

Chance, Emergence, or Design

HON - 3230
Spring Semester, 2018

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Office Hours: M,W: 2:00 – 2:50
T,Th,F: 11:00 – 11:50
Open Door Policy(See below)

Texts:

Smith, J. M., and E. Szathmary, 2000: *The Origins of Life: From the Birth of Life to the Origins of Language*. Oxford University Press, 180 pp. (ISBN: 0-19-286209-X)

Morowitz, H. J., 2002: *The Emergence of Everything: How the World Became Complex*. Oxford University Press, 209 pp. (ISBN: 0-19-513513-X)

Wise, K. P., 2002: *Faith, Form, and Time: What the Bible Teaches and Science Confirms About Creation and the Age of the Universe*. Broadman and Holman Publishers, 287 pp. (ISBN: 0-8054-2462-8)

Class Room: ENS 381
Class Time: 3:00 – 4:45 W

Class Web Page: <http://people.cedarville.edu/employee/gollmers/hon3230/hon3230.htm>

Course Description:

HON 3230 – Chance, Emergence, or Design

2 hours

The origin of complexity and order in the universe is studied from three different perspectives: Neo-Darwinian (chance and necessity), Emergence, and Creation. Starting at the origin of the physical universe and ending with the origin of self-awareness these perspectives are compared by their scientific value and their philosophical and religious implications.

Objectives:

Knowledge: The student will be able to recall secular and theological arguments for the origin of the universe, life, and intellect.

Analysis: The student will be able to identify and evaluate the consistency of various origins scenarios based on worldview assumptions. In addition he/she will propose possible resolutions to open ended origins problems.

Communication: The student will develop a personal reasoned response to theories about origins, the nature of reality and the ability to gain knowledge. This will be accomplished through writing assignments, presentations and classroom discussion.

Assessment Mapping	Knowledge	Analysis	Communication
Papers	X	X	X
Quizzes	X	X	
Question/Answer		X	X
Final Project	X	X	X

Grading:

Each student will complete the required reading and participate in class discussion. Written essays on each of the six main topics is required. These essays will summarize the student's evaluation of various approaches to the origins topic at hand. Once during the semester each student will make a 15 - 20 minute seminar presentation based on their additional research of a topic.

200	4 Papers/Projects (50 pts each)	<u>Grading Scale</u>	
120	Reading/quizzes (10 pts each)	90% and up:	A
100	Research Essay with Presentation	80% and up:	B
30	Origins Question/Answer	70% and up:	C
450		60% and up:	D
		Below 60%:	F

(-) Lowest 3 percentage points in a grade range.
(+) Highest 3 percentage points in a grade range except for an A.

The grading scale to the right will be used to relate a percentage score to a letter grade.

Major Themes Used to Guide Seminar Discussion:

The following themes are relatively independent of the topics covered and will provide a context for discussion through the entire course.

1. *Design vs. Non-Design* – We will examine the anthropic principle and fine tuning arguments in light of the question “Can random processes and natural law give us the universe we know to exist?”
2. *Faith vs. Fact* – We will examine the role of assumptions and paradigms in relation to what we know to be truth (fact) and what we assume to be true (faith).
3. *Determinism vs. Randomness* – We will examine the implications of determinism (predestination) vs. randomness (free-will) in the development of the universe given the different origins models.
4. *Comprehensibility vs. Unknowability* – We will consider principles that make the universe knowable and principles that limit our knowledge. How does paradox and finiteness of man affect the scientific endeavor?
5. *Reductionism vs. Holism* – We will consider the issue of complex interactions giving rise to properties beyond the reductionistic properties of the parts. The role of emergence and vitalism will also be discussed.
6. *Interventionism vs. Secondary Causation* – We will consider the issue of divine action in a physical universe. To what extent is God’s intervention detectable and to what extent is it through Secondary causation (explainable by physical laws).

Papers/Projects:

About every 3 weeks, you must write a 2 to 3 page paper based on the material covered or a project completed. Projects and paper topics will be introduced in class and may involve some group work. For papers responding to material covered, there must be a clear thesis, supporting argumentation, and expression of your own original thoughts. Possible theses could relate the current topic to either the major themes of the course, its influence on the popular media, or its implications to the world around us. For papers linked to a project, there must be a description of the work done on the project, summary of any data collected, conclusions reached, and suggested improvements or extensions to the project.

The last part of the semester is set aside for student presentations. Three presentations will be made each class period. The presentations should be about 10 minutes long followed by a 5 minute question/answer session and/or discussion. This presentation will be based on research performed on a supplementary topic. This presentation can be informative in nature or it can be used to frame an argument from which further discussion can ensue. This final presentation will also be written as a 2 to 3 page paper and will be included in the grading of the final presentation.

Participation:

Your prepared participation is a vital component of the course. To facilitate this, you will receive ten points for each of the weekly reading assignments. Of the ten points, five are for completing the reading on time, three are for answering general questions based on the reading and two is for discussion contribution.

I also want you to generate your own questions and find your own answers with regard to origins questions. To facilitate this I want you to generate five questions during the course of the semester. Likewise I want you to answer six questions that were generated by someone else. When you submit your question, make sure you include your name to get credit. When you answer a question, attach the original question and your answer. Make sure both names are present on the submission for credit. Your answer needs to include reference to a source. Each question is worth 2 points (maximum of 10 points) and each answer with a reference is worth 4 points (maximum of 20 points). If questions are repeats, then they will not be accepted. Also nonsense questions or answers will not be accepted for points.

Late Work:

Being prepared for class by reading and thinking through the material is important. Therefore, points lost for not reading the material can not be made up. Also any unexcused absences on days when reading is due, the full six points between reading, answering questions and discussion will be lost.

Late papers will be accepted with a penalty. Late papers will be docked 10% if turned in within the first week and 20% thereafter. If late work is turned in during finals week, 50% of the value of the paper will be docked unless it falls under the category of being within the first week. Work that is late due to an excused absence (prior arrangement with me or medical excuse) will not be docked if turned in the following class period.

Academic Integrity:

"The Academic Integrity Pledge is a commitment to live with integrity in all areas of life including the classroom. All forms of academic dishonesty violate this pledge and could result in dismissal from this community."

Although I encourage group efforts in studying, homework and lab work, I still expect you to turn in your *own* work. If your work appears to be copied from another person's lab or homework, your assignment will be returned with either a zero or returned with the intent of a redo with a loss of credit. Which of these two options is chosen is at the discretion of the instructor.

During quizzes and exams you are required to do your own work. If during the quiz or examination time you receive help from an unauthorized source (ie. class mates, wireless access to the network, etc.), your quiz or exam will receive a zero and the Office of the Academic Vice-President will be notified.

Appeal Process:

Our commitment as faculty is to provide you with the best possible educational experience this semester. If a concern arises during the semester, I encourage you to discuss the issue with me or, if you wish to remain anonymous, you may share your concern Dr. J.R. Gilhooly, Director of Honors Program. He will work to resolve the issue. If the concern is about grading assignments, your first responsibility is to speak with me. If you believe that the outcome of that meeting did not resolve the issue, you may appeal to Dr. Gilhooly. The formal grade appeal process can be found at www.cedarville.edu/gradeappealprocess." Dr. Gilhooly can be contacted by email (johnrgilhooly@cedarville.edu), by phone (extension 7998) or in his office (BTS 250).

Academic Accommodations:

Disability Services coordinates reasonable accommodations for students with documented disabilities. Students in need of academic accommodations because of the impact of a disability are invited to e-mail the Disabilities Compliance Coordinator at disabilityservices@cedarville.edu or visit www.cedarville.edu/disabilities for information and an application. **Disability Services** is located in **The Cove (Academic Enrichment Center)** on the second floor of the BTS.

Open Door Policy:

I have office hours scheduled each day of the week. You may also drop by my office at any other time whether it is class related or not. As long as I am present in my office and I do not have any pressing work that needs to be done, I will meet with you. I am privileged to have this ministry at Cedarville University. Whether you recognize it or not, God has put me in your life this semester to minister to you.

Conclusion:

I Cor. 8:1-3 says "...We know that we all possess knowledge. Knowledge puffs up, but love builds up. The man who thinks he knows something does not yet know as he ought to know. But the man who loves God is known by God." (NIV) The knowledge gained in this course can lead to a more effective witness as we understand the mindset of this world system. However, it can just as easily puff us up in pride if we think we have all the answers. My desire for you is that this material be used to manifest I Peter 3:15 in your lives, which says "But in your hearts set apart Christ as Lord. Always be prepared to give an answer to everyone who asks you to give the reason for the hope that you have. But do this with gentleness and respect, keeping a clear conscience, so that those who speak maliciously against your good behavior in Christ may be ashamed of their slander."

Addendum to the Syllabus:

Due to dynamics present during the course of the semester, the instructor may make adjustments to the printed schedule. However, if any changes are made to content coverage or dates of exams, students will be notified either in class or by email.

	Date	Topic	Topic	Reading		Date	Topic	Topic	Reading
			HON3230 - Chance, Emergence, or Design						
W	1/10		Introduction		W	3/7		<i>Spring Break - No Class</i>	
			Philosophy of Science						
W	1/17	1	Origin of Matter and Energy	M 1-3	W	3/14	4	Origin of Complex Life	S 6-8
				W 1-3					W 8
W	1/24	1	Origin of Matter and Energy	M 4-7	W	3/21	5	Origin of Ecological Environments	M 16-23
				Weinberg					S 9-11
								Paper 3	
W	1/31	1	Deep Time	W 4-6	W	3/28	5	Origin of Ecological Environments	W 11-12,14
		1						Design and Holism	
			Paper 1						
W	2/7	2	Origin of a Habitable Planet	S 1-2	W	4/4	6	Origin of Societies	M 24-30
				M 8-10					S 12-13
W	2/14	2	Origin of a Habitable Planet	W&B 3	W	4/11	6	Science and Religion	W 9, 15
				W 7,10,13					M 31-36
								Paper 4	
W	2/21	3	Origin of Simple Life	S 3-5	W	4/18		Student Presentations	Provine
				M 11-12					
			Paper 2						
W	2/28	3	Origin of Simple Life	Kauffman 4	W	4/25		Student Presentations	
				M 13-15					
					W	5/2		No Final Exam	