

PSYC 421 Environmental Psychology (3 credits)



University of British Columbia, Vancouver

Spring 2021, Tues/Thurs 3:30p – 5:00p, Zoom

<https://ubc.zoom.us/j/66612645240?pwd=T1RzZldlYDh4akOxUjQ1cEZDVkxPUT09>

Meeting ID: 666 1264 5240

Passcode: 4638342918

Instructor: Dr. Jiaying Zhao
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Office Hours: By Appointment

TA: Kyle Gooderham & James Wu
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I. Introducing your Instructor and TA



Dr. Jiaying Zhao (she/her/hers) is the Canada Research Chair in Behavioral Sustainability and an Associate Professor in the Department of Psychology and the Institute for Resources, Environment and Sustainability at UBC. She received her Ph.D. in cognitive psychology from Princeton University. Her research focuses on the cognitive and behavioral consequences of resource scarcity and interventions to promote pro-environmental behaviors.



Kyle Gooderham (he/him/his) is a PhD student in the Department of Psychology at UBC, where he researches the relationship between physical activity and cognition with an emphasis on learning and memory. Kyle completed his BA in Psychology here at UBC.

James Wu (he/him/his) is a PhD student in the Institute for Resources, Environment and Sustainability at UBC. His interest is in the relationship between diversity and stability.

II. Course description and goals

A simple fact about our existence is that we are influenced by the physical environment and our actions in turn shape the environment in which we live. This course focuses on the interaction between the environment and human beings, examining how the features of the environment impact our cognition, behavior, and well-being, and how our actions in turn produce immediate and long-term consequences on the environment. This course will also provide an overview of several pressing environmental challenges (e.g., climate change), and explore how these issues impact individual human beings, and what we can do to promote sustainability.

Important: This course is NOT about memorization. This course teaches you HOW: **how to think, how to evaluate evidence, and how to produce new knowledge.**

By the end of this course, you should be able to:

1. Critically evaluate research articles on environmental psychology
2. Design a research project with rigorous methods to examine a research question
3. Identify psychological barriers and motivators to pro-environmental actions
4. Conduct a research project throughout the term, collect and analyze data, present findings in class, and write up a research report

III. Required readings

There is no textbook for this course. Instead, we will be reading research articles. A full list of the readings can be found on the last page of the syllabus.

IV. Course webpage

<http://canvas.ubc.ca> (location for announcements, lecture slides, recordings, and grades)
It is your responsibility to check the class website weekly for updated information.

V. Course requirements

Research project proposal (30%)

You will form groups and each group will consist of 3 to 5 students. You are free to choose your group members. Your group will select one project from the UBC SEEDS (Social Ecological Economic Development Studies) Program. Your group will meet and collaborate with a UBC client on your project. By spring break, your group will write a one-page research proposal of the project. Each group only needs to submit one proposal. The proposal should be feasible, practical, and specific. It should outline what your research question is, what the hypothesis is, how you plan to collect and analyze the data, and what the implications of your project may be.

Proposal approval meeting with Dr. Zhao (10%)

Your group will need to meet with Dr. Zhao to seek final approval for your research proposal before launching the project. This meeting can occur during class or office hours. This is an opportunity to get feedback from Dr. Zhao on your project. The grade will depend on how prepared and thoughtful your group are regarding proposal development, and whether your group has integrated feedback into the proposal.

Progress check-in meeting with Dr. Zhao (10%)

Your group will need to check in with Dr. Zhao to go over your research project before the presentations start. This meeting can occur during class or office hours. This is an opportunity to update Dr. Zhao on how your project is going, get statistical analysis help, solve problems, and get feedback from Dr. Zhao. The grade will depend on how prepared and thoughtful your group are regarding project progression.

Research project presentation (10%)

In the last several classes of the term, your group will present your research project and preliminary findings to the entire class and your client. This is your chance to showcase your project and preliminary findings, and get feedback from Dr. Zhao, your client, and other students, before your group submit the final report.

Research project final report (40%)

Your group will conduct the proposed research project and collect data for your project. By the last class in April, your group will submit a final report that includes an executive summary (a short abstract summarizing what you did) and a detailed report. Your detailed report should include a literature review that includes the papers and studies covered in class, your research question, methods, results, and recommendations for UBC based on your findings. You can also include appendices if relevant (not included in the page limit).

VI. Research participation (extra credit opportunity)

You have the opportunity to earn up to 3% on your overall final grade by participating in studies using the Human Subject Pool. This provides the valuable opportunity to observe the research process directly and to contribute to the ongoing research activities at UBC. For instructions on how to sign up, see <https://hsp.psych.ubc.ca/>. **Please note that any inquiries about credits should be directed to HSP or the experimenters, NOT the instructor.** You will earn 1% for each hour of participation. These credits are added to your grade at the end of the course. Make sure that you

retain your email confirmation of the experimental credit in the event that verification of participation is required when the final grades are compiled. If you do not correctly assign your credits to this course, you will NOT receive credit so please make sure you have done this correctly.

VII. Course grading

In order to maintain equity across multiple course sections, all psychology courses are required to comply with departmental norms regarding grade distributions. According to departmental norms, **the mean grade in a 400-level class is 70 for a good class, 68 for an average class, and 66 for a weak class, with a standard deviation of 13.** Scaling may be used in order to comply with these norms; grades may be scaled up or down as necessary by the professor or department. Grades are not official until they appear on a student's academic record. You will receive both a percent and a letter grade for this course. At UBC, your course percentage is converted according to the key below:

A+	90-100%	B+	76-79%	C+	64-67%	D	50-54%
A	85-89%	B	72-75%	C	60-63%	F	0-49%
A-	80-84%	B-	68-71%	C-	55-59%		

Remember, you are earning a degree at a highly reputable post-secondary institution. Therefore, criteria for success are high. The Faculty of Arts offers the following guidelines that broadly characterize the kind of work that is generally associated with the main grade ranges. These characteristics help to put the Psychology Department Grading Policies into context. Please note that adequate performance is in the C range, which is the typical class average.

A RANGE: *Exceptional Performance.* Strong evidence of original thinking; good organization in written work; capacity to analyze (i.e., break ideas down) and to synthesize (i.e., bring different ideas together in a coherent way); superior grasp of subject matter with sound critical evaluations; evidence of extensive knowledge base.

B RANGE: *Competent Performance.* Evidence of grasp of subject matter; some evidence of critical capacity and analytic ability; reasonable understanding of relevant issues; evidence of familiarity with the literature.

D-C RANGE: *Adequate Performance.* Understanding of the subject matter; ability to develop solutions to simple problems in the material; acceptable but uninspired work; not seriously faulty but lacking style and vigor.

F RANGE: *Inadequate Performance.* Little or no evidence of understanding of the subject matter; weakness in critical and analytical skills; limited or irrelevant use of the literature.

VIII. Course policies

Class participation

Active learning is a critical component of a proper education and for that reason it will be frequently promoted during the term. You will be asked to answer questions at any point in class, and engage in group discussions. You are strongly encouraged to speak up in class.

Attendance and lecture slides

Attendance is expected for every class. Punctuality to lectures is a sign of respect to your instructor, teaching assistants and fellow students. Tardy students should not ask the instructor or teaching assistant for what they missed from lecture. In the event you miss or are late to a lecture, you should acquire notes from a fellow student. The primary reason for this is that lecture slides are designed to give you a framework, as opposed to every piece of information discussed in class. Lecture slides will be posted online. **Please note: the slides are only for the purpose of learning in this course and must not be distributed outside the course for any other reason.**

Reading the assigned articles

Before every class, you should **read the assigned article**, and **prepare questions for discussions** in class. There are two primary goals for research articles. The first is to expose you to primary literature in the field of environmental psychology. The second is to give you an opportunity to improve your ability to evaluate research, which is a fundamental skill any student should acquire.

Syllabus or course schedule changes

There may be changes to the syllabus and the course schedule during the term. You will be notified of these changes ASAP and no changes will be instituted that dramatically affect your ability to properly prepare for an assignment.

Assignment policy

For assignments, you should submit your assignment by the specified deadline. If you are late in handing in your assignment, your grade will be deducted. For every hour after the deadline, 5% will be deducted until all percentages are gone. No exception will be made, unless you have a medical emergency. In this case, you must provide Dr. Zhao with a valid doctor's note (which will be verified with your medical doctor) within 24 hours after the deadline.

Academic misconduct

Cheating, plagiarism, and other forms of academic misconduct are very serious concerns of the University, and the Department of Psychology has taken steps to alleviate them. Relevant to this course, the Department has implemented software that can reliably detect cheating by analyzing the patterns of students' responses. This will be used for every assessment in this course.

In all cases of suspected academic misconduct, the parties involved will be pursued to the fullest extent dictated by the guidelines of the University. Strong evidence of cheating may result in a zero credit for the work in question. According to the University Act (section 61), the President of UBC has the right to impose harsher penalties including (but not limited to) a failing grade for the course, suspension from the University, cancellation of scholarships, or a notation added to a student's transcript.

Psychology 421: Course and reading schedule

<i>Class</i>	<i>Date</i>	<i>Day</i>	<i>Topic</i>	<i>Assigned Reading</i>
1	Jan-12	Tu	Introductions, explain syllabus, requirements, and expectations	
2	Jan-14	Th	Psychological benefits of nature	<i>Berman et al. (2008)</i>
3	Jan-19	Tu	Urban environments	<i>Nisbet & Zelenski (2011)</i>
4	Jan-21	Th	Nudges and choice architecture	<i>DiGiacomo et al. (2018)</i>
5	Jan-26	Tu	Form groups + Select SEEDS projects	
6	Jan-28	Th	Meet UBC clients to discuss your SEEDS projects	
7	Feb-2	Tu	Environmental cues and behavior	<i>Wu et al. (2013)</i>
8	Feb-4	Th	Behavioral interventions	<i>Goldstein et al. (2008)</i>
9	Feb-9	Tu	Cognitive barriers to environmental behavior	<i>Zelenika et al. (2018)</i>
10	Feb-11	Th	Research proposal due by 5pm	
-	Feb-16	Tu	NO CLASS – Spring break	
-	Feb-18	Th		
11	Feb-23	Tu	Proposal approval meeting	
12	Feb-25	Th	Proposal approval meeting	
13	Mar-2	Tu	Proposal approval meeting	
14	Mar-4	Th	Social factors in environmental behavior	<i>Schultz et al. (2007)</i>
15	Mar-9	Tu	Contextual factors in decision making	<i>Toversky & Kahneman (1981)</i>
16	Mar-11	Th	Environmental risk perception	<i>Budescu et al. (2014)</i>
17	Mar-16	Tu	Psychology of climate change	<i>Rudman et al. (2013)</i>
18	Mar-18	Th	Public perception of climate change	<i>Whitman et al. (2018)</i>
19	Mar-23	Tu	Progress check-in meeting	
20	Mar-25	Th	Progress check-in meeting	
21	Mar-30	Tu	Progress check-in meeting	
22	Apr-1	Th	Research presentation Day 1	
23	Apr-6	Tu	Research presentation Day 2	
24	Apr-8	Th	Research presentation Day 3	
25	Apr-13	Tu	Research final report due by 5pm	

ASSIGNED READINGS

- Berman, M. G., Jonides, J., & Kaplan, S. (2008) The cognitive benefits of interacting with nature. *Psychological Science*, 19, 1207-1212.
<https://journals.sagepub.com/doi/full/10.1111/j.1467-9280.2008.02225.x>
- Nisbet, E. K., & Zelenski, J. M. (2011). Underestimating nearby nature: Affective forecasting errors obscure the happy path to sustainability. *Psychological Science*, 22, 1101-1106.
<https://journals.sagepub.com/doi/10.1177/0956797611418527>
- DiGiacomo, A., Wu, D. W. L., Lenkic, P., Fraser, B., Zhao, J., & Kingstone, A. (2018). Convenience improves composting and recycling rates in high-density residential buildings. *Journal of Environmental Planning and Management*, 61, 309-331.
<https://www.tandfonline.com/doi/full/10.1080/09640568.2017.1305332>
- Wu, D. W., DiGiacomo, A., & Kingstone, A. (2013). A sustainable building promotes pro-environmental behavior: An observational study on food disposal. *PLoS One*, 8, e53856.
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0053856>
- Goldstein, N., Cialdini, R. B., & Griskevicius, V. (2008). A room with a viewpoint: Using social norms to motivate environmental conservations in hotels. *Journal of Consumer Research*, 35, 472-482.
<https://academic.oup.com/jcr/article/35/3/472/1856257>
- Zelenika, I., Moreau, T., & Zhao, J. (2018). Toward zero waste events: Reducing contamination in waste streams with volunteer assistance. *Waste Management*, 76, 39-45.
<https://www.sciencedirect.com/science/article/pii/S0956053X18301727>
- Schultz, P. W., Nolan, J. M., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2007). The constructive, destructive, and reconstructive power of social norms. *Psychological Science*, 18, 429-434.
<https://journals.sagepub.com/doi/abs/10.1111/j.1467-9280.2007.01917.x>
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211, 453-458. <https://science.sciencemag.org/content/211/4481/453>
- Budescu, D. V., Por, H., Broomell, S., & Smithson, M. (2009). The interpretation of IPCC probabilistic statements around the world. *Nature Climate Change*, 4, 508-512.
<https://www.nature.com/articles/nclimate2194>
- Rudman, L. A., McLean, M. C., & Bunzl, M. (2013). When truth is personally inconvenient, attitudes change: The impact of extreme weather on implicit support for Green politicians and explicit climate-change beliefs. *Psychological Science*, 24, 2290-2296.
<https://journals.sagepub.com/doi/10.1177/0956797613492775>
- Whitman, J., Zhao, J., Roberts, K., & Todd, R. M. (2018). Political orientation and climate concern shape visual attention to climate change. *Climatic Change*, 147, 383-394.
<https://link.springer.com/article/10.1007/s10584-018-2147-9>