

General Biology I Focused

Fully integrating science and social issues, HUMAN GENETICS AND SOCIETY, First Edition, combines a focus on basic concepts and processes of human genetics with a Case Study approach that explores the issues that result from the flood of products, services, and techniques developed from genetic knowledge. It challenges students to think critically in their personal and professional decisions with regard to genetics. Written for nonscience majors studying human genetics/heredity, the text presumes no prior biology instruction. It enables students to learn about genetics as they relate to their world--as opposed to getting bogged down in complicated scientific and quantitative details. Offering a wide array of examples, case studies, and applications to personal and social concerns, the text delivers a strong focus on the societal issues of genetics. Its emphasis on relevant issues equips students with the tools and knowledge to make informed decisions related to their health as well as public policy. Students also learn how to recognize genetic disorders and become familiar with their causes and patterns of inheritance. Less rigorous than texts designed for science majors, HUMAN GENETICS AND SOCIETY, First Edition, is conceptually driven and provides case studies and readings that focus on issues. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

General Biology Lab II - Focus on Biodiversity Bi 186 Campbell Biology in Focus, Loose-Leaf Edition Pearson

NOTE: This edition features the same content as the traditional text in a convenient, three-hole-punched, loose-leaf version. Books a la Carte also offer a great value--this format costs significantly less than a new textbook. The Eleventh Edition of the best-selling text Campbell BIOLOGY sets you on the path to success in biology through its clear and engaging narrative, superior skills instruction, and innovative use of art, photos, and fully integrated media resources to enhance teaching and learning. To engage you in developing a deeper understanding of biology, the Eleventh Edition challenges you to apply knowledge and skills to a variety of NEW! hands-on activities and exercises in the text and online. NEW! Problem-Solving Exercises challenge you to apply scientific skills and interpret data in the context of solving a real-world problem. NEW! Visualizing Figures and Visual Skills Questions provide practice interpreting and creating visual representations in biology. NEW! Content updates throughout the text reflect rapidly evolving research in the fields of genomics, gene editing technology (CRISPR), microbiomes, the impacts of climate change across the biological hierarchy, and more. Significant revisions have been made to Unit 8, Ecology, including a deeper integration of evolutionary principles. NEW! A virtual layer to the print text incorporates media references into the printed text to direct you towards content in the Study Area and eText that will help you prepare for class and succeed in exams--Videos, Animations, Get Ready for This Chapter, Figure Walkthroughs, Vocabulary Self-Quizzes, Practice Tests, MP3 Tutors, and Interviews. (Coming summer 2017). NEW! QR codes and URLs within the Chapter Review provide easy access to Vocabulary Self-Quizzes and Practice Tests for each chapter that can be used on smartphones, tablets, and computers.

Student interest in plants and botany generally declines around the fifth grade and continues to decrease throughout the middle and high school years. New lectures and lab exercises for a mixed-majors general biology course that focused on plant-people relationships were developed. These activities were hypothesized to improve student attitude and awareness of plants and to increase their motivation to learn more about them. Students were surveyed regarding their interest in plants and regarding their knowledge of local woody plant species both pretreatment and post-treatment. During the non-treatment unit, students were instructed using the traditional lecture method and participated in lab exercises on plant structure. At the end of the unit, a standard exam was used to assess their knowledge. Topics examined during the treatment unit were medicinal plants and teas and relationships amongst plants, soil, water and people. For an introduction to ecology, plant examples were used to illustrate ecological principles wherever possible. The lecture method combined with two short assessments and two out-of-class assignments focusing on these topics. In lab, students completed a drawing exercise, created a woody plant portfolio, and participated in exercises on medicinal properties of plants, and tea brewing and tasting. There was no change in student interest in plant-related topics over the course of this project. Student ability to identify common woody plants and vines significantly improved after developing a plant portfolio. Grades for post-treatment assessment were higher than non-treatment assessment. Instructor motivation to teach botanical topics was low-to-medium at the beginning but was high at the end of this project. A new botany course intended for non-science majors has been proposed using many of the materials and tools from this project. Throughout North America, non-native wild pigs have become an ecologically and economically destructive invasive species. Though they are regarded as a popular game species by some, provide economic benefits to others, and are even engrained into societal heritage in some areas, wild pigs are responsible for an extraordinary amount of damage in both natural and anthropogenic systems throughout North America. As the density and range of wild pig habitat have substantially increased over the last several decades, the magnitude and diversity of their negative impacts are not yet fully realized or quantified. With various conflicts continually emerging, wild pig management is difficult and expensive to achieve. As a result, wild pigs represent one of the greatest wildlife management challenges North America faces in the 21st century. Invasive Wild Pigs in North America: Ecology, Impacts, and Management addresses all aspects of wild pig biology, ecology, damage, and management in a single comprehensive volume. It assimilates and organizes information on the most destructive introduced vertebrate species in the United States, establishing a foundation from which managers, researchers, policy makers, and other stakeholders can build upon into the future. The book provides comprehensive coverage of wild pig biology and ecology, techniques for management and research, and regional chapters. It is an asset to readers interested in wild pigs, the resources they impact, and how to mitigate those impacts, and establishes a vision of the future of wild pigs in North America. Features: Compiles valuable knowledge for a broad audience including wild pig managers, researchers, adversaries, and enthusiasts from across North America Addresses taxonomy, morphology, genetics, physiology, spatial ecology, population dynamics, diseases and parasites, and the naturalized niche of wild pigs Includes chapters on damage to resources, management, research methods, human dimensions and education, and policy and legislation Contains full color images and case studies of interesting and informative situations being created by wild pigs throughout North America Includes a chapter on wild pigs at the wildland-urban interface, a more recent and especially challenging issue

With increased attention paid to resilience, teamwork, and professionalism, the fourth edition of FOCUS ON COLLEGE SUCCESS recognizes the varied experiences of today's students and guides them to be more motivated and focused. The research-based approach builds a solid foundation, allowing students see the relevancy of this course to their lives. By helping students develop

realistic expectations of what it takes to learn, FOCUS ON COLLEGE SUCCESS motivates and encourages students with direct applications and immediate results. Written by Constance Staley, one of the best-known names in the field of motivation, this text increases the credibility of the college success course by providing tools that help students succeed and thereby improve institutional retention rates. Starting with the use of the FOCUS Challenge Cases that introduce each chapter, FOCUS ON COLLEGE SUCCESS strikes a personal and informal conversation with readers--directly connecting with them and drawing them into text discussions. In a recent survey of students using FOCUS, 97% would recommend that their professor use this book again with next year's first-year students. Many students today are over-optionalized and over-obligated. FOCUS ON COLLEGE SUCCESS addresses those issues head-on, creating teachable moments—and concrete results—in every class period. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Arthritis is an inflammatory disease affecting the joints and surrounding tissues. As the disease develops it can cause severe pain and disability. The two most common types of arthritis are osteoarthritis and rheumatoid arthritis. Osteoarthritis (OA) is a painful, degenerative joint disease that often involves the hips, knees, neck, lower back, or the small joints of the hands. Treatment usually includes analgesics, topical creams, or non-steroidal anti-inflammatory medications (known as NSAIDs); appropriate exercises or physical therapy; joint splinting; or joint replacement surgery for seriously damaged larger joints, such as the knee or hip.

Rheumatoid arthritis (RA) is an autoimmune inflammatory disease that usually involves the hands, wrists, elbows, shoulders, knees, feet, or ankles. Focus on Arthritis Research brings together leading research in the field.

Revised edition of: Campbell biology in focus / Lisa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V. Minorsky, Jane B. Reece. Second edition. [2016].

A concise and engaging biology text for biology majors, Understanding Biology partnered with Connect emphasizes fundamentals concepts to help students better understand biology and focus on developing scientific skills. This approach utilizes the Vision and Change guidelines of Core Concepts and Core Skills while helping students begin the process of becoming a scientist. Condensed chapters are centered on a learning path that serves to connect concepts within a chapter. The learning path begins with learning outcomes, which help students understand the core skills and concepts they should develop. Inquiry and Analysis cases help students build scientific skills, while scaffold end of chapter assessment ensures they not only grasp core concepts, but can also critically analyze and apply what they've learned. "Connecting the Concepts," a synthesis feature that ends every part, helps students understand the connections between biological concepts, thus helping them "see" the big picture.

James Valentine's camera has recorded spectacular images of the state's remote wilderness places. Dr. D. Bruce Means' captions and main text on Florida's rich biodiversity make this much more than a picture book.

This book leads you through the process of designing a learning-centered course. It is written as a "how-to" handbook, providing step-by-step guidance on creating a pathway to student learning, including 26 workboxes (also available free online) that lead you through each element of the course design process and promote a rich reflection process akin to being in a workshop setting. The authors prompt you to (1) consider the distinctive characteristics of your students; (2) clearly articulate your course learning goals; (3) create aligned summative assessments; (4) identify the specific knowledge, skills, and attitudes students will need in order to be successful; (5) craft effective learning experiences, informed by the well-documented research on how people learn; and (6) incorporate formative assessment to ensure you and your students are staying on track. Completion of the sequence of worksheets leads to a poster as a visual display of your course design. This graphic depiction of your course ties the components together, provides a clear map of action for teaching your course, for modifying as you evaluate the success of particular strategies or want to introduce new concepts, and for developing your syllabus. A rubric for evaluating course posters is included. For faculty developers, this book provides a proven and ready-made resource and text around which to design or redesign learner-centered course design workshops or multi-day course design retreats, replicating or modifying the renowned workshop that the authors have developed at the Air Force Academy for both faculty new to teaching and those with many years of teaching experience under their belt.

Devised in the 1940s by the biologist C. H. Waddington, the epigenetic landscape is a metaphor for how gene regulation modulates cellular development. As a scientific model, it fell out of use in the late 1960s but returned at the beginning of the twenty-first century with the advent of big-data genomic research because of its utility among scientists across the life sciences to think more creatively about and to discuss genetics. In *Epigenetic Landscapes* Susan Merrill Squier follows the model's cultural trail, from its first visualization by the artist John Piper to its use beyond science. Squier examines three cases in which the metaphor has been imaginatively deployed to illustrate complex systems that link scientific and cultural practices: graphic medicine, landscape architecture, and bioArt. Challenging reductive understandings of epigenetics, Squier boldly reclaims the broader significance of the epigenetic landscape as a figure at the nexus of art, design, and science.

In 900 text pages, Campbell Biology in Focus emphasizes the essential content and scientific skills needed for success in the college introductory course for biology majors. Each unit streamlines content to best fit the needs of instructors and students, based on surveys, curriculum initiatives, reviews, discussions with hundreds of biology professors, and careful analyses of course syllabi. Every chapter includes a Scientific Skills Exercise that builds skills in graphing, interpreting data, experimental design, and math—skills biology majors need in order to succeed in their upper-level courses. This briefer book upholds the Campbell hallmark standards of accuracy, clarity, and pedagogical innovation.

NOTE: This loose-leaf, three-hole punched version of the textbook gives you the flexibility to take only what you need to class and add your own notes -- all at an affordable price. For loose-leaf editions that include MyLab(tm) or Mastering(tm), several versions may exist for each title and registrations are not transferable. You may need a Course ID, provided by your instructor, to register for and use MyLab or Mastering products. For introductory biology course for science majors Focus. Practice. Engage. Built unit-by-unit, Campbell Biology in Focus achieves a balance between breadth and depth of concepts to move students away from memorization. Streamlined content enables students to prioritize essential biology content, concepts, and scientific skills that are needed to develop conceptual understanding and an ability to apply their knowledge in future courses. Every unit takes an approach to streamlining the material to best fit the needs of instructors and students, based on reviews of over 1,000 syllabi from across the country, surveys, curriculum initiatives, reviews, discussions with hundreds of biology professors, and the Vision and Change in Undergraduate Biology Education report. Maintaining the Campbell hallmark standards of accuracy, clarity, and pedagogical innovation, the 3rd Edition builds on this foundation to help students make connections across chapters, interpret real data, and synthesize their knowledge. The new edition integrates new, key scientific findings throughout and offers more than 450

videos and animations in Mastering Biology and embedded in the new Pearson eText to help students actively learn, retain tough course concepts, and successfully engage with their studies and assessments. Also available with Mastering Biology By combining trusted author content with digital tools and a flexible platform, Mastering personalizes the learning experience and improves results for each student. Integrate dynamic content and tools with Mastering Biology and enable students to practice, build skills, and apply their knowledge. Built for, and directly tied to the text, Mastering Biology enables an extension of learning, allowing students a platform to practice, learn, and apply outside of the classroom. Note: You are purchasing a standalone product; Mastering Biology does not come packaged with this content. Students, if interested in purchasing this title with Mastering Biology ask your instructor for the correct package ISBN and Course ID. Instructors, contact your Pearson representative for more information. If you would like to purchase both the loose-leaf version of the text and Mastering Biology search for: 0134988361 / 9780134988368 Campbell Biology in Focus, Loose-Leaf Plus Mastering Biology with Pearson eText -- Access Card Package Package consists of: 013489572X / 9780134895727 Campbell Biology in Focus, Loose-Leaf Edition 013487451X / 9780134874517 Mastering Biology with Pearson eText -- ValuePack Access Card -- for Campbell Biology in Focus

This book presents programmatic texts on biosemiotics, written collectively by world leading scholars in the field (Deacon, Emmeche, Favareau, Hoffmeyer, Kull, Markoš, Pattee, Stjernfelt). In addition, the book includes chapters which focus closely on semiotic case studies (Bruni, Kotov, Maran, Neuman, Turovski). According to the central thesis of biosemiotics, sign processes characterise all living systems and the very nature of life, and their diverse phenomena can be best explained via the dynamics and typology of sign relations. The authors are therefore presenting a deeper view on biological evolution, intentionality of organisms, the role of communication in the living world and the nature of sign systems - all topics which are described in this volume. This has important consequences on the methodology and epistemology of biology and study of life phenomena in general, which the authors aim to help the reader better understand.

This cutting-edge title is one of the first devoted entirely to the issue of carbofuran and wildlife mortality. It features a compilation of international contributions from policy-makers, researchers, conservationists and forensic practitioners and provides a summary of the history and mode of action of carbofuran, and its current global use. It covers wildlife mortality stemming from legal and illegal uses to this point, outlines wildlife rehabilitation, forensic and conservation approaches, and discuss global trends in responding to the wildlife mortality. The subject of carbofuran is very timely because of recent parallel discussions to withdraw and reinstate the insecticide in different parts of the world. Incidences of intentional and unintentional wildlife poisonings using carbofuran are undeniably on the rise, especially in Africa and India and gatherings of stakeholders are being organized and convened on a global basis. There is still a need to consolidate information on the different experiences and approaches taken by stakeholders. Carbofuran and Wildlife Poisoning is a comprehensive overview of global wildlife mortality, forensic developments and monitoring techniques and is a definitive reference on the subject. It comprises of historical and current perspectives, contributions from key stakeholders in the issue of global wildlife poisonings with carbofuran, people on the ground who deal with the immediate and long-term ramifications to wildlife, those who have proposed or are working towards mitigative measures and solutions, those in contact with intentional or unintentional 'offenders', those who have adapted and developed forensic methodology and are gathering evidence. "Carbofuran and Wildlife Poisoning is a collection of meticulously researched papers from all around the world that provide shocking facts about the effects of a deadly insecticide on wildlife. The book discusses the hundreds of thousands of animals, from elephants to fish, that are poisoned each year, the efforts to rehabilitate those which have been rescued, and the often heroic efforts to ban or reduce the use of the deadly chemical. This book is a must for all those concerned with the problem."

—Jane Goodall, PhD, DBE, Founder - the Jane Goodall Institute & UN Messenger of Peace, October 2011

Revised edition of: Ecology and classification of North American freshwater invertebrates / edited by James H. Thorp and Alan P. Covich. Third edition. 2010.

INTRODUCTION TO MARINE BIOLOGY distinguishes itself from other texts at this introductory level by taking an ecological approach to the study of marine biology, by providing succinct coverage of key topics, and through the use of the best illustrations and photos currently available. In this edition two co-authors have joined George Karleskint James Small from Rollins College in Winter Park, Florida, and Richard Turner from the Florida Institute of Technology. Their experience in coastal environments nicely compliments Karleskint's clear, concise student-friendly writing style. Users will also discover that the level of the text has been broadened with additional coverage of plant, microbial, planktonic, and animal biology. In support of this emphasis, new "In Perspective" summary tables have been added to each of the marine organism chapters to provide a summary of important ecological and biological aspects of various marine organisms. Even with this broadened emphasis, this edition of INTRODUCTION TO MARINE BIOLOGY remains exceptionally readable. The textual material has been broken into small paragraph sections with more headings for ease of navigation, and "In Summary" statements have been added to the end of each main heading within the chapter, making it easy for students to check their understanding before reaching the end of the chapter. Furthermore, the authors have added more words to the glossary, many new illustrations, and over one hundred new photos. This second edition also boasts an increased "ecological focus" through the addition of discussions on "ecological roles and relationships."

The Fundamentals of Scientific Research: An Introductory Laboratory Manual is a laboratory manual geared towards first semester undergraduates enrolled in general biology courses focusing on cell biology. This laboratory curriculum centers on studying a single organism throughout the entire semester – *Serratia marcescens*, or *S. marcescens*, a bacterium unique in its production of the red pigment prodigiosin. The manual separates the laboratory course into two separate modules. The first module familiarizes students with the organism and lab equipment by performing growth curves, Lowry protein assays, quantifying prodigiosin and ATP production, and by performing complementation studies to understand the biochemical pathway responsible for prodigiosin production. Students learn to use Microsoft Excel to prepare and present data in graphical format, and how to calculate their data into meaningful numbers that can be compared across experiments. The second module requires that the students employ UV mutagenesis to generate hyper-pigmented mutants of *S. marcescens* for further characterization. Students use experimental data and protocols learned in the first module to help them develop their own hypotheses, experimental protocols, and to analyze their own data. Before each lab, students are required to answer questions designed to probe their understanding of required pre-laboratory reading materials. Questions also guide the students through the development of hypotheses and predictions. Following each laboratory, students then answer a series of post-laboratory questions to guide them through the presentation and analysis of their data, and how to place their data into the context of primary literature. Students are

also asked to review their initial hypotheses and predictions to determine if their conclusions are supportive. A formal laboratory report is also to be completed after each module, in a format similar to that of primary scientific literature. The Fundamentals of Scientific Research: An Introductory Laboratory Manual is an invaluable resource to undergraduates majoring in the life sciences. This monograph sketches out a broad spectrum of problems (from evolution and metabolism to morphogenesis and biogeographical dynamics) whose solution has been impacted by mathematical models. Each of the selected examples has led to the recognition—and set direction to further study—of certain fundamental but unintuitive properties of biological systems, such as the making and breaking of specific symmetries that underlie morphogenesis. Whether they are long-established or only recently accepted, these models are selected for being thought-provoking and illuminating both the achievements and the gaps in our current understanding of the given area of biology. The selection of models is also meant to bring to the fore the existing degree of unity in the quantitative approach to diverse general-biological questions and in the systems-level properties that are discovered across the levels of biological organization. It is the thesis of this book that further cultivation of such unity is a way forward as we progress toward a general theory of living matter. This is an ideal book for students (in the broadest sense) of biology who wish to learn from this attempt to present the exemplary models, their methodological lessons, and the outline of a unified theory of living matter that is now beginning to emerge. In addition to a doctoral student preparing for quantitative biology research, this reader could also be an interdisciplinary scientist transitioning to biology. The latter—for example, a physicist or an engineer—may be comfortable with the mathematical apparatus and prepared to quickly enter the intended area of work, but desires a broader foundation in biology from the quantitative perspective.

The last quarter of the 20th century saw major scientific revolutions in genetics and computer technology. This book reflects this massive surge in our understanding of the molecular foundations of genetics. In order to understand where these technological advances are heading, there needs to be a basic understanding of how living organisms function at a molecular level. Molecular Biology, 2e, effectively introduces basic concepts followed by more specific applications as the text evolves. With the addition of Cell Press articles, the content is tied to current topics in the scientific community. NEW: "Focus On Relevant Research" sections integrate primary literature from Cell Press and focus on helping the student learn how to read and understand research to prepare them for the scientific world. NEW: Academic Cell Study Guide features all articles from the text with concurrent case studies to help students build foundations in the content while allowing them to make the appropriate connections to the text. NEW: Animations provided include topics in protein purification, transcription, splicing reactions, cell division and DNA replication and SDS-PAGE Updated chapters on Genomics and Systems Biology, Proteomics, Bacterial Genetics and Molecular Evolution and RNA Updated ancillary package includes flashcards, online self quizzing, references with links to outside content and PowerPoint slides with images. Fully revised art program

The Biology and Identification of the Coccidia (Apicomplexa) of Turtles of the World is an invaluable resource for researchers in protozoology, coccidia, and parasitology, veterinary sciences, animal sciences, zoology, and biology. This first-of-its-kind work offers a taxonomic guide to apicomplexan parasites of turtles that enables easy parasite identification, with a summary of virtually everything known about the biology of each known parasite species. It is an important documentation of this specific area, useful to a broad base of readers, including researchers in biology, parasitology, animal husbandry, diseases of wild and domestic animals, veterinary medicine, and faculty members in universities with graduate programs in these areas. There are about 330 turtle species on Earth; many are endangered, a growing number of species are kept as pets, and some are still used as food by humans. Turtles, like other vertebrate animals have many different kinds of parasites (viruses, bacteria, protozoa, worms, arthropods, and others). Coccidiosis in turtles has prevented large-scale turtle breeding, and represents a serious problem in need of control. This succinct and highly focused book will aid in that effort. Offers line drawings and photomicrographs of each parasite from each hosts species Provides methods of identification and treatment Presents a complete historical rendition of all known publications on coccidia (and their closest relatives) from all turtle species on Earth, and evaluates the scientific and scholarly merit of each Provides a complete species analysis of the known biology of every coccidian described from turtles Reviews the most current taxonomy of turtles and their phylogenetic relationships needed to help assess host-specificity and evaluate what little cross-transmission work is available

" On April 30, 1975, Saigon and the government of South Vietnam fell to the communist regime of North Vietnam, ending -- for American military forces -- exactly twenty-five year of courageous but unavailing struggle. This is not the story of how America became embroiled in a conflict in a small country half-way around the globe, nor of why our armed forces remained there so long after the futility of our efforts became obvious to many. It is the story of what went wrong there militarily, and why. The author is a professional soldier who experienced the Vietnam war in the field and in the highest command echelons. General Palmer's insights into the key events and decisions that shaped America's military role in Vietnam are uncommonly perceptive. America's most serious error, he believes, was committing its armed forces to a war in which neither political nor military goals were ever fully articulated by our civilian leaders. Our armed forces, lacking clear objectives, failed to develop an appropriate strategy, instead relinquishing the offensive to Hanoi. Yet an achievable strategy could have been devised, Palmer believes. Moreover, our South Vietnamese allies could have been bolstered by appropriate aid but were instead overwhelmed by the massive American military presence. Compounding these errors were the flawed civilian and military chains of command. The result was defeat for America and disaster for South Vietnam. General Palmer presents here an insider's history of the war and an astute critique of America's military strengths and successes as well as its weaknesses and failures.

Mariëlle Hoefnagels' passion as a classroom instructor is evident in Biology: Concepts and Investigations, an introductory biology textbook written to explain the general concepts of biology at a level of detail that allows students to understand concepts rather than memorize details. New digital resources, upgraded PowerPoint presentations, tutorial animations based on textbook art, upgraded Connect question banks, and adaptive technologies like SmartBook with Learning Resources capitalize on the power of technology to enhance student understanding. Key goals of the book are to: -help the student connect the concepts in the book to their everyday lives -show connections between ideas within the chapter and to material they have already studied -teach introductory students how to be more active learners

This lab manual guides students through practical experiments that demonstrate the concepts of Biochemistry, Cell Biology, Molecular Biology, Evolution and Ecology. Lab activities are focused on learning objectives and understanding key concepts using accessible materials and modeling.

Taken from the earlier book *Priceless Florida* (and modified for a stand-alone book), this volume discusses Florida's wetlands, including interior wetlands, seepage wetlands, marshes, flowing-water swamps, beaches and marine marshes, and mangrove swamps.

"A strikingly original . . . collection of essays, which places the work and broad intellectual interests of Lynne Margulis in a variety of contexts." —Stacy Alaimo, author of *Exposed: Environmental Politics and Pleasures in Posthuman Times*

Exploring the broad implications of evolutionary theorist Lynn Margulis's work, this collection brings together specialists across a range of disciplines, from paleontology, molecular biology, evolutionary theory, and geobiology to developmental systems theory, archaeology, history of science, cultural science studies, and literature and science. Addressing the multiple themes that animated Margulis's science, the essays within take up, variously, astrobiology and the origin of life, ecology and symbiosis from the microbial to the planetary scale, the coupled interactions of earthly environments and evolving life in Gaia theory and earth system science, and the connections of these newer scientific ideas to cultural and creative productions. "Altogether, *Earth, Life, and System* offers a series of often fascinating, always stimulating . . . invariably enriching essays in an incisive and unruly science and its existential repercussions. It is a fitting tribute to one of modern science's most generative and productive independent spirits, a gadfly like Socrates whose ultimate concern was to ensure that enquiry and debate were never stifled by received opinion and 'normal' expectations." —The British Society for Literature and Science

"A vital contribution to interdisciplinary knowledge about life, evolution, and the planetary imaginary." —Tyler Volk, award-winning author of *Quarks to Culture*

"Contributors include biologists, philosophers, historians, and even Margulis's son, a science writer who sets the tone for the rest of the text in an intimate first chapter about his mother. Clarke's sought-after interdisciplinarity shines in the finished product." —Isis Review

Taken from the earlier book *Priceless Florida* (and modified for a stand-alone book), this volume discusses the well-drained areas of Florida, including high pine grasslands, flatwoods and prairies, interior scrub, hardwood hammocks, rocklands and caves, and beach dunes.

Designed for the introductory biology student, this book is organized into comprehensive Cycles of Study that immerse students into Biochemistry, Cellular Biology, Molecular Biology, Evolution, Ecology, and Organismal Biology. Cycles of Study are divided into short, focused sections that correspond to learning objectives. Key concepts are contextualized and integrated and revisited repeatedly throughout the book. Conversational in tone and utilizing Socratic questions to engage students *Integrated General Biology and Skills for Success in Science* presents biology content in an approachable way, where core ideas are explored deeply, and mastery is attainable.

Developing Learner-Centered Teaching offers a step-by-step plan for transforming any course from teacher-centered to the more engaging learner-centered model. Filled with self-assessments and worksheets that are based on each of the five practices identified in Maryellen Weimer's *Learner-Centered Teaching*, this groundbreaking book gives instructors, faculty developers, and instructional designers a practical and effective resource for putting the learner-centered model into action.

Science competitions test a student's level of knowledge, power of scientific reasoning, and analytical thinking outside of the regular school curriculum. A systematic approach and smart study regimen are both required to get good results in science competitions. In this book, you will find many tips and tricks for how to study and prepare for science olympiads. Moreover, you will learn how to:

- boost your motivation
- cope with failures and anxiety before the tests
- defeat procrastination
- manage your time
- memorize information quicker and more effectively
- organize your study material
- read a science textbook
- plan your study schedule
- develop practical skills
- get into and survive in the lab.

Furthermore, you will find essential test-taking strategies for tackling the olympiad exams and example-based tips on how to develop critical thinking and problem solving skills.

THE HOEFNAGELS STORY... The second edition of *Biology: The Essentials* epitomizes what the market has come to recognize as Mariëlle Hoefnagels' distinct and student-friendly writing-style. Mariëlle presents up-to-date information through "What's the Point?", "Why We Care", and "Burning Questions"—pedagogical tools designed to demonstrate to readers, and her own students, that biology is everywhere. *Biology: The Essentials, 2nd Edition* offers a broader and more conceptual introduction to biology, simplifying the more complex biological content to the essential elements that students need to act as framework for the details. Mariëlle Hoefnagels is dedicated to helping students find the relevancy of biology and science in their everyday lives. A recipient of the University of Oklahoma General Education Teaching Award and the Longmire Prize (the Teaching Scholars Award from the College of Arts and Sciences), Mariëlle has been engaging, educating, and inspiring students since 1997. She believes that the right tools can make all of the difference in reaching non-majors students. Because of this, the content in this textbook is deeply integrated with the digital tools in Connect and Mariëlle has worked hard to create Connect questions and activities that go beyond simply memorizing vocabulary and facts. Static images are brought to life through animated tutorials, specifically designed to guide students through tough topics. Whether in class or at home, *Biology: The Essentials, 2nd Edition with Connect Plus* provides all of the resources a student needs to succeed in biology.

Thorp and Covich's *Freshwater Invertebrates: Keys to Nearctic Fauna, Fourth Edition* presents a comprehensive revision and expansion of this trusted professional reference manual and educational textbook—from a single North American tome into a developing multivolume series covering inland water invertebrates of the world. Readers familiar with the first three editions will welcome this new volume. The series, now entitled *Thorp and Covich's Freshwater Invertebrates*, (edited by J.H. Thorp), began with *Volume I: Ecology and General Biology*, (edited by J.H. Thorp and D.C. Rogers). It now continues in *Volume II* with taxonomic coverage of inland water invertebrates of the Nearctic zoogeographic region. As in previous editions, all volumes of the fourth edition are designed for multiple uses and levels of expertise by professionals in universities, government agencies, and private

companies, as well as by undergraduate and graduate students. Features zoogeographic coverage for all of North America, south to the general area of the Tropic of Cancer, and Greenland and Bermuda Provides keys to families of freshwater insects Provides keys to all other inland water invertebrates at the taxonomic level appropriate for the current scientific knowledge Includes multiple taxonomic keys in each chapter that progress from higher to lower taxonomic levels, thereby allowing users to work up to their level of need and expertise Presents additional material in each chapter on group introduction, limitations to the keys, terminology and morphology, material preparation and preservation, and references

The scientific achievements and forgotten legacy of a major Austrian research institute, from its founding in 1902 to its wartime destruction in 1945. The Biologische Versuchsanstalt was founded in Vienna in 1902 with the explicit goal to foster the quantification, mathematization, and theory formation of the biological sciences. Three biologists from affluent Viennese Jewish families—Hans Przibram, Wilhelm Figdor, and Leopold von Portheim—founded, financed, and nurtured the institute, overseeing its development into one of the most advanced biological research institutes of the time. And yet today its accomplishments are nearly forgotten. In 1938, the founders and other members were denied access to the institute by the Nazis and were forced into exile or deported to concentration camps. The building itself was destroyed by fire in April 1945. This book rescues the legacy of the “Vivarium” (as the Institute was often called), describing both its scientific achievements and its place in history. The book covers the Viennese sociocultural context at the time of the Vivarium's founding, and the scientific zeitgeist that shaped its investigations. It discusses the institute's departments and their research topics, and describes two examples that had scientific and international ramifications: the early work of Karl von Frisch, who in 1973 won the Nobel Prize in Physiology or Medicine; and the connection to Cold Spring Harbor Laboratory in New York. Contributors Heiner Fangerau, Johannes Feichtinger, Georg Gaugusch, Manfred D. Laubichler, Cheryl A. Logan, Gerd B. Müller, Tania Munz, Kärin Nickelsen, Christian Reiß, Kate E. Sohasky, Heiko Stoff, Klaus Taschwer

Biology: Concepts & Connections, Fifth Edition invites students into the world of biology with a new revision of this best-selling text. It is known for scientific accuracy and currency; a modular presentation that helps students to focus on the main concepts; and art that teaches better than any other book. The fifth edition builds upon this success with new features that help students synthesize and connect important topics such as Connecting the Concepts exercises and Key Concepts quizzes; and a variety of tools to help instructors enliven their lectures like our exclusive video clips from Discovery Channel.

Written by international experts, *The Biology and Fisheries of the Slipper Lobster* provides comprehensive coverage of the known biology, ecology, behavior, physiology, evolutionary history, and genetics of the numerous species in the family Scyllaridae. It covers fishing methods and regulations, size and composition of catches, fisheries management, and distribution of those particular species that are targeted species or by-products of other fisheries. The book takes a comparative approach to understanding fisheries in different regions of the world and examines management plans that have failed and those that have succeeded.

[Copyright: 9719717b50a41a61676114a1212e1b27](#)