

**Course Information**

Online class (<https://blackboard.wku.edu>)

**Instructor**

Jooyeon Hwang, Ph.D., M.S.  
Phone: 270-745-4975  
Email: [jooyeon.hwang@wku.edu](mailto:jooyeon.hwang@wku.edu)  
Office hour: by appointment

**Teaching Assistant**

Mounica Chinthakindi  
Email: [mounicareddy.chinthakindi670@topper.wku.edu](mailto:mounicareddy.chinthakindi670@topper.wku.edu)

**Summary**

An introductory course to the study of environmental issues, including the major themes of human population, sustainability, the urban world, people and nature, and science and values, with a global perspective. This course provides a general understanding of the application of science to the solution of contemporary environmental problems.

**Course objectives**

By the end of the course, students should be able to

- Demonstrate an understanding of the methods of scientific inquiry in environmental science.
- Explain basic concepts and principles in one or more of the sciences.
- Apply scientific principles to interpret and make predictions in one or more of the sciences.
- Explain how scientific principles relate to issues of personal and/or public importance.

**Required textbook**

Environmental Science: Earth as a Living Planet by Daniel Botkin and Edward Keller, 2014, John Wiley and Sons, 9th Edition (ISBN: 978-1-118-42732-3).

**Course evaluation**

40% 10 Quizzes

30% Mid-term Exam – Comprehensive over Sections 1 through 6

30% Final Exam – Comprehensive over Sections

**Course grade**

A: 90 – 100%

B: 80 – 90%

C: 70 – 80%

D: 60 – 70%

F: Below 60%

**Course schedule (subject to change)**

Week	Lecture topic for the week	Assignments
Week 1	<ul style="list-style-type: none"><li>• Course Introduction, Scope, and Objectives</li><li>• Chapter 1. Key Themes in Environmental Sciences</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 1</li><li>• Quiz #1 (Due: 1/29)</li></ul>
Week 2	<ul style="list-style-type: none"><li>• Chapter 2. Science as a Way of Knowing: Critical Thinking about the Environment</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 2</li><li>• Quiz #2 (Due: 2/5)</li></ul>
Week 3	<ul style="list-style-type: none"><li>• Chapter 5. The Human Population &amp; the Environment</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 5</li><li>• Quiz #3 (Due: 2/12)</li></ul>
Week 4	<ul style="list-style-type: none"><li>• Chapter 8. Environmental Health, Pollution, and Toxicology</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 8</li><li>• Quiz #4 (Due: 2/19)</li></ul>
Week 5	<ul style="list-style-type: none"><li>• Chapter 21. Air Pollution</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 21</li><li>• Quiz #5 (Due: 2/26)</li></ul>
Week 6	<ul style="list-style-type: none"><li>• Chapter 20. The Atmosphere &amp; Climate Change</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 20</li><li>• Quiz #6 (Due: 3/5)</li></ul>
Week 7	Midterm exam	3/6-3/10
Week 8	Spring break	
Week 9	<ul style="list-style-type: none"><li>• Chapter 23. Materials Management</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 23</li><li>• Quiz #7 (Due: 3/26)</li></ul>
Week 10	<ul style="list-style-type: none"><li>• Chapter 19. Water Pollution &amp; Treatment</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 19</li><li>• Quiz #8 (Due: 4/2)</li></ul>
Week 11	<ul style="list-style-type: none"><li>• Chapter 11. Agriculture, Aquaculture, &amp; the Environment</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 11</li><li>• Quiz #9 (Due: 4/9)</li></ul>
Week 12	<ul style="list-style-type: none"><li>• Chapter 22. Urban Environments</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 22</li><li>• Quiz #10 (Due: 4/16)</li></ul>
Week 13	<ul style="list-style-type: none"><li>• Chapter 17: Nuclear Energy and Environment</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 17</li><li>• No quiz</li></ul>
Week 14	<ul style="list-style-type: none"><li>• Chapter 24: Our Environmental Future</li></ul>	<ul style="list-style-type: none"><li>• Reading: Chapter 24</li></ul>

		• No quiz
Week 15	Final exam	5/1-5/5