Written by a team of best-selling authors, BIOLGY: THE UNITY AND DIVERSITY OF LIFE, 14th Edition reveals the biological world in wondrous detail. Packed with eye-catching photos and images, this text shows and tells the fascinating story of life on Earth, and engages readers with hands-on activities that encourage critical thinking. Chapter opening Learning Roadmaps help you focus on the topics that matter most and section-ending Take Home Messages reinforce key concepts. Helpful in-text features include a running glossary, case studies, issue-related essays, linked concepts, self-test questions, data analysis problems, and more. Known for a clear, accessible style, BIOLGY: THE UNITY AND DIVERSITY OF LIFE, 14th Edition puts the living world of biology under a microscope for readers from all walks of life to analyze, understand, and enjoy! Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

This Study Guide both invites and requires students' active participation. And because it's organized to match sections in the text, it's very easy to use. As students respond to the questions, their understanding increases.

This book surveys the world's green plant diversity, from green algae through flowering plants, in a taxonomic and evolutionary context.

With its distinctive investigative approach to learning, this effective laboratory manual encourages students to become detectives of science. While teaching the basic materials and procedures important for all biology majors to learn, the authors also invite students to pose hypotheses, make predictions, conduct open-ended experiments, collect data, and then apply the results to new problems. The result of this "process of science" approach is that students learn to think creatively, just as scientists do. Laboratory exercises are divided into three categories: investigative, traditional, and observational.

How does an organism go from a tiny seed to a towering tree? How are seeds made in the first place? Follow the life journey of these living things from seed or spore to plant, and back again. Learn what it takes to burrow roots into the ground and extend up toward the sun, sprouting leaves, flowers, spores, or pollen along the way.

Get a close-up view of the life of a pumpkin.

The central theme of Green Plants is the astonishing diversity of forms found in the plant kingdom. The book is arranged according to generally accepted classification schemes, beginning with prokaryotic and eukaryotic algae and moving through mosses, liverworts, fern allies, ferns and gymnosperms to flowering plants. Copiously illustrated throughout, it provides a concise account of all algae and land plants, with information on topics from cellular structure to life cycles and reproduction. The authors include newly emerging information on features of plants known only as fossils. This new edition has been completely updated to reflect current views on the origin of the major plant groups.

Unit One Unifying Concepts in Biology; On the Unity and Diversity of Life; Methods and Organizing Concepts in Biology; Unit Two The Cellular Basis of Life; Atoms, Molecules, and Cell Substances; Cell Structure and Function: an Overview; Water, Membranes, and Cell Functioning; Energy Transformations in the Cell; Energy-Aquiring Pathways; Energy-Releasing Pathways; Unit Three The Ongoing Flow of Life; Cell Reproduction; Observable Patterns of Inheritance; Emergence of the Chromosomal Theory of Inheritance; The Rise of Molecular Genetics; From DNA to Proteins; How Genes Function; Controls Over Gene Expression; Human Genetics; Unit Four Plant Sustems and Their Control; Plant Cells, Tissues, and Sustems; Water, Solutes, and Plant Functioning; Plant Reproduction and Embryonic Development; Plant Growth and Development; Unit Five Animal Sustems and Their Control; Systems of Cells and Homeostasis; Integration and Control: Nervous Systems; Integration and control: Endocrine Systems; Reception and Motor Response; Circulation; Respiration; Digestion and Organic M etabolism; Regulation of Body Temperature and Body Fluids; Principles of Reproduction and Development; Human Reproduction and Development; Individuals, Populations, and Evolution; Origins and the Evolution of Life; Unit Seven Diversity: Evolutionary Force, Evolutionary Product; Viruses, Bacteria, and Protists; Fungi and Plants; Animal Diversity; Human Origins and Evolution; Unit Eight Ecology and Behavior; Population Ecology; Community Interactions; Ecosystems; The Biosphere; Human Impact on the Biosphere; Animal Behavior.
Biology 2e (2nd edition) is designed to cover the scope and sequence requirements of a typical two-semester biology course for science majors. The text provides comprehensive coverage of foundational research and core biology concepts through an evolutionary lens. Biology includes rich features that engage students in scientific inquiry, highlight careers in the biological sciences, and offer everyday applications. The book also includes various types of practice and homework questions that help students understand--and apply--key concepts. The 2nd edition has been revised to incorporate clearer, more current, and more dynamic explanations, while maintaining the same organization as the first edition. Art and illustrations have been substantially improved, and the textbook features additional assessments and related resources.

Concepts of Biology is designed for the single-semester introduction to biology course for non-science majors, which for many students is their only college-level science course. As such, this course represents an important opportunity for students to develop the necessary knowledge, tools, and skills to make informed decisions as they continue with their lives. Rather than being mired down with facts and vocabulary, the typical non-science major student needs information presented in a way that is easy to read and understand. Even more importantly, the content should be meaningful. Students do much better when they understand why biology is relevant to their everyday lives. For these reasons, Concepts of Biology is grounded on an evolutionary basis and includes exciting features that highlight careers in the biological sciences and everyday applications of the concepts at hand. We also strive to show the interconnectedness of topics within this extremely broad discipline. In order to meet the needs of today's instructors and students, we maintain the overall organization and coverage found in most syllabi for this course. A strength of Concepts of Biology is that instructors can customize the book, adapting it to the approach that works best in their classroom. Concepts of Biology also includes an innovative art program that incorporates critical thinking and clicker questions to help students understand--and apply--key concepts.

Reprints from various publications.

Environmental and specific diversity in the Chihuahuan desert in general, and in the Cuatro Ciénegas Basin in particular, has long been recognized as outstanding. This book provides a global ecological overview, together with in-depth studies of specific processes. The Chihuahuan desert is the warmest in North America, and has a complex geologic, climatic and biogeographical history, which affects today's distribution of vegetation and plants and generates complex phylogeographic patterns. The high number of endemic species reflects this complex set of traits. The modern distribution of environments, including aquatic and subaquatic systems, riparian environments, gypsum dunes and gypsum-rich soils, low levels of phosphorous and organic matter, and high salinity combined with an extreme climatic call for a range of adaptations. Plants are distributed in a patchy pattern based on punctual variations, and many of them respond to different resources and conditions with considerable morphological plasticity. In terms of physiological, morphological and ecological variability, cacti were identified as the most important group in specific environments like bajadas, characterized by high diversity values, while gymnosperms and gymnosperms of different phylogenies, including species with restricted distribution and endemics.

A comprehensive guide to full-time degree courses, institutions and towns in Britain.

Written by a team of best-selling authors, BIOLOGY: THE UNITY AND DIVERSITY OF LIFE, 14th Edition reveals the biological world in wondrous detail. Packed with eye-catching photos and images, this text engages students with applications and activities that encourage critical thinking. Chapter opening Learning Roadmaps help students focus on the topics that matter most and section-ending "Take Home Messages" reinforce key concepts. Helpful in-text features include a running glossary, case studies, issue-related essays, self-test questions, data analysis problems, and more. The accompanying MindTap for Biology is the most engaging and easiest to customize online solution in Biology. Known for a clear, accessible style, BIOLOGY: THE UNITY AND DIVERSITY OF LIFE, 14th Edition puts the living world of biology under a microscope for students to analyze, understand, and enjoy! Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

A skill-building edition of the classic story about the life cycle of a flower is told through the adventures of a tiny seed that floats across the sky, nestles in the ground and grows into the giant flower it was always meant to be. Simultaneous.

Introduction to Botany's comprehensive coverage captures readers' attention by showing them why plants are a fascinating and essential part of their everyday lives. The clear, concise text focuses on four major themes: plants and people, conservation biology, evolution, and biotechnology, and gives readers practical and relevant information about the world of botany. Thematic boxes throughout each chapter further highlight the relationship between plants and readers' lives. Nabors' clear and engaging writing style keeps students interested in the science without ever becoming encyclopedic. Plants & people, conservation biology, evolution, and biotechnology. For college instructors, students, and anyone interested in plant biology or botany.

This book was written to fill the need for a document to address the specifics of native revegetation that are not adequately covered by a guideline. It assists anyone in Alberta who has to plan native plant revegetation projects or carry out the revegetation. It provides specific information on native revegetation planning, information sources, final land-use considerations, salvaging or otherwise obtaining native plant materials, field operations (site preparation, seeding, planting, ensuring establishment success), management, monitoring, and assessment. Appendices include a glossary, a list of Websites & contacts for further information, a methodology for calculating seeding rates, and a table showing native plant species & their characteristics.
This comparative, concepts-based text provides an introduction to biology. It features: expanded coverage of evolution; new chapters on biomes and the origins and diversity of life; a unit on behaviour and ecology which includes coverage of ecosystems; essays on bioethnic connections which discuss ethical questions arising due to improved biotechnology; and a discussion of chemistry.

The loss of the earth’s biological diversity is widely recognized as a critical environmental problem. That loss is most severe in developing countries, where the conditions of human existence are most difficult. Conserving Biodiversity presents an agenda for research that can provide information to formulate policy and design conservation programs in the Third World. The book includes discussions of research needs in the biological sciences as well as economics and anthropology, areas of critical importance to conservation and sustainable development. Although specifically directed toward development agencies, non-governmental organizations, and decisionmakers in developing nations, this volume should be of interest to all who are involved in the conservation of biological diversity.

Life Cycle Assessment (LCA) is widely used for environmental planning and decision-making. However, land use and its consequences for ecosystem quality still are not adequately taken into account in LCA. Land use is an economic activity that generates lar

Indexes journal articles in ecology and environmental science. Nearly 700 journals are indexed in full or in part, and the database indexes literature published from 1982 to the present. Coverage includes habitats, food chains, erosion, land reclamation, resource and ecosystems management, modeling, climate, water resources, soil, and pollution.

Contributed articles.

Lab manual for biology labs on-line evolution lab/Robert Desharnais, Jeffrey Bell, Michael A. Palladino.