Course description. We will investigate the topic of human nature, asking such questions as: What are we like? Why do we behave the way we do? Are we inherently selfish or social? Do we have a unitary “self” or are we made up of many (and sometimes contradictory) selves? Is there a single “human” nature or are there distinct “male” and “female” natures? Does human nature vary across cultures? Insights come from fields ranging from genetics to literature. The concept of “human nature” is fiercely contested and debated both within and between academic disciplines. We will be focusing on the scientific study of human nature, seeking naturalistic explanations by formulating and testing hypotheses. In particular, we will use evolutionary theory to unify explanations from disparate disciplines like biology, psychology, and anthropology. In each class, we will discuss one specific topic like sex or violence and seek to make sense of it from both the proximate level (what triggers the behavior and how does it develop?) and the ultimate level (why and how did our evolutionary history imbue us with this capacity?).

Course objectives
• To develop a scientific mindset, the ability to ask good questions, and the ability to argue rationally
• To learn the basic concepts and controversies surrounding evolutionary theory and its use in explaining behavior
• To learn how to carefully read and critically evaluate primary and secondary academic literature

Readings. You do not need to purchase anything for this course. I will post readings to the Blackboard site (see the reading list below). Read articles in the order in which they are posted. Read before coming to class, take notes, and come prepared to discuss. Some of the readings will be challenging. You may want to read them again after class.

Grading

<table>
<thead>
<tr>
<th>Grading</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Class participation</td>
<td>30%</td>
</tr>
<tr>
<td>Leading discussion</td>
<td>10%</td>
</tr>
<tr>
<td>Reaction papers (5)</td>
<td>30% (6% each)</td>
</tr>
<tr>
<td>Research Paper</td>
<td>30%</td>
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</tbody>
</table>

Writing advice. If you need help, talk to me or visit the Writing Center in the Student Success Center. Through the Writing Center, you can meet with a tutor or submit online. Appointments are available Monday–Friday from 9–5 and some evenings. For more information please visit the Writing center at http://writery.missouri.edu. You can also read a guide book. I like On Writing Well by Zinsser for, obviously, writing well; The Uses of Argument by Toulmin for building an argument; and Clear and Simple As the Truth by Thomas and Turner for writing in classic style.

Students with disabilities. Please let me know as soon as possible if you anticipate barriers related to the format or requirements of this course, you have emergency medical information to share with me, or you need to make special arrangements (e.g. in case the building needs to be evacuated). If you require disability-related accommodations (such as a notetaker, extended time on exams or captioning), please register with the Office of Disability Services (http://disabilityservices.missouri.edu, S5 Memorial Union, 573-882–4696). After you have registered, please notify me of your eligibility for reasonable accommodations. For other MU resources for students with disabilities, click on “Disability Resources” on the bottom of the MU homepage (http://missouri.edu).

Academic Integrity. Academic integrity is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person’s work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards breaches of the academic integrity rules as extremely serious matters. Sanctions for such a breach may include academic sanctions from the instructor, including failing the course for any violation, to disciplinary sanctions ranging from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, collaboration, or any other form of cheating, consult me or the University’s policy and procedures at http://osrr.missouri.edu/guidelines/procedure.html.
Course Requirements

**Class Participation.** Attendance is mandatory. You will be evaluated on how well you participate. This means doing the readings before class and contributing to the discussions. To facilitate active discussion, cell phones and laptops are not permitted in class. Take notes the old fashion way, on paper.

**Leading discussion.** Each of you will lead one session’s discussion. Below are some tips for discussion leaders.
- Read the assignments extra carefully, preferably more than once.
- Think about what you want to get across. What are the main points? How do the readings relate to one another?
- Think about how you want to lead discussion. Do you want to divide the class into small discussion groups? Do you want to give a short introduction and then moderate a large-group discussion?
- When leading discussion remember not to answer your own questions before you ask them (e.g., “I thought Dawkins did a bad job when discussing the evolution of behavior. What did you think?”). Avoid “yes”/”no” questions. Ask open-ended questions that will get people to share their own ideas about the readings.
- Be organized. Sketch out a general map of how you think the discussion might go. Work from organized notes.
- At the same time, don’t expect to follow the map exactly. The best part of discussions are often the unexpected turns. Allow a few minutes here and there to see where tangents might go. Some advice from President Eisenhower: “In preparing for battle I have always found that plans are useless, but planning is indispensable.”
- Don’t get nervous. You won’t be alone. I will be lecturing on some topics during each meeting. And, I will facilitate discussion by asking some questions and answering others.

**Reaction papers.** You will write five 750-word reaction papers, one for each of the topic modules. Each reaction paper is due on the Tuesday following the relevant discussions. I will distribute questions on the Thursday before. You don’t need to do additional research. Instead, offer your reactions to the questions, drawing on the assigned readings. Reaction papers should be well-written and coherent essays with a thesis, good structure, and a conclusion.

**Research paper.** Choose a fictional character (not too obscure, please) who exhibits some behavior you would like to better understand. Write a 10–15 page research paper aimed at a smart reader (but not a specialist) that explains this behavior from an evolutionary perspective. This is a research paper, not a creative writing assignment! You should read broadly to understand your topic, mostly research articles, not newspapers or websites. Your final paper should have at least 7–10 high-quality citations. Document your citations following a consistent format (e.g., the MLA guidelines: [http://unitproj.library.ucla.edu/col/bruinsuccess/files/mlaguide.pdf](http://unitproj.library.ucla.edu/col/bruinsuccess/files/mlaguide.pdf)). Your assignment isn’t necessarily to come up with a novel evolutionary explanation; since there is plenty of bad science, you can criticize existing explanations. You have complete freedom to choose the character and behavior. Example essays are posted on the course website. If you need help coming up with a question or finding sources, don’t hesitate to contact me. **Remember, this paper is about a scientific question, not the fictional character.**

At the end of the semester, with your permission, I will compile the essays into a book called *The Science of Fiction, Volume V*, and distribute copies to everyone. Below are the deadlines for the paper.

<table>
<thead>
<tr>
<th>Date</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>Sep 4</td>
<td>Bring in a (rough and tentative) research question and fictional character</td>
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<tr>
<td>Sep 18</td>
<td>Annotated bibliography – a detailed summary of at least 3 articles</td>
</tr>
<tr>
<td>Oct 2</td>
<td>Bring in a one-page research proposal</td>
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<tr>
<td>Nov 11</td>
<td>Rough draft due – Bring in a paper copy for me and each of your peer reviewers</td>
</tr>
<tr>
<td>Dec 4</td>
<td>Last day to submit a second draft of your paper to me (this is optional)</td>
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<tr>
<td>Dec 9</td>
<td>Email me a short biography of you written in the third-person (have fun with this)</td>
</tr>
<tr>
<td>Dec 11</td>
<td>Turn in Research Process Form</td>
</tr>
<tr>
<td>Dec 9, 11</td>
<td>In-class presentations – email me powerpoint files by 5 pm the night before (if using)</td>
</tr>
<tr>
<td>Dec 18</td>
<td>Final draft of the research paper due</td>
</tr>
<tr>
<td>June 1</td>
<td>Optional: Submit your paper for consideration in the MU Libraries Undergraduate Research Paper Contest with cash prizes of $250 for 2nd place and $500 for 1st place. For more information, visit the website: <a href="http://libraryguides.missouri.edu/researchcontest">http://libraryguides.missouri.edu/researchcontest</a></td>
</tr>
</tbody>
</table>

**In-class presentation.** On December 9 and 11, each of you will present a summary of your research paper to the class. Oral presentations are fine. I’ll have a projector if you need one. Keep the presentation about 5–7 minutes (3–4 slides) so that we can accommodate all the students in the class.
# Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Discussant</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>August 26</td>
<td>Course introduction</td>
<td></td>
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<tr>
<td>August 28</td>
<td>What is human nature?</td>
<td></td>
<td></td>
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<tr>
<td>September 2</td>
<td>The scientific method</td>
<td></td>
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**Module 1: Biology and behavior**
- September 4: Adaptation and natural selection
- September 9: Levels of causation
- September 11: Heritability and development
- September 16: *** Meet in Ellis Library Room 213 ***
- September 18: Inferring adaptation

**Module 2: Sex and gender**
- September 23: Lecture
- September 25: Student-led discussion  
  Discussant: Sean
- September 30: Student-led discussion  
  Discussant: Poonam
- October 2: Discuss a technical paper

**Module 3: Marriage and parenting**
- October 7: Lecture
- October 9: Student-led discussion  
  Discussant: Meghan
- October 14: Student-led discussion  
  Discussant: Brenda
- October 16: Discuss a technical paper

**Module 4: Conflict and cooperation**
- October 21: Lecture
- October 23: Student-led discussion  
  Discussant: Erica
- October 28: Student-led discussion  
  Discussant: Jacob
- October 30: Discuss a technical paper

**Module 5: Culture and adaptation**
- November 4: Lecture
- November 6: Student-led discussion  
  Discussant: Abbie
- November 11: Student-led discussion  
  Discussant: Natalie
- November 13: Discuss a technical paper
- November 18: **No class - Arrange peer reviews**
- November 20: **No class - Arrange peer reviews**
- December 2: Bonus topic: Anxiety and insecurity  
  Discussant: Elizabeth
- December 4: Bonus topic: Culture and mental illness  
  Discussants: Carole & Colleen
- December 9: **In-class presentations**
- December 11: **In-class presentations**
- December 18: **No class - Finals week**
- June 1: Submit paper to Undergraduate Research Paper Contest (optional)  
  [http://libraryguides.missouri.edu/researchcontest](http://libraryguides.missouri.edu/researchcontest)
Readings

**August 28.** What is human nature?

**September 2.** The scientific method

**September 4.** Adaptation and natural selection

**September 9.** Levels of causation and inferring adaptation

**September 11.** Heritability

**September 18.** Development

**September 25.** Sex and gender 2

**September 30.** Sex and gender 3

**October 2.** Sex and gender 4

**October 9.** Marriage and parenting 2

**October 14.** Marriage and parenting 3

**October 16.** Marriage and parenting 4

**October 23.** Conflict and cooperation 2

**October 28.** Conflict and cooperation 3

**October 30.** Conflict and cooperation 4

**November 11.** Culture and adaptation 2

**November 13.** Culture and adaptation 3

**December 2.** Anxiety and insecurity

**December 4.** Culture and mental illness