



CORE-211 Creation Care and the Environment (4 credits)

Spring 2022

Cross listed: ENVR-151, COMD-151, EARTH-151

Instructor Information

Instructor: Dylan Bartels

Email: dylan.bartels@dordt.edu

Appointments/Office Hours: Available upon request

Course Description & Curricular Context

Welcome to an introductory course in contemporary environmental studies. This class will emphasize class discussion of relationships between human populations, resource use, natural ecosystems and pollution, in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic and physical dimensions of creation. We will explore the causes and seek to develop a Christian response to contemporary environmental problems including endangered species, habitat loss, water resources, soil erosion, and others.

This course includes lecture and laboratory components and is designed to be the introductory course for environmental studies majors and also to meet the requirements of the natural science CORE course. Environmental studies majors at Dordt University should take this course concurrently with Environmental Studies 161. Environmental Studies 151 is cross-listed as Community Development 151, CORE 211, and Earth Science 151.

Required Texts & Materials

- Text: Wright RT, Boorse DF. 2016. *Environmental Science. 13th edition*. ISBN-13: 978-0-134-01127-1
- Canvas access: Online at <https://dordt.instructure.com/> (free mobile app available on the App Store & Google Play)
- Other articles and excerpts will supplement the course text and are available on Canvas.
- Office 365: assignments should be completed and submitted using Word unless otherwise directed. ([Office 365 is available to students for free here!](#))
- Laboratory requires the purchase of the following items:
 - [20 petri plates](#)
 - [Radish seeds](#)
 - [Osmocote granule fertilizer](#)

Student Learning Objectives

Upon successful completion of this course*, you will be able to:

1. Articulate the meaning of our role as stewards of creation as described in the Bible. (RO)
2. Formulate a personal and communal response to the call to be stewards. (CR)
3. Readily participate in environmental conservation and restoration. (CR)
4. Describe and connect global, regional, and local environmental systems and processes. (CS)
5. Reflect critically on how human activity has altered the structure and function of ecosystems. (CD)
6. Appreciate the interdisciplinary nature of environmental issues in an interconnected world. (CS)

*This course is taught from the reformational Christian perspective consistent with the Educational Task and Framework of Dordt University. The four coordinates of this curricular framework are religious orientation (RO), creational structure (CS), creational development (CD), and contemporary response (CR). If you are interested in reading more about this framework, it can be found [here](#).

Grading Scales & Assessment Tools

Your overall letter grade for the course will be determined with this scale:

Exceptional	94-100%	A	73-76%	C	Graduation Level
	90-93%	A-	70-72%	C-	
	87-89%	B+	67-69%	D+	
Good	83-86%	B	63-66%	D	Unsatisfactory
	80-82%	B-	60-62%	D-	
	77-79%	C+	00-59%	F	
					Failure

The major assessments for this course are listed below along with the possible points for each assignment, the number of assignments in each assessment category, and the total possible points and weighted percentages for each assessment category. Detailed instructions for each assessment can be found on the course Canvas page.

Assessment	Points/ Each	Number	Total Points	Percent of Final Grade
Tests	100	2	200	20%
Final Paper	115	1	115	12%
Laboratory Activities	50	7	350	35%
Group Discussions	25	8	200	20%
Reading Quizzes	15	7	105	10%
Introduction Video	10	1	10	1%
Spoken Reading Video	20	1	20	2%
Total			1000	100%

Course Format & Policies

This is an **asynchronous, online course** designed to introduce you to environmental science and stewardship. This course format offers more freedom and flexibility than synchronous, face-to-face courses, but it also demands a high level of intentionality and self-motivation. With additional freedom comes additional responsibility. You must stay engaged and keep pace with the schedule to be successful in this course.

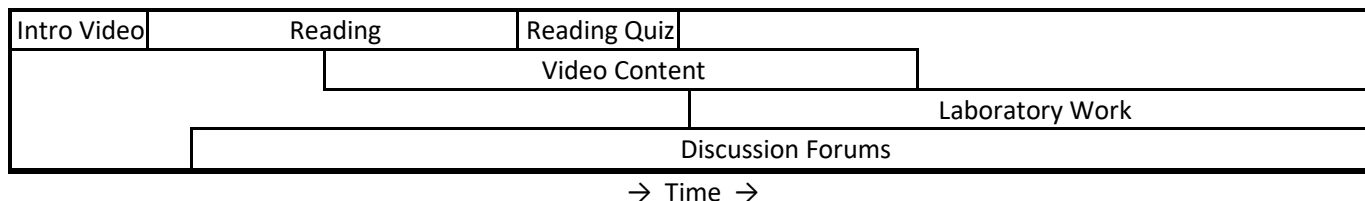
Effective **communication** will also influence your success in this course. Courses that occur entirely online require extra efforts to interact meaningfully with your instructor and your peers. Unlike in a face-to-face setting, you will not run into your instructor in the hallway or hang around after class with peers to compare notes or have conversations. The course Canvas page includes a “water cooler” discussion board for asking questions, sharing resources, and connecting with peers. It is intended to be an informal gathering place. Posting in the water cooler discussion board is not required, but everyone is welcome and encouraged to contribute. Email is by far the best way to communicate with your instructor. Email will be checked daily Monday through Friday, and you can expect a response from your instructor within 24 hours, with the exception of weekends. Phone conversations are also an effective and often overlooked form of communication between students and online instructors. The office phone number of your instructor is listed above. Please feel free to contact the instructor via email or office phone with any questions or concerns you may have.

This course consists of eight topical **modules**, including Science & Sustainability, Ecology Basics, Ecosystem Services, The Human Population, Water Degradation & Conservation, Land Degradation & Conservation, Environmental Stewardship, and Action & Appreciation. If this is a 15-week semester, the first 7 modules will each span two weeks with the final module spanning 1 week. If this is an 8-week semester, each module will span one week. Modules consist of

- an introductory video,

- required readings,
- a reading quiz,
- lecture and supplemental videos,
- group discussions,
- and a laboratory activity.

The specific resources, activities, and assessments used in a module are listed and described in the **learning guide** that accompanies each module. All of the learning guides are available as downloadable documents on Canvas. The following figure illustrates the sequence of learning activities in each module over time.



The instructor will facilitate your learning using a variety of instructional methods.

- **Required readings** deliver thorough explanations of important concepts along with helpful examples and stories, and **reading quizzes** are assigned for accountability and for you to check your understanding.
- In **lecture videos**, the instructor will help explain new content, highlight big ideas, and make important connections.
- **Supplemental videos** are assigned to deepen your understanding of a particular topic and provide an additional voice to speak into current issues.
- In group **discussion boards**, the instructor will interact directly with students by responding to ideas, posing questions, and sharing resources.
- All **laboratory activities** will require that you spend time outdoors or out in your community. Most lab activities also require scheduling and planning in advance. Look ahead to the next laboratory often to make sure you are prepared.
- **Tests** will be administered to both evaluate you and to help you know yourself and track your progress and growth.

Additionally, the instructor will provide timely and constructive feedback on graded assessments, be actively engaged in all discussion boards, and share additional resources and newsworthy items in response to class conversation.

Late assignments will not be accepted unless prior approval has been obtained from the instructor. Late submissions and posts do not only affect you; they affect your peers, your instructor and the overall flow of the course. All due dates are available to you at the start of the course, allowing you to plan ahead and submit your work on time. Moreover, technology often seems to fail us when we need it most; thus, please avoid submitting assignments mere minutes before the due date.

Academic integrity: Dordt University is committed to developing a community of Christian scholars where all members accept the responsibility of practicing personal and academic integrity in obedience to biblical teaching. For students, this means not lying, cheating, or stealing others' work to gain academic advantage; it also means opposing academic dishonesty. Students found to be academically dishonest will receive academic sanctions from their professor (from a failing grade on the particular academic task to a failing grade in the course) and will be reported to the Student Life Committee for possible institutional sanctions (from a warning to dismissal from the university). Appeals in such matters will be handled by the student disciplinary process. For more information, see the [Student Handbook](#).

Technology support: For assistance with course technology, contact Sandy Reitsma (sandy.reitsma@dordt.edu or 712-722-6299).

Accommodations: Dordt University is committed to providing reasonable accommodations for students with documented qualifying disabilities in accordance with federal laws and university policy. Any student who needs access to accommodations based on the impact of a documented disability should contact the Coordinator of Services for Students with Disabilities (CSSD): Sharon Rosenboom, Academic Enrichment Center, Office: L168, (712) 722-6490, Email: Sharon.Rosenboom@dordt.edu.

Course Outline & Tentative Schedule

Dates	Module	Readings	Assignments Due
1/13 – 2/2	Science & Sustainability	Ch. 1 Science & faith essays	Introduction video: Jan 18 Initial discussion posts (2): Jan 25 Reading quiz: Jan 27 Laboratory activity: Feb 2 Response discussion posts (2): Feb 2
2/3 – 2/16	Ecology Basics	Ch. 3, 4, 5	Initial discussion posts (2): Feb 8 Reading quiz: Feb 10 Laboratory activity: Feb 16 Response discussion posts (2): Feb 16
2/17 – 3/2	Ecosystem Services	Ch. 6, 7	Initial discussion posts (2): Feb 22 Reading quiz: Feb 24 Laboratory activity: Mar 2 Response discussion posts (2): Mar 2
			Test 1: March 3-5
3/3 – 3/23 (including Spring Break: 3/9-15)	The Human Population	Ch. 8, 9	Initial discussion posts (2): Mar 8 Reading quiz: Mar 17 Laboratory activity: Mar 23 Response discussion posts (2): Mar 23
3/24 – 4/6	Water Degradation & Conservation	Ch. 10, 20	Initial discussion posts (2): Mar 29 Reading quiz: Mar 31 Laboratory activity: Apr 6 Response discussion posts (2): Apr 6
4/7 – 4/20	Land Degradation & Conservation	Ch. 11, 12, 13	Initial discussion posts (2): Apr 12 Reading quiz: Apr 14 Laboratory activity: Apr 20 Response discussion posts (2): Apr 20
4/21 – 5/4	Environmental Stewardship	Ch. 2, 23	Initial discussion posts (2): Apr 26 Reading quiz: Apr 28 Laboratory activity: May 4 Response discussion posts (2): May 4
			Test 2: May 5-7
5/5 – 5/11	Action & Appreciation		Spoken reading video: May 10 Initial discussion posts (2): May 9 Response discussion posts (2): May 11 Strategic Plan Logic Model: May 11