List of New Acquisition
BS Biology and Chemistry Books
Sept. 09, 2023

Bibliography

Sorted by Call Number / Author. Limited by Book.

CIR QD 33.2 .B87i3 2024

Burdge, Julia. Introductory chemistry : an atoms first approach. 3rd ed. New York, NY : McGraw-Hill Education, c2024.
"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 a carefully crafted text, designed and written with the introductory chemistry student in mind"-- Provided by publisher.

CIR QD 33.2 .S55c10 2024

Silberberg, Martin S. Chemistry : the molecular nature of matter and change. 10th ed. New York, NY : McGraw-Hill Education, c2024.
"In this edition, chemistry is so crucial to an understanding of medicine and biology, environmental science, and many areas of engineering and industrial processing that it has become a requirement for an increasing number of academic majors. Furthermore, chemical principles lie at the core of some of the key societal issues we face in the 21st century-dealing with climate change, finding new energy options, and supplying nutrition and curing disease on an ever more populated planet"-- Provided by publisher.

CIR QD 75.2 .H65f10 2022

Holler, F. James. Fundamentals of analytical chemistry. 10th ed. Belmont, CA : Cengage - Brooks/Cole, c2022.

CIR QM 23.2 .D35m9 2023

Dalley, Arthur F., II. Moore's clinically oriented anatomy. 9th ed. Philadelphia : Wolters Kluwer, c2023.
Overview and Basic Concepts -- Back -- Upper Limb -- Thorax -- Abdomen -- Pelvis and Perineum -- Lower Limb -- Head -- Neck -- Summary of Cranial Nerves. "Clinically Oriented Anatomy is widely acclaimed for its comprehensive and well-written, "story-telling" text, accurate and detailed illustrations, and the relevance of its clinical correlations ("blue boxes"). The textbook serves as a complete reference and places clinical emphasis on anatomy that is important in physical diagnosis for primary care, interpretation of diagnostic imaging, and understanding the anatomical basis of emergency medicine and general surgery. This textbook is popular in a variety of programs, including medical, physician assistant, physical therapy, occupational therapy, graduate biology/anatomy, and exercise science"-- Provided by publisher.

CIR QR 46 .M87m9 2021

Murray, Patrick R. Medical microbiology. 9th ed. Edinburgh ; New York : Elsevier, Inc, c2021.

CIR QR 46 .S33 2022

Schaechter's mechanisms of microbial disease. 6th ed. Philadelphia : Wolters Kluwer, c2022.
"This textbook is intended to be used in courses on medical microbiology or infectious diseases for medical students, allied health professionals, graduate students, or advanced undergraduates. Because the purpose of this book is to develop a conceptual framework for understanding infection, it highlights certain agents and diseases of special biological or clinical importance and does not attempt to describe the microbial world in an exhaustive fashion"-- Provided by publisher.

CIR QR 67 .D45i2 2022

Delost, Maria Dannessa. Introduction to diagnostic microbiology for the laboratory sciences. 2nd ed. Burlington, MA : Jones & Bartlett Learning, c2022.
Taxonomy, the Microbial Cell, Metabolism, and Genetics -- Safety in the Clinical Microbiology Laboratory -- Host and Microorganism Interactions -- Specimen Collection and Management -- Microscopy, Staining, and Direct Examination of Specimens -- Traditional Culture and Identification -- Immunochemical and Molecular Methods -- Antimicrobial Agents and Susceptibility Testing -- Staphylococci and Other Catalase-Positive Gram-Positive Cocci -- Streptococcus, Enterococcus, and Related Organisms -- Neisseria -- Enterobacteriaceae -- Nonfermentative Gram-Negative Bacilli and Similar Bacteria -- Vibrio, Aeromonas, Campylobacter, & Similar Organisms -- Haemophilis, HACEK, Legionella, Bordetella and other Fastidious Gram-Negative Bacilli -- Gram-Positive Bacilli -- Spirochetes -- Anaerobes -- Mycobacterium -- Chlamydia, Rickettsia, Mycoplasma and Similar Organisms -- Introduction to Medical Mycology -- Introduction to Medical Parasitology -- Introduction to Virology -- Clinical Specimens. "Introduction to Diagnostic Microbiology for the Laboratory Sciences provides a concise study of clinically significant microorganisms for the medical laboratory student and laboratory practitioner. This text provides microbiology content for the Microbiology Lab Technician program, which includes metabolism and genetics, safety in the clinical microbiology laboratory, specimen collection and management, host and microorganism interactions, and more"-- Provided by publisher.

CIR RB 37 .B39b6 2023

Baynes, John W. Medical biochemistry. 6th ed. [Amsterdam] : Elsevier, c2023.
Section 1: Introduction. Biochemistry and clinical medicine: Introduction and overview - Section 2: Molecules and cells. Amino acids and proteins -- Carbohydrates and lipids -- Membranes and transport - Section 3: Metabolism. oxygen transport -- Catalytic proteins: enzymes -- Vitamins and minerals -- Bioenergetics and oxidative metabolism -- Glycolysis and the pentose phosphate pathway -- The tricarboxylic acid cycle -- Fatty acid and triglyceride catabolism -- Biosynthesis and storage of carbohydrate -- Biosynthesis and storage of fatty acids -- Biosynthesis of cholesterol and steroids -- Biosynthesis and degradation of amino acids -- Biosynthesis and

degradation of nucleotides -- Complex carbohydrates: glycoproteins -- Complex lipids -- The extracellular matrix - Section 4: Molecular basis of inheritance. Deoxyribonucleic acid -- Ribonucleic acid -- Protein synthesis and turnover -- Regulation of gene expression: basic mechanisms -- Genomics, proteomics, and metabolomics - Section 5: Signalling and growth. Membrane receptors and signal transduction - Neurotransmitters -- Biochemical endocrinology -- Cellular homeostasis: cell growth and cancer - Aging - Section 6: Fuels, nutrients and minerals. Digestion and absorption of nutrients: the gastrointestinal -- Glucose homeostasis and fuel metabolism: diabetes mellitus -- Nutrients and diets -- Lipoprotein metabolism and atherogenesis -- Section 7: Specialized tissues and their function. Role of the liver in metabolism -- Water and electrolytes homeostasis -- The lung and the regulation of hydrogen ion concentration (Acid-base balance) -- Muscle: energy metabolism, contraction, and exercise -- Bone metabolism and calcium homeostasis - Neurochemistry -- Section 8: Blood and immunity. Clinical biochemistry. Blood and plasma proteins -- Hemostasis and thrombosis -- Oxidative stress and inflammation -- The immune response: innate and adaptive immunity. "Written by carefully selected global experts, practicing physicians, and educators in the various sub-disciplines of biochemistry, Medical Biochemistry, 6th Edition, offers a unique combination of research and clinical practice tailored to today's integrated courses. Covering clinically relevant topics in greater detail than other texts, this outstanding resource provides a strong overview of traditional areas in medical biochemistry along with state-of-the-art coverage of today's latest developments. You'll learn basic science concepts alongside clinical cases that describe patients likely to be encountered in clinical training, as well as how to use laboratory tests to diagnose and monitor the most important conditions. Thorough yet accessible, this clinically focused text is useful from medical school to clinical practice."-- Publisher's description.

CIR RC 71.5 .A23b 2024

Abali, Emine E. Biochemistry behind the symptoms. Philadelphia : Wolters Kluwer, c2024.
Shortness of Breath -- Jaundice -- Diarrhea -- Bruising -- Fatigue -- Failure to Thrive -- Developmental Delays in Infancy and Early Childhood -- Gout -- Altered Mental Status -- Obesity. "This book can serve as a companion text for many standard textbooks of biochemistry, especially in stand-alone biochemistry or foundational science lecture-based courses, it is particularly suited as a primary resource in more integrated curricula. It can also serve as an excellent review of relevant biochemistry topics for more advanced students"-- Provided by publisher. "Biochemistry Behind the Symptoms takes a problem-based approach to understanding and applying biochemistry for superior clinical outcomes. Organized around the common symptoms encountered by clinicians, this engaging text clarifies the connections between foundational science and clinical manifestations to help users form confident diagnoses throughout their clerkship and beyond. Each chapter explores the biochemical concepts behind underlying causes and demonstrates their ties to presenting symptoms through 5 realistic patient cases. Accompanying questions encourage discussion and guide users in building accurate differential diagnoses. Ideal for peer-to-peer learning environments or independent study, this practical approach strengthens users' application of fundamental knowledge and ensures the long-term retention essential to clinical success. 50 Patient Cases emphasize the biochemical concepts behind common patient symptoms through problem-based learning. Clinical Impression sections encourage critical thinking and train students step by step in building effective differential diagnoses. Basic Science Correlations in each Patient Case clarify the biochemical concepts underlying diagnosis with an engaging question-and-answer format. High-Yield Concepts summarized after each Patient Case reinforce students' comprehension of essential chapter concepts. Digital Animations immerse students in biochemical processes to enrich their understanding and diagnostic confidence. "-- Provided by publisher.

CIR QA 276.12 .M66i10 2021

Moore, David S. Introduction to the practice of statistics. 10th ed. Austin : Macmillan Learning, c2021.

CIR QD 502.5 .V35o2 2023

Valiulin, Roman A. Organic chemistry : 100 must-know mechanisms. 2nd ed. Berlin ; Boston : De Gruyter, c2023.

CIR QH 308.2 .B76b6 2023

Brooker, Robert J. Biology. 6th ed. New York, NY : McGraw Hill LLC, c2023.
"Over the course of these editions, the ways in which biology is taught have dramatically changed. We have seen a shift away from the memorization of details, which are easily forgotten, and a movement toward emphasizing core concepts and critical thinking skills. The previous edition of Biology strengthened skill development by adding two new features, called CoreSKILLS and BioTIPS, which are aimed at helping students develop effective strategies for solving problems and applying their knowledge in novel situations. In this edition, we have focused our pedagogy on the five core concepts of biology as advocated by "Vision and Change". In addition to core concepts, "Vision and Change" has strongly advocated the development of core skills (also called core competencies). Those skills are emphasized in this textbook. A key goal of this textbook is to bring to life the five core concepts of biology and the core skills. These concepts and skills are highlighted in each chapter with a "Vision and Change" icon, which indicates subsections and figures that focus on one or more of them. With regard to the scientific content in the textbook, the author team has worked with faculty reviewers to refine this new edition and to update the content so that students are exposed to the most current material. In addition to new pedagogical additions involving Core Concepts, Core Skills, and Modeling Challenges, every chapter has been extensively edited for clarity, presentation, layout, readability, modifications of artwork, and new and challenging end-of-chapter questions"-- Provided by publisher.

CIR QH 581.2 .C43c3 2024

Chandar, Nalini. Cell and molecular biology. 3rd ed. Philadelphia : Wolters Kluwer, c2024.
Stem cells and their differentiation -- Extracellular matrix and cell adhesion -- Biological membranes -- Cytoskeleton -- Organelles -- The eukaryotic genome -- DNA replication -- Transcription -- Translation -- Regulation of gene expression -- Protein trafficking -- Protein degradation -- Basic concepts of transport -- Active transport -- Glucose transport -- Drug

transport -- G protein signaling -- Catalytic receptor signaling -- Steroid receptor signaling -- The cell cycle -- Regulation of the cell cycle -- Abnormal cell growth -- Cell death -- Aging and senescence.

CIR QL 363 .S35i 2022

Invertebrate zoology : a tree of life approach. Boca Raton, FL : Taylor & Francis, c2022.
"This book presents a comprehensive overview of invertebrate organismal zoology (IZ), defining invertebrates as any multicellular organism without a backbone (excluding plants and Fungi). While there are many IZ textbooks on the market, few combine the classical anatomical information with the newer genome level DNA sequence data and evo-devo data for teaching purposes. This book documents the latest research in these areas and combines it with classical information, giving students a unique opportunity to learn the biology of these organisms"-- Provided by publisher.

CIR QL 757 .L35p2 2023

Loker, Eric S. Parasitology : a conceptual approach. 2nd ed. Boca Raton, FL : CRC Press, Taylor & Francis Group, c2023.
"Produced amidst the still rippling effects of a pandemic and as the world experiences the increasing burden of global warming and a rapidly changing biosphere, the second edition of Parasitology: A Conceptual Approach offers a timely overview of the eukaryotic parasites affecting human health and the health of domestic and wild animals and plants. The book offers a broadly encompassing, integrative view of the phenomenon of parasitism and of the remarkable diversity of the world's parasites. This second edition has been thoroughly updated on all aspects of parasitism, including expanded sections on parasite biodiversity, parasite genomes, the interface between parasitology and disease ecology, and applications of new techniques like CRISPR and gene drives for parasite control. Key selling features: Emphasis on a distinctive integrative and conceptual approach rather than the taxon-by-taxon approach used in most parasitology books A concise, handy Rogues Gallery section that summarizes the basic biology for the most important eukaryotic parasites of humans and domestic animals, one a reader is repeatedly directed to throughout the chapters Outstanding full-color illustrations and photographs to reinforce key points The use of text boxes to set apart important topics or ideas that deserve special emphasis Provision of end-of-chapter summaries, questions to test understanding and key references for those wishing to seek further information Reference to particular URLs to highlight recent developments that often pose new and distinctive problems awaiting solution Parasitology: A Conceptual Approach is designed for an upper-level undergraduate audience, but its readability and careful explanation of underlying scientific concepts and terminology makes it appropriate for anyone seeking a broader understanding of the impact of infectious organisms on our well-being and the changes underway in the modern world"-- Provided by publisher.

CIR QP 514.2 .A23b8 2022

Abali, Emine Ercikan. Biochemistry. 8th ed. Philadelphia : Wolters Kluwer, c2022.
Amino Acids and the Role of PH -- Protein Structure -- Globular Proteins -- Fibrous Proteins -- Enzymes -- Bioenergetics and Oxidative Phosphorylation -- Introduction to Carbohydrates -- Introduction to Metabolism and Glycolysis -- Tricarboxylic Acid Cycle and Pyruvate Dehydrogenase Complex -- Gluconeogenesis -- Glycogen Metabolism -- Monosaccharide and Disaccharide Metabolism -- Pentose Phosphate Pathway and Nicotinamide Adenine Dinucleotide Phosphate -- Glycosaminoglycans, Proteoglycans, and Glycoproteins -- Dietary Lipid Metabolism -- Fatty Acid, Triacylglycerol, and Ketone Body Metabolism -- Phospholipid, Glycosphingolipid, and Eicosanoid Metabolism -- Cholesterol, Lipoprotein, and Steroid Metabolism -- Amino Acids : Nitrogen Disposal -- Amino Acids : Degradation and Synthesis -- Amino Acids : Conversion to Specialized Products -- Nucleotide Metabolism -- Metabolic Effects of Insulin and Glucagon -- The Feed-Fast Cycle -- Diabetes Mellitus -- Obesity -- Nutrition : Overview and Macronutrients -- Micronutrients : Vitamins -- Micronutrients : Minerals -- DNA Structure, Replication, and Repair -- RNA Structure, Synthesis, and Processing -- Protein Synthesis -- Regulation of Gene Expression -- Biotechnology and Human Disease -- Blood Clotting. "Biochemistry is the study of how our bodies utilize the nutritional substances in our diet to make building blocks, fuels, and communication molecules for our cells. It also includes the processes by which we convert chemicals within our bodies and eliminate chemicals from our bodies"-- Provided by publisher.

CIR QR 360 .F54 2021

Fields virology Volume 1 Emerging viruses. 7th ed. Philadelphia : Wolters Kluwer, c2021.

CIR QR 360 .F54 2022

Fields virology Volume 2 DNA viruses. 7th ed. Philadelphia : Wolters Kluwer, c2022.

CIR QR 360 .F54 2023

Fields virology Volume 3 RNA viruses. Philadelphia : Wolters Kluwer, c2023.

CIR QR 462 .M87m2 2024

Murray, Patrick R. Murray's basic medical microbiology : foundations and clinical cases. 2nd ed. Philadelphia, PA : Elsevier, Inc, c2024.

CIR RB 113 .N38a4 2023

Nath, Judi. Applied pathophysiology : a conceptual approach. 4th ed. Philadelphia, PA : Wolters Kluwer, c2023.
Introduction to pathophysiology -- Altered cells and tissues -- Inflammation and tissue repair -- Altered immunity -- Infection -- Genetic and developmental disorders -- Altered cellular proliferation and differentiation -- Altered fluid and electrolyte balance -- Altered acid-base balance -- Altered neural function -- Altered mood, attention, and behavior -- Altered somatic and special sensory function -- Altered hormonal and metabolic regulation -- Altered reproductive function -- Altered ventilation and diffusion -- Altered perfusion -- Altered nutrition -- Altered elimination -- Degenerative changes in aging -- Integrated pathophysiologic concepts. "Presenting pathophysiology through the lens of body function, Applied Pathophysiology: A Conceptual Approach, 4th Edition, goes beyond memorization of facts to give students a thorough understanding of altered human function and a practical framework for applying

concepts in clinical settings. By helping students understand that diseases are rarely confined to one body system, this novel approach conditions students to think like practitioners, working from symptom to cause to build an understanding of the disease process essential to successful practice. Supported by the latest clinical practices and research-based evidence, this 4th Edition has been updated to prepare students for today's changing healthcare environment. Engaging features and resources throughout the text emphasize active learning strategies and challenge students to apply their knowledge to a wide range of diseases."--Publisher's description.

Prepared by:

VILMA L. D EGUZMAN, RL, MLIS
College Librarian 1