

## **SAMPLE SYLLABUS**

### **ANIMAL EXPERIMENTS**

#### **Course Description:**

This course explores concepts in the history, philosophy, and social study of biology focused on work with animal models. Topics may include dissection in ancient and medieval times, experiments with electricity, cloning, gene knockout mice, CRISPR, and animal rights activism. Questions may include how we draw inferences across species lines; how scientists choose model organisms; whether there is an ethical boundary between persons and animals; how species should be classified; what the ethical responsibilities of scientists are; whether animals and plants are conscious; and how to regulate genetic manipulation technologies.

#### **Assessment:**

5 Reading Responses	50%
Class Discussions	15%
Midterm Exam	10%
Media Assignment	25%

#### **Reading Responses:**

Write a brief response to the week's readings, to be handed in before class begins. Responses should express what you learned from the readings, any disagreements you have, additional questions you want to ask, and/or corroborating evidence from your own experience.

#### **Class Discussions:**

Classes will feature structured discussion activities. Students are expected to come to class prepared to discuss the readings, and to participate in these activities.

#### **Midterm Exam:**

The midterm will consist of a choice of long-answer questions drawn from topics of class discussions. Students will draft an opinion piece responding to their chosen topic.

#### **Media Assignment:**

In small groups, students choose a topic related to course readings that has been the subject of public debate. Examine the issue, and produce an opinion piece (article or podcast).

#### **Sample Readings:**

Andreas Vesalius, *De humani corporis fabrica*

Charles Darwin, *On the Origin of Species*

Willi Hennig, *Phylogenetic Systematics*

Rachel Ankeny & Sabina Leonelli, What's So Special About Model Organisms?

Peter Godfrey-Smith, *Other Minds: The Octopus, the Sea and the Deep Origins of Consciousness*

Hastings Centre, Synthetic Future: Can We Create What We Want Out of Synthetic Biology?

The Weatherall report on the use of non-human primates in research

Open Letter Regarding the Max Planck Society's Actions Against Prof. Logothetis

Sarah Chan & John Harris, Human Animals and Nonhuman Persons

Doudna & Charpentier, Genome editing. The new frontier of genome engineering with CRISPR-Cas9.