

ENVIRONMENTAL SCIENCE TEXTBOOKS

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Introduction

This list identifies environmental science textbooks distributed by various publishers. The Wisconsin Center for [Environmental Education Resources Library](#) has copies of most of the books available for review, either in person by visiting the library in Stevens Point or through the Wisconsin Library System Delivery Network. [How to access books](#)

Table 1: Environmental Science Texts Designed for High School Students - Some books in this table may be suitable for AP High School Courses.

Table 2: Environmental Science Texts Designed for AP High School Courses/Introductory College Courses - The Advanced Placement (AP) Environmental Science Program is intended to permit high school students to take college-level courses; AP classes are designed to be rigorous laboratory science courses. For AP courses, teachers often select textbooks developed for introductory college courses in environmental science.

TABLE 1: Environmental Science Texts Designed for High School Students	
Book descriptions are from the publishers' websites. Doing an Internet search will bring up more information about each book.	
Author	American Geological Institute
Title	Environmental Science: Understanding Our Earth
Publisher	Cengage Learning
Publish Date	2011
Description	Environmental Science: Understanding Our Earth, offers a unique "Earth Systems" approach to teaching both Earth Science and Environmental Science. Earth system science provides a framework for developing a truly innovative environmental science curriculum. An interdisciplinary environmental science curriculum that emphasizes Earth systems helps students develop the underlying science and knowledge that forms the foundation for understanding and policy discussion. Moreover, the critical component of environmental science is the focus on how earth systems interact with human society. This subject uniquely ties the physical sciences with social sciences, constituting an opportunity to demonstrate the widest application of science to life. Within this context of human interaction is the need to address concepts of risk and cost-benefit. Students begin to understand the process of decision-making made by policy-makers when using earth system information.
Author	Arms, Karen
Title	Environmental Science
Publisher	Houghton Mifflin Harcourt
Publish Date	2008
Description	Build skills for success in science with relevant and motivating features, extensive labs and activities to grab students' attention, and comprehensive test prep review. Earth Science Connections integrate Earth and environmental science. Lab Generator CD-ROM, and PowerPoint Resources and MindPoint Quiz Show, located on the Teacher's One-Stop Planner CD-ROM, keep students actively engaged in their learning.
Author	Berg, Linda R. and Hager, Mary Catherine
Title	Visualizing Environmental Science, Second Edition

Publisher	Wiley and National Geographic
Publish Date	2009
Description	This book follows a unique approach by placing a greater emphasis on visual learning as a means for environmental scientists to understand and connect with the central issues of environmental science. It vividly illustrates the overarching role that humans play in our planet's environmental problems and successes. In each chapter, What a Scientist Sees features are presented to highlight a concept or phenomenon from the perspective of a professional in the field. Process diagrams are also used to depict complex processes. Environmental scientists will be able to reinforce their understanding of the field and gain new insights with this second edition.
Author	
	Braus, Judy and St. Antonie, Sara
Title	
	Environmental Science
Publisher	
	Pearson – AGS Globe
Publish Date	
	2007
Description	Environmental Science: Fundamentals and Applications is an applied science textbook written for a high school audience. It provides practical instruction in the sciences that address principles related to the environment. Chapters include topics such as natural resource management, fish and wildlife management, aquaculture, soil science and forestry. It addresses basic principles of science as they relate to outdoor environments, providing numerous examples of applications of science to environmental problems. The textbook is illustrated with many colored photos, sketches, diagrams, and tables. Chapters include objectives, evaluation materials, suggested class activities, and key terms. In addition, Internet key words are provided throughout the text to guide in-depth Internet study. Note: This text is designed for the agriculture education community.
Author	
	Burton, DeVere Editor
Title	
	Environmental Science: Fundamentals and Applications
Publisher	
	Cengage Learning
Publish Date	
	2009
Description	Environmental Science: Fundamentals and Applications is an applied science textbook written for a high school audience. It provides practical instruction in the sciences that address principles related to the environment. Chapters include topics such as natural resource management, fish and wildlife management, aquaculture, soil science and forestry. It addresses basic principles of science as they relate to outdoor environments, providing numerous examples of applications of science to environmental problems. The textbook is illustrated with many colored photos, sketches, diagrams, and tables. Chapters include objectives, evaluation materials, suggested class activities, and key terms. In addition, Internet key words are provided throughout the text to guide in-depth Internet study. Note: This text is designed for the agriculture education community.
Author	
	Camp, William G and Heath-Camp, Betty
Title	
	Managing Natural Resources, Fifth Edition
Publisher	
	Cengage Learning
Publish Date	
	2009
Description	Managing Our Natural Resources, fifth edition, was designed and written with people and the environment in which we live in mind. The original book was written specifically to meet the need for an up-to-date introductory level natural resources text for high school and postsecondary agricultural education students. It provides an overview of a wide array of

	<p>topics in the broad area of natural resources management, ranging from forestry to air quality to wildlife management to solid waste management. Each chapter is built around specific learning objectives and includes numerous photographs and other graphic illustrations that provide a lively look at the topics being discussed. Case studies that address real-world and current issues are provided for each unit and are designed to promote lively classroom discussion and facilitate critical thinking.</p> <p>Note: This text is designed for the agriculture education community.</p>
Author	Edelson, Daniel
Title	Investigations in Environmental Science – Unit 1: Land Use, Unit 2: Energy Generation, Unit 3: Water Management
Publisher	It's About Time
Publish Date	2005
Description	<p><i>Investigations in Environmental Science,™</i> a Case-Based Approach to Environmental Systems is a 3-unit, one-year high school environmental science course that employs a case-based approach to science education. Investigations in Environmental Science is research-based and supported by the National Science Foundation. Investigations in Environmental Science, places students in the role of environmental scientists. It engages them in investigations of realistic environmental problems, in which they must make recommendations for sustainable uses of resources. In the course of these investigations, students employ a variety of scientific research techniques, including technology research tools that were specially designed to help students use technology in solving problem. These tools include WorldWatcher, a visualization and analysis tool for learners developed at Northwestern University and ArcView, the leading commercial geographic information system (GIS).</p>
Author	Pearson, Jane
Title	Environmental Science: How the World Works and Your Place in It, Third Edition
Publisher	J.M. LeBel Publishers, Inc
Publish Date	2007
Description	<p>Geared toward high school students (appropriate reading level); Presents students with real-life environmental issues and concerns; Designed to encourage and challenge students to think about practical solutions to genuine environmental concerns; Overview of Life, Earth and Physical sciences using the environment as a point of reference; Provides websites to encourage learning outside the classroom; Suitable for students not taking Physics or Chemistry; Six core units: Ecology, Air, Food, Aquatic Systems, Water for the People and Energy; Award-winning author; Third edition has been completely rewritten and updated to provide better comprehension; Soft grade-nine reading level; Four-color throughout; Internet connections; Paginated Glossary; 26 "Closer Looks" review real life Environmental Problems; In-depth coverage of complex issues; Many new charts, graphs and maps; Added opportunities for problem-solving and decision-making; New Study Guide and Test Program; New non-consumable Lab Manual has 64 activities plus 19 additional labs in the textbook; Thorough discussion of new issues, including: Logging, the Ozone Layer, Climate Change, Superfund Sites, and Environmental Impact of Consumer Choices and Population; Career Sections</p>
Author	Schachter, Martin
Title	Environmental Science
Publisher	AMSCO School Publications, Inc.
Publish Date	2005

Description	Provides complete coverage of a one-year high school course in environmental science. This four-color basal text uses real-world examples to encourage student interest in environmental science. Problem-solving and critical-thinking skills involve students and awaken their natural interest in the environment.
Author	Science Education for Public Understanding Program (SEPUP)
Title	Science and Sustainability
Publisher	Lab-aids
Publish Date	2005
Description	Science and Sustainability is a full-year, integrated high school science course with a strong emphasis on hands-on investigations. The program is presented in four thematic units and includes an array of concepts and topics including physics, chemistry, biology and earth science. Each unit presents basic science content involving local and global issues related to sustainability. Material World, a companion student resource book, is a magnificent photographic portrait of families and their lives across the world. It's an excellent resource for taking your students on a "field trip" to investigate global issues.
Author	Various
Title	Global Systems Science: A New World View; Climate Change; Life and Climate; Ozone; Losing Biodiversity; Energy Flow; Ecosystem Change; Population Growth; Energy Use
Publisher	Lawrence Hall of Science
Publish Date	2005
Description	Global Systems Science (GSS) is an integrated, interdisciplinary course for high school, consisting of twelve student books, teacher guides, Digital Earth Watch software, and Hands On Universe Image Processing software. Each GSS book deals with a societal issue that requires science for full understanding. The books may be sequenced in a custom one-year integrated science course or serve as supplementary materials for existing high school biology, physics, chemistry, Earth science, or social studies courses.
Author	Withgott, Jay
Title	Environmental Science: Your World, Your Turn
Publisher	Pearson
Publish Date	2011
Description	Teaching environmental science is much more than just communicating facts and information. It's about engaging and motivating students. It's about helping them to better understand how and why their actions--and those around them--impact the world in which they live. Environmental Science: Your World, Your Turn is a new high school program that brings the outside world into the classroom—making the science personal, actionable, and empowering for each student.

TABLE 2: Environmental Science Texts Designed for AP High School Courses/Introductory College Courses

Book descriptions are from the publishers' websites. Doing an Internet search will bring up more information about each book.	
Author	Botkin, Daniel and Keller, Edward
Title	Environmental Science: Earth as a Living Planet, Eighth Edition
Publisher	John Wiley and Sons, Inc.

Publish Date	2010
Description	Environmental Science: Earth as a Living Planet, Eighth Edition provides emphasis on the scientific process throughout the book gives readers the structure to develop their critical thinking skills. Updated and revised to include the latest research in the field, the eighth edition continues to present a balanced analytical and interdisciplinary approach to the field. New streamlined text clears away the "jargon" to bring the issues and the science to the forefront. The new design and updated image program highlights key points and makes the book easier to navigate.
Author	Botkin, Daniel and Keller, Edward
Title	Essential Environmental Science, First Edition
Publisher	John Wiley and Sons, Inc.
Publish Date	2008
Description	Essential Environmental Science is a learning tool to help educate the next generation of environmentally aware college students by introducing them to some of the most important questions in Environmental Science today. By building scientific confidence and critical thinking skills, students will be better able to understand the natural world around them, how environmental issues affect them and their future, and how to act responsibly in a global environment. This title is appropriate for a 1-term introductory course in Environmental Science.
Author	Chiras, Daniel
Title	Environmental Science, Eight Edition
Publisher	Jones and Bartlett
Publish Date	2010
Description	Updated throughout with the latest environmental information, issues, and facts, the new Eighth Edition of Environmental Science provides a clear introduction to the environmental topics facing society today and offers many possible solutions on how we can move towards a more sustainable way of life. The author focuses on the root cause of many environmental problems and takes care to presents both sides of the issues. Every chapter emphasizes critical analysis to teach students how to approach these complex topics and determine the merits of the debates for themselves. New Go Green tips offer suggestions for how students can be more environmentally conscious in their daily lives
Author	Cunningham, William and Cunningham, Mary Ann
Title	Principles of Environmental Science: Inquiry and Applications
Publisher	McGraw Hill
Publish Date	2010
Description	Rather than the 25 to 30 chapters found in most environmental science textbooks, the authors have limited Principles of Environmental Science: Inquiry and Applications to 15 chapters-- perfect for the one-semester, non-majors environmental science course. True to its title, the goal of this concise text is to provide an up-to-date, introductory view of essential themes in environmental science along with offering students numerous opportunities to practice scientific thinking and active learning.
Author	Cunningham, William and Cunningham, Mary Ann
Title	Environmental Science: A Global Concern, Twelfth Edition
Publisher	McGraw Hill
Publish Date	2011

Description	<p>Environmental Science: A Global Concern, Twelfth Edition, is a comprehensive presentation of environmental science for non-science majors which emphasizes critical thinking, environmental responsibility, and global awareness. This book is intended for use in a one or two-semester course in environmental science, human ecology, or environmental studies at the college or advanced placement high school level.</p> <p>Cunningham and Cunningham have updated much of the data in the 12th edition; updated data on hunger and obesity, waste production, CO2 emissions, and the effects of the 2010 oil spill are just a few examples.</p> <p>Environmental Science: A Global Concern, Twelfth Edition, provides readers with an up-to-date, introductory global view of essential themes in environmental science. The authors balance evidence of serious environmental challenges with ideas about what we can do to overcome them. An entire chapter focuses on ecological restoration; one of the most important aspects of ecology today. Case studies in most chapters show examples of real progress, and "What Can You Do?" lists give students ideas for contributing to solutions.</p>
Author	Enger, Eldon and Smith, Bradley
Title	Environmental Science: A Study of Interrelationships
Publisher	McGraw Hill
Publish Date	2009
Description	<p>This full-color, introductory environmental science text is known for being concise, conceptual, and value-priced. The approach and reading level cover the basic concepts without overloading students with too much detail. The authors reinforce the text's central theme of "interrelationships" by providing a historical perspective, information on economic and political realities, discuss the role of different social experiences, and integrate this with the crucial science to describe the natural world and how we affect it.</p>
Author	Friedland, Andrew; Relyea, Rick; and Courard-Hauri, David
Title	Environmental Science: Foundations and Applications
Publisher	W.H. Freeman
Publish Date	2012
Description	<p>Created for non-majors courses in environmental science, environmental studies, and environmental biology, Environmental Science: Foundations and Applications emphasizes critical thinking and quantitative reasoning skills. Students learn how to analyze graphs, measure environmental impact on various scales, and use simple calculations to understand key concepts. With a solid understanding of science fundamentals and how the scientific method is applied, students are able to evaluate information objectively and draw their own conclusions. The text equips students to interpret the wealth of data they will encounter as citizens, professionals, and consumers.</p>
Author	McConnell, Robert and Abel, Daniel
Title	Environmental Issues: An Introduction to Sustainability, Third Edition
Publisher	Pearson – Prentice Hall
Publish Date	2008
Description	<p>This issues workbook takes an interdisciplinary approach, combining simple math and critical thinking to gain insight into relevant local, regional, and global environmental issues. It focuses on sustainability, integrating a broad overview of the essentials throughout the text and providing an in-depth exploration in Part 7, "Sustainability and the Individual." The</p>

	presentation of real-world issues and examples fosters the development of the math and analytical skills necessary to truly think critically and to understand these complex issues.
Author	McKinney, Michael and Schoch, Robert
Title	Environmental Science: Systems and Solutions, Fourth Edition
Publisher	Jones and Bartlett
Publish Date	2007
Description	The critical importance of environmental preservation is apparent to everyone. The issues facing us today, be they global warming, the depleting ozone layer, the controversy over nuclear power, or the continuing problems of water pollution and solid waste disposal, are headline news. <i>Environmental Science: Systems and Solutions, Fourth Edition</i> , offers the basic principles necessary to understand and address these multi-faceted and often very complex current environmental concerns. The book provides a comprehensive overview and synthesis of environmental science and provides the basic factual data necessary to understand the environment as it is today. It is important that students understand how various aspects of the natural environment interconnect with each other and with human society. Using a systems approach, the authors have organized complex information in a way that highlights these connections in a fair and unbiased fashion. A Study Guide is incorporated at the end of each chapter to help reinforce concepts and provide a clear overview of material.
Author	Miller, G. Tyler and Spoolman, Scott
Title	Environmental Science, Thirteenth Edition
Publisher	Cengage Learning
Publish Date	2011
Description	Environmental Science inspires and equips students to make a difference for the world. Featuring sustainability as their central theme, authors Tyler Miller and Scott Spoolman emphasize natural capital, natural capital degradation, solutions, trade-offs, and the importance of individuals. As a result, students learn how nature works, how they interact with it, and how humanity has sustained—and can continue to sustain—its relationship with the earth by applying nature's lessons to economies and individual lifestyles. Engaging features like "Core Case Studies," "How Would You Vote" questions, and "Thinking About" exercises demonstrate the relevance of issues and encourage critical thinking. Updated with new learning tools, the latest content, and an enhanced art program, this highly flexible book allows instructors to vary the order of chapters and sections within chapters to meet the needs of their courses.
Author	Miller, G. Tyler and Spoolman, Scott
Title	Environmental Science: Problems, Connections, and Solutions, Twelfth Edition
Publisher	Cengage Learning
Publish Date	2008
Description	Environmental Science: Problems, Connections, and Solutions, Twelfth Edition, boasts an unparalleled coverage of sustainability, basic science, and bias-free explanations, all within a flexible chapter organization. The central theme of sustainability is clarified by a consistent emphasis on natural capital, natural capital degradation, solutions, trade-offs, and the importance of individuals. As a result, students learn how nature works, how we interact with it, and how we have sustained--and can continue to sustain--our relationship with the earth by applying nature's lessons to our economies and individual lifestyles. Designed for students with little to no science background, the book's science- and concept-centered approach encourages students to think about important concepts and issues that affect their lives. Core

	<p>case studies illustrate key topics and issues, reinforcing the sustainability theme. These and other cases inspire almost 70 "How Would You Vote?" questions, which sharpen students' critical thinking by asking them to consider facts, conflicting solutions, and trade-offs surrounding the issues, and then cast their vote. The text is supported by the strongest media tools and illustration program available. Highlights include CengageNOW, an online resource featuring automatic grading and Personalized Study Plans; videos; and the PowerLecture presentation tool that makes it easy for you to create customized multimedia lectures.</p>
Author	Miller, G. Tyler and Spoolman, Scott
Title	Essentials of Ecology, Sixth Edition
Publisher	Cengage Learning
Publish Date	2012
Description	<p>An ideal alternative to ecology texts that tend to be too difficult for non-majors, this succinct 11-chapter, full-color textbook covers scientific principles and concepts, ecosystems, evolution, biodiversity, population ecology, and more. Sustainability is the integrating theme and co-authors G. Tyler Miller and Scott Spoolman inspire students to take a positive approach toward finding and implementing useful environmental solutions in their own lives and in their careers. Updated with new information, art, and "Good News" examples, the text engages and motivates students with vivid case studies and hands-on quantitative exercises. The concept-centered approach transforms complex environmental topics and issues into key concepts that students will understand and remember.</p>
Author	Miller, G. Tyler and Spoolman, Scott
Title	Living in the Environment: Principles, Connections, and Solutions, Seventeenth Edition
Publisher	Cengage Learning
Publish Date	2012
Description	<p>Sustainability is the integrating theme of this current and thought-provoking book. Living in the Environment: Principles, Connections, and Solutions provides the basic scientific tools for understanding and thinking critically about the environment. Co-authors G. Tyler Miller and Scott Spoolman inspire students to take a positive approach toward finding and implementing useful environmental solutions in their own lives and in their careers. Updated with the most up-to-date information, art, and "Good News" examples, the text engages and motivates students with vivid case studies and hands-on quantitative exercises. The concept-centered approach transforms complex environmental topics and issues into key concepts that students will understand and remember. Overall, by framing the concepts with goals for more sustainable lifestyles and human communities, students see how promising the future can be.</p>
Author	Miller, G. Tyler and Spoolman, Scott
Title	Sustaining the Earth: An Integrated Approach, Tenth Edition
Publisher	Cengage Learning
Publish Date	2012
Description	<p>Sustainability is the integrating theme of this current and thought-provoking book. Sustaining the Earth provides the basic scientific tools for understanding and thinking critically about the environmental problems we face. About half the price of other environmental science texts, this 14-chapter, one-color core book offers an integrated approach that emphasizes how environmental and resource problems and solutions are related. The concept-centered approach transforms complex environmental topics and issues into key concepts that students will understand and remember. By framing the concepts with goals for more sustainable lifestyles and human communities, students see how promising the future can be.</p>

Author	Raven, Peter and Berg, Linda
Title	Environment, Seventh Edition
Publisher	John Wiley and Sons, Inc.
Publish Date	2010
Description	Environment 7/e is a comprehensive, systems-based environmental science text known for an accessible writing style and for its student-friendly integrated learning system designed to help students move from general concepts to specific applications. The new edition continues the tradition of currency as well as the systems approach, which emphasizes the interconnected nature of environmental science throughout the text making Environment 7/e the most student-friendly environmental science book. The result is a text that provides the basic facts, the various perspectives on the issues, and the framework for students to reach their own informed decisions so they can take an active, positive role in understanding and addressing the environmental challenges of today and tomorrow.
Author	Withgott, Jay and Brennan, Scott
Title	Environment: The Science Behind the Stories, Fourth Edition
Publisher	Pearson
Publish Date	2012
Description	Essential Environment: The Science behind the Stories, Fourth Edition engages students with integrated central case studies that provide students with a tangible framework for understanding science in a brief 18-chapter book. Jay Withgott and new co-author Matt Laposata present the latest coverage of environmental science and introduce new FAQ sections to address common student misconceptions.
Author	Wright, Richard and Boorse, Dorothy
Title	Environmental Science: Toward a Sustainable Future, Eleventh Edition
Publisher	Pearson
Publish Date	2011
Description	For introductory courses in Environmental Science, Environmental Studies, and Environmental Biology. By emphasizing the memorable themes of science, sustainability and stewardship, the Eleventh Edition of this popular textbook helps students understand the science behind environmental issues and what they can do to build a more sustainable future. This thorough revision features updated content, graphics, and photos, plus the addition of new co-author Dorothy Boorse. A wealth of effective new online resources is also available through the new MasteringEnvironmentalScience™ online assessment and tutorial system, including five intriguing Video Field Trips.