PSYC 321 Environmental Psychology (3 credits)

University of British Columbia, Vancouver
Spring 2014, Tues/Thurs 3:30p – 4:50p, CIRS 1250

Instructor: Dr. Jiaying Zhao
E-mail: jiayingz@psych.ubc.ca
Office Hours: Wednesdays 1p-2p in CIRS 4341

TA: Shaina Cahill
E-mail: scahill@psych.ubc.ca
Office Hours: Tuesdays 11-12 in Kenny 3512

I. Introducing your Instructor and TA

Dr. Zhao is an assistant professor in the Department of Psychology and the Institute for Resources, Environment and Sustainability. She received her Ph.D. in Psychology from Princeton University. Her research focuses on the cognitive and behavioral consequences of resource scarcity, interventions to promote pro-environmental actions, and the perception of environmental regularities.

Shaina is a PhD student in Neuroscience. She received a BSc (Hons) in Psychology from Memorial University of Newfoundland and a MSc in Neuroscience from Carleton University. She is currently working in the Snyder lab. Her research interests are in learning and memory as well as neurogenesis.

II. Course description and goals

One simple fact about our existence is that we are influenced by the physical environment and our actions shape the environment in which we live. This course precisely focuses on the interaction between the environment and human beings, examining how the physical 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.

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

1. Critically evaluate current research on environmental psychology
2. Design an experiment with rigorous methods to examine a research hypothesis
3. Explain psychological mechanisms underlying the environmental impact on human behavior
4. Identify psychological barriers to pro-environmental actions
5. Create and implement behavioral interventions to promote pro-environmental actions
6. Apply psychological perspectives to environmental issues

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

In-class writing (10%)
There are numerous in-class activities, in which you will complete short writing exercises.

Midterm Paper – Research Proposal (30%)
For the midterm paper, you will write a one-page research proposal using psychological principles learned in class to address a new question, design an intervention, conduct a campaign, or solve an environmental issue. Instructions and guidelines of the paper will be distributed at least two weeks before the due date. You will have two weeks to complete the paper individually, and hand in the paper in class (see course schedule).

Assignment Paper – Behavioral Intervention (30%)
You will choose one behavior that you would like to stop, change, or initiate, which can contribute to environmental sustainability. Over a period of 4 weeks, you will engage in this behavioral change, track and record your behavior. At the end of the period, you will write up a one-page report on what you did. Specific instructions and guidelines will be distributed in February and the report is due in March (see course schedule).

Final Examination (30%)
The final exam will be in-class and consist of short-answer questions. It will cover materials from all lectures and readings. There will be strong emphases on the critical evaluation of studies, creative design of new experiments, and the analysis of environmental issues using psychological insights. The last class will be a review class and the format/structure of the final exam will be introduced. **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 sing 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 300-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 highly 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 usually be posted the evening before a lecture. **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 the 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 process and evaluate research, since this is a fundamental skill any student should acquire.

Syllabus or reading changes
There may be minor changes to the syllabus 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 examination. In the event that a better article comes along that would enhance your experience in the course, it may be added in or substituted with an article that is currently on the course schedule. In the event that this occurs, ample notice will be given to allow you to adjust accordingly.

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.

There will be no "in and out" privileges once you've started an exam (e.g., bathroom break) unless you have a documented medical reason for such a need. Medical documentation must be disclosed with Dr. Zhao at least 24 hours prior to the exam.

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 midterm paper and the assignment paper, 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 321: Course and reading schedule

Class	*Date*	*Day*	*Topic*	*Assigned Reading*
1	7-Jan	Tu	Introductions, explain syllabus, requirements, and expectations	
2	9-Jan	Th	Environmental cognition	*Hidayetoglu et al. (2012)*
3	14-Jan	Tu	Psychological benefits of nature	*Berman et al. (2008)*
4	16-Jan	Th	Wild life and biophilia hypothesis	*Kellert (1993)*
5	21-Jan	Tu	Urban environments	*Nisbet & Zelenski (2011)*
6	23-Jan	Th	Environmental design	*Stone (2001)*
7	28-Jan	Tu	Place attachment and identity **(Midterm info)**	*Scannell & Gifford (2010)*
8	30-Jan	Th	Environmental cues and behavior	*Wu et al. (2013)*
9	4-Feb	Tu	Contextual factors in decision making	*Tversky & Kahneman (1981)*
10	6-Feb	Th	Social factors in environmental behavior	*Schultz et al. (2007)*
11	11-Feb	Tu	Cognitive barriers to environmental behavior	*Shu & Bazerman (2011)*
12	13-Feb	Th	Models of environmental behavior **(Midterm paper due)**	*Steg & Vlek (2009)*
-	18-Feb	Tu	**NO CLASS - Reading Week**	
-	20-Feb	Th		
13	25-Feb	Tu	Behavioral interventions I **(Assignment info)**	*Eves et al. (2009)*
14	27-Feb	Th	Behavioral interventions II	*Schwartz et al. (2013)*
15	4-Mar	Tu	Climate change and psychology I	*Rudman et al. (2013)*
16	6-Mar	Th	Climate change and psychology II	*Swim et al. (2011)*
17	11-Mar	Tu	Environmental risk perception	*Budescu et al. (2009)*
18	13-Mar	Th	Psychology and conservation	*Markowitz et al. (2013)*
19	18-Mar	Tu	Income and well-being	*Oishi et al. (2011)*
20	20-Mar	Th	Poverty and inequality	*Mani et al. (2013)*
21	25-Mar	Tu	Environmental activism and movements	*Feinberg & Willer (2013)*
22	27-Mar	Th	Public perception of environmental issues **(Assignment due)**	*Leiserowitz (2005)*
23	1-Apr	Tu	Special topics nominated by students	
24	3-Apr	Th	Special topics nominated by students	
25	8-Apr	Tu	Course review, and info on the final exam	
			Final Examination	

ASSIGNED READINGS

Berman, M. G., Jonides, J., & Kaplan, S. (2008) The cognitive benefits of interacting with nature. *Psychological Science, 19,* 1207-1212.

Budescu, D. V., Broomell, S., & Por, H. (2009). Improving communication of uncertainty in the reports of the Intergovernmental Panel on Climate Change. *Psychological Science, 20,* 299-308.

Eves, F. F., Olander, E. K., Nicoll, G., Puig-Ribera, A., & Griffin, C. (2009). Increasing stair climbing in a train station: The effects of contextual variables. *Journal of Environmental Psychology, 29,* 300-303.

Feinberg, M., & Willer, R. (2013). The moral roots of environmental attitudes. *Psychological Science, 24,* 56-62.

Hidayetoglu, M. L. Yildirim, K., & Akalin, A. (2012). The effects of color and light on indoor wayfinding and the evaluation of the perceived environment. *Journal of Environmental Psychology, 32,* 50-58.

Kellert, S. R. (1993). The biological basis for human values of nature. *The biophilia hypothesis,* 42-69.

Leiserowitz, A. A. (2005). American risk perceptions: Is climate change dangerous? *Risk Analysis, 25,* 1433-1442.

Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science, 341,* 976-980.

Markowitz, E. M., Slovic, P., Vastfjall, D., & Hodges, S. D. (2013). Compassion fade and the challenge of environmental conservation. *Judgment and Decision Making, 8,* 397-406.

Nisbet, E. K., & Zelenski, J. M. (2011). Underestimating nearby nature: Affective forecasting errors obscure the happy path to sustainability. *Psychological Science, 22,* 1101-1106.

Oishi S., Kesebir, S., & Diener, E. (2011). Income inequality and happiness. *Psychological Science, 22,* 1095-1100.

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.

Scannell, L., & Gifford, R. (2010). The relations between natural and civic place attachment and pro-environmental behavior. *Journal of Environmental Psychology, 30,* 289-297.

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.

Schwartz, D., Fischhoff, B., Krishnamurti, T., & Sowell, F. (2013). The Hawthorne effect and energy awareness. *PNAS, 110,* 15242-15246.

Shu, L. L., & Bazerman, M. H. (2011). Cognitive barriers to environmental action: Problems and solutions. *The Oxford Handbook of Business and the Natural Environment,* 161-175.

Steg, L., & Vlek, C. (2009). Encouraging pro-environmental behaviour: An integrative review and research agenda. *Journal of Environmental Psychology, 29,* 309-317.

Stone, N. J. (2001). Designing effective study environments. *Journal of Environmental Psychology, 21,* 179-190.

Swim, J. K., Stern, P. C., Doherty, T. J., Clayton, S., Reser, J. P., Weber, E. U., Gifford, R., & Howard, G. S. (2011). Psychology's contributions to understanding and addressing global climate change. *American Psychologist, 66,* 241-250.

Tversky, A., & Kahneman D. (1981). The framing of decisions and the psychology of choice. *Science, 211,* 453-458.

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.