COLQ 3010-01  *Psychobiology of Sexuality and Gender*
*Thursdays 5:45-8:15 PM, Percival Stern 3015D*

**Course**  Gary Dohanich, Ph.D., Psychology / Neuroscience
**Instructors:** Katherine Cost, B.S., Doctoral Student in Neuroscience

**Guest Instructors:** Jill Daniel, Ph.D., Psychology - Neuroscience
Beth Wee, Ph.D., Neuroscience
Nandini Vasudevan, Ph.D., Cell and Molecular Biology – Neuroscience
Michael Cunningham, Ph.D., Psychology
Elizabeth Hammer, Ph.D., Psychology, Xavier University
Janet Ross, M.D., Obstetrics and Gynecology, Touro Infirmary
Ege Serenoglu, M.D., Urology, Tulane Medical School

**Contact Information:**
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**Prerequisite:** PSYC 100 or 101 – *Introductory Psychology*

**Approved Elective for Majors:** Psychology, Gender and Sexuality

**Description:** This Honors Colloquium will draw from several disciplines to introduce Honors Program students to the roles of psychology and biology in human sexuality across the life span. The course will feature a comprehensive presentation of the factors that regulate reproductive processes and behaviors, sexual development, pregnancy and birth, puberty, and reproductive aging. The course will expose Honors students to a broad range of issues in human sexuality extending from conception to senescence. The active participation of faculty members and clinicians from various departments and institutions with expertise in sex and gender will provide an interdisciplinary framework accessible to honors students with diverse backgrounds.

**Target Audience:** The course will be offered at the 300-level and is designed for Honors students above the freshman level in all majors.

**General Course Format:** Students will have access to relevant readings and videos posted on Blackboard weekly. Students will be responsible for completing assigned readings and viewing assigned videos prior to class. During the first hour of each class session, a course or guest instructor will provide an overview of the weekly topic drawing from assigned materials. During the second hour of the class session, students will participate in discussions facilitated by the instructors.
Grading: Final grades will be based on performance in four areas.
(1) Students will submit discussion points weekly based on assigned materials. (15%)
(2) Students will be expected to participate actively in weekly discussions. A rubric will
be applied to allow objective assessment of participation. (15%)
(3) Students will be given 4 quizzes on the reading and lecture material. (20%)
(4) Teams of two students will prepare posters on a topic that integrates a minimum of
two topics covered during the course. Topics for the poster must be approved.
Progress on the posters will be ensured with deadlines for topics, outlines (5%),
references (5%), and an abstract (10%). Posters will be presented during the final class
meeting, which will be open to the public (30%).

Syllabus by Week

❖ January 19: Introduction to Hormones, The Molecules of Reproduction
  o Instructors: Gary Dohanich, Ph.D. and Katherine Cost, B.S.
  o Readings:
    ▪ “Greasing the wheels” by N. Angier in Woman
    ▪ “Human Nature” by Matt Ridley in The Red Queen
    ▪ “The Endocrine System: How It Works”
    http://www.youtube.com/watch?v=YI2qYRWzSZ4&feature=fvw
    ▪ “How Hormones Work”
    http://www.youtube.com/watch?v=-m-m-iP4_f4

❖ January 26: The Biology of the Male Reproductive System
  o Instructors: Gary Dohanich, Ph.D.
  o Readings:
    ▪ “Male sexual circuitry” by I. Goldstein, Scientific American
    ▪ “Of babies and the barren Man” by M. Goldstein, Scientific American
    ▪ “Impotence in the Age of Viagra” by A. Melman, Scientific American
    ▪ “The Circumcision Dilemma” by E. Laumann, Scientific American
    ▪ “Castration of Sex Offenders” by D. Bilefsky, The New York Times
    ▪ “Male Contraception”
    http://www.msnbc.msn.com/id/3543478/ns/health-sexual_health/t/male-birth-control-pill-soon-reality/#.TnO-Z2bqaA
    ▪ “Sperm”
    http://www.radiolab.org/2008/dec/01/

❖ February 2: The Biology of the Female Reproductive System
  o Instructor: Nandini Vasudevan, Ph.D.
  o Readings:
    ▪ “The human menstrual cycle” by M. Hill
    ▪ “The clinical rationale for menses-free contraception” by K. Lin and
      K. Barnhart in Journal of Women’s Health
“Does the Contraceptive Pill Alter Mate Choice?” by A. Alvergne and V. Lummaa, *Trends in Ecology & Evolution*

“Women’s Brains on Steroids” by C. Kinsley & E. Meyer, *Scientific American*

“Is there a PMS Gene?” by B. Kantrowitz, *Newsweek*

“Saying Yes to the HPV Vaccine” by C. Wallis, *Time*

“Cancer Sluts” by M. O’Rourke, *Slate*

“Ovulation”

http://www.youtube.com/watch?v=nLmg4wSHdxQ&feature=related

**February 9: Conception, Pregnancy, and Birth**

- **Instructor:** Janet Ross, M.D.
- **Readings:**
  - “Prenatal Sex Selection and Missing Girls in China: Evidence from the Diffusion of Diagnostic Ultrasound”, by Yuyu Chen et al., February 2011
  - “Is Refusing C-Section Child Abuse?” by A. Newman, *RH Reality Check*
  - Human Fertilization

http://www.youtube.com/watch?v=vXNaTRs83hE&feature=related

**February 16: Mardi Gras Break**

**February 23: Differentiation of Biological Sex**

- **Instructor:** Jill Daniel, Ph.D.
- **Readings:**
  - “The science and politics of comparing women and men” by A. Eagly in *American Psychologist*
  - “His Brain, Her Brain”
  - “Defending the Brain from Estrogen” by D. Puts, C. Jordan & S. Breedlove in *Nature Neuroscience*
  - “Don’t Let Larry Summers Off the Hook Yet” by M. O’Rourke, *Slate*
  - “Don’t Worry Your Pretty Little Head” by W. Saletan, *Slate*
  - Essential Reproduction, Chapter 1: Sex by Johnson & Everitt (2000)
  - Essential Reproduction, Chapter 2: Gender & Sexuality by Johnson & Everitt (2000)
  - Gender Differences Over Time:

http://www.youtube.com/watch?v=EXzLEtuj04Y&feature=related
March 1: Disorders of Sexual Development
  o Instructor: Beth Wee, Ph.D.
  o Readings:
    ▪ “Defending the brain from estrogen” by D. Puts et al. in Nature Neuroscience
    ▪ “The Intersex Spectrum” by C. Gold, NOVA Online
    ▪ “The Effects of Early Androgens on Sex-Typed Activities and Interests in Adolescents with Congenital Adrenal Hyperplasia” by S. Berenbaum, Hormones & Behavior
    ▪ “South Africa Hits Out Against Semenya Caster’s Gender Test” by E. Harrell, Time
    ▪ “Consensus Statement on the Treatment of Intersex Disorders” by I. Hughes et al., Journal of Pediatric Urology
    ▪ “Babies Born with Penis Developmental Disorder Happier When Raised as Males” by D. Bricker, Hormone Research
    ▪ “Dr. Money and the Boy with No Penis” http://www.youtube.com/watch?v=GEilpXUzzEk&feature=related

March 8: Parenting Behavior
  o Instructor: Katherine Cost, B.S.
  o Readings:
    ▪ Why Babies Are Born Facing Backward, Helpless and Chubby by N. Angier, New York Times
    ▪ “Genetic Code for Monogamy” in National Geographic Online http://www.youtube.com/watch?v=5ddIKQwDle8&feature=fvw
    ▪ ”The Maternal Brain” by C.H. Kinsley and K. G. Lambert in Scientific American
    ▪ “Do Animals Feel Empathy?” by F. de Waal, Scientific American Mind
    ▪ “Family Guy” by E. Anthes, Scientific American Mind
    ▪ “Maternity Benefits” by K. Acosta, Fit Pregnancy
    ▪ “Cells the Read Minds” by S. Blakeslee, The New York Times

March 15: Spring Break

March 22: Puberty and Adolescence
  o Instructor: Michael Cunningham, Ph.D.
  o Readings:
    ▪ “The Environmental effect on puberty” by EarthTalk in Scientific American Online
    ▪ “Whatever!: Hormonal reversal during puberty keeps teens totally anxious” by N. Swaminathan in Scientific American
    ▪ “Teens before their time” by M. Lemonick et al. in Time Magazine
    ▪ “The Age of Consent”
    ▪ “Where’d you learn that?” by R. Stodghill, Time
❖ March 29: Sexual Behavior
  o Instructor: Elizabeth Hammer, Ph.D.
  o Readings:
    ▪ “The Chemistry of Desire” by M. D. Lemonick and S. Steptoe in *Time Magazine*
    ▪ “Sex Addiction: Real Illness or Excuse for Men to Cheat?” by J. Cloud, *Time*
    ▪ “Polygamy and the Nature of Men” by Matt Ridley in *The Red Queen*
    ▪ “Monogamy and the Nature of Women” by Matt Ridley in *The Red Queen*
    ▪ “The Orgasmic Mind” by M. Portner, *Scientific American*
    ▪ “Men and Women Differ in Amygdala Response to Visual Sexual Stimuli” by S. Hamann et al., *Nature Neuroscience*
    ▪ “How the Penis Lost Its Spikes” by Z. Corbyn, *Nature*

❖ April 5: Sexual Orientation
  o Instructor: Gary Dohanich, Ph.D.
  o Readings:
    ▪ “A Boy’s Life” by H. Rosin, *The Atlantic*
    ▪ “Ethical Issues in Attempts to Ban Reorientation Therapies” by M. Yarhouse & W. Throckmorton, *Psychotherapy: Theory/Research/Practice/Teaching*
    ▪ “Brain Aromatase: Dyed in the Wool Homosexuality” by Morris et al., *Endocrinology*
    ▪ “Bisexual Species” by E. Driscoll, *Scientific American Mind*
    ▪ “Sugar, Boys, and Sugar Boys” by A. Dreger, *Psychology Today*

❖ April 12: Pharmacology and Sexuality
  o Instructor: Ege Serefoglu, M.D.
  o Readings:
    ▪ “Doping by design” by S. Ashley in *Scientific American*
    ▪ “The rationale for banning human chorionic gonadotropin and estrogen blockers in sport” by D. J. Handelsman in *Journal of Clinical Endocrinology and Metabolism*
    ▪ “Drugs and sexual assault: A review” by E. Pope and M. Shouldice in *Trauma Violence Abuse*
    ▪ “Avoiding Date Rape”
      [http://www.youtube.com/watch?v=a-dY1jPjpQE](http://www.youtube.com/watch?v=a-dY1jPjpQE)

❖ April 19: Sexual Senescence
  o Instructor: Gary Dohanich, Ph.D.
  o Readings:
    ▪ “Is male menopause a real thing?” by N. Jones in *Time Magazine*
“An evolutionary and life history perspective on human male reproductive senescence” by R. G. Bribiescas in *Annals of the New York Academy of Sciences*

“Ageing: A biological perspective” by R. Arking in *American Scientist*

“There’s no place like Notoriety” by N. Angier in *Woman*

“The science of cougar sex: why older women lust” by J. Cloud in *Time Magazine*

“Hormone replacement therapy: Is it right for you?” by Mayo Clinic Staff


- April 26: **Student Poster Session**

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  - Instructors: Gary Dohanich, Ph.D.

- **February 2:** *The Biology of the Female Reproductive System*
  - Instructor: Nandini Vasudevan, Ph.D.

- **February 9:** *Conception, Pregnancy, and Birth*
  - Instructor: Janet Ross, M.D.

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- **March 8:** *Parenting Behavior*
  - Instructor: Katherine Cost, B.S.

- **March 15:** *Spring Break*

- **March 22:** *Puberty and Adolescence*
  - Instructor: Michael Cunningham, Ph.D.

- **Week 29:** *Sexual Behavior*
  - Instructor: Elizabeth Hammer, Ph.D.

- **April 5:** Sexual Orientation
  - Instructor: Gary Dohanich, Ph.D.

- **April 12:** *Pharmacology and Sexuality*
  - Instructor: Ege Sereglu, M.D.

- **April 19:** *Sexual Senescence*
  - Instructor: Gary Dohanich, Ph.D.

- **April 26:** *Student Poster Session*