - iii) Is the desired behavior being punished?
 - iv) Does your internal dialogue either reward or punish your behavior?
 - v) Are the consequences for some behaviors difficult to identify?
- 3) Plan for behavior modification
 - a) Build commitment: commit to your goal here in writing and specify another person (or several) to whom you communicated this commitment.
 - b) Antecedents: devise plans to increase or decrease antecedent stimulus control. For example, avoid some situations; use prompts; rely on support system for reminders.
 - c) Behavior (actions, thoughts, feelings)
 - i) Consider methods of developing new behaviors (e.g., substituting other behaviors, modeling the behaviors to others, practice, shaping through reinforcement). Plan specifically how to interrupt habits and automatic patterns.
 - d) Based on the rewards and punishments identified above, make a plan to eliminate or neutralize reinforcement for undesired behaviors.
- 4) Integration. Write out your detailed plan:
 - a) State your goal and any sub-goals. Indicate your current level of performance using your records.
 - b) State specific rules for your goal or first sub-goal (i.e., "If....., then.....", "When....., I will"). These are best when concrete: when I am in (place), I will (concrete behavior). What behaviors will you have to perform in each situation to achieve the sub-goal? Examine your earlier plans and consider alternatives.

- 5) Begin implementation!
 - a) Continue accurate self-observation and social feedback, and compare your progress to your goals for at least three weeks.
 - b) Keep detailed records of behavior frequency and report the ongoing behavior frequency.
 - c) Evaluate success in changing situations that previously elicited the behavior.
 - d) Reflect on whether you have been successful so far and why.
- 6) Incorporate behavior theories
 - a) Using at least two behavior change theories, had did your attitude, cognitions, and/or strategies fit into those theories? Would you say one theory was more applicable to you or your chosen health behavior change than other theories?
 - b) Are these theories useful for evaluating your project? How might you redesign your goals given the knowledge of these theories?
- 7) Solving problems
 - a) List concrete details of obstacles. Were you impacted by a school break?
 - b) Consider many solutions, including those difficult, expensive, federal, etc.
 - c) Brainstorm with others.
 - d) Implement one or more solutions and record the result. What strategy was most effective?
 - e) Do you think this behavior change will last? Why or why not? If you were to continue this behavior change long-term, how might your strategies and goals differ from the current project?
 - f) What did you learn from this experience overall? If you did not learn much, saying so won't affect your grade, and in that case please give concrete suggestions to improve the assignment.

Brief reaction papers

On some days, there will be no individual student discussion leader in lab. Instead, you will write brief reaction papers to the readings (generally ~400 words; no maximum), **due at 10pm the day before class** so I can read and incorporate your contributions to class. This does not require formal scientific writing, so you may include feelings and personal reactions if you wish. You could also choose to focus on interpreting the methods and results in line with course material and your other knowledge. Please demonstrate that you completed the readings and thought carefully about what they mean. You may pose additional questions that you have about the studies, their implications, or the next theoretical steps. You are welcome to disagree or say you disliked components of the readings or don't recommend their inclusion in the next course: that is helpful! Your grade is not based on whether you liked or were personally moved by the reading.

Written assignments

Please use theories and ideas from the course, write in a scientific style (minimize anecdotes), and use direct argument development, and correct grammar and spelling. Late assignments -10% per day (max -30%: please complete all assignments for the benefit). To cite lecture: "(lecture, x/xx/xx)." Cite textbook studies directly, or if no citation is given: "(Steg, van den Berg, & De Groot, 2012, pp. xx)." Writing center appointments are highly recommended. If you would like a paper conference with me, I prefer to help at the outline stage, with a specific writing question or problem, or after assignment submission. See handout 'APA research paper instructions' for detailed advice.

- D/F Does not meet expectations. Fails to address the prompt, doesn't use psychological concepts, is difficult to understand, has other major issues, or contains [plagiarism](#).
- C Meets expectations. May lack clear thesis, analysis or critical thinking beyond summarizing or referencing course material, and/or has inaccuracies, distractions, or grammar or spelling errors.
- B Exceeds expectations. May lack deep, novel analysis, tight argument flow, creative ideas, scientific voice, has other issues, and/or see above.
- A Extraordinary. Characterized by an original thesis, critical thinking & new analysis, creative extension of class concepts, and a clear, precise, and rigorous argument without errors.

Course grade

Evaluate research paper	5%
Behavior change I	7%
Behavior change II	5%
Behavior change III	8%
Research proposal	8%
Research proposal (revision)	7%
Final presentation	8%
Lead discussion	6%
Class/lab participation and papers	16%
Exams (3 @ 10% each)	30%

Grades are useful to build accountability, but they are not the goal (see the learning objectives). Come meet with me anytime to help improve your thinking, writing, and studying habits.

Extra credit

Life sometimes interferes with your steady engagement in the course. You may earn up to 3% total based on department policy. Note that A+ cannot be reached with extra credit. Due at the beginning of the last class. Grades are based on effort and quality.

- 1) [Psychology department research \(SONA\)](#). One SONA point = 0.2%.
- 2) Evaluate research assignment (additional; see above). $\leq 2\%$ each.
- 3) Creative project. Propose a creative project that engages with empirical or theoretical course concepts. For example, you could design an persuasive message about a local issue and explain how the features align with previous research; design a field study at our school; compose a song that combines course concepts; or something even wilder. Discuss with me first. $\leq 3\%$ each.

Optional and recommended: the Spring 2016 Environmental Studies Speaker Series

- 1/25 (7pm, Red Pit/KJ 127): Oren Cass, Manhattan Institute, will speak on "Play-Acting on Climate: The Futility and Farce of Global Negotiations."
- 1/31 (5pm, SCCT G041): Adirondack Program, "Internship Symposium and Info Session." Program Director Janelle Schwartz and participants in the inaugural fall 2015 session will discuss students' internship experiences and answer questions.
- 2/4 (7pm, Red Pit/KJ 127): Dr. M.K. Dorsey, Joint Center for Political and Economic Studies, will speak on "Pathways Beyond Paris: Towards Energy & Climate Justice."
- 3/16 (4:15pm, Red Pit/KJ 127): Karen Washington, New York City Community Garden Coalition and Rise & Root Farm, will speak on "The Power of Food. The Impact of Growing Food on Leveraging One's Power."
- 3/3 (7pm, Red Pit/KJ 127): Professor Dorceta Taylor, University of Michigan, will speak on "Food Insecurity, Resistance, and the Quest for Justice in Communities of Color."
- 3/30 (TBA): Professor Robert Ballard (Commander, USN, Ret.), University of Rhode Island, will speak on oceanography.
- 4/4 (7pm, The Chapel): Professor Michael Mann, Pennsylvania State University, will speak on "The Hockey Stick and the Climate Wars: Dispatches from the Front Lines."
- 4/27 (7pm, Science Center G041): Environmental Studies Senior Project Presentations

Submit all assignments on [Blackboard](#).

Date	Topic	Readings/Assignments due by lecture
1/19 T	Lecture: Introduction, course structure, sustainability and nature Lab: Footprint exercise	Syllabus, PDF Koger & Winter
1/21 Th	Lecture: Attitudes, emotions, and effects of natural environments Lab: General social survey exercise	Ch. 1 & 6 Behavior change assignment: email me section 1a only by Fri 5pm for feedback
1/26 T	Lecture: Effects of built environments Lab: Survey design theory; design class survey	pp. 29-34, Ch. 10 lab: PDF Furr
1/28 Th	Guest lecture: Catherine Beck, PhD : How the geosciences shape climate change predictions Lab: No meeting. Find online a brief scale of scientific knowledge, and then design two pro-environmental behavior questions appropriate for undergraduates. Submit on BB.	PDF Bennett Optional: PDF climate change science basics lab: PDF Nusser Behavior assignment Stage I due next class
2/2 T	Lecture: Environment & health Lab: discuss articles, class administration	Ch. 5; PDF Patz; optional: CDC lab: PDF Newman (Scott) Behavior assignment Stage I due
2/4 Th	Lecture: Guest visit with Michael Dorsey, PhD , Interim Director of Energy & Environment at the Joint Center for Political and Economic Studies Lab: Amazon MTurk; Discuss articles	lab: PDFs Mason, Leiserowitz (Kyndal)
2/9 T	Lecture: Happiness; values including materialism and consumerism Lab: Writing workshop, discuss articles	Optional: Simms lab: PDF Nisbet (Jeremy)
2/11 Th	Lecture: Exam 1 Lab: Janelle Schwartz, PhD , introduces Adirondack Program. Discuss article.	lab: PDF Beery (Saige) Behavior assignment: begin implementation and tracking
2/16 T	Lecture: Risk perception; Six Americas of climate change beliefs; cultural cognition Lab: Discuss articles	Ch. 2; PDF Lee (2015) lab: PDF Brügger (Sarah)
2/18 Th	Lecture: Personality & values Lab: Novel research proposal prep; discuss articles	Ch. 14; PDF Brick. Optional background: PDF Lee (2010) lab: PDFs Matthews, Zaval (Anna) Evaluate research due for peer review
2/23 T	Lecture: Behavior theories 1 Lab: NECC, HEAG; discuss articles	Ch. 13 & 18 lab: PDF Stern (Emma)
2/25 Th	Lecture: Behavior theories 2 Lab: Discuss articles & survey project	Ch. 25 lab: PDF Steg (Ben) Peer reviews due
3/1 T	Lecture: Mental automaticity; weather & climate Lab: Discuss articles & survey project	PDF Bargh lab: Joireman (Hayley)
3/3 Th	Lecture: Identities and social groups Lab: Discuss articles & survey project	No reading: work on proposal lab: PDF Gromet (Rachel) Novel research proposal due Sun at 6pm
3/8 T	Lecture: Local environmental challenges, guest lecture: Karen Rauter, Rondout Stream Neversink Program	PDF Clayton (2003)

	Lab: Guest discussion on fracking: Steven Palmatier, oil & gas industry. Discuss articles.	lab: PDFs Spence, Pearson (Charlotte)
3/10 Th	Lecture: Exam 2 Lab: none	Behavior assignment Stage II due
	~ Enjoy Spring Recess! ~	
3/29 T	Lecture: Barriers to individual behavior Lab: Discuss articles & survey project	PDFs Dietz, Gifford lab PDF: Markowitz (2012a) (Jane)
3/31 Th	Lecture: Limits of individual behavior Lab: Discuss articles & survey project	PDF Tidwell, optional poem (Mary Oliver) lab: PDF Maniates (Lindsay) Begin behavior assignment Stage III Fri: Evaluate research assignment due: Describe the peer review revisions
4/5 T	Lecture: Social norms Lab: Discuss articles & survey project	Ch. 15 & 16; PDF Cialdini lab: PDF Clayton (2013) (Kate)
4/7 Th	Lecture: Communication and persuasion Lab: Discuss articles & survey project	PDFs Kahan (2010, 2015) Behavior assignment Stage III due Reference (optional): PDF CRED lab: PDF Bain (Alex)
4/12 T	Lecture: Flipped sessions today. Discuss articles & survey project Lab: Guest lecture: Peter Cannavò, PhD : Environmental politics	lecture: PDFs Hardin, Chasek (Meg) lab guest lecture: Ch. 24; PDF van Boven
4/14 Th	Lecture: Social dilemmas; discuss articles Lab: Guest lecture: Stephen Wu, PhD : Environmental economics	Ch. 17 & 22, PDF Cornforth (Annali) lab: see above, flipped day Revised novel proposal due
4/19 T	Lecture: <i>Disruption</i> documentary Lab: Discuss articles & survey project	PDF Klein lab: PDF Cleveland, and watch or listen to a debate about GMOs (Scott)
4/21 Th	Lecture: Interventions and conclusions Lab: Discuss articles & survey project	Ch. 21 lab: PDFs van Vugt, van der Linden (Bayard)
4/26 T	Lecture: Student presentations: Meg, Hayley, Rachel, Jeremy Lab: Discuss articles & survey project	Ch. 27 lab: Feinberg Brief reaction paper due
4/28 Th	Lecture: Student presentations: Kate, Alex, Annali, Lindsay, Kyndal Lab: Discuss articles & survey project	What's next for enviro psych? lab: PDF Clayton (2015)
5/3 T	Lecture: Student presentations: Jane, Emma, Anna Do, Charlotte, Ben Lab: Discuss articles & survey project	lab: PDF Markowitz (2012b) Brief reaction paper due
5/5 Th	Lecture: Student presentations: Sarah, Saige, Scott, Bayard Lab: Discuss articles & survey project	lab: PDF Fernbach
5/11 W	Final exam 7-10pm SCCT 2048	

Come to my office to browse a wealth of environmental psychology books and articles.

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