

Anth 332: Evolution of Human Mating Strategies and Attraction

Prof. Sugiyama

Lecture: 4:00-5:20

Condon 329 hours: TBA

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Introduction: Identifying, attracting, and maintaining a relationship with another individual long enough to successfully reproduce is a psychologically and behaviorally complicated affair, fraught with potential missteps and conflicts of interest. Nevertheless all living people are descendants of a long unbroken line of individuals who successfully reproduced, and none, obviously, are descendants of those who did not. Yet out of the vast universe of all potential behaviors we could engage in, only a very limited subset lead to successful reproduction under any given set of particular circumstances. Selection is the process by which traits that tend to increase the relative reproductive success of their bearers tend, for that reason, to get passed on to future generations. Perhaps no other psychological domain has been under more intense selection as our mating strategies—the conscious and unconscious psychological and behavioral tactics we use in mating.

A key component in mating strategies is attraction. What makes someone more or less attractive to others has been of interest to scholars dating back to before Plato. Cross-culturally this interest is reflected in folklore, music, poetry, and the visual arts, including in one of the oldest written texts, the Epic of Gilgamesh. How attractive one is impacts not only mating strategy and opportunities, but one's hiring prospects, salary, promotions (and teaching evaluations). Commercial revenue from hair, skincare, fragrance, makeup and ancillary products (420 billion), retail fashion sales (1.1 trillion) and U.S. health club revenue (\$21.4 billion) alone are staggering. Such widespread interest and impact lead us to question, what do people find attractive in others and why? A modern evolutionary approach to this question now provides us with firm scientific grounds for answering these questions.

Course Description:

What do men want? What do women want? What is beauty? These questions are the basis for countless popular magazine articles, books, songs and movies, and have been pondered by philosophers for millennia. This course introduces the fundamental theoretical basis and empirical data to understand these issues: human mating strategies and human attractiveness. We will use an evolutionary approach to understand human mating strategies and use that knowledge to understand the bases of human attraction: why we find some people, or specific human traits, more or less attractive than others, and an evolutionary life history theory to understand why not all attractiveness assessment is related to mating. We will examine how one's own attractiveness influences mating strategy. To do so, this course presents: (1) an introduction to evolutionary and ancillary theory necessary to understand mating strategies and attraction, including intra- and inter- sexual selection, life history and costly signaling theory; (2) an evolutionary approach to understanding psychological phenomena and its application to understanding mating strategies and physical attractiveness; (3) hypotheses about why people follow different mating strategies and why (4) what makes people more or less attractive and why, and experimental tests of these hypotheses; (5) fundamental questions that an evolutionary perspective leads us to ask, including 'if we all have the same mating strategy and attractiveness assessment psychology, why do we find variation strategies and in who different people are attracted to?' and research exploring

possible answers; (5) real-world examples of what people find attractive and the real-world consequences of differential mating strategies and attractiveness, and (6) avenues or research calling for increased attention.

This course satisfies Group 3, Science requirements, by introducing students to the foundations of multiple scientific disciplines including evolutionary anthropology, biology, and psychology, as well as the scientific method.

Course Goals:

1. Acquire knowledge and conceptual understanding of evolutionary theory, sexual selection, life history theory, costly signaling, sexual strategies theories and hypotheses derived from them.
2. Understand the adaptationist approach to the mind, and how it helps us understand the human mind and behavior, particularly mating strategies and what we find attractive in people.
3. Learn about a number of hypotheses about specific information processing features of the human mind, and how they generate assessments of attractiveness and feelings of attraction.
4. Learn about the complex nature of human mating strategies, and how selection shaped context sensitive human mating strategies that result in differing individual mix of strategies depending on a variety of individual variables and social variables.
5. Learn about why some aspects of attractiveness appear to be universal, while others seem to vary through time, across individuals, or across cultures.
6. Learn about how these ideas have been tested and evaluate the data used to support or falsify these hypotheses.
7. Gain an appreciation for how these adaptations affect real-world behavior and outcomes.

Be forewarned:

Read and understand the following three statements. Continuing in the class indicates that you have read the following and understand these aspects of this course.

1. The human mind and human behavior are fascinating, but not always pretty or what we might wish them to be. In this class we will be examining scientific literature on what people find attractive in others and their mate preferences. In other words, this course is about (1) evidence about *what people find attractive in others*, (2) *hypotheses* to understand some aspects of this behavior, and (3) *data* relevant to testing these hypotheses. It is not about how you, I, or anyone else necessarily believes people *ought* to find attractive or what is morally good or bad. To confuse these is to commit an error so common that it has been given a name: the *naturalistic fallacy*. If you cannot intellectually distinguish between these, you should find a different course.
2. This course uses an evolutionary, cognitive, and scientific approach to human behavior. While you do not have to accept evolutionary theories of human mind and behavior, you are required to understand them, answer questions about them, and be able to discuss the readings from that perspective. If you feel you will not be able to do so, you should find a different course. **In other words, you do not have to agree with all of the theories discussed in class, but you do need to understand them, and the evidence upon which they are based or which has been used to test them.**

3. Keep in mind that, as in all science, current empirical findings might need later revision or abandonment based on new studies, or later findings may ultimately falsify current hypotheses. This is an expected part of scientific advance.
4. The readings in this course are scientific articles and chapters from edited volumes. Reading assignments are detailed and must be read prior to the week's meetings for which they are assigned (after the first week of class). If you cannot or will not do the readings, you will feel lost and do poorly because class lecture will involve interactive discussion of the readings.

Prerequisites (none).

The following is quoted from Dr. Frances White's syllabus for Evolution of Human Sexuality (2012) who has taught that class for some years. I would appreciate if you would extend me this courtesy as well. "Bloopers and Gaffs: I feel I must say from the beginning that this is not an easy subject to lecture on. I do try to present the material in a fair and balanced way, but everyone makes mistakes, especially when I am standing up here talking about such a loaded subject as sex for 10 weeks. I also believe in using humor to interest students, provide a break in a long lecture, and provide an additional way for memory to retain information. Although obviously I will try not to say anything too offensive, mistakes do happen and if you are offended by anything I say, I apologize, and please work with me to help each year that I teach this course better than the year before. Some of my best humor-based learning tools (i.e. cartoons and jokes) have come from students in this class and I welcome more if you find them!"

Course Requirements

Important* This course that grows out of a chapter I wrote, and am currently updating, on attractiveness for the Handbook of Evolutionary Psychology. That means that we will be exploring fascinating but complex issues, and even though this is a large class, discussion and student response will inevitably expose areas which we find worthy of further exploration. The reading assignments or schedule may therefore be adjusted accordingly. It is my responsibility to decide when changes are necessary and to inform you of such changes; it is your responsibility to stay abreast of them, and to alter your reading schedule accordingly. All changes will be announced in class.

Readings:

Readings for this class are available online via blackboard. The readings are scientific articles and chapters from edited volumes, as opposed to a broad synthesis or overview that might be found in a textbook. Class lecture and discussion will help put these articles into perspective. After the first week of class, you are expected to do the reading before the week of class for which it is assigned, and be ready to discuss and ask questions about the material in class.

Film and Video clips:

Film and video clips are an integral part of this class, integrated into class lectures, and are critical for generating a more direct feel for issues being discussed in a way that illustrates the material in a way that is difficult via lecture and readings alone. Some of the films may, however, present simplifications of the issues or data involved: we must evaluate all claims based on their logical ability to explain the empirical evidence. There are no "make-ups" for film

or video clips if you miss them, but links to sources available via youtube will be made available on Blackboard.

Grading:

1. Grading is based on Pop quizzes (5%), Lab assignments, section attendance and Participation (5%), a Midterm (45%), and a Final (45%). Grading is done on a straight percentage scale so theoretically there is no reason that everyone cannot get A's in this course.

90%+ = A

80-89 = B

70-79 = C

60-69 = D

0-60 = F

2. **Exams** will be essay type exams that test your theoretical and empirical knowledge of each of the issues presented in class. Questions will cover important theoretical explanations or approaches used to understand specific aspects of attractiveness, tests of specific hypotheses derived from them, and the results of tests of these hypotheses. THERE ARE NO MAKEUP EXAMS without Approved Proof of Legitimate Reason for missing the exam.
3. **Pop Quizzes** provide a carrot and stick for keeping up with the readings, and give you a preview of the kind of material that will be on the exams. Quizzes will not be announced before-hand and no make-ups will be allowed under any circumstances.

The standard grading rubric for Anthropology is used for this course.

A- Outstanding performance relative to that required to meet course requirements; demonstrates mastery of course content at the highest level.

B –Performance that is significantly above that required to meet course requirements; demonstrates a mastery of course content at a high level.

C –Performance that meets the course requirements in every respect; demonstrates an adequate understanding of course content.

D – Performance that is at the minimal level necessary to pass the course but does not fully meet the course requirements; demonstrates a marginal understanding of course content.

F – Performance in the course, for whatever reason, is unacceptable and does not meet the course requirements; demonstrates an inadequate understanding of the course content.

Blackboard course site.

We will make *extensive* use of Blackboard, which is a web-based course management application. The course site will contain announcements and reading assignments. Note: not all minor science news reports included in the readings are listed in the syllabus. They can be found under the readings for that week on blackboard. You are responsible for all readings included within each week's folder on blackboard.

WEEK 1: Introduction to class: Brief overview of an evolutionary approach to mating and attraction

Assigned Readings:

Sugiyama LS. 1996. Chapter 1, Introduction. In, *In search of the adapted mind*. Pp 1-14..

Sugiyama LS. 2005. Evolution section intro, Physical Attractiveness in Adaptationist Perspective. In, Buss (ed), *Handbook of Evolutionary Psychology*. Oxford. pp. 1-27

Nesse N & GC Williams 1996. Chapter 2, Evolution by natural selection. In, *Why we get sick*. pp. 13-25

Daly M. & Wilson M. 1983. Chapter 1, Natural Selection. In, *Sex Evolution and Behavior*. Wadsworth. pp 1-19.

WEEK 2: Theoretical foundations: Basic Evolutionary theory, Evolution, mind and behavior

Assigned Readings:

Tooby J. and L. Cosmides. 2005. Conceptual Foundations of Evolutionary Psychology. In Buss (ed.) *Handbook of Evolutionary Psychology*. Oxford. pp 1-63

Supplementary reading

Hagen, E. The evolutionary Psychology FAQ:

http://www.anth.ucsb.edu/projects/human/epfaq/evpsychfaq_full.html

Hagen E. 2005. Controversial Issues in Evolutionary Psychology. In Buss (ed.) *Handbook of Evolutionary Psychology*.

WEEK 3: Life History, Parental Investment, Sexual Selection and Costly Signaling Theory

Assignment 1 due.

Assigned Readings:

Daly & Wilson. Chapter 5: Sexual Selection. *Evolution and Human Behavior*. 77-110.

Bergstrom C. 2006: Honest Signally Theory: An Introduction 1-14.

http://octavia.zoology.washington.edu/handicap/honest_intro_02.html.

Sugiyama 2005. Attractiveness in Adaptationist Perspective. Pp 27-31.

Week 4: Fundamentals of male and female mating strategies.

Assignment 2 due

Assigned Readings:

Buss DM. 2007. Evolution of human mating strategies. *Acta Psychologica Sinica*. 39 (3): 502-512.

Gangestad SW & Simpson JA. 2000. The evolution of human mating: Trade-offs and strategic pluralism. *Behavioral and Brain Sciences*. 573-644.

Hill SE & Reeve HK. 2004. Mating games: the evolution of human mating transactions *Behavioral Ecology*. 15(5): 748–756

Gutierrez, S.E., Kenrick, D.T., & Partch, J. 1999. Contrast effects in self assessment reflect gender differences in mate selection criteria. *Personality & Social Psychology Bulletin*, 25, 1126-1134.

Kenrick, D.T. 2011. Chapter 2: Why playboy is bad for your mental mechanisms. In, Sex, Murder and the meaning of life. In, *Sex, murder, and the meaning of life: A psychologist investigates how evolution, cognition, and complexity are revolutionizing our view of human nature*. New York: Basic Books. Pp. 9-22.

Video clips:

Science of Sex Appeal: Women are choosier: <http://dsc.discovery.com/videos/science-of-sex-appeal-women-are-choosier.html>

Consequences of beauty:

<http://www.economist.com/node/21551535/print>

Mating Markets: Science of Sex Appeal: The Dating and Mating Pool, Out of Your League?

<http://dsc.discovery.com/videos/science-of-sex-appeal-the-dating-and-mating-pool.html>

<http://dsc.discovery.com/videos/science-of-sex-appeal-out-of-your-league.html>

WEEK 5: Male and female bodily attractiveness

Assignment 3 due:

Assigned Readings:

Sugiyama LS. 2005. Attractiveness in Adaptationist Perspective. In Buss (ed) *Handbook of Evolutionary Psychology*. Oxford. pp. 40-58.

Marlowe TF, Apicella C, Reed D. 2005. Men's preferences for women's profile waist-to-hip ratio in two societies. *Evolution and Human Behavior*. 26:458-468.

Lassek WD & Gaulin SJC. 2005. Waist-hip ratio and cognitive ability: is gluteofemoral fat a privileged store of neurodevelopmental resources? *Evolution and Human Behavior*. 29:26-34.

Hughes S. SHR and female preferences for male bodies. *Evolution and Human Behavior*. 24: 173-178.

Video clips:

<http://dsc.discovery.com/videos/science-of-sex-appeal-human-behavior/>

Science of Sex Appeal: Shapely Figures
Science of Sex Appeal: A sexy walk
Science of Sex Appeal: Sexy Swaying Bodies

Week 6: Facial Attractiveness; phenotypic cues in the eyes, skin, hair, oral hygiene and body odor. MIDTERM EXAM

Assigned Reading:

Sugiyama LS. 2005: Attractiveness in Adaptationist Perspective. In Buss (ed) *Handbook of Evolutionary Psychology*. Oxford. 9-12; 25-42:

Rhodes G. 2006. The Evolutionary Psychology of Facial Beauty. *Annual Review of Psychology*. 57: 199-226

Saxton et al. 2009. Face and voice attractiveness judgments change during adolescence. *Evolution and Human Behavior*. 398-408.

Little AC, Apicella CL, Marlowe FW. 2007. Preferences for symmetry in human faces in two cultures: data from the UK and the Hadza, an isolated group of hunter-gatherers. *Proceedings of the Royal Academy B*. 274: 3113-3117.

Thornhill R, Gangestad SW, Comer R. 1995. Human female orgasm and mate fluctuating asymmetry. *Animal Behavior*. 50:1601-1615.

Thornhill R & Gangestad S. 1999. The Scent of Symmetry The Scent of Symmetry: A Human Sex Pheromone that Signals Fitness? *Evolution and Human Behavior* 20: 175–201.

Video clips:

Beauty Evolution

Science of sex: facial attractiveness

Week 7: Ovulatory effects on female sexual attractiveness, assessment, and behavior

Assigned Readings:

Penton-Voak IS & Perrett DI. 2000. Female preference for male faces changes cyclically: 21: 39-48.

Gangestad et al. 2007. Changes in women's mate preferences across the ovulatory cycle. *JPSP* 92(1) 151-163.

Haselton et al. 2007. Ovulatory shifts in human female ornamentation: Near ovulation, women dress to impress *Hormones & Behavior* 51: 40-45.

Haselton MG & Gangestad SW. 2006. Conditional expression of women's desires and men's mate guarding across the ovulatory cycle. *Hormones and Behavior*. 49(4) 509–518.

Miller SL & JK Maner. 2010. Scent of a Woman: Men's testosterone responses to olfactory ovulation cues. *Psychological Science*. 21: 276-281.

Durante K et al. 2011. Choice: Hormonal Influences on Consumer Behavior. *Journal of Consumer Research* 37(6): 921-32.

Week 8: Evoked culture and variation in attractiveness; Own attractiveness, mating strategy and variation in attractions

Assignment 4 due.

Assigned Readings:

Gangestad SW, Haselton MG, Buss DM. 2006. Evolutionary Foundations of Cultural Variation: Evoked Culture and Mate Preferences. *Psychological Inquiry*. 17(2) 75-95.

DeBruine LM et al. 2010. The health of a nation predicts their mate preferences: cross-cultural variation in women's preferences for masculinized male faces. *Proc. R. Soc. B*. 277-282.

Little AC, DeBruine LM, Jones BC. 2011. Exposure to visual cues of pathogen contagion changes preferences for masculinity and symmetry in opposite sex faces. *Proceedings of the Royal Society B*. 278: 2032-2039.

Quist et al. 2011. Sociosexuality predicts women's preferences for symmetry in men's faces. *Archives of Sexual Behavior*. 1-7.

Price ME, Pound N, Dunn J, Hopkins S, Kang J (2013) Body Shape Preferences: Associations with Rater Body Shape and Sociosexuality. *PLoS ONE* 8(1): 1-18.

Week 9: MHC complex and individual differences in attraction. Mate Choice Copying

Assignment 5 due.

Assigned Readings:

Thornhill R, Gangestad SW, Miller R, Scheyd G, McCollough JK, Franklin M. 2003. Major histocompatibility complex genes, symmetry, and body scent attractiveness in men and women. *Behavioral Ecology* 14(5): 668-678.

Christine E. Garver-Apgar, Steven W. Gangestad, Randy Thornhill, Robert D. Miller and Jon J. Olp. 2006. Major Histocompatibility Complex Alleles, Sexual Responsivity, and Unfaithfulness in Romantic Couples *Psychological Science*. 17: 830-838

Place SS, Todd PM, Penke L, Asendorpf JB 2010. Humans show mate copying after observing real mate choices. *Evolution and Human Behavior* 31 (2010) 320-332.

Hill SE & Buss DM. 2008. The Mere Presence of Opposite-Sex Others on Judgments of Sexual and Romantic Desirability: Opposite results for men and women. *Bulletin of Personality and Social Psychology*.34: 635-647.

Week 10: Body language, movement and behavioral indicators of interest. What dating sites tell us about mating and attraction

Grammer K, Kruck K, Juette A, Fink B. 2000. Non-verbal behavior as courtship signals: the role of control and choice in selecting partners. *Evolution and Human Behavior* 21 (2000) 371 - 390

Renninger LA, Wade TJ, Grammer K. 2004. Getting that female glance: Patterns and consequences of male nonverbal behavior in courtship contexts. *Evolution and Human Behavior*. 25(6) 416-431.

Neave et al. 2011. Male dance moves that catch a woman's eye. *Biology Letters*. 7(2) 221-224.

OK cupid trends