

EVOLUTION & SOCIAL BEHAVIOR

Instructor: Timothy Crippen
Office: Monroe Hall 308-B
Phone: 654-1503
email: tcrippen@umw.edu
Office Hours: T Th 12:30-2:00 PM, and by appointment
MWF by appointment

COURSE OVERVIEW

A revolution of the social and behavioral sciences is currently afoot, one that is hardly recognized by most practitioners of the sociological craft. The challenge is being posed by developments that have taken place in evolutionary theory over the course of the past forty years or so. These developments comprise powerful theoretical tools for the analysis and understanding of behavior across a diversity of social species, including *Homo sapiens*. These analytic innovations are increasingly making their presence felt in a variety of human behavioral sciences, most especially anthropology and psychology. Whether sociology will engage and incorporate these helpful tools is a question that remains unanswered. The principal goals of this course are to introduce students to these developments in evolutionary theory, to suggest ways in which they have been applied with considerable success to the study of animal (including human) social behavior, and to urge students to recognize the significance of these developments for the discipline of sociology.

The course is organized by reference to two parts. First, we shall examine the nature of the tools of evolutionary theory that underlie the reorientation of the social and behavioral sciences. Here we shall consider the development of evolutionary theory beginning with Darwin's crucial insights that laid the foundations for the theories of natural selection and sexual selection. Next we shall take a look at how the rediscovery of the gene eventually led to the "Modern Synthesis," i.e., the fusion of the modern science of genetics with Darwinian evolutionism. Finally, we shall see how these prior developments laid the groundwork for the emergence of what E.O. Wilson termed the "New Synthesis," i.e., the application of evolutionary reasoning to the study of social behavior. Specifically, we shall examine recent developments in the theories of altruism, cooperation, and relative parental investment, all the while lending special emphasis to a basic premise of evolutionary reasoning, the Interaction Principle.

The second section of the course will examine various strategies of social behavior from the standpoint of these evolutionary theoretical tools. We shall consider, at minimum, the appropriate conception of sex and gender, mating preferences and mate selection, and patterns of promiscuity and pair-bonding in human societies. Additional topics will also be considered depending on the amount of time remaining in the semester.

REQUIRED BOOKS

- Laura Betzig (editor), *Human Nature: A Critical Reader*. New York: Oxford University Press, 1997.
- Richard Dawkins, *The Selfish Gene*, New Edition. New York: Oxford University Press, 1989.
- Melvin Konner, *The Tangled Wing: Biological Constraints on the Human Spirit*, revised and updated. New York: Henry Holt and Company, 2002.
- Geoffrey Miller, *The Mating Mind: How Sexual Choice Shaped the Evolution of Human Nature*. New York: Random House, 2000.
- Matt Ridley, *The Origins of Virtue: Human Instincts and the Evolution of Cooperation*. London: Penguin Books, 1996.

EXAMINATIONS, PROJECTS, AND FINAL GRADES

Final course grades will be determined on the basis of your performance on a midterm and a *comprehensive* final essay examination, class participation, and a term paper. The final grade will be calculated by averaging the four scores based on the following weights: midterm essay examination (25%), comprehensive final essay examination (30%), class participation (15%), and term paper (30%). Each component is discussed more fully below:

Exams: One week prior to the examination date, students will receive a list of essay questions relevant to materials covered in readings, lectures, and class discussions. On the day of the exam, students will be asked to answer only *some* of the listed questions (usually three of the questions randomly selected from the entire list). *No books or notes are allowed during the course of the examination.* Blue books will be provided by the instructor; students are required to bring only a “clean” copy of the questions and a pen. Given the advance preparation time, answers to the essay questions are expected to be written in clear and well-organized prose and should convey considerable thoughtfulness.

Class participation: The course is structured around the assumption that students will contribute actively to the class format. Questions about and discussion of assigned reading and other relevant materials are essential for making the course enjoyable and intellectually productive. Hence, you are expected to read the material *prior* to the assigned class meeting. Additionally, do not hesitate to raise relevant issues that you have encountered through your own reading, other courses, personal experience, or other sources.

Term Paper: Students will select a topic concerning some aspect of animal (including human) social behavior and prepare a 10-15 page term paper on the subject matter. Your choice of topic is entirely up to you, with the proviso that only one student can prepare a paper on a given topic. Topics must be approved by the instructor by *no later than the beginning of class on Tuesday October 3rd*. Should two or more students propose a paper on the same topic, the instructor’s approval will be granted on a first-come, first-serve basis. Term papers will be due *at the beginning of our class session on the evening of November 14th*.

IMPORTANT NOTE: DATES SPECIFIED FOR EXAMS, FOR TERM PAPER TOPIC SELECTION, AND FOR TERM PAPERS DUE ARE UNALTERABLE (unless specified by the instructor). NO PROVISIONS ARE MADE FOR MAKE-UP EXAMS OR FOR LATE TOPIC SELECTION OR LATE PAPERS (expect in cases of absences due to documental and justifiable causes—e.g., illness, extreme family crises, etc.). PLEASE TAKE NOTE OF THIS PROVISION.

TENTATIVE OUTLINE

Evening of:	Lecture/Discussion Topic	Assigned Reading
Aug. 29	Introductory Comments	D Chs. 1-4
Sept. 5	The Struggle for Existence: The Theories of Natural Selection & Sexual Selection	K Chs. 1-3 M Chs. 1-3
12	The New Synthesis: The Genetic Bases of Altruism and Cooperation; Relative Parental Investment; and the Interaction Principle	B Ch. 1; D Chs. 6, 10, 12; R Prologue
19	To Be or Not To Be Social: Wilson's Four Pinnacles of Social Evolution	R Chs. 1-4 video showing
26	Communication and Its Discontents	B Ch. 26; K Chs. 4-5
Oct. 3	Review for Midterm Examination (time permitting)	
10	MIDTERM ESSAY EXAMINATION	
17	No class meeting: FALL BREAK	
24	On Sex & Gender	D Ch. 9; K Ch. 6; M Chs. 4-5
31	Mating Preferences & Mate Selection	B Chs. 18, 20, 29; K Chs. 12-13
Nov. 7	Promiscuity <i>versus</i> Pair-Bonding	B Chs. 11, 22-23, 35; M Chs. 6-7
14	Parent-offspring conflict	D 7-8; B 16, 33
21	Ethnicity & Ethnocentrism	R 8
28	Aggression & Warfare	D 5; R 9; B 9
Dec. 5	Review for Final Examination (time permitting)	
12	FINAL ESSAY EXAMINATION (7:00-9:30 PM)	

Key to Assigned Readings:

B Betzig
D Dawkins
K Konner
M Miller
R Ridley

GUIDE TO ADDITIONAL RESOURCES

Journals that you may find useful for selecting a topic and for preparing your term paper (they often publish articles on relevant topics written from an evolutionary perspective):

Evolution & Human Behavior (formerly *Ethology and Sociobiology*)
Human Nature
Politics & the Life Sciences
Journal of Personality and Social Psychology
American Anthropologist
Science
Nature
Quarterly Review of Biology
Journal of Sex Research
Journal of Personality

Key textbooks focusing on the evolution of social behavior in animals (including humans):

Barash, D. *Sociobiology and Behavior*, 2nd ed. New York: Elsevier, 1982.
Boyd, R. and J.B. Silk. *How Humans Evolved*, 2nd ed. New York: W.W. Norton, 2000.
Cartwright, J. *Evolution and Human Behavior: Darwinian Perspectives on Human Nature*.
Cambridge, MA: MIT Press, 2001.
Trivers, R. *Social Evolution*. Menlo Park, CA: Benjamin/Cummings, 1985.
Walsh, A. *Biosociology: An Emerging Paradigm*. Westport, CT: Praeger, 1995.
Wilson, E.O. *Sociobiology: The New Synthesis*. Cambridge, MA: Harvard University Press,
1975.

Other volumes that treat social behavior in evolutionary perspective:

Alcock, J. *The Triumph of Sociobiology*. New York: Oxford University Press, 2001.
Alexander, R.D. *Darwinism and Human Affairs*. Seattle: University of Washington Press, 1979.
_____. *The Biology of Moral Systems*. New York: Aldine de Gruyter, 1987

- Angier, N. *Woman: An Intimate Geography*. New York: Random House, 1999.
- Axelrod, R. *The Evolution of Cooperation*. New York: Basic Books, 1984.
- Bailey, J.M. *The Man Who Would Be Queen: The Science of Gender-Bending and Transsexualism*. Washington, DC: Joseph Henry Press, 2003.
- Barash, D. and J.E. Lipton, *Making Sense of Sex*. Washington, DC: Island Press, 1997.
- _____. *The Myth of Monogamy*. New York: W.H. Freeman and Company, 2001.
- Barkow, J.H. (ed.). *Missing the Revolution: Darwinism for Social Scientists*. New York: Oxford University Press, 2006.
- Barkow, J.H., et al. (eds.). *The Adapted Mind*. New York: Oxford University Press, 1992.
- Baron-Cohen, S. *The Essential Difference: The Truth about the Male & Female Brain*. New York: Basic Books, 2003.
- Berreby, D. *Us and Them: Understanding Your Tribal Mind*. New York: Little, Brown and Co., 2005.
- Betzig, L. *Despotism and Differential Reproduction*. New York: Aldine, 1986.
- Betzig, L., M. Borgerhoff Mulder, and P. Turke, eds. *Human Reproductive Behaviour: A Darwinian Perspective*. New York: Cambridge University Press, 1988.
- Blum, D. *Sex on the Brain: The Biological Differences between Men and Women*. New York: Penguin Books, 1997.
- Brizendine, L. *The Female Brain*. New York: Morgan Road Books, 2006.
- Brown, D.E. *Human Universals*. New York: McGraw-Hill, 1991.
- Burt, A. and R. Trivers. *Genes in Conflict: The Biology of Selfish Genetic Elements*. Cambridge, MA: Harvard University Press, 2006.
- Buss, D.M. *The Evolution of Desire*. New York: Basic Books, 1994.
- _____. *The Evolution of Desire*, revised and expanded edition. New York: Basic Books, 2003.
- _____. *Evolutionary Psychology: The New Science of the Mind*. Boston: Allyn and Bacon, 1999.
- Chagnon, N.A. and W. Irons (eds.). *Evolutionary Biology and Human Social Behavior*. North Scituate, MA: Duxbury Press, 1979.
- Chapais, B. and C.M. Berman, eds. *Kinship and Behavior in Primates*. New York: Oxford University Press, 2004.
- Cheney, D.L. and R.M. Seyfarth. *How Monkeys See the World*. Chicago: University of Chicago Press, 1990.
- Clark, W.R. and M. Grunstein. *Are We Hardwired? The Role of Genes in Human Behavior*. New York: Oxford University Press, 2000.
- Cronin, H. *The Ant and the Peacock*. Cambridge: Cambridge University Press, 1991.
- Cronk, L. *That Complex Whole: Culture and the Evolution of Human Behavior*. Boulder, CO: Westview Press, 1999.
- _____. *From Mukogodo to Maasai: Ethnicity and Cultural Change in Kenya*. Boulder, CO: Westview Press, 2004.
- Cronk, L., N. Chagnon, and W. Irons (eds.). *Adaptation and Human Behavior: An Anthropological Perspective*. New York: Aldine de Gruyter, 2000.
- Daly, M. and M. Wilson. *Sex, Evolution, and Behavior*, 2nd ed. Boston: Willard Grant Press, 1983.
- _____. *Homicide*. New York: Aldine de Gruyter, 1988.

- Damasio, A. *Descartes' Error: Emotion, Reason, and the Human Brain*. New York: G.P. Putnam's Sons, 1994.
- _____. *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*. New York: Harcourt Brace, 1999.
- Darwin, C. *The Origin of Species*. New York: New American Library, 1859.
- _____. *The Descent of Man and Selection in Relation to Sex*. Chicago: University of Chicago Press, 1871.
- _____. *The Expression of Emotions in Man and Animals*. Chicago: University of Chicago Press, 1872.
- Dawkins, R. *The Selfish Gene*. New York: Oxford University Press, 1976; new edition, 1989.
- _____. *The Extended Phenotype*. New York: Oxford University Press, 1982.
- _____. *The Blind Watchmaker*. New York: W.W. Norton & Co., 1986.
- _____. *River Out of Eden*. New York: HarperCollins, 1995.
- _____. *Climbing Mount Improbable*. New York: W.W. Norton & Co., 1996.
- _____. *Unweaving the Rainbow: Science, Delusion, and the Appetite for Wonder*. Boston: Houghton Mifflin, 1998.
- _____. *A Devil's Chaplain: Reflections on Hope, Lies, Science, and Love*. Boston: Houghton Mifflin, 2003.
- Deacon, T.W. *The Symbolic Species: The Co-Evolution of Language and the Brain*. New York: W.W. Norton & Co., 1997.
- Dennett, D.C. *Consciousness Explained*. Boston: Little Brown, 1991.
- _____. *Darwin's Dangerous Idea*. New York: Simon & Schuster, 1995.
- _____. *Breaking the Spell: Religion as a Natural Phenomenon*. New York: Viking, 2006.
- de Waal, F. *Chimpanzee Politics: Power and Sex among Apes*. Baltimore: Johns Hopkins University Press, 1982.
- _____. *Peacemaking among Primates*. Cambridge, MA: Harvard University Press, 1989.
- _____. *Chimpanzee Politics: Power and Sex among Apes*, rev. ed. Baltimore: Johns Hopkins University Press, 1998.
- _____, ed. *Tree of Origin: What Primate Behavior Can Tell Us about Human Social Evolution*. Cambridge, MA: Harvard University Press, 2001.
- _____. *Our Inner Ape*. New York: Riverhead Books, 2005.
- Diamond, J. *The Third Chimpanzee*. New York: HarperCollins, 1992.
- _____. *Why is Sex Fun?* New York: Basic Books, 1997.
- Dunbar, R., C. Knight, and C. Power, eds. *The Evolution of Culture*. New Brunswick, NJ: Rutgers University Press, 1999.
- Eaton, S.B., M. Shostak, and M. Konner. *The Paleolithic Prescription: A Program of Diet and Exercise and a Design for Living*. New York: Harper & Row, 1988.
- Eibl-Eibesfeldt, I. *Human Ethology*. New York: Aldine de Gruyter, 1989.
- Ellison, P.T. *On Fertile Ground: A Natural History of Human Reproduction*. Cambridge, MA: Harvard University Press, 2001.
- Fisher, H.E. *The Anatomy of Love*. New York: Norton, 1992.
- _____. *Why We Love: The Nature and Chemistry of Romantic Love*. New York: Henry Holt Company, 2004.

- Gazzaniga, M.S. *Nature's Mind: The Biological Roots of Thinking, Emotions, Sexuality, Language, and Intelligence*. New York: Basic Books, 1992.
- Geary, D.D. *Male, Female: The Evolution of Human Sex Differences*. Washington, DC: American Psychological Association, 1998.
- Goodall, J. *Chimpanzees of Gombe*. Cambridge, MA: Harvard University Press, 1986.
- Hamilton, W.D. *Narrow Roads of Gene Land*, vol. 1: *Evolution of Social Behaviour*. New York: W.H. Freeman, Spektrum, 1996.
- _____. *Narrow Roads of Gene Land*, vol. 2: *Evolution of Sex*. New York: Oxford University Press, 2001.
- Hamon, R.R. and B.B. Ingoldsby, eds. *Mate Selection Across Cultures*. Thousand Oaks, CA: Sage, 2003.
- Hrdy, S.B. *The Woman That Never Evolved*. Cambridge, MA: Harvard University Press, 1981.
- _____. *Mother Nature: Maternal Instincts and How They Shape the Human Species*. New York: Ballantine, 1999.
- Judson, O. *Dr. Tatiana's Sex Advice to All Creation*. New York: Henry Holt, 2002.
- Kimura, D. *Sex and Cognition*. Cambridge, MA: MIT Press, 1999.
- Konner, M. *The Tangled Wing*. New York: Holt, Reinhart and Winston, 1982 (revised and updated, 2002).
- _____. *Why the Reckless Survive, and Other Secrets of Human Nature*. New York: Viking, 1990.
- LeBlanc, S.A. *Constant Battles: The Myth of the Peaceful, Noble Savage*. New York: St. Martin's Press, 2003.
- LeDoux, J. *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*. New York: Simon & Schuster, 1996.
- Lenski, G. *Ecological-Evolutionary Theory: Principles and Applications*. Boulder, CO: Paradigm Publishers, 2005.
- LeVay, S. *The Sexual Brain*. Cambridge, MA: MIT Press, 1993.
- Lopreato, J. *Human Nature & Biocultural Evolution*. New York: Allen & Unwin, 1984.
- Lopreato, J. and T. Crippen, *Crisis in Sociology: The Need for Darwin*. New Brunswick, NJ: Transaction Publishers, 1999.
- Low, B.S. *Why Sex Matters*. Princeton, NJ: Princeton University Press, 2000.
- Maryanski, A. and J.H. Turner, *The Social Cage*. Stanford, CA: Stanford University Press, 1992.
- Massey, D.S. *Strangers in a Strange Land: Humans in an Urbanizing World*. New York: W.W. Norton, 2005.
- Master, R.D. *The Nature of Politics*. New Haven: Yale University Press, 1989.
- McKnight, J. *Straight Science? Homosexuality, Evolution and Adaptation*. London: Routledge, 1997.
- Panksepp, J. *Affective Neuroscience: The Foundations of Human and Animal Emotions*. New York: Oxford University Press, 1998.
- Perper, T. *Sex Signals: The Biology of Love*. Philadelphia: ISI Press, 1985.
- Pinker, S. *The Language Instinct*. New York: HarperCollins, 1994.
- _____. *How the Mind Works*. New York: W.W. Norton, 1997.
- _____. *The Blank Slate: The Modern Denial of Human Nature*. New York: Viking, 2002.
- Rhoads, S.E. *Taking Sex Differences Seriously*. San Francisco: Encounter Books, 2004.

- Rhodes, G. and L.A. Zebrowitz, eds. *Facial Attractiveness: Evolutionary, Cognitive, and Social Perspectives*. Westport, CT: Ablex, 2002.
- Richerson, P.J. and R. Boyd. *Not By Genes Alone: How Culture Transformed Human Evolution*. Chicago: University of Chicago Press, 2005.
- Ridley, M. *The Red Queen: Sex and the Evolution of Human Nature*. New York: Macmillan, 1993.
- _____. *The Origins of Virtue: Human Instincts and the Evolution of Cooperation*. London: Penguin Books, 1996.
- _____. *Nature Via Nurture: Genes, Experience & What Makes Us Human*. New York: HarperCollins, 2003.
- Sanderson, S.K. *The Evolution of Human Sociality: A Darwinian Conflict Perspective*. New York: Rowman & Littlefield Publishers, Inc., 2001.
- Seegerstråle, U. *Defenders of the Truth: The Battle for Science in the Sociobiology Debate and Beyond*. New York: Oxford University Press, 2000.
- Shaw, R.P. and Y. Wong. *Genetic Seeds of Warfare*. Boston: Unwin Hyman, 1989.
- Shlain, L. *Sex, Time and Power: How Women's Sexuality Shaped Human Evolution*. New York: Viking, 2003.
- Smith, E.A. and B. Winterhalder, eds. *Evolutionary Ecology and Human Behavior*. New York: Aldine de Gruyter, 1992.
- Smith, D.L. *Why We Lie: The Evolutionary Roots of Deception and the Unconscious Mind*. New York: St. Martin's Press, 2004.
- Smuts, B.B. *Sex and Friendship in Baboons*. New York: Aldine, 1985.
- Smuts, B.B., et al. (eds.). *Primate Societies*. Chicago: University of Chicago Press, 1987.
- Symons, D. *The Evolution of Human Sexuality*. New York: Oxford University Press, 1979.
- Theissen, D.D. *Bittersweet Destiny: The Stormy Evolution of Human Behavior*. New Brunswick, NJ: Transaction Publishers.
- Tiger, L. *The Pursuit of Pleasure*. Boston: Little, Brown and Co., 1992.
- Trivers, R. *Natural Selection and Social Theory: Selected Papers of Robert Trivers*. New York: Oxford University Press, 2002.
- Turner, J.H. *On the Origins of Human Emotions: A Sociological Inquiry into the Evolution of Human Affect*. Stanford, CA: Stanford University Press, 2000.
- Turner, J.H. and A. Maryanski. *Incest: Origins of the Taboo*. Boulder, CO: Paradigm Publishers, 2005.
- van den Berghe, P. *Human Family Systems*. New York: Elsevier, 1979.
- _____. *The Ethnic Phenomenon*. New York: Elsevier, 1981.
- Vandermassen, G. *Who's Afraid of Charles Darwin? Debating Feminism and Evolutionary Theory*. New York: Rowman & Littlefield Publishers, Inc., 2005.
- Wilson, E.O. *On Human Nature*. New York: Bantam Books, 1978.
- Wispé, L., ed. *Altruism, Sympathy, and Helping*. New York: Academic Press, 1978.
- Wrangham, R. and D. Peterson. *Demonic Males: Apes and the Origins of Human Violence*. New York: Houghton Mifflin, 1996.
- Wright, R. *The Moral Animal*. New York: Pantheon Books, 1994.
- Zuk, M. *Sexual Selections: What We Can and Can't Learn about Sex from Animals*. Berkeley, CA: University of California Press, 2002.