

Book Review

G. Tyler Miller and Scott E. Spoolman, Environmental Science 14th Edition. Brooks/Cole: Cengage Learning, 2013, 459 pp., ISBN: 13:978 1 133 10439 1.

The textbook entitled “Environmental Science, 14th Edition” is a comprehensive academic and general reading resource with an emphasis on fundamental understanding of how life on Earth has survived and thrived. The focus of this book is on sustainability. This book discusses multiple environmental problems and attempts to present potential solutions for each of them. The authors G. Tyler Miller and Scott E. Spoolman have many years of practical experience in the fields of science, which make them ideal candidates for the authorship on a textbook about Environmental Science. For students and practitioners of Environmental Science and its related fields and sub-fields, the book and its authors are household names. The text is highly colorful and graphics laden, which should appeal to the technological and visual preferences of the current generation of university students and general readers. Each chapter also contains a quote which helps to relate the gist of the chapter to the issues and aspects of modern human societies at large.

The book is a highly organized academic and general reading text. The textbook contains 17 chapters and each chapter begins with a core case study and key questions and concepts, which enables the reader to get a roadmap and overall picture of the chapter. The book contains 19 pages of Glossary and 25 pages of Index which make it easier for the reader to look up the meaning of any technical words quickly and easily. This book has both brief contents for quick browsing and detailed illustrated contents to cater to the needs of detail oriented readers. The authors Miller and Spoolman have given a sincere effort to include the most up-to-date issues of environmental science that include toxicology, air pollution, water pollution and energy. There is also a supplements section of 7 modules which provide a concise idea about measurement units, basic chemistry, maps, environmental data and data analysis. A Preface section for Instructors is also one of the notable characteristics of the text.

However, the book could include a chapter on emerging contaminants in water and runoff as well as in the air. The idea of smog is discussed but it could add some historic event that shook the world such as the “London Smog” in 1952. Regarding water pollution, the case of “Minamata Disease” in Japan could be discussed and analyzed. The book should also include in later editions a chapter on noise pollution and its environmental impacts, as it has become an important topic related to environment and human health. Another noticeable aspect of the text is that the examples of environmental issues and disasters included in the chapters focus mostly on the developed nations, with little focus on the disasters and environmental issues faced by developing nations.

There is a “Chapter Review Exercise” section followed by a “Critical Thinking” segment at the end of the book which provides a snapshot of each section. The exercise and thinking portions will allow students and general readers to test their newfound knowledge, and therefore sustain their curiosity and interest about contemporary environmental issues and problems. The book also provides links to online resources so that students and general readers alike can explore further. In addition to the “Core Case Study,” a chapter also contains additional case studies, e.g. Chapter 6 “The Human Population and Urbanization” and Chapter 13 “Energy” each contain 8 case studies, which highlight how the main concepts of the chapter work in practical settings, and a “Revisiting” section which serves as a brief summary for the Chapter. Chapter 4, Chapters 8 through 11, and Chapters 14 through 17 have an “Individuals Matters” section which highlights the individual contributions of researchers, activists, and corporate leaders to the topics studied in this book.

Overall, this book is heavily illustrated, and clearly explained with a good outline. This book is a must-read for any student or interested reader who needs comprehensive knowledge about environment science topics.

“Environmental Science, 14th Edition” is probably the most well known text book in Environmental Science for university level foundation students, and one of the most significant works in the field which introduces important environmental concepts and topics to general readers as well. The text book will be easy to follow for specialized and general readers alike, and has the potential to motivate readers to be concerned about environmental issues and problems. The book is highly recommended for university libraries, whether as a text for foundation courses, or the beginning text for degrees in environmental science. Although students from non-science disciplines may be a little apprehensive about reading this book, but once they begin to read through and understand it, they will find that this textbook makes a priceless addition to the university library.

Rahat Bari Tooheen
Assistant Professor,
CIU Business School (CIUBS),
Chittagong Independent University,
Chattogram, Bangladesh
Email: tooheen@ciu.edu.bd

Aminul Islam Chowdhury
Lecturer,
Department of Applied Chemistry and Chemical Engineering,
University of Chittagong,
Chattogram, Bangladesh