

Effective Date: Fall 2002

**Revised Course Proposal: University Senior Seminar
Sociobiology: The Biological Origins of Social Practices**

1. Catalog description

- a. EIU 4118G
- b. Sociobiology: The Biological Origins of Social Practices
- c. Credit 3-0-3
- d. On demand
- e. Sociobiology
- f. An investigation of the biological origins of certain forms of behaviors common to animals including humans. Reproductive behavior will be used as the model for the study of how natural selection determines some human behavioral patterns. **Majors in Biological Sciences are excluded.**
- g. Completion of 75 semester hours
- h. Writing intensive

2. Student learning objectives

In accordance with the goals of GENERAL EDUCATION, Students will-----

- a. read a variety of written materials including review or summary periodicals in addition to primary sources (literacy)
- b. discuss readings in class enhancing speaking standard English as well as listening with comprehension skills (literacy, critical thinking)
- c. write two integrative papers analyzing and synthesizing materials and concepts covered in course readings and class discussions (literacy, critical thinking)
- d. write 7-10 "in-class" 10 minute essays on major themes covered in class discussion (literacy, critical thinking)
- e. orally present term paper in the class (literacy)
- f. learn to respond to "thought" (e.g., the relationship between "learned" versus "inherited" behaviors) questions based on assigned readings during classroom discussion (critical thinking, citizenship)
- g. gain an understanding of the scientific method, ethics in science, and social responsibility of scientific investigation (citizenship)
- h. understand current issues that deal with genetic aspects of human behavior after gaining an awareness of historical events that have contributed to the current understanding of why humans behave the way they do (critical thinking, citizenship)
- i. enhance understanding of the influence of genes on human behavior and how such knowledge can be used to better humankind (citizenship, critical thinking)

3. Course outline

Course outline is based on one 150-minute class meeting a week for 15 weeks. The first week is devoted to introducing terms, themes and reading material. The twelfth week will be used for assessment, specifically **TASKS** test, and the last week oral presentations given as well as the course conclusion and summary.

Week 1--Introduction to the Course

- a. "Nature versus "nurture"
- b. History of the nature vs nurture argument
- c. Examples of innate behaviors (genetic)
- d. Examples of learned behaviors (learned)

Week 2--Natural selection, altruism, kin selection and the evolution of selfishness

- a. Coefficient of relatedness (r)
- b. Selfless behavior
- c. Selfish behavior
- d. Evolution of parental care

Readings: Chapter 1*

Week 3 and 4—Sexual selection and the evolution of mating systems

- a. Why do males compete with males for access to females?
- b. Why are females the "discriminating sex"?
- c. What is parental investment?
- d. Polygyny and polyandry, why does variation exist?

Readings: Chapters 2*, 3*, 4*

Buss, D. 1994. The strategies of human mating. *American Scientists* 82:238-249.

Week 5 and 6--Love and marriage, sex and pregnancy and are the brains of males and females different?

- a. What is love "biologically"?
- b. What is marriage "biologically"?
- c. Why are there differences in the anatomy/physiology of male and female brains?

Readings: Chapters 5*, 6*

Babies, bonds and brains, DISCOVER 1997. Family man, DISCOVER 1997. Passion pills, DISCOVER 1999. Sizing up the Sexes, TIME 1992. Genetic battle of the sexes, NATURAL HISTORY 1998.

Week 7 and 8—Sex and power, the evolution of sexual jealousy

- a. Why are males often larger than females in body size?
- b. Why are males and female often sexually dimorphic (i.e., don't look alike)?
- c. Why do men often take on leadership roles?
- d. Is male and female sexual jealousy different?? Why or why not?
- e. Is being "jealous" adaptive? MAMA'S BABY, DADDY'S MAYBE??

Readings: Chapter 8*, 9*

Daly, M. and M. Wilson. Whom are new born babies said to resemble ? Ethology and Sociobiology 3:69-78

Daly, M. and M. Wilson. Male sexual jealousy. Ethology and Sociobiology 3:11-27.
"Sperm Wars" DISCOVER 1991

Week 9, 10 and 11—Divorce, disease, aging and death

- a. Why do humans divorce?
- b. Why do other animal species divorce?
- c. What causes disease?
- d. What causes aging,, why female menopause only?
- e. What causes death?
- f. Why has natural selection not removed c, d and e above??

Readings: Chapters 10*, 11*, 12*

Week 12--Assessment Week

Week 13 and 14—"Can we explain what appear to be non-adaptive behaviors with an adaptive explanation?"

- a. Why do people use contraception?
- b. Why do people adopt?
- c. Why are some people celibate?
- d. Why does child abuse exist?
- e. Why do people behave altruistically to non-relatives?

Readings: Chapter 13*

Against nature, DISCOVER 1997. Oppressed evolution, DISCOVER 1998.

Lewontin, R.C., S. Rose, and L. J. Kamin. Not in our genes. Chapters 1, 2 3, 4 and 10.

Week 15—ORAL PRESENTIONS --Course conclusion and summary

4. Evaluation of student learning

- a) Writing skills will be evaluated through several writing assignments. Students will write two, integrative reaction papers based on the course material and class discussion. The papers (minimum of 10 typed pages) will be returned to the student after preliminary evaluation for further revision and expansion. In addition, students will be advised to consult with the instructor during the writing process. In addition, students will have approximately 7-10 “in-class” writing essays (10 minutes each) that cover major themes and concepts covered that day. Speaking skills will be evaluated based on the class discussions and oral presentation of the term paper. Critical thinking and understanding of the material will be continuously evaluated in the grading of the content and quality of written and oral work.
- b) 60% of the course grade will be on written assignments as indicated below:

Attendance and class participation	20%
Two reaction papers	40%
Oral presentation	20%
In class writings (best 5)	20%
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TOTAL	100%

5. Rationale

- a. Senior Seminar
- b. Prerequisite: 75 hours completed
- c. This course is a revision of the current 2-hour Senior Seminar, EIU 4018G.
- d. Course will not be required in any majors or programs other than general education senior seminar.

6. Implementation

- a. Initial instructor: Kipp C. Kruse
- b. Textbooks and supplementary materials:

*Potts, M. and R. Short. 1999. Ever Since Adam and Eve—The Evolution of Human Sexuality. Cambridge University Press. 358 pp.

Enrichment readings from a variety of sources including journals (e.g., Ethology and Sociobiology, Behavioral Ecology and Sociobiology), review literature sources (e.g., Scientific American, American Scientist) and popular literature (e.g., Discover, Newsweek, Times, etc.).

- c. Additional costs: none
- d. Term potentially first offered: Fall 2002

- 7. **Community college transfer:** Not applicable.
- 8. **Date approved by the College Curriculum Committee:** 10/12/01
- 9. **Date approved by CAA:** 11/01/01

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