Western societies are characterized, at least in part, by their commitment to scientific discovery and technological innovation. Consequently, we face a need to understand the nature of relationships between science and society, empirical facts and human values, and nature and culture. In this course we explore various ways of conceptualizing these relationships by closely considering evolution and its possible significance for how we think of ourselves and what we ought to do.

HNRS 320H is an upper-division general education course that satisfies Area B or Area C and is associated with the following Pathways: Great Books and Ideas, Ethics, Justice, and Policy, Diversity Studies, Science Technology and Values, Gender and Sexuality Studies.

Class format combines lecture, video, debate, discussion, and student presentation.

Course Materials:

Free Will and Science: a dialogue, Frank Mele
Free Will, Sam Harris
The Hard Problem, Tom Stoppard
Other readings will be available through an electronic reader on Blackboard Learn.

GE Pathways
This course is associated with the following Pathways: Diversity Studies; Ethics, Justice and Policy; Great Books and Ideas, Science; Technology and Values; and Gender and Sexuality Studies and fulfills UD-B or UD-C GE disciplinary areas.

**GE Learning Objectives**

**Student Learning Outcomes**

The Student Learning Outcomes for our General Education program flow from the recognition that certain essential intellectual and practical skills rest at the foundation of a high-quality General Education program. These include effective written and oral communication, critical thinking, and mathematical reasoning skills.

1. **Oral Communication:** Demonstrates effective listening and speaking skills necessary to organize information and deliver it effectively to the intended audience. Students utilize oral communication for class discussions and their small group debate.

2. **Written Communication:** Demonstrates the ability to question, investigate and draw well-reasoned conclusions and to formulate ideas through effective written communication appropriate to the intended audience. Students participate in daily writing assignments as well as two philosophical argumentative essays.

3. **Critical Thinking:** Identifies issues and problems raised in written texts, visual media and other forms of discourse, and assesses the relevance, adequacy and credibility of arguments and evidence used in reaching conclusions. Students are confronted with different and often opposing views, they have to work through these controversies to reach their own conclusions.

4. **Diversity:** Demonstrates an understanding of and facility with different intellectual viewpoints as well as the unique perspectives of others based on varied experiences, identities and social attributes. Students consider the relationship of humans to other animals in the natural world. The biological differences between men and women are explored in several contexts.

**Grading:**

Course grades will be assigned based on the standard scale: (scores will not be rounded up)

- 93-- 100 = A
- 90-- 92 = A-
- 87-- 89 = B+
- 83-- 86 = B
- 80-- 82 = B-
- 77-- 79 = C+
- 73-- 76 = C
70--72 = C-
67--69 = D+
60--66 = D
< 60 = F

Final grades for the course will be calculated as follows:

- **5%** Science News Watch (every Thursday)
- **10%** Class Preparation and discussion (Reading questions)
- **20%** Midsemester exam
- **20%** Final Examination
- **30%** Essay (approximately 2000 words)
- **15%** Class presentation/debate

**Specific Instructions for Assignments:**

**Science News Watch (5%)**
Students will monitor various media sources, NGOs, science journals and blogs throughout the semester. Before Thursday class students will submit via Blackboard Learn a report of a relevant issue and how it relates to human values. Please bring a printed copy of your Science News Watch to class. During the first ten or fifteen minutes of the class, some students will be called upon to report their findings and respond to questions regarding their article.

**Class Preparation (10%)**
Points will be earned for quality of Reading Question responses (submitted via Blackboard Learn), class attendance and participation. Responses to the Reading Questions will **ONLY** be accepted on time and in Blackboard Learn (email or paper copy responses will not be accepted).

**Midsemester exam (20%)**
This exam will be take-home in essay format.

**Essay (30%)**
There will be one essay, approximately 2000 words. Due date is on the class schedule. Essays will be submitted electronically through Blackboard Learn. Each late paper will be penalized with 5% of the maximum value deducted for every (work)day past the deadline. Students will have the option of submitting a revised paper. Note that there are resources on paper writing under the menu item *Essay Assignment*.

**Class presentation/debate (15%)**
In the last three weeks of the semester, everyone will have to participate in a group presentation or debate on an assigned topic. Ideally, there will be 3 students in each group. We will discuss and vote on topics for the presentations/debates. Students will be able to rank their favorite topics. Prior to the presentation/debate, each team will have to meet with one of the two
instructors to discuss their presentation/debate. A detailed rubric will be handed out before the first student presentations/debate.

**Final Examination (20%)**
The final examination will be held during the final examination period. The final will be a comprehensive examination that covers material from lectures, assigned readings, films, and presentations for the entire semester.

*There are no extra credit assignments in this course or in life.*

*Only in extreme circumstances and with prior notification and permission as well as approved documentation will examinations be rescheduled, extensions on essay assignments be granted, or class participation requirements be modified.*

*Plagiarism will not be tolerated: students who submit essays that include plagiarized material will be assigned an F in the course and reported to Student Judicial Affairs.*

Note that this policy is not subject to alteration or negotiation. See the document, "What is Plagiarism and Why Is It Important?" in Blackboard Learn, for more information on the definition and nature of plagiarism.

**Students with disabilities**
If you need course adaptations or accommodations because of a disability or chronic illness, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Please also contact Accessibility Resource Center (ARC) as they are the designated department responsible for approving and coordinating reasonable accommodations and services for students with disabilities. ARC will help you understand your rights and responsibilities under the Americans with Disabilities Act and provide you further assistance with requesting and arranging accommodations. ARC is in SSC 170 and can be reached at 898-5959.

**Confidentiality and Mandatory Reporting**
As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. As a Professor, I also have a mandatory reporting responsibility. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep information you share private
to the greatest extent possible. However, please be aware that I am required to share information regarding sexual misconduct with the University. Students may speak to someone confidentially by contacting the Counseling and Wellness Center (898-6345) or Safe Place (898-3030). Information on campus reporting obligations and other Title IX related resources are available here: www.csuchico.edu/title-ix
<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Readings</th>
</tr>
</thead>
</table>
| **Week 1** | 8/25, 8/27 | Introduction to the course | Arthur Lovejoy, “The Great Chain of Being and Some Aspects of 18th C. Biology”
Gavin De Beer, “Biology before the Beagle” |
| **Week 2** | 9/1, 9/3 | Natural Theology and the Struggle for Existence | William Paley, “Natural Theology”
Michael Behe, “Intelligent Design” (video)
Ken Miller, *Only a Theory* “Devil in the Details”
| **Week 3** | 9/8, 9/10 | Darwin and Evolution | Charles Darwin, *Voyage of the Beagle*
Charles Darwin, *On the Origin of Species* |
| **Week 4** | 9/15, 9/17 | Evolution and Human Sexuality | Charles Darwin, *The Descent of Man*
Robert Wright, *The Moral Animal*
Janet Richards, *Human Nature after Darwin* |
| **Week 5** | 9/22, 9/24 | The Fact of Evolution and Social Darwinism | Richard Dawkins, *The Greatest Show on Earth*
Charles Darwin, *Descent of Man*
Social Darwinism (selected readings) |
| **Week 6** | 9/29, 10/1 | The Hard Problem | Tom Stoppard |
| **Week 7** | 10/6, 10/8 | Evolutionary Explanations Of Altruism | Richard Dawkins, *The Selfish Gene*
Andrew Flescher, Dan Worthen, *The Altruistic Species*
Edgar Keret, “Good Intentions” |
| **Week 8** | 10/14, 10/16 | Science and Human Values | Sam Harris, *The Moral Landscape* (selected readings) (video)
Sam Harris, TED talk *The Moral Landscape* |
| **Week 9** | 10/21, 10/23 | Science and Free Will | Sam Harris, *Free Will* |
| **Week 10** | 10/28, 10/30 | Science and Free Will | Alfred Mele, *FREE: Why science hasn’t disproved free will* |
| **Week 11** | 11/4, 11/6 | Transhumanism & Sexbots | *Ex Machina*, the movie
Readings tba |
<table>
<thead>
<tr>
<th>Week 12</th>
<th>Tom Stoppard, <em>The Hard Problem</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>11/11, 11/13</td>
<td>Essay due Friday 11/13 by 5 PM.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 13</th>
<th>Presentations/Debates</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/18, 11/20</td>
<td>See Debate Assignment for reading</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 14</th>
<th>Presentations/Debates</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/2, 12/4</td>
<td>See Debate Assignment for reading</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 15</th>
<th>Presentations/Debates</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/9, 12/11</td>
<td>Essay revisions (optional) due Friday 12/11 by 5 PM</td>
</tr>
</tbody>
</table>

| FINAL EXAM: Thursday December 17, 10:00-11:50 AM (this is the usual time for the final) |

NOTE: The syllabus is subject to change. Revised syllabi will be announced and posted on