

The Psychology of Environmental Stewardship

ENVIRON 361 / PSYCH 385 and NRE / UP 561

INSTRUCTORS

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RESOURCES

[W] Websites CTools = ctools.umich.edu and UM.Lessons = lessons.ummu.umich.edu (ENVIRON 361)
[R] Reserve Required readings on reserve at www.lib.umich.edu/reserves
[A] Additional Additional material on reserve at www.lib.umich.edu/reserves

COURSE GRADING

Exam 1	15%	Week of February 20
Exam 2	20%	Week of April 10
Individual exploratory	15%	See below
Team-based research project	35%	See below
Article review	5%	Review of one article during the term
Participation, pop-quizzes, tasks, etc.	10%	Throughout the term

DUE DATES

Individual exploratory:

Task 1 – Pre-exploratory survey	No later than January 13
Task 2 – Select and research technique	No later than January 27
Task 3 – Journaling	Throughout the term (weekly)
Task 4 – Post-exploratory survey	No later than March 24
Task 5 – Term paper	April 14

Team-based research project:

Lab 1 report	5%	January 23
Lab 2 report	5%	February 20
Lab 3 report	5%	March 20
Pattern Language Booklet	20%	April 7

SCHEDULE

Updated: Saturday, March 11, 2006

1/9	Green consumers & green citizens Environmental impacts	1/11	Intervention Frameworks	Discussion 1
1/16	No Class – MLK Day	1/18	Walking & Active Living Intro to Team-based Projects	Discussion 2
1/23	Prompting	1/25	Attitudes, awareness, & stories Environmental education	Discussion 3
1/30	Theory of Reasoned Action (TRA) Theory of Planned Behavior (TPB)	2/1	ACTIVITY	Discussion 4
2/6	Norm Activation Model	2/8	ACTIVITY	Discussion 5
2/13	M/BM Introduction	2/15	M/BM & Attention Restoration Theory (ART)	Discussion 6
2/20	M/BM & Mindfulness	2/22	M/BM & Walking	EXAM 1
WINTER RECESS				
3/6	Extrinsic Motivation	3/8	ACTIVITY	Discussion 7
3/13	Social Motivation	3/15	ACTIVITY	Discussion 8
3/20	Social Support & Social Marketing	3/22	ACTIVITY	Discussion 10
3/27	Commitment	3/29	ACTIVITY	Discussion 11
4/3	Intrinsic Motivation	4/5	ACTIVITY	Discussion 12
4/10	CBDM & Self Interest	4/12	HIP / BC Summary	Discussion 13
4/17	EXAM 2			

JANUARY 9 GREEN MARKETS AND GREEN CITIZENS CONCEPTUALIZING ENVIRONMENTAL IMPACTS

- [R] Ehrlich, P. (2002) Human natures, nature conservation, and environmental ethics. *BioScience*. 52 (1): 31-42 (Read first half, scan the rest)
- [R] Wackernagel, M. and Rees, W. (1996) Footprints and sustainability (Ch. 2). *Our Ecological Footprint*. Gabriola Island, B.C.: New Society Publishers. ...[R - 561]
- [R] Vining, J. and Ebreo, A. (2002) Emerging theoretical and methodological perspectives on conservation behavior. (Chapter 35, pp. 541-558). *Handbook of Environmental Psychology*. Eds. Bechtel R. and Churchman A. New York: John Wiley and Sons, Inc.

JANUARY 11 INTERVENTION FRAMEWORKS FOR BEHAVIOR CHANGE

- [R] Clay, R. A. (2001). Many approaches to being green. *Monitor on Psychology*. 32: 1-6.
- [R] De Young, R. (1993). Changing behavior and making it stick: The conceptualization and management of conservation behavior. *Environment and Behavior*. 25:485-505.
- [R] Parnell, R. and Popovic Larsen, O. (2005). Informing the development of domestic energy efficiency initiatives: An everyday householder-centered framework. *Environment and Behavior*. 37(6): 787-807.

JANUARY 16 NO CLASS - MLK Day

JANUARY 18 WALKING & ACTIVE LIVING

- [R] McAuley, E. (1994). Enhancing psychological health through physical activity. *Toward Active Living*. H. A. Quinney, L. Gauvin and A. E. T. Wall [Eds.] Champaign IL: Human Kinetics Publishers.
- [R] Jackson, R. J. (2003). The impact of the built environment on health: An emerging field. *American Journal of Public Health*. 93(9): 1382-1384.
- [R] Bauman, A. E., Sallis, J. F., Dzewaltowski, D. A., & Owen, N. (2002). Toward a better understanding of the influences on physical activity: The role of determinants, correlates, casual variables, mediators, moderators, and confounders. *American Journal of Preventive Medicine*. 23(2S): 5-14.
- [R] Teisl, M. F., & O'Brien, K. (2003). Who cares and who acts? Outdoor recreationists exhibit different levels of environmental concern and behavior. *Environment and Behavior*. 35(4): 506-522.
- [A] Endredy, J. (2002). *Earthwalks for Body and Spirit: Exercises to Restore Our Sacred Bond with the Earth*. Rochester, VT: Bear & Company.
- [A] Frank, L. D, P. O. Engelke and T. L. Schmid (2003). *Health and Community Design: The Impact of the Built Environment on Physical Activity*. Washington, D.C.: Island Press.
- [A] Burton, T. L. (1994). Issues in policy development for active living and sustainable living in Canada. I *Toward Active Living*. H. A. Quinney, L. Gauvin and A. E. T. Wall [Eds.] Champaign IL: Human Kinetics Publishers.

JANUARY 23 PROMPTING

- [R] Katzev, R. D. and T. R. Johnson (1987). Antecedent communications: prompts. (Chapter 2). *Promoting Energy Conservation: An Analysis of Behavioral Research*. Boulder, CO: Westview Press.
- [R] Ester, P. and R. A. Winett (1981-1982). Toward more effective antecedent strategies for environmental programs. *Journal of Environmental Systems*. 11: 201-221.
- [R] Aronson, E. and M. O'Leary (1982-1983). The relative effectiveness of models and prompts on energy conservation: A field experiment in a shower room. *Journal of Environmental Systems*. 12: 219-224.

JANUARY 25 ATTITUDES and AWARENESS STORIES ENVIRONMENTAL EDUCATION

- [R] Hines, J. M., H. R. Hungerford and A. N. Tomera (1987). Analysis and synthesis of research on responsible environmental behavior: A meta-analysis. *Journal of Environmental Education*. 18(2): 1-8.
- [R] Thompson, S. and M. A. Barton (1994). Ecocentric and anthropocentric attitudes toward the environment. *Journal of Environmental Psychology*. 14: 149-157.
- [R] Shanahan, J., Pelstring, L., McComas, K. (1999) Using narratives to think about environmental attitude and behavior: An exploratory study. *Society and Natural Resources*. 12: 405-419.
- [R] De Young, R. and M. Monroe (1996) Some fundamentals of engaging stories. *Environmental Education Research*. 2: 171-187.
- [A] Monroe, M. C. and S. Kaplan (1988). When words speak louder than actions: Environmental problem solving in the classroom. *Journal of Environmental Education*. 19(3): 38-41.
- [A] Costanzo, M., D. Archer, E. Aronson and T. Pettigrew (1986). Energy conservation behavior: The difficult path from information to action. *American Psychologist*. 41: 521-528.

JANUARY 30 THEORY OF REASONED ACTION (TRA) THEORY OF PLANNED BEHAVIOR (TPB)

- [R] Ajzen, I. and M. Fishbein (1980). A theory of reasoned action. (Chapter 1, Pp. 5-9). *Understanding Attitudes and Predicting Social Behavior*. NJ: Prentice-Hall.
- [R] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. 50:179-211.

FEBRUARY 6 NORM ACTIVATION MODEL

- [R] Bamberg, S. and P. Schmidt (2003) Incentives, morality or Habit?: Predicting students' car use for university routes with the models of Ajzen, Schwartz and Trandis. *Environment and Behavior*. 35: 264-285.
- [R] Collins, C. M. and Chambers, S. M. (2005). Psychological and situational influences on commuter-transport-mode choice. *Environment and Behavior*. 37(5): 640-661.
- [R] Staats, H., Harland, P. and Wilke, H. (2004). Effecting durable change: A team approach to improve environmental behavior in the household. *Environment and Behavior*. 36(3): 341-367.

FEBRUARY 13 M/BM INTRODUCTION

- [R] Astin, J. A., S. L. Shapiro, et al. (2003). Mind-body medicine: State of the science, implications for practice. *J AM Board Fam Pract*. 16(2), 131-147.
- [R] Rice, R. I. (2001). Mind-body interventions. *Diabetes Spectrum*. 14(4): 213-217.
- [A] Cassidy, C. M. (2001). Social and cultural context of complementary and alternative medicine systems. *Fundamentals of Complementary and Alternative Medicine*. M. S. Micozzi [Ed.] NY: Churchill Livingstone: 18-41.
- [A] Jacobs, G. D. (2001). The physiology of mind-body interactions: The stress response and the relaxation response. *J Altern Complement Med*. 7 Suppl 1, S83-92.
- [A] Oken, B.S., S. Kishiyama, et al. (2004). Randomized controlled trial of yoga and exercise in Multiple Sclerosis. *Neurology*. 62(11): 2058-2064.
- [A] Caspi, O., L. Sechrest, et al. (2003). On the definition of complementary, alternative, and integrative medicine: Societal mega-stereotypes vs. the patients' perspectives. *Altern Ther Health Med*. 9(6): 58-62.
- [A] Ausubel, K. (2001). The coming age of ecological medicine: Our health depends on a healthy planet. *Utne Reader*.

FEBRUARY 15 M/BM & ATTENTION RESTORATION THEORY (ART)

- [R] Kaplan, S. (1995). The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology*, 15, 169-182.
- [R] Kaplan, S. (2001). Meditation, restoration and the management of mental fatigue. *Environment and Behavior*, 33, 480-506.

FEBRUARY 20 M/MB & MINDFULNESS

- [R] Bishop, Lau, et al. (2004). Mindfulness, A proposed operational definition. *Clinical Psychology: Science and Practice*. 11(3), 230-241.
- [R] Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present and future. *Clinical Psychology: Science and Practice*. 10(2), 144-156.
- [R] Grossman, P., L. Niemann, et al. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *J Psychosom Res* 57(1), 35-43.
- [R] Wenk-Sormaz, H. (2005). Meditation can reduce habitual responding. *Alternative Therapies in Health and Medicine*. 11(2):42-58.
- [A] Brown, K. W. and R. M. Ryan (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *J Pers Soc Psychol*. 84(4): 822-848.
- [A] Brown, K. and R. M. Ryan (2004). Perils and promise in defining and measuring mindfulness: Observations from experience. *Clinical Psychology: Science & Practice*. 11(3).
- [A] Davidson, R.J., J. Kabat-Zinn (2003). Alteration in brain and immune function produced by mindfulness meditation. *Psychosom Med*. 65(4), 564-570.
- [A] Gunaratana, B. H. (2002) Mindfulness in plain english. Somerville, MA: Wisdom Publications.

FEBRUARY 20 M/MB & WALKING

- [R] Kabat-Zinn, J. (2005). Walking meditations. *Coming to Our Senses: Healing Ourselves and the World Through Mindfulness*. NY: Hyperion. (Pp. 268-272).
- [R] Kabat-Zinn, J. (1994). Walking meditation. *Wherever you go, there you are: Mindfulness meditation in everyday life*. NY: Hyperion. (Pp. 145-148).
- [R] Nhat Han, T. (1991). Walking meditation. *Peace is every step: The path of mindfulness in everyday life*. NY: Bantam (Pp. 27-29).
- [A] Nhat Han, T. (1996). *The long road turns to joy: A guide to walking meditation*. Berkeley, CA: Parallax.
- [A] Segerstrom, S.C. and G. E. Miller (2004). Psychological stress and the human immune system: A meta-analytic study of 30 years of inquiry. *Psychol Bull*. 130(4): 601-630

WINTER RECESS – FEBRUARY 25 through MARCH 5

MARCH 6 EXTRINSIC MOTIVATION

- [R] Geller, E. S. (1989) Applied behavior analysis and social marketing. *Journal of Social Issues*. 45: 17-36.
- [R] Geller, E. S., R. Winett and P. Everett (1982) Waste Reduction and Resource Recovery. (Chapter 4, Pp. 113-157, scan the beginning and focus on the studies). *Preserving the Environment: New Strategies for Behavioral Change*. NY: Pergamon Press.
- [R] Ebreo, A. and J. Vining (2001) How similar are recycling and waste reduction?: Future orientation and reasons for reducing waste as predictors of self-reported behavior. *Environment and Behavior*. 33: 424-448.
- [R] Vining, J. and A. Ebreo (1990). What makes a recycler?: A comparison of recyclers and nonrecyclers. *Environment and Behavior*. 22: 55-73.

[R] McMakin, A. et al. (2002) Motivating residents to conserve energy without financial incentives. *Environment and Behavior*. 34(6): 848-863.

[A] Thøgersen, J. (1996) Recycling and morality: A critical review of the literature. *Environment and Behavior*. 28:536-558.

MARCH 13 SOCIAL MOTIVATION

[R] Hopper, J. R. and J. M. Nielsen (1991). Recycling as altruistic behavior: Normative and behavioral strategies to expand participation in a community recycling program. *Environment and Behavior*. 23: 195-220.

[R] Katzev, R. D. and T. R. Johnson (1987). Social Influences (Chapter 4, Pp. 89-107). *Promoting Energy Conservation: An Analysis of Behavioral Research*. Boulder, CO: Westview Press.

[R] Guagnano, G. A. (1995). Locus of control, altruism and agentic disposition. *Population and Environment*. 17: 63-77.

MARCH 20 SOCIAL SUPPORT & SOCIAL MARKETING

[R] Andreasen, A. R. (1994) Social marketing: Its definition and domain. *Journal of Public Policy and Marketing*. 13(1): 108-114.

[R] Kilbourne, W. E. and Beckmann, S. C. (1998) Review and critical assessment of research on marketing and the environment. *Journal of Marketing Management*. 14:513-532.

[R] Cialdini, R. (2003) Crafting normative messages to protect the environment. *Current Directions in Psychological Science*. 12: 105-109.

MARCH 27 COMMITMENT MOTIVATION

[R] Katzev, R. D. (1986). The impact of commitment in promoting consumer energy conservation. (Chapter 21, Pp. 280-294). In E. Monnier, G. Gaskell, P. Ester, B. Joerges, B. Lapillonne, C. Midden and L. Puisseux (Eds.). *Consumer Behavior and Energy Policy: An International Perspective*. NY: Praeger.

[R] Katzev, R. D. and A. U. Pardini (1987-1988). The comparative effectiveness of reward and commitment approaches in motivating community recycling. *Journal of Environmental Systems*. 17:93-113.

APRIL 3 INTRINSIC MOTIVATION & COMPETENCE MOTIVATION

[R] Granzin, K. L. and J. E. Olsen (1991) Table 7 in Characterizing participants in activities protecting the environment: A focus on donating, recycling, and conservation behaviors. *Journal of Public Policy and Marketing*. 10: 18-21 (Table 7).

[R] De Young, R. (1985-1986) Encouraging environmentally appropriate behavior: The role of intrinsic motivation. *Journal of Environmental Systems*. 15:281-292.

[R] Sansone, C. (1999) Introductory comments. *Journal of Experimental Social Psychology*. 35: 205-208.

[R] De Young, R. (1996) Some psychological aspects of a reduced consumption lifestyle: The role of intrinsic satisfaction and competence. *Environment and Behavior*. 28: 358-409.

[A] Corral-Verdugo, V. (2002) A structural model of proenvironmental competency. *Environment and Behavior*. 34 (4): 531-549.

[A] White, R. W. (1959). Motivation reconsidered: The concept of competence (Needs for excitement and novelty). *Psychological Review*. 66: 313-324. ...[O]

[A] Isaac, J. D. and C. Sansone (1999) Other people as a source of interest in an activity. *Journal of Experimental Social Psychology*. 35: 239-265. ...[O]

APRIL 10 CLARITY-BASED DECISION MAKING & SELF-INTEREST

[R] Kaplan, S. (1991). Beyond rationality: Clarity-based decision making. (Pp. 171-190). In T. Gärling and G. W. Evans [Eds.] *Environment, Cognition, and Action*. NY: Oxford University Press.

- [R] De Young, R. (2000) Expanding and evaluating motives for environmentally responsible behavior. In Zelezny, L. and P. Schultz [Eds.] *Journal of Social Issues*. 56:509-526.
- [R] Kaplan, S. and C. Peterson (1993). Health and environment: A psychological analysis. *Landscape and Urban Planning*. 26:17-23.

APRIL 12 HIP / BC SUMMARY

- [R] Kaplan, S. and R. Kaplan (2003) Health, supportive environments, and the reasonable person model. *American Journal of Public Health*. 93: 1484-1489.

APRIL 17 EXAM 2