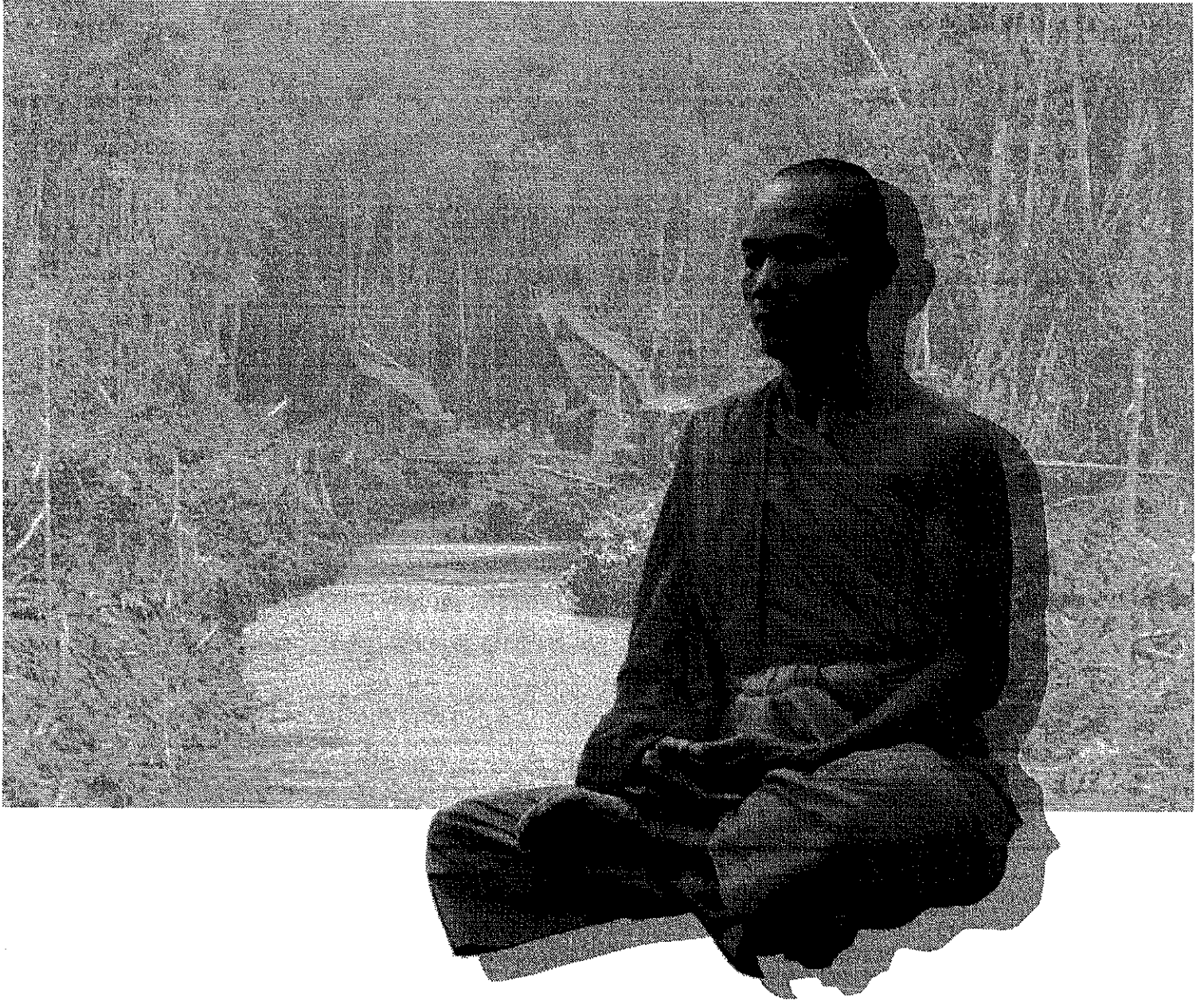




SANTA CLARA UNIVERSITY
THE JESUIT UNIVERSITY IN SILICON VALLEY



RELIGION
AND THE
ECOLOGICAL **CRISIS**

TESP 192

RELIGION AND THE ECOLOGICAL CRISIS

the class _____

quarter Spring 2015
times TR 2:00 – 3:40 PM
room Graham Hall 163
office hour T 12:30-1:30 PM or by appointment at Kenna 323E
phone (408) 554-4035.
e-mail oputz@scu.edu

Course Description

The world is in a state of crisis. Anthropogenic habitat destruction, overexploitation of resources, pollution, and excessive emission of greenhouse gases endanger the diversity of life on our planet. According to a recent study, the Earth might be undergoing its sixth mass extinction event (a loss of more than three-quarters of its species), which, unlike the previous five, unfolds at a far more rapid rate over the course of merely a few centuries. Weather patterns are changing, average air and water temperatures are rising, bringing with them violent storms hitting with increasing intensity. This crisis is already affecting everyone, though no one as hard as the poor, who are most exposed to the elements and dependent on natural resources. Such a dramatic situation demands an immediate and adequately substantial response, especially from the industrial nations, which consume most resources, produce the bulk of the planet's pollutants, and hold the majority of the wealth. In this course we will explore what role the world religion might play in the genesis of the ecological crisis and the global efforts to curtail it. Was it, as Lynn White Jr. infamously claimed, the Judeo-Christian belief in humanity's God-given dominion over nature that caused the crisis in the first place? Do religions bear a responsibility to act, not only out of a preferential option for the poor, but also because nature possesses intrinsic value? Might religion be indispensable to resolve the ecological crisis, as some theologians have suggested? We will engage these and other existential and ethical questions that may arise for believers of different religious backgrounds. Students seeking RTC 3 credit must have completed RTC 2 **and** have at least 88 units.

Course Objectives

At the end of this course, students should be able to:

- grasp the nature of the ecological crisis and the resulting ethical challenges for religions and religious believers.
- identify and evaluate diverse religious ethical responses to the ecological crisis.
- evaluate different approaches of relating scientific data on the ecological crisis and its potential scientific resolutions to religious positions on nature, non-human life, the environment, human nature, human responsibility toward nature, the role of deities, etc.

Department Goals (adapted from RS "Description of the Three Levels")

1. Students question and probe religion for what it reveals about human beings, their diverse societies, traditions, convictions and aspirations.
2. Students use diverse materials and demonstrate formal postures of inquiry into religion in order to go beyond simple description of religion to reflective engagement with it.
3. Students propose and investigate the "big questions"—that is, the meta-reflective questions that ask how and why we ask the questions we do about religion.

Core Curriculum Learning Goals and Objectives

- 3.1 Be able to identify diverse perspectives and evaluate ethical positions on contemporary questions. (Critical Thinking; Ethical Reasoning; Perspective)
- 3.2 Be able to evaluate and apply insights from the study of religion to open-ended questions facing contemporary society. (Critical Thinking; Religious Reflection)

course requirements _____

Readings

The texts for this class will be available on our CAMINO/Canvas course website, from where they should be downloaded. All readings should be brought to class on the day assigned; failure to do so limits a student's ability to participate and, hence, points in that area will be lost. Please bring hard copies. Lap top computers, tablets, or smart phones are not permitted in class.

Class Participation (20% of final grade)

The success of this class largely depends on your regular participation. Only if you engage the assigned materials in depth can you evaluate the ideas put forth in them and assess in how far they are applicable to the problem at hand. Hence, it is in your own and your colleagues' interest to come to class prepared (all required readings done and questions or comments prepared) and open to constructive dialogue. I will evaluate your participation throughout the course at the end of the quarter. You can earn up to ten points for regular participation in the class conversation.

Attendance at all class meetings is mandatory. Please make sure you are on time to class. More than two unexcused absences and/or repeated tardiness will result in a lower final grade (0.5 points per absence of late appearance).

Oral Presentation (20% of final grade)

Each student will be responsible for one 15-minute oral in-class presentation on an aspect of the question how a specific religion views nature and the relationship of the human being to nature.

Students will be divided into groups of four. Each group has to coordinate its presentations so that in the allotted time each student will cover one particular aspect of the overall presentation. Each group has to address the following points:

1. Religious/theological foundations of the religious tradition in question.
2. Understanding of nature in the religious tradition in question.
3. Views on the human being and its relationship to nature held in the religious tradition in question.
4. The religious tradition in question as a resource for a constructive response to the crisis.

After each 15-minute presentation there will be 5 minutes for questions from the audience. Each speaker will be timed strictly as would be the case for a presentation at a professional or academic conference.

Each speaker has to prepare a typewritten handout that states the title of the presentation, its underlying question (one-sentence statement), its thesis or intent (one-sentence statement), the main points of the presentation, and three questions that could facilitate a conversation about the issue at hand.

Your presentation should involve multiple media (certainly slides; audio- or video-recordings are certainly welcomed, but should not be extensive in length!).

Students not presenting on the day in question will prepare the text provided on Canvas.

Summary-Response Essays (SRE's; 30% of final grade)

Introduction: You will write four short essays (3-4 pages) of an analytical nature. The essays will give you a chance to reflect on the readings we will discuss in class and respond to questions posed on the course schedule below.

Preparation: You are expected to attend an office hour before the date the first discussion paper is due so we can once more review the details of the paper's format. This is not negotiable. Experience shows that

students who do not meet with me before writing their first SRE earn significantly lower grades (around 20 % fewer points; t-test; $p = 0.0062$). Failure to comply will result in a 2-point deduction from the first SRE.

Content: The summary part of your essay will present (i) the underlying question of the text we read (one-sentence statement), (ii) the thesis or objective of the text (one-sentence statement), and (iii) the necessary steps of the argument the text presents in support of its thesis. Your response part of the essay will address a specific question about themes raised in the text or related to the issues discussed therein. Try to devote equal space (1.5 to 2 pages) to each part.

Questions:

SRE 1: Living in the Anthropocene?

The term *Anthropocene* suggests that humans have had an enormous impact on their environment and that in fact, humanity has become a global geological force. Yet, humans are hardly geological formations; they are organisms. In light of this discrepancy, do you find the term Anthropocene helpful or problematic? Essay due on **Thursday, April 9.**

SRE 2: Is It Religion's Fault?

In his now infamous essay "The Historical Root of Our Ecological Crisis," Lynn White, Jr. assigns the main responsibility for today's ecological crisis to the Judeo-Christian tradition. What do you think of White's argument and do you find his alternative Christian view convincingly helpful? (Summarize White's paper.) Essay due on **Thursday, April 16.**

SRE 3: Deep Incarnation – Anthropocentrism Overcome?

In his chapter, Denis Edwards presents the incarnation in a new light, one that is largely divorced from antiquated ideas of redemption and instead views the incarnation as a transforming event offering salvation to all living beings, animals included. In your opinion, does Edward's deep incarnation approach truly overcome Christian anthropocentrism? Essay due on **Tuesday, May 19.**

SRE 4: Religion and Science – a Chance for Biodiversity?

Any religious response to the biodiversity crisis depends on good science. Once both, insights from religion and insights from science are related in a constructive way, can such a relationship offer new chances for a religiously based ethical response to the ecological crisis? **Essay due on Tuesday, May 26.**

Formatting: The SRE's should be typed, double-spaced, and stapled. Make sure that each page of your text contains a footer with your name, the title of your SRE, and page number. Divide your SRE's into these sections: 1. Introduction, 2. Tracing the Argument, 3. Response, and 4. Bibliography. Format your references using either the Turabian or MLA Style Sheet (see the class CAMINO page for respective style manuals; for detailed descriptions see <http://owl.english.purdue.edu/owl/>). Verbatim quotes from the texts must be placed in quotation marks and referenced properly. Failure to reference at all is considered plagiarism; so, make sure you quote appropriately. Do not simply copy-and-paste sections from the texts. Rather, describe the question, thesis, and arguments of the paper presented in your own words and chose literal quotes wisely to substantiate your description.

Submission: Please submit an electronic copy of your essay online (Canvas) through Turnitin.com as early as 24 hours before class, as well as a hard copy during class. Not turning in a paper copy on time will result in point deduction (1.5 points or 10% per day)!

Grading: The Summary-Response Essay will be graded on the basis of how well you engaged the readings, how well you grasped their questions, arguments and conclusions, and how well you related the content of the readings to the question at hand. They will be graded according to the following scheme:

Total possible points: 15.

- (i) Underlying question of the text (1 point)
Does the Summary-Response Essay contain
 - a one-sentence statement summarizing in the student's own word the underlying question he text addresses?
- (ii) Thesis or objective of the text (1 point)
Does the Summary-Response Essay contain

- a one-sentence statement summarizing in the student's own word the thesis the texts argues or the text's objective?
- (iii) Tracing the argument (5 points)
- Does the Summary-Response Essay
- Trace the individual steps of the argument (description) with which the text supports its thesis?
- (iv) Reflections and response to the question (5 points)
- Does the Summary-Response Essay reveal
- the ability to answer the question posed on the syllabus adequately?
 - the ability to evaluate critically, creatively and fairly the relevance of the readings for the evaluation of the role religions can play in dealing with the biodiversity crisis?
 - the ability to generate relevant questions about the implications and meaning of the readings?
- (v) Communication (3 points)
- Does the Summary-Response Essay
- contain a clear, concise, and lucid presentation of the student's understanding of the readings?
 - use proper idiomatic English (i.e., grammar, syntax, words, etc.)?
 - employ the appropriate academic writing style?
 - reference quotes from the text or other sources properly (i.e., Turabian or MLA)?

Research Paper (30% of final grade)

Content: Students are expected to write a research paper 2500-3000 words in length (approximately 10 to 12 pages; not counting notes and references) on a topic relevant to the themes discussed in the course. This is your chance to actively engage a question that in your opinion emerges out of the ecological situation and its particular challenges for religion in general or a particular religious tradition in particular. For example, you can investigate and evaluate how a particular religion or religious tradition approaches the issue of man-made species and habitat decline ethically (e.g., how Christian theologians interpret both the doctrine of creation and theological anthropology as the foundation of an ethical position that demands active participation in habitat and species protection). You might find it helpful to start with a particular thinker's perspective on an issue (e.g., Roger Gottlieb's approach to a Christian spiritual deep ecology). In either case, you will have to present your own argument in support of your thesis.

Preparation: An outline of the paper is due **Thursday, May 7**. This should be page-numbered and have your name in the footer. For your paper outline you can earn up to five points, which will count to your total paper grade. By not handing in the outline on time you will forfeit the points. Make sure your outline features (i) a clear one-sentence question statement, (ii) a clear one-sentence thesis statement, (iii) the main points of your argument (as far as you can assess prior to completing your research and writing), (iv) your possible conclusion, and (v) an annotated bibliography with at least five references. Handing in outlines late will reduce in point reduction (one point per day). After I return the outline to you, read my comments carefully and make an appointment to see me during office hours so we can talk about your paper idea.

Formatting: Your research paper should adhere to the following structure:

- a. **Introduction:** The introduction should give the background to your study. It is here that you present to the reader the problem and the resulting question that you will address in your essay. The Introduction should end on a clear one-sentence thesis statement. The thesis statement is a statement of intent and should be formulated accordingly. For example: "The aim of the present paper is to show that..." or "I will argue that..." Try to keep your introduction to about one page. You can headline this section with "Introduction."
- b. **Main body of the paper:** This will make up the main part of your paper and lead the reader through your argument in detail. Overall, the body of your paper should (1) explicate on the positions to which you respond or on which you will build your own position, (2) present your argument in support of your thesis, and (3) discuss possible objections or challenges to your proposal. Each paragraph should logically build on what you have said before. Thus, a paragraph can introduce the next step in your argument or elaborate on a thought you have introduced in a previous paragraph. In case of the latter, make sure to begin the new paragraph with a strong topic sentence, which is to the paragraph

what the thesis is to the paper. The paragraph explains, develops, or supports the idea presented in its introductory topic sentence. It is not enough if you claim that a particular religion would make for an excellent partner in the efforts of secular environmental groups; you must present a coherent argument on the basis of clearly stated premises.

- c. Conclusion: In this section you restate your thesis, summarize your argument, and try to once more convince the reader of your proposal. This includes a discussion of possible objections that may be raised against it, as well as a brief discourse of possible future issues, question, and outlooks.
- d. Bibliography: List the literature you have referenced in the paper's footnotes.

Use headlines for each of the main sections of the paper and, if necessary or otherwise helpful, sub-headlines within each section. Headlines should hint at the main theme of the section and will, thus, help your reader to trace your argument. Use "Introduction" for the first section, "Conclusion" for the last, and "Bibliography" for the listed references at the end, but not "Main Body of the Paper" for the section containing your argument.

Writing should be in Standard English and must demonstrate a good, formal, clear writing style. The format of the paper must follow the Turabian or MLA Style Sheet. Pages should be numbered and contain the student's name in a footer. I will **not** accept electronic submission of the outline or the final paper! Make sure the paper is typed, double-spaced, and stapled.

Your paper should have at least 10 and no more than 50 references. The only permissible literature is peer-reviewed texts (e.g., journal articles, published books, etc.). Gray literature (e.g., patents, technical reports from government agencies or scientific research groups, working papers from research groups or committees, and white papers) can also be used. Popular media, such as websites, newspaper articles, TV shows, etc., do not count as academically sound resources. They can be occasionally used to raise a question or make a point about public perception of issues, but not to substantiate an argument! Popular references do not count towards the needed 10 to 50 academic references of your paper.

Submission: The final paper is due on **Thursday, June 4 (last day of class)**. Turning in the paper late will result in point deduction (1 point per day). Please submit an electronic copy online (Canvas) through Turnitin.com and a hard copy during class. Add a note on your paper title page if you want your paper back. I will neither add marginal notes and comments nor write an evaluation unless you are planning on collecting your essay after the quarter.

Grading: The research paper will be graded according to the following scheme:

Total possible: 35 points (including outline)

- (i) Communication: 10 points
Does the paper contain
 - a clear question description? (1 point)
 - a clear, one-sentence thesis statement? (1 point)
 - proper referencing in Turabian or MLA style? (1 point)
 - a clear, concise, and lucid presentation (incl. spelling, grammar, and syntax)? (3 points)
 - logical argument, building on clear stated premises? (3 points)
 - a summary conclusion supported by the argument? (1 point)
- (ii) Content: 10 points
Does the paper demonstrate
 - a clear understanding of the issue(s) raised in it, including alternative approaches and interpretations of secondary literature? (3 points)
 - an adequate grasp of the implications of the issue(s) raised? (2 points)
 - the ability to apply adequate scholarly tools to address the raised issue(s)? (2 points)
 - the ability to reason critically, analyze carefully, and reflect on the issue(s) at hand? (3 points)
- (iii) Constructiveness: 10 points
Does the paper reveal

- the ability to evaluate critically, creatively and fairly the role Christianity has played in society as a whole? (5 points)
- concern for the relevance of Christianity for one's personal worldview formation? (5 points)

grade scale _____

A = 96-100%	C = 66-69%
A- = 90-95%	C- = 60-65%
B+ = 86-89%	D+ = 56-59%
B = 80-85%	D = 50-55%
B- = 76-79%	D- = 46-49%
C+ = 70-75%	F = 45 or less

classroom etiquette _____

Students and professor are expected to conduct themselves with the professionalism suitable for an academic forum. Civil discourse is expected; conversations and discussion may be led with fierce tenacity, but not with condescension, cynicism, or inappropriate sarcasm. Cell phones must be turned to silent mode and may not be used in class for any purpose that has not been previously cleared with the instructor (e.g., if you expect a call due to a family related medical emergency). Use of laptop computers, tablets, or smart phones **is not** permitted during class!

academic integrity _____

Academic integrity is an absolute requirement: "Engaging in any form of academic dishonesty, such as plagiarism (representing the work or ideas of others as one's own without giving proper acknowledgment), cheating (e.g., copying the work of another person, falsifying laboratory data, sabotaging the work of others), and other acts generally understood to be dishonest by faculty or students in an academic context subjects a student to disciplinary action." (Santa Clara University Academic Integrity Protocol, <http://www.scu.edu/studentlife/resources/upload/Academic-Integrity-Protocol-Document.pdf>) Such disciplinary actions may include failing the class. Please review the section on Academic Integrity in the Undergraduate Bulletin 2013-14, pages 412-414. Also, review the following websites for information on academic integrity: <http://law.scu.edu/bulletin/academic-integrity-policy/>; <http://www.plagiarism.org>; <http://owl.english.purdue.edu/owl/resource/589/1/>

disability resources _____






To request academic accommodations for a disability, students must be registered with Disabilities Resources, located in Benson, room 216. In order to register, please go on-line to www.scu.edu/disabilities. You will need to register and provide professional documentation of a disability prior to receiving academic accommodations. It is best to read "Required Documentation" on the website before starting the registration process in order to determine what is needed. You may contact Disabilities Resources at 408-554-4109 if you have questions.

office hours and contact information _____

I encourage you to stop by my office during office hours and/or by appointment whenever you want help or would like to talk. In case more than one student shows up for the office hours, I may ask everyone in for a group conversation on class related issues unless anyone requires a meeting with me alone. I have found that discussing the questions asked by one student usually benefits other students as well.

course schedule

0. DESCRIPTIONS OF SCHEDULE ICONS

-  Information on class.
-  Themes to be addressed in this unit.
-  Questions for the readings to be prepared for that day.
-  Required readings to be prepared for that day.
-  Summary-Response Essay to be prepared for that day.

I. CRISIS – WHAT CRISIS?

In this introduction to the class we will explore the nature of the biodiversity crisis. What is the state of biodiversity? What dangers – manmade or otherwise – to biological diversity exist? We will also explore the biology of diversity in some detail. What exactly is meant by biodiversity? And how does this new understanding differ from older ecological categories such as “species diversity”? Moreover, we will raise the question how religions can factor into the equation of conservation efforts. Why would we ask about religions when it comes to the biodiversity crisis in the first place?


In this section we will seek to develop some underlying questions that will shape the framework for our class:


1. What is biodiversity?
2. In how far is biodiversity at risk and requires conservation actions?
3. Are the world religions in part responsible for the state of the environment in general and of the biological diversity in particular?
4. Whatever their involvement in bringing about the biodiversity crisis, do the world religions bear a special ethical responsibility for the environment that arises from their own self-understanding and central faith commitments?


The objectives of this first part are to show the following:

1. Biodiversity as the totality of life in its various forms within a particular region is increasingly at risk due to manmade activity.
2. This raises a number of ethical questions revolving around the central issue of how humanity can actively preserve biodiversity and assure longtime well-being of the ecosystem Earth.
3. The World religions face a particular ethical and moral responsibility arising out of their self-understanding and out of an affirmation of central faith commitments in light of the contemporary situation.


1. Tuesday, March 31: Framing the Issue




 This introduction will give a brief overview over the course, its aims and themes as well as its requirements. We will take a close look at the syllabus and address some of the underlying question of a class concerned with religious responses to the biodiversity crisis. In this section, we will briefly talk about the nature of the biodiversity crisis, mention some evidence for it, and look at the ethical challenge it presents to religious believers in particular.

-  • Class organization.
• Student requirements.
• The biodiversity crisis.
• Ethical challenges for religions.





 • Syllabus.

2. Thursday, April 2: What is Biodiversity?


 Before we can talk about the biodiversity crisis and its ethical implications for religious believers we need to be clear about what biodiversity is. In this section we will take a closer look at the biology of biodiversity and some of the underlying ecological premises.

- 
 - Types of biological diversity.
 - Measurability of biodiversity.
 - Rates of change in biodiversity.
 - Habitats and biodiversity.
 - Biogeography.
- 
 - Define the term "biodiversity." What are the key elements of biodiversity?
 - How can biodiversity be measured?
 - According to Gaston, how has biodiversity changed through time?
 - How is biodiversity varied in terms of space such as biogeographic realms and ecoregions?
 - Why would it matter to have reliable assessments of biodiversity in all these different categories (i.e., time, space, biogeography, etc.)?
- 
 - Kevin J. Gaston, "Biodiversity," in *Conservation Biology for All*, edited by Navjot S. Sodhi and Paul R. Ehrlich (Oxford: Oxford University Press, 2010), 27-44.

3. Tuesday, April 7: Ecology in Crisis - The Loss of Biodiversity

-  What exactly is the biodiversity crisis? What are the symptoms, what is the evidence? And perhaps most importantly: what are the causes for the crisis? These are the questions we will address in today's section.
- 
 - Rate of species extinction.
 - Biome crisis.
 - Habitat loss.
 - Climate change related biodiversity loss.
 - Mass extinction.
- 
 - What is the rate of species loss (as of 2002 and of 2011) and in how far is this reason for concern?
 - Summarize at least two hypotheses regarding the relationship between biodiversity and ecosystem function.
 - What are "biomes" (including individual subcategories) and why do Hoekstra et al. argue that the biodiversity crisis has become a global-scale biome crisis?
 - In how far is the adequate identification of species important for biodiversity conservation? What is a species to begin with?
 - In how far does the current mass extinction differ from previous mass extinctions?
- 
 - J.S.Singh, "The Biodiversity Crisis: A Multifaceted Review," *Current Science* 82, no. 6 (2002), 638-647.
 - J.M. Hoekstra, T.M. Boucher, T.H. Ricketts, and C. Roberts, "Confronting a Biome Crisis: Global Disparities of Habitat Loss and Protection," *Ecology Letters* 8 (2005), 23-29.
 - H. Hoag, "Confronting the Biodiversity Crisis," *Nature Reports Climate Change*, 4 (2010), 51-54.
 - A.D. Baronsky, N. Matzke, S. Tomiya, G.O.U. Wogan, B. Swartz, T.B. Quental, C. Marshall, J.L. McGuire, E.L. Lindsey, K.C. Maguire, B. Mersey and E.A. Ferrer, "Has the Earth's Sixth Mass Extinction Already Arrived?" *Nature* 471 (2011), 51-57.

4. Thursday, April 9: Ecology in Crisis – Climate Change

-  The perhaps most dramatic and dangerous challenge Earth faces today is the rapidly changing climate. Due to anthropogenic emissions of greenhouse gases such as CO₂ the average surface temperature increase might reach 4°C by mid-century. If so, the Arctic will be ice-free during the summer, sea levels will rise by about 98 cm, global hydrological cycles will be altered significantly, weather patterns will continuously and increasingly spin out of control, driving the Earth climate into an evermore catastrophic state where all life as we know it will be at risk. Mitigation and adaptation alone are no longer sufficient strategies to counter these effects, but are climate and geoengineering viable alternatives? In today's class we will review the problems of climate change and consider some of the proposals for responding to the issue using technology.



- Anthropocene.
- Climate change.
- Planetary boundaries.
- Industrial Revolution.
- The "Great Acceleration".
- Mitigation and adaptation.
- Climate and geoengineering.



- What is the anthropocene, and what does the term suggest?
- What was the "Great Acceleration," and what were the causes for the increase in CO₂ levels during this time?
- What particular event in human history can be seen as the beginning of the anthropocene?
- What are the mechanisms of global warming and the associated climate change?
- What are planetary boundaries, and in how far according to the authors might geoengineering be important in the near future?



- Will Steffen, Jacques Grinevald, Paul Crutzen, and John McNeill, "The Anthropocene: Conceptual and Historical Perspectives," *Philosophical Transactions of the Royal Society A* 369 (2011), 842-867.



Summary-Response Essay 1 due today!

5. Tuesday, April 14: Why Bother?



Why should humans, regardless of their creed and faith, be bothered by the decline in biodiversity? Species have come and go throughout the Earth's history. Up to now the planet has experienced five previous mass extinctions (a loss of more than three-quarters of all species). Why would the sixth mass extinction, provided it has indeed arrived, make any difference to us? How is a New Yorker affected by the loss of another shark species? Here, we will try to look at the question of the significance the biodiversity crisis has for humanity specifically through the lens of ecosystem services.



- Ecosystem services.
- Climate.
- Hydrologic cycle.
- Erosion.
- Biomedical services of ecosystems.



- What are ecosystem services?
- At what levels can ecosystem services affect us?
- In how far is the hydrologic cycle a central service of ecosystems? Why is water so essential?
- What is the role of biodiversity for ecosystem functions? Are the two positively correlated or not?
- How can ecological systems be valuable in developing cures for emerging diseases?



- Cagan H. Sekercioglu, "Ecosystem Functions and Services," in *Conservation Biology for All*, edited by Navjot S. Sodhi and Paul R. Ehrlich (Oxford: Oxford University Press, 2010), 45-72.

6. Thursday, April 16: Religious Responsibilities?



In 1967, Lynn White wrote a watershed paper in which he held religion, the Abrahamic tradition in particular, responsible for the environmental crisis the planet is in. Three years later Lewis Moncrief published an essay in which he argued that the Judeo-Christian tradition is at best indirectly responsible for the crisis. Others, however, found empirical evidence in support of White's thesis. In today's section we will ask specifically whether the responsibility for the biodiversity crisis lies – at least partially – with religions, especially the Judeo-Christian tradition. If so, this would heighten the need for appropriate ethical responses to the crisis from the side of religious believers.



- Theological anthropology.
- Image of God.

- Doctrine of creation.
 - Capitalism, urbanization and environmental degradation.
 - Varieties of religious identification and environmental concerns.
- ?
- According to White, how is the Judeo-Christian tradition responsible for the ecological crisis?
 - How did technological development affect subsistence farming?
 - What is White's alternative to what he perceives as the traditional theological anthropology?
 - In how far does Moncrief disagree with White, and what does he identify as the main cultural factors responsible for the ecological crisis?
 - What do the results of Eckberg and Blocker's study suggest to its author and what do they mean for White's claim? Do you find their study convincing? If so, why; if not, why not?
- 📖
- Lynn White, Jr., "The Historical Roots of Our Ecological Crisis," *Science* 155, no. 3767 (1967), 1203-1207. (Summarize this paper in the SRE.)
 - Lewis W. Moncrief, "The Cultural Basis for Our Environmental Crisis," *Science* 170 (1970), 508-512.
 - Douglas L. Eckberg and T. Jean Blocker, "Varieties of Religious Involvement and Environmental Concerns: Testing the Lynn White Thesis," *Journal of the Scientific Study of Religion* 28, no. 4 (1989), 509-517.
- 📅 **Summary-Response Essay 2 due today!**

II. RELIGIONS AND NATURE

In this second part of the class we will take a closer look at how the world religions have viewed nature traditionally and how this perception may start to change in light of the biodiversity crisis. In particular, we will be interested in inter-religious similarities and differences. For example, it has been argued that indigenous and Eastern religions have always had a far more positive understanding of nature and of humanity's place in it than the Abrahamic religions. If so, this might indeed support views according to which at least Judaism and Christianity bear a particular responsibility for the crisis. It certainly would explain why especially Christian theology has shown great efforts to re-imagine its view of nature and see the salvation of humanity as deeply connected to that of other life on Earth.

The questions we will address specifically will be:

1. What are "religions" and what characterizes "religious teachings"?
2. What are the main similarities and differences between the different perspectives of nature found in the different world religions?
3. Is it true that indigenous and Eastern religions have a more holistic understanding of life, where humanity is either not elevated from the rest of life or where humanity is called to a more sustainable way of life?
4. How have religious perceptions of nature changed in light of the biodiversity crisis?

This part will try to show that:

1. A religion is "(1) a system of symbols which acts to (2) establish powerful, pervasive, and long-lasting moods and motivations in men by (3) formulating conceptions of a general order of existence and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic." (Clifford Geertz)
2. In all religions there have always been traditions that valued nature for its intrinsic value.

7. Tuesday, April 21: Faith and Nature

- 📖 Some have argued that faith traditions share with conservation organizations a concern for the environment, the management of land and water. One commonality that can be found in virtually all religious traditions and which might explain why the concern for biodiversity may be deeply engrained in religious worldviews is the notion of the sacred in nature. This section will take a closer look at the concept of the "sacred" as it applies to nature and the treatment of nature.

- ☰
 - Sacred.
 - The sacred in nature.
 - Relationships between religion and the natural world.
- ❓
 - What is the meaning of the word “sacred” and how does it matter in the relationship of religions toward the natural world?
 - Give some examples of sacred sites and sacred species in the world religions.
 - In how far, according to Dudley et al., does the relationship between traditional belief systems and the natural world and that of “mainstream” faiths and the natural world differ?
 - What is the idea of “good stewardship” and where did it originate?
 - In how far does the sacred in nature play an important role for conservation efforts?
- 👤
 - Nigel Dudley, Liza Higgins-Zogib, Josep Mallarach, Martin Palmer, Deborah Rose, Sue Stolton, Iwan Wisbono, and He Xiaoxin, *Beyond Belief* (Gland: WWF International, 2001), 11-33.

8. Thursday, April 23: Indigenous Traditions


- 👤
 - In this section we will explore how indigenous religions relate to nature, to its biodiversity, and how they provide a particular perspective toward conservation efforts.
- ☰
 - Role of ancestors in indigenous religions.
 - Wilderness versus community concepts of nature.
 - Natural hierarchies.
 - The sacred in indigenous views of nature.
- ❓
 - According to the texts by Dudley, Hughes, and Mbiti, how does the view of nature held by indigenous people differ from that held by Westerners?
 - What, according to Hughes, is the difference between the indigenous view of nature as “community” versus the European view of nature as “wilderness”?
 - What is the role of ancestors and nature in indigenous traditions and how do these religious views possibly affect treatment of nature?
 - What is the position of humans in indigenous understandings of nature?
 - What are some of the main similarities of indigenous cosmogenies?
- 👤
 - Michael Kioni Dudley, “Traditional Naative Hawaiian Environmental Philosophy,” in *This Sacred Earth: Religion, Nature, Environment*, edited by Roger S. Gottlieb (New York: Routledge, 1996), 125-130.
 - J. Donald Hughes, “Excerpt from *American Indian Ecology*,” in *This Sacred Earth: Religion, Nature, Environment*, edited by Roger S. Gottlieb (New York: Routledge, 1996), 131-146.
 - John S. Mbiti, “African Views of the Universe,” in *This Sacred Earth: Religion, Nature, Environment*, edited by Roger S. Gottlieb (New York: Routledge, 1996), 174-180.

9. Tuesday, April 28: Hinduism




- 👤
 - In this section we will take a closer look at how the dominant religion of the Indian subcontinent and one of the oldest living religions in the world – Hinduism – views nature. Hinduism is a very diverse tradition that shares a common reverence for the Vedas, a collection of diverse sacred literature. What is the traditional view of the universe in this plurality of faith expressions that are known collectively as Hinduism? This will be the question of today’s class.
- ☰
 - *Ishwarah sarvabhutanam.*
 - *Vasudhaiv kutumbakam.*
 - Dharmic ecology.
 - Dharma and Karma to the environment.
- ❓
 - What is the Indian notion of a divinified universe?
 - What is the position of humanity among all life forms according to the Hindu tradition?

- How is the Hindu cosmogeny related to vegetarianism, and in what way could this be important for conservation efforts?
- What is the concept of *vasudhaiv kutumbakam* in Hinduism?
- How, according to Dwivedi, do Hindu beliefs give rise to a Dharmic ecology?
- O.P. Dwivedi, "Hindu Religion and Environmental Well-Being," in *The Oxford Handbook of Religion and Ecology*, edited by Roger S. Gottlieb (London: Oxford University Press, 2006), 160-183.


10. Thursday, April 30: Buddhism



 Buddhism also originated in India with the teachings of Siddhartha Gautama, the Buddha or "enlightened one." The religion eventually spread over Asia and more recently the Western world leading to a plurality of interpretations subsumed under two major branches, Theravada and Mahayana. Central to Buddhism are the experiences of impermanence, suffering, and not-self as well as the aim of cessation or extinction of all cravings and ignorance and, consequently, suffering, and the cycle of involuntary rebirths. Given the importance of overcoming suffering, it only follows that a Buddhist must not cause any suffering, a rule that obviously has great potential for a Buddhist conservation effort. Here, we will particularly look at different currents of environmental thought in Buddhist traditions and how these could affect biodiversity conservation.

Please remember that the Research Paper Outline is due next week!

- 
 - Nature as refuge.
 - Eightfold Path of practice.
 - Emptiness.
 - Buddhist virtue ethics.
 - Mandala.
 - Eco-karma.
- 
 - What are some of the major environmental themes in the main Buddhist traditions?
 - What is the Eightfold Path of practice, and how could it promote conservation efforts?
 - what is the law of interdependence and how does it relate to the biodiversity crisis?
 - What does Kenneth Kraft mean by the neologism "eco-karma"?
 - What are some of the strengths, what some of the limitations of Buddhism in a responding constructively to the biodiversity crisis?
- 
 - Stephanie Kaza, "The Greening of Buddhism: Promise and Perils," in *The Oxford Handbook of Religion and Ecology*, edited by Roger S. Gottlieb (London: Oxford University Press, 2006), 184-206.

11. Tuesday, May 5: Daoism

 Daoism originated in China and emphasizes living in harmony with the Dao, that is, "the way." The Dao is a difficult concept, but in some sense it can be seen as the ontological ground of all things and or the path of the universe. Central to it is the notion of "naturalness," a state in which one identifies with the Dao and abandons selfishness and desire. Could such a perspective of harmony offer a particularly helpful religious perspective when it comes to the ecological crisis?

- 
 - Dao.
 - Ying and Yang.
 - Naturalness.
 - Naturalness as spontaneity.
 - Nature as balance.
- 
 - What characterizes the Dao, that is, the way or path with which we are to live in harmony?
 - What does naturalness mean and how is nature spontaneous according to Daoism?
 - Describe the nature of the Qi and link it to the notion of balance in Daoism.
 - Describe the Ying, Yang, and the Five Phases.
 - What do Daoists mean when they envision nature as fluid?

- James Miller, "Daoism and Nature," in *The Oxford Handbook of Religion and Ecology*, edited by Roger S. Gottlieb (London: Oxford University Press, 2006), 220-235.

12. Thursday, May 7: Judaism

- With Judaism came the monotheistic notion of a fully transcendent God who creates the universe with a word and humanity in the divine image and likeness. As Lynn White argued, with this new anthropology came a sense of human entitlement, which gave way to the biodiversity crisis we face today. But has the notion of human uniqueness really always translated into a justification for blindly using natural resources? In today's class we will take a look at the history of the conception of nature in Judaism.





Please remember that the Research Paper Outline is due today!

- Biblical nature metaphors.
 - *Bal tash-chit*.
 - *Shlemut*.
 - *Mishnah* and *Talmud*.
 - Medieval urbanization.
- Describe the use and importance of nature metaphors in the Hebrew Bible.
 - What is the principle of *bal tash-chit*?
 - What does the term *shlemut* mean?
 - What was the specific view of nature that emerged during the time of the development of the *Mishnah* and the *Talmud*?
 - How did the Jewish understanding of nature change during the Middle Ages?
- Daniel Swartz, "Jews, Jewish Texts, and Nature: A Brief History," in *This Sacred Earth: Religion, Nature, Environment*, edited by Roger S. Gottlieb (New York: Routledge, 1996), 87-103.

13. Tuesday, May 12: Christianity

- In this section we will pay specific attention to how Christianity views nature and how in response to White some novel ways of imagining creation in light of the biodiversity crisis may have emerged.
- Apologetics.
 - Sacramental theology.
 - Eschatology.
 - Cosmic Christ.
 - Telos of creation.
 - Theodicy.
- What does Haught mean by saying that many Christians interpret the universe as little more than a "soul school"?
 - What characterizes the three different approaches of rethinking Christian theology in light of the ecological crisis that Haught highlights?
 - What does McFague mean by the "Cosmic Christ"?
 - According to McFague the cosmos is moving towards a clear end, a telos. How do you think this theological notion of a directional trajectory relates to the natural sciences (e.g. evolutionary biology, cosmology) and their claims for the future of the cosmos?
 - What, in your opinion, are the strengths and weaknesses of McFague's Cosmic Christ theology?
- John Haught, "Christianity and Ecology," in *This Sacred Earth: Religion, Nature, Environment*, edited by Roger S. Gottlieb (New York: Routledge, 1996), 270-285.

14. Thursday, May 14: Islam

-  Islam is the second-largest religion in the world, and that fact alone makes it interesting to ask about the way Muslim theology views nature and the role of human beings in that nature. This section will specifically look at the possibility of a deep ecology approach within a Muslim context.
- 
 - *Tawhid*.
 - *Ammanah*.
 - Deep ecology.
 - Stewardship.
- 
 - In how far is the concept of *Tawhid* potentially helpful for a deep ecology in Islam?
 - Is nature itself intrinsically sacred to Muslims?
 - What does it mean that the universe is given to humans as “trust,” *ammanah*? What consequences for human behavior regarding nature would result from this?
 - What, according to Ammar, are the five general regulations in Islam that protect nature?
 - In Ammar’s opinion what is the main problem of motivating Muslim environmental activism?
-  • Nawal Ammar, “Islam and Deep Ecology,” in *Deep Ecology and World Religions: New Essays on Sacred Ground*, edited by David L. Barnhill and Roger S. Gottlieb (Albany: State University of New York Press, 2001), 193-211.

III. SAYING THE OLD ANEW

How, then, are the world religions trying to reinterpret their faith commitments in order to offer an appropriate and constructive response to the biodiversity crisis? What moral or ethical stances have emerged from this re-envisioned religious self-understanding? In the third part of the class we will address these questions by analyzing some concrete approaches that have emerged during the past years.




The questions we will ask are:


1. What are some of the main doctrinal and ethical strategies on part of the world religions to respond to the biodiversity crisis?
2. What aspects that have always been part of the religious worldview are being moved further toward the center in order to highlight the conservation responsibilities on part of the religions?

Part III of the class will attempt to demonstrate that:

1. Main shifts in how religions re-envision their faith commitments is a shift toward highlighting topics such as the sacred, creation, incarnation, anthropology, interpretation of sacred literature.
2. These new approaches often include novel interpretations of the role that nature, life, and animals play within the traditional religious understanding.


15. Tuesday, May 19: Deep Incarnation


-  One strategy that has emerged in Christian theology is the concept of deep incarnation, according to which Christ does not only redeem humanity but all life. Accordingly, then, the world is not merely the background against which human salvation unfolds, but itself awaiting the salvation promised and brought about by and through the incarnate God. In this section we will carefully analyze some deep incarnation approaches.
- 
 - Deep incarnation.
 - Redemption.
 - Salvation.
 - *Creatio ex nihilo* and *creatio continua*.
 - Athanasius.
 - *Theopoiesis*.
-  • How is “deep incarnation” related to “deep ecology,” from which it borrows at least part of its name?


- How does Edwards understand the term “redemption,” and why does he believe that Christian theology has to rethink its traditional view of it?
 - What does Athanasius mean by *theopoeisis*, and in what way is the concept important for Edwards’ idea of deep incarnation?
 - How is the incarnation, God’s taking on flesh, a way of God to communicate divine life to all flesh in principle?
 - Summarize the eight elements of Edwards’ novel theology of salvation.
-  • Denis Edwards, “The Redemption of Animals in an Incarnational Theology,” in *Creaturely Theology: On God, Humans and Other Animals*, edited by Celia Deane-Drummond and David Clough (London: SCM Press, 2009), 81-99.


 **Summary-Response Essay 3 due today!**

16. Thursday, May 21: Liberation Theology and Ecofeminism


 Two very important currents in contemporary Christian theology are liberation theology and feminist theology. Both have been linked to the biodiversity crisis and provide an ethical framework for how to address the issue of the ecological problem. We will look at two exemplars of these emerging traditions, Leonardo Boff, who has linked liberation theology and ecology, and Rosemary Radford Ruether, the founder of ecofeminism.


-  • Liberation theology.
• Option for the poor.
• Ecofeminism.
• Domination of women and nature.

-  • In how far are the liberation of the poor and the conservation of nature to Boff linked issues?
• What is for Boff the underlying attitude that is one of the major reasons for that the Earth today finds itself in an ecological crisis?
• What is the starting place for liberation theology, and how does it relate to the question of the biodiversity crisis?
• What is for Ruether the connection between the way religions (in her particular case, Christianity) have treated nature and the way women have been treated in Western society?
• Where does Ruether find the roots of both, Christian domination of women and Christian domination of nature?

-  • Leonardo Boff, “Liberation Theology and Ecology: Alternative, Confrontation or Complementarity?” in *Cry of the Earth, Cry of the Poor* (Maryknoll: Orbis, 1997), 67-77.
• Rosemary Radford Ruether, “Religious Ecofeminism: Healing the Ecological Crisis,” in *The Oxford Handbook of Religion and Ecology*, edited by Roger S. Gottlieb (London: Oxford University Press, 2006), 362-375.

17. Tuesday, May 26: The Ecological Crisis in Religion and Science

 In order for religions to respond properly to the biodiversity crisis they will have to engage the relevant scientific data. This raises the question if and how religions and the natural sciences can actually be related to each other constructively. Today’s section will focus on how such a constructive relationship can be established and how biodiversity protection can be viewed from within the framework of such a constructive relationship.

-  • Conflict, independence, dialogue, or integration.
• Scientism.
• Materialism.
• Reductionism.
• Literalism.
• Consonance.
• Theology of Nature versus Natural Theology.

- Hermeneutics of religion and science.
- Methodological naturalism.
- ? • How, according to Rolston, does the concept of “value in nature” possibly require both, insights from science and insights from religion, in order to be helpful for conservation efforts?
- What is the distinction in ethics between “is” and “ought,” and do you think one can construct appropriate actions – the “ought” – from the “is”?
- How are the concepts of “natural selection” and “divine providence” in contrast to one another? And how does Rolston suggest this opposition could be overcome?
- According to Rolston, how could Western religion moderate its view of nature in light of Eastern religions?
- How does Rolston evaluate the capacity of religious ethics to factor in an effort to save biodiversity?
- 👤 • Holmes Rolston III, “Science and Religion in the Face of the Environmental Crisis,” in *The Oxford Handbook of Religion and Ecology*, edited by Roger S. Gottlieb (London: Oxford University Press, 2006), 376-397.

📅 **Summary-Response Essay 4 due today!**

18. Thursday, May 28: Religion and Climate Change

👤 Climate change might be the most dramatic threat our planet is facing today. Anthropogenic emissions of greenhouse gases are the highest in history and the average combined land and ocean surface temperature has increased by almost a whole degree Celsius (0.85° C). Recent studies show that former projections of warming underestimated the situation and that by mid to end century the average increase could reach about 4° C. At this point, mitigation and adaptation alone are not going to resolve the issue. What role does religion play in the decision making process regarding the action to be taken in light of the challenge? We have seen that the ecological crisis is a religious and theological question, but is geoengineering? Should the decision on whether or not to technologically affect the climate be left to specialists (i.e., scientists) or should other disciplines, including religion, be involved?

- 📖
- Moral theology.
 - Ethical religious positions.
 - Playing God.
 - Frameworks for geoengineering.

- ? • Why do Clingerman and O'Brien think that religion should have a place in the debate over climate change and geoengineering?
- In what four ways do the authors think religion important to climate researchers?
 - In how far does the question of geoengineering raise issues of the relationship between human and nonhuman beings, and what might be the insights religions could possibly offer here?
 - What are some of the concerns that may come with the ability of climate engineering?
 - What does the “playing God” metaphor imply and how might it be shaping the debate about climate engineering?



- 👤 • Forest Clingerman and Kevin J. O'Brien, “Playing God: Why Religion Belongs in the Climate Engineering Debate,” *Bulletin of the Atomic Scientists* 70, no. 3 (2014), 27-37.

19. Tuesday, June 2: Animal Theology


👤 Can animals be seen as theological subjects? Is their wellbeing and overcoming of suffering as important to religious traditions as that of human beings? Humans have always used animals as resources for food and other benefits. But now overexploitation has led to an extinction crisis. In this section we will address the way some religious believers have begun to make animals the center of their theological efforts.

- 📖
- Animal theology.

- Redemption.
- Nature as incomplete
- Vegetarianism in a Judeo-Christian context.

- 
 - In Linzey's opinion, how are animal theology and ecological theology opposed to one another rather than in agreement?
 - In how far is grace important to Linzey not only for humanity, but also for all other animal species?
 - Linzey describes nature as incomplete. What does he mean by that, and how does he believe can nature attain completion?
 - Why does Linzey think the eco-theological view of all nature as intrinsically good is no guarantee for avoiding exploitation?
 - In Linzey's analysis, why is the idea of nature as intrinsically good – including suffering – problematic when it comes to the ethics of killing?
 - In how far is vegetarianism for Linzey related to being created in God's image?
- 
 - Andrew Linzey, "So Near and Yet So Far: Animal Theology," in *The Oxford Handbook of Religion and Ecology*, edited by Roger S. Gottlieb (London: Oxford University Press, 2006), 348-361.

20. Thursday, June 4: Future Strategies of Collaboration

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Where are we to go from here, then? Can religious environmentalists be partners with non-religious environmentalists? Does religious environmentalism offer a unique perspective that is valuable to all people concerned about the environment? In this final meeting of our class we will review the class and discuss what strategies for future collaboration of believers and non-believers in conservation endeavors could look like.

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 - None.

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 - None.

- 
 - None.

Final Research Paper is due today!