

PSYC 421 Environmental Psychology (3 credits)



University of British Columbia, Vancouver
Spring 2020, Tues/Thurs 3:30p – 5:00p, BUCH a102

Instructor: Dr. Jiaying Zhao
E-mail: jiayingz@psych.ubc.ca
Office Hours: Tuesdays 2p-3p in CIRS 4341

TA: Kyle Gooderham
E-mail: kyle@psych.ubc.ca
Office Hours: By Appointment in Kenny

I. Introducing your Instructor and TA



Dr. Jiaying Zhao 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 is a PhD student in the Department of Psychology, 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.

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. The articles will be available online.

IV. Course webpage

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

V. Course requirements

Research Project Proposal (20%) – group

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. Detailed instructions and guidelines of the proposal will be distributed around two weeks before the due date.

Research Project Report (20%) – group

Throughout March, 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 research 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, 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). Instructions and guidelines of the report will be distributed in March.

Research Project Presentation (10%) – group

In the last few 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 the instructor and other students, before your group submits the report.

Final Examination (50%) – individual

In the final exam, you will answer questions about the course materials, and also read a new research article. You will need to critically analyze the article, and identify the research question, the hypothesis, the methods, the results, strength and weakness of the article, and future directions. **Please note: You should NOT make travel plans until you learn the date of your final exams. You CANNOT take the final at a different date/time unless you have a verifiable medical reason.**

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 or an examination.

Laptop use and classroom conduct

You should only use your laptop or tablet to take notes in class. No other online activities are allowed, unless specifically required by the instructor. Our classroom is a place for learning where

open intellectual discussions are highly encouraged. Any behaviors compromising this environment will not be tolerated and the student(s) will be asked to leave.

Exam and assignment policy

You should arrive on time for the exam. You will not be allowed to take the final exam if (1) you are late 30 minutes or more, or (2) you have already finished and submitted the exam, whichever occurs first. Students in this situation, or any other situation where they miss the exam for a reason of a non-medical nature, will not be allowed to write the exam and will receive a "0." Absolutely no exceptions will be made to these policies.

When time is called at the end of the exam, you must immediately stop working and submit your exam materials. You will not be allowed more time for any reason, including (but not limited to): putting your name or ID on the exam or filling in or changing an answer. You must also remain completely silent until every exam has been collected. Failure to stop working when time is called or to stay silent will result in a "0" on the exam. No exceptions will be made.

The exam cannot be written at another time. You will not be accommodated unless you have a valid doctor's note (which will be verified with your medical doctor). If you are a student from the Faculty of Arts, you must meet with an Arts Advisor within 48 hours of missing the exam (unless it is medically impossible). If you are from a different faculty, you should provide Dr. Zhao with your medical note within the same time frame. Non-Arts students may scan and email their medical note to Dr. Zhao. Being excused from an examination is at the sole discretion of Dr. Zhao. Make-ups for the Final may differ from the version used for the rest of the class.

For the two papers, you should attend the class (as usual) and hand in the paper to Dr. Zhao or the TA by the end of the class (5pm) on the due date. If you are late in handing in your paper, 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 on multiple-choice exams by analyzing the patterns of students' responses. This will be used for every assessment and exam 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.

Do note that during the exam, the instructor and invigilators reserve the right to move students in their seating arrangement with no explanation provided.

Psychology 421: Course and reading schedule

<i>Class</i>	<i>Date</i>	<i>Day</i>	<i>Topic</i>	<i>Assigned Reading</i>
1	7-Jan	Tu	Introductions, explain syllabus, requirements, and expectations	
2	9-Jan	Th	Psychological benefits of nature	<i>Berman et al. (2008)</i>
3	14-Jan	Tu	Urban environments	<i>Nisbet & Zelenski (2011)</i>
4	16-Jan	Th	Nudges and choice architecture	<i>DiGiacomo et al. (2018)</i>
5	21-Jan	Tu	Form groups + Select SEEDS projects	
6	23-Jan	Th	Meet UBC clients about your SEEDS projects	
7	28-Jan	Tu	Environmental cues and behavior	<i>Wu et al. (2013)</i>
8	30-Jan	Th	Social factors in environmental behavior	<i>Schultz et al. (2007)</i>
9	4-Feb	Tu	Cognitive barriers to environmental behavior	<i>Zelenika et al. (2018)</i>
10	6-Feb	Th	Behavioral interventions	<i>Goldstein et al. (2008)</i>
11	11-Feb	Tu	Contextual factors in decision making	<i>Tversky & Kahneman (1981)</i>
12	13-Feb	Th	Group project Q&A (Research proposal due)	
-	18-Feb	Tu	NO CLASS – Spring break	
-	20-Feb	Th		
13	25-Feb	Tu	Feedback from SEEDS, group project starts	
14	27-Feb	Th	Environmental risk perception	<i>Budescu et al. (2014)</i>
15	3-Mar	Tu	Climate change and psychology I	<i>Rudman et al. (2013)</i>
16	5-Mar	Th	Climate change and psychology II	<i>Li et al. (2011)</i>
17	10-Mar	Tu	Public perception of climate change	<i>Whitman et al. (2018)</i>
18	12-Mar	Th	Income and well-being	<i>Oishi et al. (2011)</i>
19	17-Mar	Tu	Poverty and inequality	<i>Mani et al. (2013)</i>
20	19-Mar	Th	Group project Q&A	
21	24-Mar	Tu	Group project Q&A	
22	26-Mar	Th	Research Presentation Day 1	
23	31-Mar	Tu	Research Presentation Day 2	
24	2-Apr	Th	Research Presentation Day 3	
25	7-Apr	Tu	Prep for final exam (Research report due)	
Final Examination				

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>
- 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>
- 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>
- 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>
- Li, Y., Johnson, E. J., & Zaval, L. (2011). Local warming: Daily temperature change influences belief in global warming. *Psychological Science*, 22, 454-459.
<https://journals.sagepub.com/doi/full/10.1177/0956797611400913>
- Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science*, 341, 976-980. <https://science.sciencemag.org/content/341/6149/976>
- 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>
- Oishi S., Kesebir, S., & Diener, E. (2011). Income inequality and happiness. *Psychological Science*, 22, 1095-1100. https://www.jstor.org/stable/41319994?seq=1#metadata_info_tab_contents
- 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>
- 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>
- 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>
- 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>
- 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>