This course investigates how evolutionary thought—evolutionary biology in particular—helps us better understand the utility function, a central concept in economics. Why are people risk averse? Why do men tend on average to hold riskier portfolios than women do? Why are people impatient? What explains novelty seeking, habits, and addictions? Where do the preferences that govern parent-child relationships come from? In addition to the questions above, evolutionary thought will be brought to bear on a variety of diverse topics such as: violence; adolescent risk taking; sexual behavior; mating preferences; marriage and divorce; rearing and investing in children; extended families; trade and specialization; cooperation and conflict; cults and gangs; religion; interactions between genetic and cultural forces; social learning, including fads, fashion and imitative and herd behavior; behavioral finance; concerns for relative status; civic life; warfare and aggression; political revolutions and the psychology of cooperation, guilt, shame, spite and revenge.

Books: There are two books that we will use in this course, each available at the bookstore:


Prerequisites: Microeconomic Theory (Econ 201 or 401) and Macroeconomic Theory (Econ 202 or 402). Econometrics is not required but can be helpful.

Grading: The course grade is based on the following:

- Midterm (in class, Tuesday, March 23) 25 percent
- Research Paper (due May 6th, 3:00 p.m.) 25 percent
- Final Exam (Saturday, May 15th, 9:00—11:00 a.m.) 50 percent

No make-up or early exams will be given. Students should check their schedules to make sure that no conflicts occur on these exam dates.

Reading: This class is reading intensive. But unlike most economics texts, the required books contain mostly verbal arguments rather than equations and graphs. One of the authors, Robert Wright, is a journalist, not an economist. And Jared Diamond is a physiologist who writes well. But some of the articles contain advanced material, much of which can be skipped. The detailed reading schedule below explains when to do the reading and how to approach the material.

Class Meetings: The lecture will begin precisely at the beginning of the scheduled class time. All students are required to arrive at least 3 minutes early for all classes, so that we can start (and end) on time.
Topics and Readings

I. Genes and Evolution

Reading: Richard Dawkins, *The Selfish Gene*, chapter 2. *This is a short chapter that contains the ideas that are outlined in Handout 1. You should read through it right away, to make sure you understand the “replicator” principle.*

Handout: Handout 1—“Evolutionary Preliminaries”

II. An Introduction and Overview of Evolutionary Psychology

Reading: Robert Wright, *The Moral Animal*. *This book is best read right at the beginning, pretty much all at once, during the first two weeks of the class. It provides the foundation for the evolutionary theory that we will refer to time and time again throughout the course. The book is written by a journalist for the educated non-specialist, so it is especially accessible and clear. The use of Darwin himself as a case study for some of the psychological concepts is sort of clever, though if you are pressed for time you can skim the chapters that deal with Darwin’s life (the book makes clear which chapters those are). The ideas from this book will emerge repeatedly in nearly all the handouts that will be distributed in class.*

III. Dating, Mating, Marriage and Children

Reading: *This section focuses on material from The Moral Animal, chapters 1-6, which you should have mostly read by now. In addition, when we get to the material in Handout 6, you should read the article listed below. Note that this article is marked with a star (*). Starred articles contain technical material that can be skipped, that is, you can read the words and skip the equations.*

Handouts: Handout 2—“The Battle of the Sexes,” Part I

Handout 3—“The Battle of the Sexes,” Part II

Handout 4—“The Battle of the Sexes,” Part III, and “Sexual Selection and the ‘Handicap Principle’”

Handout 5—“The Selfish Gene Once Again: Kin Selection and Hamilton’s Rule”

Handout 6—“The ‘Trivers-Willard’ Effect”

IV. How Geography and History Interact with Biology

Reading: Jared Diamond, *Guns, Germs and Steel*, parts 1-3. *One of the most insightful books ever written. The most definitive argument against “biological determinism.” One of the main points: genetic influences act in concert with environmental influences; one or the other cannot be analyzed in a vacuum.*

Handout: Handout 7—“Geography, History and Incomes Around the World”
V. Family Life—Giving, Exchanging and Taking

Reading: This section uses the material from The Moral Animal, chapter 7. In addition, there are four articles related to this section. Again, the rule for any article marked with the (*) is to read the words and skip the equations.


3. Donald Cox, “Biological Basics and the Economics of the Family.” Journal of Economic Perspectives (Spring 2007). This paper adds considerations of reproductive biology to the economics of the family. Some of its ideas are a bit alien to economists, but by now they will look familiar to you.

4. Francis Bloch and Vijayendra Rao, “Terror as a Bargaining Instrument: A Case Study of Dowry Violence in Rural India,” American Economic Review (September 2002). There’s more than just altruism or exchange in family relationships…there’s extortion too.

Handouts: Handout 8—“The Economic Implications of Altruism,”
“The Exchange Model,”
“Altruism and Exchange Together”

Handout 9—“The Economics of Temper Tantrums”

VI. Ways that Non-relatives Cooperate and Ways They Fight

Reading: Can having a hair-trigger temper actually facilitate rather than discourage trade? How about a guilty conscience? The term “emotion” often implies being out of control and irrational. But, as the authors of these papers argue, maybe emotions play a “smart” role in the grand scheme of things, and complement rather than work against, our rational sides.

1. *Robert Frank, “If Homo Economicus Could Choose His Own Utility Function, Would He Want One with a Conscience?” American Economic Review (January 1987). This article contains a lot of ideas that will be useful for understanding cooperative interaction among non-relatives.


Handouts: Handout 10—“Friendship, Reciprocity, the Division of Labor and Trade”
Handout 11—“Frank’s Analysis of Emotions and Exchange”
VII. Language, Coordination and Social Capital

Reading: Robin I. M. Dunbar and Susanne Shultz, “Evolution in the Social Brain.” Science (September 2007). How many people can you keep track of? A jumping off point for thinking about a core concept in economics, the division of labor.


Handouts: Handout 12—“Gossip, Grooming, Networks and the Division of Labor”

Handout 13—“Coordination and Social Capital.”

VIII. Clubs, Cooperatives, Cults and Gangs

Reading: What do Hare Krishnas, academic economists, Hell’s Angels, and Israeli Ultra-Orthodox Jews all have in common? Perhaps more than you might have guessed.


Handout: Handout 14—“Collective Behavior: Religious Sects, Clubs, Gangs, Communes and Cults”

IX. Fads, Fashion and Conformity

Reading: How many beliefs do you currently hold right now that are completely false? Plus, how your friends might drag you down.


Handout: Handout 15—“Conformity: Fads, Fashion, Herd Behavior and Other Ways of Sticking with the Crowd”
X. Revolutions

Reading: Timur Kuran, “The East European Revolution of 1989: Is it Surprising that We Were Surprised?” American Economic Review (May 1991). This paper contains clues as to why pedophilia in the Catholic Church went unreported for so long, and also why the scandal broke so suddenly.

Handout: Handout 16—“Revolutions”

XI. Context and Status

Reading: Two short items having to do with status and frames of reference.

1. Robert H. Frank, “Frames of Reference and the Quality of Life.” American Economic Review (May 1989). How happy you are probably depends on more than just goods and services. It also might depend on how you are doing relative to others or relative to how you were doing before.


Handout: Handout 17—“Status”

XII. Traditions, Habits and Addictions


Handout: Handout 18—“Habits and Addictions”

XIII. Impatience

Reading: Why do people procrastinate? Is it because of a quirk in their utility functions, or because of their upbringing?


Handout: Handout 19—“Impatience”
XIV. Neuroeconomics

Reading: A brand new, exciting field in economics that takes advantage of new technology for understanding the human brain.


Handout: Handout 20—“Neuroeconomics”

XV. Group Selection

Reading: What is the appropriate “unit” of selection? Might it be the group, rather than the gene or the organism? This is a question that is on the cutting edge of biology, and it has vast implications for our understanding of what people are like: are they nice, are they bloodthirsty, or both?


Handout: Handout 21—“Group Selection”
Schedule

Following this list exactly will keep you at or ahead of the material being covered in class. Reading averages about 70 pages per class meeting. Much of the early material is lighter fare than what is in economics textbooks, but some of the later articles contain dense technical material. The rule for the technical articles is to read the words, skip the equations, and concentrate on grasping the “big-picture” concepts rather than the technical details.

The roman numerals refer to the topics listed in the reading list above.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Reading</th>
<th>Exams and Due Dates</th>
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<tbody>
<tr>
<td>January 19</td>
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<tr>
<td>January 26</td>
<td>II</td>
<td>You should be well into <em>Moral Animal</em>, part I.</td>
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<td>January 28</td>
<td>III</td>
<td>You should have finished <em>Moral Animal</em> part I and be well into part II.</td>
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<tr>
<td>February 2</td>
<td>III</td>
<td>Finished part II, well into part III of <em>Moral Animal</em>.</td>
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<tr>
<td>February 4</td>
<td>III</td>
<td>You should have finished <em>Moral Animal</em> by now. Read Edlund (1999).</td>
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<tr>
<td>February 9</td>
<td>III</td>
<td>You should have read though part I of <em>Guns, Germs and Steel</em>.</td>
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<td>February 11*</td>
<td>III</td>
<td>You should be well into part II of <em>Guns, Germs and Steel</em>.</td>
<td>TERMPAPER TOPICS DUE</td>
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<tr>
<td>February 16</td>
<td>IV</td>
<td>Finish part II of <em>Guns, Germs and Steel</em>.</td>
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<tr>
<td>February 18</td>
<td>IV</td>
<td>Start part III of <em>Guns, Germs and Steel</em>.</td>
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<tr>
<td>February 23</td>
<td>V</td>
<td>Finish part III of <em>Guns, Germs and Steel</em>.</td>
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<td>March 11</td>
<td>V</td>
<td>Cox (2007).</td>
<td>PROBLEM SET DUE</td>
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<tr>
<td>Date</td>
<td>Topics</td>
<td>Reading</td>
<td>Exams and Due Dates</td>
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<tr>
<td>March 18</td>
<td>VI</td>
<td>Frank (1987), Hirshleifer (1987)</td>
<td>REVIEW</td>
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<td>March 23*</td>
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<td>MIDTERM EXAM</td>
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<tr>
<td>April 15</td>
<td>XII</td>
<td>Becker (1992).</td>
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<td>April 22</td>
<td>XIV</td>
<td>Readings 1 – 3.</td>
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<tr>
<td>April 27</td>
<td>XIV</td>
<td>Readings 4 – 7.</td>
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<tr>
<td>April 29</td>
<td>XV</td>
<td>Bergstrom (2002).</td>
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<tr>
<td>May     6*</td>
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<td>LAST DAY OF CLASSES TERMPAPERS DUE</td>
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<tr>
<td>May     15*</td>
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<td>FINAL EXAM, 9:00 — 11:00 a.m.</td>
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NOTE: Starred (*) dates will not be changed.