RECOEVO LESSON

Biology 10 SMC

What is an animal? Are humans animals?

Saint Mary’s College of California

Kai Blaisdell, Eric Sias, Anthony Suarez-Abraham

**Possible Resources for establishing respect early in the semester:**

**Syllabus Statement:**

Every student in this class, regardless of personal history or identity categories, is a welcome and important member of this group. Your experiences are important and you are encouraged to share them as they become relevant to our class. No student in this class is ever expected or believed to speak for all members of any group(s).

In this classroom, you have the right to determine your own identity. You have the right to be called by whatever name you wish. You have the right to be referred to by your pronouns. You have the right to adjust these things at any point in your education. If you find that there are aspects of course instruction, subject matter, or class environment that you find result in barriers to your inclusion, please contact me right away, privately without fear of reprisal. We are all learning. I am learning, and it is my goal to continue learning and improving in my job to support all students in your education.

**Draft Classroom Integrity:**

**Code of Conduct:** An individual by voluntarily joining the university community assumes the responsibility for abiding by the standards that have been instituted by Saint Mary’s College. The Code of Student Responsibility was developed by the Student Affairs Office to give formal recognition to the rights and responsibilities of students at Saint Mary’s College and is based on the following principles:

1. The intrinsic value of the person stands above other values. The personal rights and dignity of individuals are to be held inviolate. They take precedence over any academic goal set forth by the university.
2. The student is respected as a responsible person. They are, therefore, encouraged to make informed decisions with respect to his or her own education and to be involved in university decisions to the fullest extent possible.
3. The university is by definition a corporation. Just as the individual student has his or her own personal rights, so the university, as a corporate person, has an obligation to exercise its rights and privileges in conformity with the laws and procedures governing its actions.
4. Saint Mary’s College recognizes that freedom to teach and freedom to learn depend upon opportunities and conditions in the classroom, on the campus and in the larger community. The responsibility to secure and respect general conditions conducive to learning is shared by all members of the academic community. Freedom is meaningless unless responsibility is also present.

The above rights can be exercised effectively and without fear only if they are incorporated into policies and regulations that are as precise and informative as possible, and only if there are adequate procedures to settle disputes that arise in their regard. This statement is subject to change depending upon the most current version of the Student Handbook. For more information regarding these rights see the Student Handbook.

**Classroom Integrity:** This course will be run as a seminar where all will be given opportunities to contribute to our study of Teologia en Conjunto. Acknowledging the intrinsic value of the person/human dignity, respecting the corporate nature of a college and allowing for the greatest possible freedom for teaching and learning within the classroom, responsible individuals will act with general gentle personal conduct including, but not limited to: properly communicating without expletives and or harassment before, during and after class; silencing cell phones prior to the beginning of class; bringing drinks with lids and food which one would only bring to a professional meeting.

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**LESSON PLAN:**

**Team taught!** Biologist and Biblical Scholar/Theologian

**Learning Outcomes:**

* What is an animal?
* How is an animal similar to/different from other organisms?
* How are humans similar to/different from other animals?
* How do these questions relate (or not) to *imago dei?*
* What are the ethical implications of these questions?
* To disabuse the idea of human superiority in the animal kingdom.

**Resources:**

* Openstax Concepts of Biology - free online nonmajors biology textbook
* **Diversity of animals:** <https://openstax.org/books/concepts-biology/pages/15-introduction>
* Reading of Genesis 1 and 2
* Robert Sapolsky *Stress: Portrait of a Killer* (2008) (Nat Geo Video) https://www.youtube.com/watch?v=a58RrLUs4YE
* RadioLab Podcasts: The Beauty Puzzle https://www.wnycstudios.org/podcasts/radiolab/articles/beauty-puzzle
* St. John Paul II, Address to the Pontifical Academy of Sciences, October 22, 1996, “Magisterium is Concerned with the Question of Evolution for It Involves the Conception of Man.”
* Pope Pius XII, encyclical letter Humani generis, section 36.

**Estimated Time:**

* Part 1: 40 minute discussion on animals (Biologist Instructor)
* Part 2: 40 minute discussion on Gen 1 and 2 — History (Biblical Scholar) and Ethics (Theologian)

**Engage**

Have students each write a list of 10 animals.

Consider and write down: How are these animals similar to each other? How are they different from each other?

**Explore**

Questions to write/discuss/share/consider:

What is an animal? How are animals different from/similar to other organisms?

Are humans animals? How are they similar to/different from other animals?

 *Possible student contributions, questions, and answer:*

 Humans have abstract thought, use tools, have a complex social organization, appreciate art/beauty/pleasure. Humans are social with each other. They have domesticated animals, plants, and fungi.

**Explain**

Some of this info may come from the students:

What is an animal?

Animals have more than one cell.

Cells do not have cell walls (like plants, fungi).

Animals can move around, and have to eat food that is derived from other living organisms.

They interact with their environment.

They breathe in oxygen and exhale carbon dioxide.

Biology Lecture:

 Bonobos and Chimpanzees social organization/government

Ants and aphids social/cooperative relationship

Termites cultivate fungi

Aphids and sharks give live birth

Aphids have facultative sexual reproduction

Some fish species carry babies in their mouth

Genetics of chimpanzees and humans/chromosomal arrangement

**Elaborate**

Students revisit discussion and questions from Engage and Explore.

**Evaluate**

Revisit Learning Objectives

Rereading and possible reinterpretation of Gen 1 and 2 as a discussion

 Questions to ask: In light of your list of animals, how would you interpret the image of God (Gen 1:27)? Do animals fit into this image? Do animals contain the “breath of life” like *adam* (Gen 2:7)?

**Cultural Barriers:**

* Biblical Interpretations of Gen 1:27 (humans in the image of God) challenged with biological definitions and categories of animal classification. Essentially, if humans are in the “image of God,” are humans animals? Or, are animals in the image of God?
* Possible doctrinal challenges from the Roman Catholic Tradition.
	+ Humans as apex of God’s creation?