

Syllabus
 First Year Seminar 13: Gender and Science
 Fall 2010
 Professor Olver

Texts:

E Reserve Readings – Articles marked **E** on the syllabus are online in library e-reserve (go to course web page). **Readings on e-reserve must be printed out and brought to class** for discussion on the date assigned.

<https://www.amherst.edu/academiclife/departments/courses/1011F/FYSE/FYSE-13-1011F>

Print Reserve Readings – Several copies of the assigned reading marked **R** on the syllabus are on reserve in the Science Library:

T.H. Goldsmith & W.F. Zimmerman, Biology, Evolution, and Human Nature
 assigned for 9/16/10

Packet to be purchased – Readings marked **P** are in a packet of readings available from the WAGS office in Grosvenor House (14 Grosvenor House) Items marked with an * appear in your packet as (1998) Questions of Gender: Perspectives and Paradoxes eds. D. Anselmi & A. Law, McGraw Hill

Text to be purchased – available at Amherst Books (8 Main St., Amherst)

Kimura, D., Sex and Cognition, MIT Press, 2000

Children's book of your choice (available at local bookstores, the Jones Library or your own bookshelf)

Written and oral presentations:

A series of brief writing assignments and in-class discussions focused on analysis of the arguments posed in the assigned texts will provide the foundation for a longer final paper and oral presentation of a proposed empirical study based on library resources as well as on the course materials.

Written work should be typed and handed in in hard copy (12-point font, double spaced with 1 inch margins).

Topics and Readings:

9/7 (Tu) **Introduction**

9/9 (Th) **Stereotypes**

- P** Deaux, K. (1987) Chapter 18, Psychological constructions of masculinity and femininity, pp. 289-303 from J.M. Reinisch, L.A. Rosenblum & S.A. Sanders Masculinity and Femininity: Basic Perspectives, Oxford University Press
- Kimura, Appendix: Dealing with numbers, pp. 189-200
- Gender-Science IAT <https://implicit.harvard.edu/implicit/>

9/14 (Tu) **Discussion: Gender Stereotypes at Amherst**

Bring gender stereotypes interview responses to class for discussion

Accounting for gender differences and similarities

9/16 (Th) **Evolution**

- R** Goldsmith, T.H. & Zimmerman, W.F. (2001) Chapter 6 Evolutionary social theory, pp. 125-154 from Biology, Evolution, and Human Nature, Wiley & Sons, Inc.
- E** Buss, D.M. (1995) Psychological sex differences, American Psychologist, 50, #3, 164-168
- P** Hrdy, S.B. (1995) Natural-born mothers, Natural History, 104, #12, pp. 30-42
- Bring analysis of argument and evidence to class for discussion*

9/21 (Tu) **Genes & Hormones**

- Kimura, Chapter 3
- P** Berenbaum, L.S. (2008) Biological foundations of sex and gender , Chapter 3, pp. 39-68 from J.E. Blakemore, S.A. Berenbaum, L.S. Liben, Gender Development, Psychology Press
- E** Auyeung, B., et al. (2009) Fetal testosterone predicts sexually differentiated childhood behavior in girls and in boys, Psychological Science, 20, #2, 144-148
- E** Golombok, S. & Rust, J., (1993) The pre-school activities inventory, Psychological Assessment, 5, #2, 131-136
- E** Boylan, J.F. (2008) The XY games, NYTimes, August 3, 2008 Op-Ed
- Bring response to should male and female be defined differently in different circumstances? to class for discussion*

9/23 (Th) **Socialization**

- *P Fagot, B. (1995) Psychosocial and cognitive determinants of early gender-role development, Annual Review of Sex Research (6), pp. 1-31
- P Margolis, J. & Fisher, A. (2002) Ch. 1 The magnetic attraction, pp. 15-32 from Unlocking the Clubhouse, MIT Press
- E Crowley, K. et al. (2001) Parents explain more often to boys than to girls during shared scientific thinking, Psychological Science, 12, #3, 258-261

Writing Center presentation: Michael Keezing (in class)

9/28 (Tu) **Discussion of children's book**

- E McArthur, L. & Eisen, S. (1976) Achievements of male and female storybook characters, Journal of Personality and Social Psychology, 33, #4, 467-473
 - E Dittmar, H. et al. (2006) Does Barbie make girls want to be thin? Developmental Psychology, 42, #2, 283-292
- Bring analysis of children's book to class for discussion*

Personality and Social Behaviors9/30 (Th) **Aggression**

- P Mazur, A. (1994) Chapter 21, Hormones, aggression and dominance in humans, pp. 563-576 from B.B. Svare, Hormones and Aggressive Behavior, Plenum Press
- E Sullivan, A. (2000) The He hormone, NYTimes Magazine, April 2, 2000, pp. 46, 48-51, 58-59, 69, 73, 79
- E Cohen, D., et al. (1996) Insult, aggression, and the southern culture of honor, Journal of Personality and Social Psychology, 70, #5, 945-960
- E Popma, A. et al. (2007) Cortisol moderates the relationship between testosterone and aggression in delinquent male adolescents – *abstract*, Biol Psychiatry, 61, p. 405

10/5 (Tu) **Affiliation**

- P Bjorkqvist, K. (1994) Sex differences in physical, verbal, and indirect aggression, Sex Roles, 30, #3/4, 177-188
- E Taylor, S. (2006) Tend and befriend: Biobehavioral bases of affiliation under stress, Current Directions in Psychological Science, 15, #6, 273-277
- E Azar, B. (2002) The postpartum cuddles: Inspired by hormones? Monitor on Psychology, 33, #9, 54-56
- E Alexander, G.M. & Hines, M. (2002) Sex differences in response to children's toys in nonhuman primates (*Cercopithecus aethiops sabaues*), Evolution and Human Behavior, 23, 467-479

10/7 (Th) **Discussion: Comparison of Explanatory Models**

Bring comparison paper to class for discussion

10/12 (Tu) **October Break**

Embodied and Disembodied Gender

10/14 (Th) **Transgender**

- E** American Psychological Association (2006) Answers to your questions about transgender individuals and gender identity, Brochure written by the APA Task Force on Gender Identity, Gender Variance, and Intersex Conditions
- E** Brown, P. (2006) Supporting boys or girls when the line isn't clear, NYTimes, December 2, 2006, 4 pages

Film: You Don't Know Dick (shown in class)

10/19 (Tu) **Gender identity**

- P** Money, J. & Ehrhardt, A. (1972) Rearing of a sex-reassigned normal male infant after traumatic loss of the penis, pp. 118-123 from Man & Woman, Boy & Girl, Johns Hopkins Univ. Press
- E** Diamond, M. & Sigmundson, H.K. (1997) Sex reassignment at birth, Arch. Pediatr. Adolesc. Med., 151, 298-303
- P** Imperato-McGinley, J., et al. (1981) The impact of androgens on the evolution of male gender identity, from S. Kogan & H. Hafez, eds., Pediatric Andrology, pp. 125-139, Kluwer

10/21 (Th) **Language**

- P** Walsh, M.R. (1997) Conversational style: Do women and men speak different languages? Tannen "yes"; Aries "no" pp. 79-100 from Women, Men & Gender, Yale Univ. Press
- E** Guiller, J. & Durndell, A. (2007) Students' linguistic behaviour in online discussion groups: Does gender matter? Computers in Human Behavior, 23, 2240-2255
- E** Desser, D. (2000) Gender morphing in cyberspace, Journal of Electronic Publishing, 6, #1 (September 2000)

Bring gender in cyberspace posts to class for discussion

Cognition

10/26 (Tu) **Cognitive skills and abilities**

Kimura (2000) Chapters 1, 4, 5, 7, 8

Film: War of the Sexes: Spatial Abilities (shown in class)

10/28 (Th) **Biological factors**

Kimura (2000) Chapter 9

- P** Williams, C. & Meck, W. (1991) The organizational effects of gonadal steroids on sexually dimorphic spatial ability, Psychoneuroendocrinology, 16, #1-3, 155-176
- E** Epting, L.K. & Overman, W.H. (1998) Sex-sensitive tasks in men and women: A search for performance fluctuations across the menstrual cycle, Behavioral Neuroscience, 112, Iss. 6, 1304-1317

11/2 (Tu) **Role of experience**

- P** Denmark, F., Rabinowitz, V., & Sechzer, J. (2000) Ch. 6 Ability and achievement, pp. 171-195 from Engendering Psychology, Allyn & Bacon
- E** Vasta, R., Knott, J., & Gaze, C. (1996) Can spatial training erase the gender difference on the water-level task? Psychology of Women Quarterly, 20, 549-567
- E** Feng, J., Spence, I., & Pratt, J. (2007) Playing an action video game reduces gender differences in spatial cognition, Psychological Science, 18, #10, 850-855
- Library research presentation: Susan Kimball (in class)*

11/4 (Th) **Math and Science**

Kimura (2000) Chapter 6

- *P** Kimball, M. (1995) Gender and math: What makes a difference? pp. 83-104 from Feminist Visions of Gender Similarities & Differences, Haworth Press
- E** Shih, M. et al. (1999) Stereotype susceptibility, Psychological Science, 10, #1, 80-83
- E** Murphy, M., Steele, C., & Gross, J. (2007) Signaling threat: How situational cues affect women in math, science, and engineering settings, Psychological Science, 18, #10, 879-885

11/9 (Tu) **Discussion: Sex differences in performance on cognitive tasks**

Bring analysis of sex differences on cognitive tasks to class for discussion

Issues and Topics for Research on Gender

11/11 (Th) & 11/16 (Tu) **No class meetings**

Individual meetings to discuss final projects

Gender and Science

11/18 (Th) **Is science a gendered activity?**

- E** Bombardieri, M. (2005) Summers' remarks on women draw fire, The Boston Globe, Jan. 17, 2005
- E** Rosser, S.V. & Taylor, M.Z. (2009) Why are we still worried about women in science? Academe, May-June 2009, pp. 7-10
- E** Selections from Women in Science '93 (1993), Science, 260, issue 5106, 16 April 1993, pp. 384-386, 390-391, 428-429
Is there a 'female style' in science?
Seeing nature through the lens of gender
- E** Begley, S. (1997) The science wars, Newsweek, April 21, 1997, pp. 54-56
- E** Martin, E. (1991) The egg and the sperm, Signs, 16, #3, 485-501
- P** Roughgarden, J. (2009) Introduction: Is nature selfish? pp. 1-13 from The Genial Gene, Univ. of California Press

11/23 & 11/25 **Thanksgiving**

11/30 (Tu) **Presentations**

12/2 (Th) **Presentations**

12/7 (Tu) **Presentations**

12/9 (Th) **Presentations**

12/14 (Tu) **Presentations**

Final paper due Monday, December 20 at noon in Merrill 326