

COVIDFOR 6005 – Conservation Behavior

University of Florida

Class 26602, Section 1111

Fall 2020

Wednesday periods 7-9; 1:55 – 4:55 p.m.

219 Newins Ziegler Hall and Online

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Office Hours: On zoom, Tues 1-3 and on request

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Office Hours: On zoom, on request

COVID Plans: This class will meet online by Zoom in the month of September. After testing several potential technologies to engage in-class and online students concurrently, we believe remaining online will be the best way to enable you all to hear each other and discuss these readings. Nevertheless, if the class chooses to meet in-person at some point, we will follow these guidelines:

- No more than 13 students will attend class in NZ 219 or McCarty G001, wearing masks, in seats over 6 feet apart. If more than 13 students wish to attend in person, we will alternate weeks. Those who are not present will attend online.
- The instructor and TA will also wear masks and remain 6 feet from others.
- One window and the door will remain open for air flow.
- As students file in the classroom (maintaining 6 ft distance) they will select seats farthest from the door, such that the last student will sit closest to the door. Students will leave the room in the reverse order.
- An OWL or technological equivalent will connect the remaining online students to the discussion. It will be necessary for everyone to speak loudly and distinctly and be silent while others are speaking.
- No papers will be distributed in class; everything will be shared online.
- Sanitizer will be available in the room for your hands and for cleaning the desks.
- No snacks will be offered.
- We will take a 15-minute break in the middle of the class and continue to maintain distance and masks.
- Masks may be removed when eating during break, preferably outdoors.
- If this plan does not work for any reason, we will revert to online teaching.

Any individuals who are unable or unwilling to meet [these requirements](#) cannot participate in face-to-face activities and may be subject to progressive discipline. If you are experiencing [COVID-19 symptoms](#) please use the UF Health screening system and follow the instructions on [whether you are able to attend class](#). Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work.

When we are online, students will keep their video cameras on and mute themselves if there is background noise. We are attempting to create an environment that

engages us in lively discussion! If students request that a session be recorded for their personal use, the privacy statement from the university is relevant:

“Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.”

And now, back to the course:

Conservation behavior is becoming an increasingly important concept as natural resource managers, development officers, educators, politicians, regulators, and business leaders consider what it takes to nudge people toward sustainable behaviors. Most acknowledge that our behavior plays an important role in creating and resolving environmental challenges. This course will explore what we know about human behavior and apply it to the design of helpful education and communication tools.

A variety of disciplines have something to contribute to the field of conservation behavior. While this class will be firmly rooted in psychology, we will also explore other social sciences, such as anthropology, sociology, and communication.

While it is important to understand environmental issues, that is not the purpose of this course. Education and communication play essential roles in creating a sustainable future. We will explore the theoretical foundation and application of using education and communication strategies in our collective efforts to reach this goal. This course is geared toward those who will be conducting research on behavior change through work with the public in a variety of formal and informal settings to develop strategies that support responsible environmental behavior.

Because of concerns about infection and illness, this syllabus describes the plan for an online course. We expect each student to participate in synchronous discussions with a camera and microphone sufficient for engaging with others. Cameras will be on unless bandwidth is an issue. We will make the decision about meeting in-person when we have more information about illness and more experience using online teaching strategies.

Course Overview:

Link theories of human behavior and change to education and communication research and strategies designed to move toward sustainability.

Course Objectives:

- Explain the models or theoretical frameworks that can be used to analyze the questions: Why do some people demonstrate environmentally responsible behaviors (ERB)? What are some psychological barriers to pro-environmental behavior? What encourages the formation and adoption of ERB? Students will identify the similarities and differences among these models and become comfortable using them.
- Increase familiarity with social science research designs and goals to discuss what we can learn from theories and models and how they add value to your research.
- Explain a range of education and communication strategies and identify the underlying theoretical assumptions about human behavior.
- Examine current programs that are working toward sustainability by identifying how the programs address change, the behaviors that are targeted, the strategies that are used, and the theoretical frameworks/assumptions that might drive the programs.
- Explore your own ideas and experiences regarding personal behavior change and develop a composite model of what you think works to support behavior change in people like you.

Required Readings:

There is a pile of reading materials for this course. It is imperative that you read the materials before class, as much of our class time will be spent discussing the readings. The readings are available on electronic reserve at <https://ares.uflib.ufl.edu/ares/> and there is a link to them in the Canvas course at <https://elearning.ufl.edu>. Access from off campus is through the UF VPN client. For more information on downloading, installing and using the VPN client, please go to <http://www.uflib.ufl.edu/login/vpn.html>. For general information on course reserves, please contact the Course Reserves Unit at 352-273-2520, or email at eres@uflib.ufl.edu.

To find readings, please use the tags. Required readings are tagged by the week they should be read (i.e., Week 3). Loads of goodies are tagged Optional and Background.

Course Policies

Participation

This course depends on active student engagement. You will read and discuss a number of models and research studies that contribute to our understanding of conservation behavior. The workload is heavy on theory and thinking in the first half of the course to give you a practical, working knowledge of this literature. The time you spend on reading probably correlates to your ability to engage in productive discussion and the amount you will learn about each theory.

Students are expected to attend class, engage in discussion, submit assignments on time, and participate in group work. Absences will be excused if accompanied by advanced notice or appropriate paperwork and if students join the online discussion for that week. Non-excused absences will result in a deduction of .5 points from the participation score

per week. Assignments should be uploaded to Canvas by midnight (Eastern time) on the day they are due. If you are unable to attend class meetings (online or otherwise), you are expected to obtain notes from another student and engage on the Canvas discussion space.

Diversity and Inclusion

As we work to recognize the opportunities and limits of privilege and change the outcomes of systemic injustice in the United States, it is important that we create a safe environment in this class to explore sensitive topics and help each other grow in our ability to respect all people and help them thrive. We can begin to do so by using inclusive and preferred language, acknowledging assumptions, considering the consequences and limitations of research findings, and seeking research that challenges the status quo.

Academic Honesty

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity.” On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honorcode/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class. Please also refer to the UF guidelines on plagiarism at <http://web.uflib.ufl.edu/msl/07b/instructorplagiarism.html> and plan on avoiding all types of plagiarism: stealing, misquoting, insufficient paraphrasing, and duplication.

Technology

For issues with technical difficulties for e-learning in Canvas, please post your question to the Technical Help Discussion in your course, or contact the UF Help Desk at:

- Learning-support@ufl.edu | (352) 392-HELP - select option 2 | <http://elearning.ufl.edu>
- Library Help Desk support <http://cms.uflib.ufl.edu/ask>
- SFRC Academic Hub <https://ufl.instructure.com/courses/303721>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues MUST be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

UF Campus Resources

Resources are available on campus for students having concerns or challenges related to their personal life, their academic progress, or their future that might interfere with their academic performance. These resources include:

Health and Wellness U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 3921575 so that a team member can reach out to the student.

Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies. Sexual Assault Recovery Services (SARS) Student Health Care Center, 392-1161.

University Police Department, 392-1111 (or 9-1-1 for emergencies).
<http://www.police.ufl.edu/>

Academic Resources E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learningsupport@ufl.edu. <https://lss.at.ufl.edu/help.shtml>.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.
<http://www.crc.ufl.edu/>

Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.
<http://teachingcenter.ufl.edu/>

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>

Student Complaints Campus:

https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf

On-Line Students Complaints: <http://www.distance.ufl.edu/student-complaintprocess>

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student

who must then provide this documentation to the Instructor when requesting accommodation. 0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

Grades

Your grade will be determined from the level and frequency of participation, presentations, attendance, and 8 assignments that total 100 points. The following scale will be used:

Grading Scale

A	3.67 – 4.00	93 – 100%	C	1.67 – 1.99	73 – 76%
A-	3.33 – 3.66	90 – 92%	C-	1.33 – 1.66	70 – 72%
B+	3.00 – 3.32	87 – 89%	D+	1.00 – 1.32	67 – 69%
B	2.67 – 2.99	83 – 86%	D	0.67 – 0.99	63 – 66%
B-	2.33 – 2.66	80 – 82%	D-	0.33 – 0.66	60 – 62%
C+	2.00 – 2.32	77 – 79%	E	0.00 – 0.32	59% or below

Course Schedule

Sept 2 Wk 1. Introduction, General Framework, Getting Started

Assignments and Comparison Chart
Thinking behind the course design
Discuss ideas for personal habitual behavior changes
Sign up for discussion responsibilities

Section 1: Exploring Theories

Sept 9 Wk 2. Intuitive and traditional models of human behavior change

Due: Assignment 1: Post your barriers and motives for personal behavior. Pick a Behavior Buddy to stay in touch with.
Every week: Comparison Chart and Behavior Update

Bucchi, Massimiano. 2008. Of deficits, deviations, and dialogues: Theories of public communication of science, in Bucchi, M. and Trench, B. (eds.) *Handbook of Public Communication of Science and Technology*. London: Routledge, pages 57-76.

Kibert, C., M. Monroe, A. Peterson, R. Plate, L. Thiele. 2012. Portion of chapter 8: Improving our thinking about sustainability, from *Working toward Sustainability: Ethical*

decision making in a technological world. NY: John Wiley & Sons, pages 209-222.

Schultz, P. Wesley. 2002. Knowledge, Information, and Household Recycling: Examining the knowledge-deficit model of behavior change. In Dietz, Thomas and Paul C. Stern (eds) *New Tools for environmental protection: Education, information, and voluntary measures*. Washington DC: National Academy Press, Pages 67-82.

Sept 16 Wk 3. Motives, values, attitudes and behavior change

Due: Assignment 2a

De Young, Raymond. 2000. Expanding and evaluating motives for environmentally responsible behavior. *Journal of Social Issues*. 56 (3): 509-526.

Aronson, E. 1997. Back to the future: Retrospective review of Leon Festinger's A Theory of Cognitive Dissonance. *American Journal of Psychology*. 110 (1): 127-137

Dietz, T., A. Fitzgerald, and R. Shwom. 2005. Environmental Values. *Annual Review of Environment and Resources* 30:335-372. Just Skim.

Ryan, R. M. and E. L. Deci. 2000. Self-determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist*. 55(1): 68-78.

Ed Deci video on motivation

Dan Ariely video on motivation

Sept 23 Wk 4. Perceptions: hope, identity, optimism and connection to nature

Due: Assignment 2b

Clayton, S. 2003. Environmental identity: A conceptual and an operational definition. In Clayton, S. and S. Opatow. 2003. *Identity and the Natural Environment*. Cambridge, MA: MIT Press. Pages 45-65.

Snyder, C.R., Rand, K. L., and Sigmon, D.R. 2001. Hope theory. A member of the positive psychology family. In *Handbook of positive psychology*, ed. C.R. Snyder and S.J. Lopez, 257-75. New York, NY: Oxford University Press.

Whitburn, J., W. Linklater, and W. Abrahamse. 2019. Meta-analysis of human connection to nature and proenvironmental behavior. *Conservation Biology*, 34(1): 180-193.

Shatté, A. J., K. J. Reivich, J. Gillham, and M. E. P. Seligman. 1999. Learned optimism in children. *Coping: The psychology of what works*. 165-181. DOI: 10.1093/med:psych/9780195119343.003.0008 <https://works.swarthmore.edu/fac-psychology/543>

Sept 30 Wk 5. Major models of behavior from psychology

Due: Assignment 3a

Ajzen, I. 1985. From intentions to actions: A theory of planned behavior. In Kuhl, J. and J. Beckman (eds) *Action-control: From cognition to behavior*. Heidelberg: Springer, pp 11-39.

Stern, Paul C. 2000. Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*. 56 (3): 407-424.

Oct 7 Wk 6. Major models influencing behavior from communication

Due: Assignment 3b

Petty, Richard E. and Joseph R. Priester. 1994. Mass Media Attitude Change: Implications of the Elaboration Likelihood model of persuasion. In Bryant, Jennings and Dolf Zillmann, *Media Effects: Advances in theory and research*. Hillsdale NJ: Lawrence Erlbaum Associates. Pages 91-122.

Rogers, Everett. M. 2003. *Diffusion of Innovations*. Fifth edition New York: Free Press. Chapter 1.

Oct 14 Wk 7. Presentations and Review (Assignment 5)

Upload presentations and handouts by midnight Sunday October 11, though you can upload it any time prior to this, of course. Come to class prepared to ask questions of others, and answer questions about yours.

Vining, Joanne and Angela Ebreo. 2002. Emerging theoretical and methodological perspectives on conservation behavior. In Bechtel, Robert and Arza Churchman (eds) *Handbook of Environmental Psychology*. New York: John Wiley, 541-558.

Section 2: Apply Theories

Oct 21 Wk 8. Social Marketing

Use your comparison chart to think about what theories social marketing uses!
In small groups report on one of the social marketing tools. What it is, how it works, why it works, and provide a case study of it working.
Explain Assignment 6.

McKenzie-Mohr, D. and P. W. Schultz. 2014. Choosing Effective Behavior Change Tools. *Social Marketing Quarterly*, 20(1): 35-46.

Byerly, H., A. Balmford, P. J. Ferraro, C. H. Wagner, E. Palchak, S. Polasky, T. H. Ricketts, A. J. Schwartz, and B. Fisher. 2018. Nudging pro-environmental behavior: evidence and opportunities. *Frontiers in Ecology and the Environment*, 16(3): 159-168.

Smith, R. J., G. Salazar, J. Starinchak, L. A. Thomas-Walters, and D. Verissimo. 2020. Chapter 19: Social marketing and conservation. In W. J. Sutherland, P. N. M. Brotherton, Z. G. Davies, N. Ockendon, N. Pettorelli, & J. A. Vickery (Eds.), *Conservation Research, Policy and Practice* (pp. 309 – 321). Cambridge University Press. Open Access: <https://www.cambridge.org/core/books/conservation-research-policy-and-practice/social-marketing-and-conservation/5D1DDA6E5E7C5DFB0A81527CD961FCD2>

Verissimo, D., A. Bianchessi, A. Arrivillaga, F. C. Cadiz, R. Mancao, and K. Green. 2018. Does it work for biodiversity? Experiences and challenges in the evaluation of social marketing campaigns. *Social Marketing Quarterly*, 24(1): 18-34.

Optional: Fostering Sustainable Behavior by Doug McKenzie-Mohr

Oct 28 Wk 9. Critique and Expansion of Social Marketing

We will discuss your mid-term Application Exercise (Assignment 6) as we expand social marketing ideas.

Geller, Scott. 2002. Chapter 34: The challenge of increasing proenvironment behavior. In Bechtel, Robert and Arza Churchman (eds) *Handbook of Environmental Psychology*.

Thaler, R. H. and C. R. Sunstein. 2003. Libertarian Paternalism. *The American Economic Review*. 93(2): 175-179.

Hausman, D. M. and B. Welch. 2010. Debate: To nudge or not to nudge. *Journal of political philosophy*. 18(1): 123-136.

De Young, R. 1993. Changing behavior and making it stick: The conceptualization and management of conservation behavior. *Environment and Behavior* 25, 485-505.

Videos: Nudge

Nov 4 Wk 10. Discuss your cases (Assignment 7)

Post your case studies to Voice Thread by Sunday.

Instead of readings this week, you'll be reviewing everyone's case studies! If possible, those who are in Gainesville may wish to meet in-person in the NZ Breezeway to view and share posters during class time. Since this will be outdoors, there should be no limit on the number assembled, as long as we wear masks and keep the distance!

Section 3: Broaden Application

Nov 11 Wk 11. Moral and worldview contributions to behavior

Assignment 4a

Haidt, Jonathan. 2007. The new synthesis in moral psychology. *Science*. 316: 998-1001.

Feinberg, M. and R. Willer. 2013. The moral roots of environmental attitudes. *Psychological Sciences*, 24(1): 56-62.

Wolsko, C., H. Ariceaga, and J. Seiden. 2016. Red, white and blue enough to be green: Effects of moral framing on climate change attitudes and conservation behaviors. *Journal of Experimental Social Psychology*, 65: 7-19.

Kahan, D. 2010. Fixing the communications failure. *Nature*. 463: 296-297.

Optional: Haidt, Jonathan. 2001. The emotional dog and its rational tail: a social intuitionist approach to moral judgment. *Psychological Review*, 108:4, 814-834.

Videos: Haidt

Nov 18 Wk 12. Change at the Community Level

Assignment 4b

Muro, M. and P. Jeffrey. 2008. A critical review of the theory and application of social learning in participatory natural resource management processes. *Journal of environmental planning and management*. 51(3): 325-344.

Berkes, F. 2009. Evolution of co-management: Role of knowledge generation, bridging organizations, and social learning. *Journal of environmental management*. 90: 1692-1702.

Pretty, J. 2003. Social Capital and the Collective Management of Resources. *Science*, 302(5652): 1912-1914.

Colvin, R. M., G. B. Witt, and J. Lacey. 2015. The social identity approach to understanding socio-political conflict in environmental and natural resources management. *Global Environmental Change*, 34: 237-246.

Optional: Bodin and Crona. 2009. The role of social networks in natural resource governance: What relational patterns make a difference? *Global environmental change*, 19(3): 366-374.

changed it yet, 4) describe the barriers you experience to making this change, and 5) describe your motivations for wanting to change it. 1-2 pages, single spaced. There is a template on Canvas you may use.

Then, throughout the semester you will keep a journal that records your attempts and measures your success, try different strategies to adopt a new behavior, discuss your efforts with “behavior buddy” and analyze your efforts in the context of the theories we discuss in this course. Aim to record evidence of your attempts, in addition to your thoughts about your behavior, and to reflect on your progress with your Behavior Buddy during class.

2, 3, and 4. Three research articles on theories **10 points each**

For each assignment, select one theory/paper from class that you are interested in and find a **research-based article** that explores this theory with a topic of interest to you. Please avoid assigned reading for the course (you will have to check ahead in the syllabus). Read the article, write a 1-2 page paper in which you summarize the findings and reflect on the theory you selected, and come to class prepared to discuss how the theory we read has or has not worked in this case (or include in online posting). Submit your paper on the day we discuss the theory.

- **Assignment 2;** If you select cognitive dissonance, motives, or any of the theories listed in the Dietz review, or Self Determination this is due Sept 16. If you select learned helplessness, hope, or environmental identity, it is due Sept 23.
- **Assignment 3:** Use TPB or Stern’s Coherent Theory for a paper due Sept 30, or use ELM or Diffusion for a paper due Oct 7.
- **Assignment 4:** Use Moral Reasoning or Cultural Cognition for a paper due Nov 11, or social identity, social learning, social capital for a paper due Nov 18.

Please note that these authors have written about many things – aim to find articles that reference these theories. In addition, some authors talk about someone else’s theory – please hunt for research articles that **test and explore the theory**. To find cited works, go to www.uflib.ufl.edu and follow these steps: Click on Databases and Journals tab, then Project Starters, Web of Science, Cited Reference Search, and input Cited Author and Cited Work. Narrow your search with ‘social science,’ etc.

5. Present another behavior change theory **Oct 14 10 points**

Using Vining’s overview of behavior change theories (and others), identify one that we have not yet covered and become an expert on it. You may work in pairs on this assignment if you wish. You will explain the theory, find at least two articles that use the theory, and explain those too. Some may not have been applied to conservation topics yet. What can we learn from these authors? Prepare a 1-2 page handout for the class to accompany your short (5-10 minute) ppt presentation that will help everyone complete their Comparison Charts. Upload your handout and presentation to Voice Thread by October 11 and narrate the presentation in Voice Thread. Respond to comments and questions in class on October 14.

Bandura

Self efficacy and outcome expectancy

Brehm and Brehm	Reactance
Chawla	Significant Life Experience
Fazio	Attitudes and Behavior
Hungerford and Volk	Environmental Citizen Model
Kahneman and Tversky	Decision Heuristics
Kaiser and Shimoda	Responsibility
Kals & Schumacher	Emotional Affinity
Krasny	Civic Ecology Education
Millar and Millar	Direct Experience, Information
Prochaska	Stages of Change
Sansone	Self Regulation
Schwartz	Norm Activation
Seguin & Pelletier	Environmental activism
Tuan	Sense of Place (see Jorgensen and Stedman)

6. Application of Theories **Oct 28 5 points**

Complete a “take home quiz” that asks you to apply these theories to potential survey questions. Submit your responses prior to class, and we will discuss on October 28. You’ll be able to submit a revised version and new reflections after class discussion.

7. Case study of a program/project **Nov 4 15 points**

Identify a program or project that is designed to encourage people to engage in or change environmental behavior. Describe the program, critique the degree to which the program is successful, and suggest which theories are or are not working. Explain why. Create and narrate a powerpoint that describes your program or project and makes clear the connections to theory. Upload to Voice Thread by Sunday Nov 1 so that everyone can review the programs prior to class. We’ll discuss similarities, differences, and the ways theories could have been more helpful on Wednesday. This will be an opportunity to meet in person if you want to bring posters instead of creating powerpoints; let’s make sure we are all in agreement when the time comes.

8. Reflection & Model of Personal Behavior Change **Dec 9/12 15 points**

Throughout the semester you have worked on changing a personal behavior that you selected. Return to your first assignment and reflect on your initial ideas about motivations and barriers. Review your journal that noted your attempts to alter your behavior and the evidence of your effort. Reflect on what worked and why. What incentives did you try? Did commitment work? To what extent is perceived control or subjective norm a relevant factor? Summarize your experience in the language we used in the course (identifying variables, barriers, theories, etc.) in about 2 single spaced pages.

Then, using what did or did not work for you, develop and describe an all-encompassing synthesis model that explains your behavior change using at least four of the theories and models that resonate most strongly with your experience. You should consider and define the context in which this model might hold true – all behaviors, just personal behavior, just public behavior; any behavior or only self-selected behaviors; only when motivated by a class assignment, with peer support, etc. Then describe how you could use this

model to design communication or education programs to change other people's personal behaviors. Have a draft ready for our last class. The model description should be about 3-4 pages. If you need more time, you can submit the final assignment by Dec 12; it should be no more than a total of 5 pages, single spaced, with a graphic model.

Participation points from participation, questions, attendance 20 points
Asking questions, providing answers, facilitating conversation, attending class, and engaging in small group work are important components of this class. Points will be based on quality of participation in discussion – online and/or in person. One point is allocated for each discussion on Canvas; other points will come from synchronous discussion.

Suggested background to support conservation behavior

Oskamp, S. 2000. Psychological contributions to achieving an ecologically sustainable future for humanity. *Journal of Social Issues*, 56 (3): 373-390.

Meadows, D.J., Meadows, and Randers. 2002. Overshoot but not collapse, in *Beyond the Limits*.

Monroe, M. C. 2003. Two avenues for encouraging conservation behaviors, *Human Ec Rev* 10(2): 113-125.

Heimlich, J.E., & Ardoin, N.M. 2008. Understanding Behavior to Understand Behavior Change: A Literature Review. *Environmental Education Research*. Vol. 14, No. 3, pp. 215-237.

Wackernagel, M. et al. 2002. Tracking the ecological overshoot of the human economy. *PNAS*. 99(14): 9266-9271.

Marten, G. et al. 2005. Environmental Tipping Points. *World Watch*. 18(6): 10-14.

Specific theories and papers to help with Assignment 5

Chawla, L. 1998. Significant life experiences revisited: A review of research on sources of environmental sensitivity. *Environmental Education Research*. 4 (4): 369-382. Also of interest: Chawla. 1999. *Journal of Environmental Education* 31 (1): last 2 pages.

Hines, J. M., H. R. Hungerford, A.N. Tomera. 1986/87. Analysis and synthesis of research on responsible environmental behavior: A meta-analysis. *Journal of environmental education*. 18 (2): 1-8.

Hungerford, Harold R. and Trudi L. Volk. 1990. Changing learner behavior through environmental education, *Journal of Environmental Education*. 21 (3): 8-22.

Jorgensen. B. S. and R. C. Stedman. 2001. Sense of place as an attitude: Lakeshore owners' attitudes toward their properties. *Journal of Environmental Psychology*. 21, 233-248.

Kaiser, F. and T. Shimoda. 1999. Responsibility as a predictor of ecological behavior. *Journal of Environmental Psychology*. 19, 243-253.

Optional readings that support class discussions

Adler, P. S. and S-W Kwon. 2002. Social Capital: Prospects for a new concept. *The Academy of Management Review*. 27(1): 17-40.

Keen, M., V. A. Brown, and R. Dyball. 2005. *Social Learning in environmental management: Towards a sustainable future*. London: Earthscan.

Kaplan, Stephen. 2000. Human nature and environmentally responsible behavior. *Journal of Social Issues*. 56 (3): 491-508.

Pahl-Wostl, C. 2006. The importance of social learning in restoring the multifunctionality of rivers and floodplains. *Ecology and Society*. 11(1): 10. <http://www.ecologyandsociety.org/vol11/iss1/art10/>

Zelezny, L. C. 1999. Educational interventions that improve environmental behaviors. *JEE* 31(1): 5-10.

Oyserman, Daphna, Neil A. Lewis, Veronica X. Yan, Oliver Fisher, S. Casey O'Donnell, & Eric Horowitz. 2017. An identity-based motivation framework for self-regulation. *Psychological Inquiry*, 28(2-3):139-147.

Mascia, M. B. and Mills, M. 2018. When conservation goes viral: The diffusion of innovative biodiversity conservation policies and practices. *Conservation Letters*, 11: e12332.