

Burdge Chemistry 2nd Edition

Some printings include access code card, "Mastering Chemistry."

"The fourteenth edition continues a long tradition of providing a firm foundation in the concepts of chemical principles while instilling an appreciation of the important role chemistry plays in our daily lives. We believe that it is our responsibility to assist both instructors and students in their pursuit of this goal by presenting a broad range of chemical topics in a logical format. At all times, we strive to illustrate principles with applicable examples whenever possible"--

The Atoms First approach provides a consistent and logical method for teaching general chemistry. This approach starts with the fundamental building block of matter, the atom, and uses it as the stepping stone to understanding more complex chemistry topics. Once mastery of the nature of atoms and electrons is achieved, the formation and properties of compounds are developed. Only after sufficient background to fully engage in topics such as stoichiometry, kinetics, equilibrium, and thermodynamics. Thus, the Atoms First approach empowers instructors to present the most complete and compelling story of general chemistry. Far from a simple re-ordering of topics, this is a book that will truly meet the needs of the growing atoms-first market. The third edition continues to build on previous editions. Changes to this edition include specific refinements intended to augment the student-centered pedagogical features that continue to make this book effective and popular both with professors, and with their students.

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Swing Along

A Modern Approach to Classical Theorems of Advanced Calculus

Introduction to Chemistry

Introductory Chemistry

Nature of Science in General Chemistry Textbooks

Accounting Information for Business Decisions is a business-focused introduction to Accounting for all students - not just those intending to be Accounting majors. Lead students through the real-world business cycle and how accounting information informs decision-making. Departing from the traditional approach taken by other introductory accounting textbooks, students apply both managerial and financial approaches within the topics examined in each chapter, to see the direct impact that Managerial Accounting decisions make on the Financial Accounting processes (and vice versa). The conversational writing engages students in the theoretical content and how it applies to contemporary real-world scenarios. Students follow a retail coffee business in the relatable Cafe Revive running case study integrated into every chapter, to learn about applying accounting issues in the real world. Premium online teaching and learning tools are available on the MindTap platform. Learn more about the online tools cengage.com.au/mindtap

"Jumping into C++ covers every step of the programming process, including : * getting the tools you need to program and how to use them * basic language features like variables, loops and functions * how to go from an idea to code * a clear, understandable explanation of pointers * strings, file IO, arrays, references * classes, object oriented programming, and advanced class design * data structures and the standard template library (STL). Key concepts are reinforced with quizzes and over 75 practice problems. You'll also get over 70 sample source code files to use or adapt. [...]" **(**extrait du résumé de quatrième de couverture).

This book uses elementary versions of modern methods found in sophisticated mathematics to discuss portions of "advanced calculus" in which the subtlety of the concepts and methods makes rigor difficult to attain at an elementary level.

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Fundamentals of Industrial Chemistry

Chemistry 2e

Calculus on Manifolds

Preparing for Your ACS Examination in General Chemistry

Selected Chapters from Chemistry, Second Edition

"General Chemistry: Atoms First," Second Edition starts from the building blocks of chemistry, the atom, allowing the authors to tell a cohesive story that progresses logically through molecules and compounds to help students intuitively follow complex concepts more logically. This unified thread of ideas helps students build a better foundation and ultimately gain a deeper understanding of chemical concepts. Students can more easily understand the microscopic-to-macroscopic connections between unobservable atoms and the observable behavior of matter in daily life, and are brought immediately into real chemistryinstead of being forced to memorize facts. Reflecting a true atoms first perspective, the Second Edition features experienced atoms-first authors, incorporates recommendations from a panel of atoms-first experts, and follows historical beliefs in teaching chemistry concepts based and real experimental data first. This approach distinguishes this text in the market based whereby other authors teach theory first, followed by experimental data.

Introduces the fundamentals of classical mechanics by taking a concise, practical and accessible approach using historical perspective to enhance understanding and insight. This edition emphasises numerical, worked examples to address student problem- solving needs.

Winner of the CHOICE Outstanding Academic Title 2017 Award This comprehensive collection of top-level contributions provides a thorough review of the vibrant field of chemistry education. Highly-experienced chemistry professors and education experts cover the latest developments in chemistry learning and teaching, as well as the pivotal role of chemistry for shaping a more sustainable future. Adopting a practice-oriented approach, the current challenges and opportunities posed by chemistry education are critically discussed, highlighting the pitfalls that can occur in teaching chemistry and how to circumvent them. The main topics discussed include best practices, project-based education, blended learning and the role of technology, including e-learning, and science visualization. Hands-on recommendations on how to optimally implement innovative strategies of teaching chemistry at university and high-school levels make this book an essential resource for anybody interested in either teaching or learning chemistry more effectively, from experience chemistry professors to secondary school teachers, from educators with no formal training in didactics to frustrated chemistry students.

This is a self-contained student-friendly introduction to the key concepts of quantum chemistry. The math is developed as needed and motivated by the concepts themselves. (Midwest).

Chemistry Education

Maternal-fetal Medicine

Jumping Into C++

Essentials of Cognitive Neuroscience

An Atoms First Approach

Chemistry, Second Edition, by Julia Burdge has been created to bridge the gap in the McGraw-Hill general chemistry offerings. This textbook offers a clear writing style written with the students in mind. Julia uses her background of teaching hundreds of general chemistry students per year and creates content to offer more detailed explanation on areas where she knows they have problems. Sitting down with the artist house, Julia Burdge worked with the artist to create the style and major art pieces in her text. Out of these discussions, came the creation of the Visualizing Art two-page spreads which detail a process for the students and provide them with the answer to "What is the Point?" Due the success of the art with students, this offering has been doubled in the second edition. With outstanding art, a consistent problem-solving approach, interesting applications woven throughout the chapters, and a wide range of end-of-chapter problems, this is a great second edition text.

Offering detailed solutions to the blue-numbered end-of-chapter Study Questions found in the text, this comprehensive guide helps you achieve a deeper intuitive understanding of chapter material through constant reinforcement and practice. Solutions match the problem-solving strategies used in the text.

Fully revised and updated content matching new Cambridge International Examinations 9701 syllabus for first examination in 2016. Endorsed by Cambridge International Examinations, this digital edition comprehensively covers all the knowledge and skills students need during the A Level Chemistry course (9701), for first examination in 2016, in a reflowable format, adapting to any screen size or device. Written by renowned experts in Chemistry teaching, the text is written in an accessible style with international learners in mind. Self-assessment questions allow learners to track their progress, and exam-style questions help learners to prepare thoroughly for their examinations. Answers to all the questions from within the Coursebook are provided.

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. Before purchasing, check with your instructor or review your course syllabus to ensure that you select the correct ISBN. Several versions of MyLab(tm)and Mastering(tm) platforms exist for each title, including customized versions for individual schools, and registrations are not transferable. In addition, you may need a Course ID, provided by your instructor, to register for and use MyLab and Mastering products. For courses in two-semester general chemistry. Tells the story of chemistry in a unified and thematic way while building 21st century skills Bestselling author Nivaldo Tro's premise is that matter is particulate - it is composed of molecules; the structure of those particles determines the properties of matter. " This core idea is the inspiration for his seminal text-Chemistry: Structure and Properties. Dr. Tro emphasizes the relationship between structure and properties, establishes a unique approach to teaching chemistry by presenting atomic and bonding theories early in the course, and stresses key concepts and themes in text, images, and interactive media. The book is organized to present chemistry as a logical, cohesive story from the microscopic to the macroscopic, so students can fully grasp the theories and framework behind the chemical facts. Each topic is carefully crafted to convey to students that the relationship between structure and properties is the thread that weaves all of chemistry together. The 2nd Edition works seamlessly with Mastering(tm) Chemistry and new eText 2.0 to engage students in active learning and the world of chemistry. Dr. Tro helps readers build 21st century skills, engaging them through new end-of-chapter questions-Data Interpretation and Analysis questions present real data in real life situations and ask students to analyze that data, and Questions for Group Work foster collaborative learning and encourage students to work together as a team to solve problems. Dr. Tro also engages students through the power of video, animations, and real-time assessment with new and expanded interactive media. New Key Concept Videos, newly interactive Conceptual Connections and Self-Assessment Quizzes, and Interactive Worked Examples are embedded in the new eText 2.0 version of the book, enabling students to make connections that they cannot make by simply reading a static page. Also available with Mastering Chemistry Mastering (tm) Chemistry is the leading online homework, tutorial, and assessment system, designed to improve results by engaging students with powerful content. The enhanced eText 2.0 and Mastering Chemistry work with the book to provide seamless and tightly integrated videos and other rich media and assessment throughout the course.

Instructors can assign interactive media before class to engage students and ensure they arrive ready to learn. Students further master concepts through book-specific Mastering Chemistry assignments, which provide hints and answer-specific feedback that build problem-solving skills. With Learning Catalytics(tm) instructors can expand on key concepts and encourage student engagement during lecture through questions answered individually or in pairs and groups. Mastering Chemistry now provides students with the new General Chemistry Primer for remediation of chemistry math skills needed in the general chemistry course. If you would like to purchase both the loose-leaf version of the text and MyLab and Mastering, search for: 0134457301 / 9780134457304 Chemistry: Structure and Properties, Books a la Carte Plus MasteringChemistry with Pearson eText -- Access Card Package Package consists of: 0134449231 / 9780134449234 MasteringChemistry with Pearson eText -- ValuePack Access Card -- for Chemistry: Structure and Properties 0134528220 / 9780134528229 Chemistry: Structure and Properties, Books a la Carte Edition

Loose Leaf Chemistry

An Introduction to Chemistry - Atoms First

An Atoms First Approach 2e

General Chemistry

The Official Guide

Steve and Susan Zumdahl's texts focus on helping students build critical thinking skills through the process of becoming independent problem-solvers. They help students learn to think like a chemists so they can apply the problem solving process to all aspects of their lives. In CHEMISTRY: AN ATOMS FIRST APPROACH, the Zumdahls use a meaningful approach that begins with the atom and proceeds through the concept of molecules, structure, and bonding, to more complex materials and their properties. Because this approach differs from what most students have experienced in high school courses, it encourages them to focus on conceptual learning early in the course, rather than relying on memorization and a plug and chug method of problem solving that even the best students can fall back on when confronted with familiar material. The atoms first organization provides an opportunity for students to use the tools of critical thinkers: to ask questions, to apply rules and models and to evaluate outcomes. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

"Atoms First seems to be the flavor of the year in chemistry textbooks, but many of them seem to be little more than rearrangement of the chapters. It takes a master like McQuarrie to go back to the drawing board and create a logical development from smallest to largest that makes sense to students."---Hal Harris, University of Missouri-St. Louis "McQuarrie's book is extremely well written, the order of topics is logical, and it does a great job with both introductory material and more advanced concepts. Students of all skill levels will be able to learn from this book."---Mark Kearley, Florida State University This new fourth edition of General Chemistry takes an atoms-first approach from beginning to end. In the tradition of McQuarrie's many previous works, it promises to be another ground-breaking text. This superb new book combines the clear writing and wonderful problems that have made McQuarrie famous among chemistry professors and students worldwide. Presented in an elegant design with all-new illustrations, it is available in a soft-cover edition to offer professors a fresh choice at an outstanding value. Student supplements include an online series of descriptive chemistry Interchapters, a Student Solutions Manual, and an optional state-of-the-art Online Homework program. For adopting professors, an Instructor's Manual and a CD of the art are also available.

From its very origin, Introductory Chemistry: An Atoms First Approach has been developed and written using an atoms-first approach specific to introductory chemistry. It is not a pared down version of a general chemistry text, but carefully crafted with the introductory-chemistry student in mind.The ordering of topics facilitates the conceptual development of chemistry for the novice, rather than the historical development that has been used traditionally. Its language and style are student-friendly and conversational and the importance and wonder of chemistry in everyday life are emphasised at every opportunity. Continuing in the Burdge tradition, this text employs an outstanding art program, a consistent problem-solving approach, interesting applications woven throughout the chapters and a wide range of end-of-chapter problems.

This is part two of two for Chemistry: Atoms First by OpenStax. This book covers chapters 11-21. Chemistry: Atoms First is a peer-reviewed, openly licensed introductory textbook produced through a collaborative publishing partnership between OpenStax and the University of Connecticut and UConn Undergraduate Student Government Association. This title is an adaptation of the OpenStax Chemistry text and covers scope and sequence requirements of the two-semester general chemistry course. Reordered to fit an atoms first approach, this title introduces atomic and molecular structure much earlier than the traditional approach, delaying the introduction of more abstract material so students have time to acclimate to the study of chemistry. Chemistry: Atoms First also provides a basis for understanding the application of quantitative principles to the chemistry that underlies the entire course. The images in this textbook are grayscale.

Basic Chemistry

The Musical Life of Will Marion Cook

Chemistry

Loose Leaf Version for Chemistry: Atoms First

Analytical Mechanics

Research in science education has recognized the importance of history and philosophy of science (HPS). Nature of science (NOS) is considered to be an essential part of HPS with important implications for teaching science. The role played by textbooks in developing students' informed conceptions of NOS has been a source of considerable interest for science educators. In some parts of the world, textbooks become the curriculum and determine to a great extent what is taught and learned in the classroom. Given this background and interest, this monograph has evaluated NOS in university level general chemistry textbooks published in U.S.A. Most textbooks in this study provided little insight with respect to the nine criteria used for evaluating NOS. Some of the textbooks, however, inevitably refer to HPS and thus provide guidelines for future textbooks. A few of the textbooks go into considerable detail to present the atomic models of Dalton, Thomson, Rutherford, Bohr and wave mechanical to illustrate the tentative nature of scientific theories --- an important NOS aspect. These results lead to the question: Are we teaching science as practiced by scientists? An answer to this question can help us to understand the importance of NOS, by providing students an HPS-based environment, so that they too (just like the scientists) feel the thrill and excitement of discovering new things. This monograph provides students and teachers guidelines for introducing various aspects of NOS, based on historical episodes.

Laboratory Manual to Accompany Chemistry: Atoms First by Gregg Dieckmann and John Sibert from the University of Texas at Dallas. This laboratory manual presents a lab curriculum that is organized around an atoms-first approach to general chemistry. The philosophy behind this manual is to (1) provide engaging experiments that tap into student curiosity, (2) emphasize topics that students find challenging in the general chemistry lecture course, and (3) create a laboratory environment that encourages students to "solve puzzles" or "play" with course content and not just "follow recipes." Laboratory Manual represents a terrific opportunity to get students turned on to science while creating an environment that connects the relevance of the experiments to a greater understanding of their world. This manual has been written to provide instructors with tools that engage students, while providing important connections to the material covered in an atoms-first lecture course.

"Chemistry is designed for the two-semester general chemistry course. For many students, this course provides the foundation to a career in chemistry, while for others, this may be their only college-level science course. As such, this textbook provides an important opportunity for students to learn the core concepts of chemistry and understand how those concepts apply to their lives and the world around them. The text has been developed to meet the scope and sequence of most general chemistry courses. At the same time, the book includes a number of innovative features designed to enhance student learning. A strength of Chemistry is that instructors can customize the book, adapting it to the approach that works best in their classroom."--Openstax College website.

As the car anticipates its dance around the racetrack, the engine growls and pops, and all senses become immersed in the smell of exhaust vapors and the sounds of raw speed and excitement. As it turns out, these also are the sights, sounds, and smells of chemistry! The car is a great example of an everyday device with an abundance of chemistry hiding in plain sight. In fact, almost everything in a car can be described from a chemical perspective. Understanding Chemistry through Cars guides novice chemists and car enthusiasts in learning basic chemical principles in an engaging context. It also supports upper-level chemists in synthesizing knowledge gained over a chemistry curriculum and seeing how it can manifest in the real world. This book provides an overview of chemistry in relation to cars. Various topics are discussed including the ideal gas law, materials chemistry, thermochemistry, solution chemistry, mass transport, polymerization, light/matter interactions, and oxidation and reduction. The book incorporates expected learning outcomes at the beginning of each section, detailed and easy-to-follow example problems, appendices reviewing basic chemical topics, suggestions on how to use the resource in upper-level courses. Ancillary materials, such as a Twitter account and an associated blog, allow readers to explore the latest in the world of car chemistry, ask questions, and interact directly with the authors and other experts.

Structure and Properties, Books a la Carte Edition

Problem-Solving Workbook with Selected Solutions for Chemistry: Atoms First

Atoms First

Principles and Practice

Quantum Chemistry

From its very origin, Introductory Chemistry: An Atoms First Approach by Julia Burdge and Michelle Driessen has been developed and written using an atoms-first approach specific to introductory chemistry. It is not a pared down version of a general chemistry text, but carefully crafted with the introductory-chemistry student in mind. The ordering of topics facilitates the conceptual development of chemistry for the novice, rather than the historical development that has been used traditionally. Its language and style are student-friendly and conversational; and the importance and wonder of chemistry in everyday life are emphasized at every opportunity. Continuing in the Burdge tradition, this text employs an outstanding art program, a consistent problem-solving approach, interesting applications woven throughout the chapters, and a wide range of end-of-chapter problems.

Essentials of Cognitive Neuroscience guides undergraduate and early-stage graduate students with no previous neuroscientific background through the fundamental principles and themes in a concise, organized, and engaging manner. Provides students with the foundation to understand primary literature, recognize current controversies in the field, and engage in discussions on cognitive neuroscience and its future Introduces important experimental methods and techniques integrated throughout the text Assists student comprehension through four-color images and thorough pedagogical resources throughout the text Accompanied by a robust website with multiple choice questions, experiment vidoes, fMRI data, web links and video narratives from a global group of leading scientists for students. For Instructors there are sample syllabi and exam questions

Renowned today as a prominent African-American in Music Theater and the Arts community, composer, conductor, and violinist Will Marion Cook was a key figure in the development of American music from the 1890s to the 1920s. In this insightful biography, Marva Griffin Carter offers the first definitive look at this pivotal life's story, drawing on both Cook's unfinished autobiography and his wife Abbie's memoir. A violin virtuoso, Cook studied at Oberlin College (his parents' alma mater), Berlin's Hochschule f?r Musik with Joseph Joachim, and New York's national Conservatory of Music with Antonin Dvorak. Cook wrote music for a now-lost production of Uncle Tom's Cabin for the Chicago World's Fair of 1893, and then devoted the majority of his career to black musical comedies due to limited opportunities available to him as a black composer. He was instrumental in showcasing his Southern Syncopated Orchestra in the prominent concert halls of the Unites States and Europe, even featuring New Orleans clarinetist Sidney Bechet, who later introduced European audiences to authentic blues. Once mentored by Frederick Douglas, Will Marion Cook went on to mentor Duke Ellington, paving the path for orchestral concert jazz. Through interpretive and musical analyses, Carter traces Cook's successful evolution from minstrelsy to musical theater. Written with his collaborator, the distinguished poet Paul Lawrence Dunbar, Cook's musicals infused American Musical Theater with African-American music, consequently altering the direction of American popular music. Cook's In Dahomey, hailed by Gerald Bordman as "one of the most important events in American Musical Theater history," was the first full-length Broadway musical to be written and performed by blacks. Alongside his accomplishments, Carter reveals Cook's contentious side- a man known for his aggressiveness, pride, and constant quarrels, who became his own worst enemy in regards to his career. Carter further sets Cook's life against the backdrop of the changing cultural and social milieu: the black theatrical tradition, white audiences' reaction to black performers, and the growing consciousness and sophistication of blacks in the arts, especially music.

Authoritative, thorough, and engaging, Life: The Science of Biology achieves an optimal balance of scholarship and teachability, never losing sight of either the science or the student. The first introductory text to present biological concepts through the research that revealed them, Life covers the full range of topics with an integrated experimental focus that flows naturally from the narrative. This approach helps to bring the drama of classic and cutting-edge research to the classroom - but always in the context of reinforcing core ideas and the innovative scientific thinking behind them. Students will experience biology not just as a litany of facts or a highlight reel of experiments, but as a rich, coherent discipline.

Chemistry and Chemical Reactivity

Chemistry: An Atoms First Approach

Best Practices, Opportunities and Trends

Fundamentals of Quantum Chemistry

Part 2: Atoms First

This book discusses the connectivity between major chemicals, showing how a chemical is made along with why and some of the business considerations. The book helps smooth a student's transition to industry and assists current professionals who need to understand the larger picture of industrial chemistry principles and practices. The book: Addresses a wide scope of content, emphasizing the business and polymer / pharmaceutical / agricultural aspects of industrial chemistry Covers patenting, experimental design, and systematic optimization of experiments Written by an author with extensive industrial experience but who is now a university professor, making him uniquely positioned to present this material Has problems at the end of chapters and a separate solution manual available for adopting professors Puts chemical industry topics in context and ties together many of the principles chemistry majors learn across more specific courses

An Introduction to Chemistry is intended for use in beginning chemistry courses that have no chemistry prerequisite. The text was written for students who want to prepare themselves for general college chemistry, for students seeking to satisfy a science requirement for graduation, and for students in health-related or other programs that require a one-semester introduction to general chemistry.

The Workbook includes the student solutions manual for a one-stop shop for student use. The Workbook was written by Dawn Richardson and Amina El-Ashmawy from Collin College. The Workbook offers students the opportunity to practice the basic skills and test their understanding of the content knowledge within the chapter. Types of problems and how to solve them are presented along with any key notes on the concepts to facilitate understanding. Key Concepts, Study Questions, Practice Questions, and a Practice Quiz are provided within each chapter. The student will find detailed solutions and explanations for the odd-numbered problems in this text in the solutions manual by AccuMedia Publishing Services, Julia Burdge, and Jason Overby.

The Science of Biology

Loose Leaf for Chemistry: Atoms First

Accounting: Information for Business Decisions

Cambridge International AS and A Level Chemistry Coursebook with CD-ROM

Pharmaceuticals, Polymers, and Business