

course for non-science majors, which for many students is their only college-level science course. As such, this course represents an important opportunity for students to develop the necessary knowledge, tools, and skills to make informed decisions as they continue with their lives. Rather than being mired down with facts and vocabulary, the typical non-science major student needs information presented in a way that is easy to read and understand. Even more importantly, the content should be meaningful.

Students do much better when they understand why biology is relevant to their everyday lives. For these reasons, *Concepts of Biology* is grounded on an evolutionary basis and includes exciting features that highlight careers in the biological sciences and everyday applications of the concepts at hand. We also strive to show the interconnectedness of topics within this extremely broad discipline. In order to meet the needs of today's instructors and students, we maintain the overall organization and coverage found in most syllabi for this course. A strength of *Concepts of Biology* is that instructors can customize the book, adapting it to the approach that works best in their classroom.

Concepts of Biology also includes an innovative art program that incorporates critical thinking and clicker questions to help students understand--and apply--key

concepts. **Physical Sciences, Grade 12** Study & Master Physical Sciences Grade 12 has been especially developed by an experienced author team for the Curriculum and Assessment Policy Statement (CAPS). This new and easy-to-use course helps learners

to master essential content and skills in Physical Sciences. **Study and Master Life Sciences Grade 11** CAPS Study Guide **The Theory of Flight**

The fascinating autobiographical reflections of Nobel Prizewinner George Olah How did a young man who grew up in Hungary between the two World Wars go from cleaning rubble and moving pianos at the end of World War II in the Budapest Opera House to winning the Nobel Prize in Chemistry? George Olah takes us on a remarkable journey from Budapest to Cleveland to Los Angeles--with a stopover in Stockholm, of course. An innovative scientist, George Olah is truly one of a kind, whose amazing research into extremely strong acids and their new chemistry yielded what is now commonly known as "superacidic" magic acid chemistry." *A Life of Magic Chemistry* is an intimate look at the many journeys that George Olah has traveled--from his early research and teaching in Hungary, to his move to North America where, during his years in industry, he continued his study of the elusive cations of carbon, to his return to academia in Cleveland, and, finally, his move to Los Angeles, where he built the Loker Hydrocarbon Research Institute to find new solutions to the grave problem of the world's diminishing natural oil and gas resources and to mitigate global warming by recycling carbon dioxide into hydrocarbon fuels and products. Professor Olah invites the reader to enjoy the story of his remarkable path--marked by hard work, imagination, and never-ending quests for discovery--which eventually led to the Nobel Prize. Intertwining his research and teaching with a unique personal writing style truly makes *A Life of Magic Chemistry* an engaging read. His autobiography not only touches on his exhilarating life and pursuit for new chemistry but also reflects on the broader meaning of science in our perpetual search for understanding and knowledge.

Scientific Babel Oxford University Press, USA

First published in 1891, Pellegrino Artusi's *La scienza in cucina e l'arte di mangiar bene* has come to be recognized as the most significant Italian cookbook of modern times. It was reprinted thirteen times and had sold more than 52,000 copies in the years before Artusi's death in 1910, with the number of recipes growing from 475 to 790. And while this figure has not changed, the book has consistently remained in print. Although Artusi was himself of the upper classes and it was doubtful he had ever touched a kitchen utensil or lit a fire under a pot, he wrote the book not for professional chefs, as was the nineteenth-century custom, but for middle-class family cooks: housewives and their domestic helpers. His tone is that of a friendly advisor -- humorous and nonchalant. He indulges in witty anecdotes about many of the recipes, describing his experiences and the historical relevance of particular dishes. Artusi's masterpiece is not merely a popular cookbook; it is a landmark work in Italian culture. This English edition (first published by Marsilio Publishers in 1997) features a delightful introduction by Luigi Ballerini that traces the fascinating history of the book and explains its importance in the context of Italian history and politics. The illustrations are by the noted Italian artist Giuliano Della Casa.

Nutrient Requirements of Laboratory Animals, Catalyst Press

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Doc Scientia Physical Sciences. Chemistry Springer Nature

"On the third of September, not so long ago, something truly wondrous happened on the Beauford Farm and Estate. At the moment of her death, Imogen Zula Nyoni - Genie - was seen to fly away on a giant pair of silver wings ..."

Study and Master Accounting Grade 11 CAPS Study Guide John Wiley & Sons

This book covers not only foundational materials but also the most recent progresses made during the past few years on the area of machine learning algorithms. In spite of the intensive research and development in this area, there does not exist a systematic treatment to introduce the fundamental concepts and recent progresses on machine learning algorithms, especially on those based on stochastic optimization methods, randomized algorithms, nonconvex optimization, distributed and online learning, and projection free methods. This book will benefit the broad audience in the area of machine learning, artificial intelligence and mathematical programming community by presenting these recent developments in a tutorial style, starting from the basic building blocks to the most carefully designed and complicated algorithms for machine learning.

Doc Scientia Physical Sciences. Chemistry LAPA Uitgewers

The Sourcebook for Teaching Science is a unique, comprehensive resource designed to give middle and high school science teachers a wealth of information that will enhance any science curriculum. Filled with innovative tools, dynamic activities, and practical lesson plans that are grounded in theory, research, and national standards, the book offers both new and experienced science teachers powerful strategies and original ideas that will enhance the teaching of physics, chemistry, biology, and the earth and space sciences.

The Theory of Flight National Academies Press

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Physical Sciences, Grade 10 Springer

Study & Master Physical Sciences Grade 10 has been especially developed by an experienced author team for the Curriculum and Assessment Policy Statement (CAPS). This new and easy-to-use course helps learners to master essential content and skills in Physical Sciences. The innovative Teacher's File includes: * guidance on the teaching of each lesson for the year * answers to all activities in the Learner's Book * assessment guidelines * photocopiable templates and resources for the teacher

Study and Master Life Sciences Grade 11 CAPS Study Guide

In the years since the third edition of this indispensable reference was published, a great deal has been learned about the nutritional requirements of common laboratory species: rat, mouse, guinea pig, hamster, gerbil, and vole. The Fourth Revised Edition presents the current expert understanding of the lipid, carbohydrate, protein, mineral, vitamin, and other nutritional needs of these animals. The extensive use of tables provides easy access to a wealth of comprehensive data and resource information. The volume also provides an expanded background discussion of general dietary considerations. In addition to a more user-friendly organization, new features in this edition include: A significantly expanded section on dietary requirements for rats, reporting substantial new findings. A new section on nutrients that are not required but that may produce beneficial results. New information on growth and reproductive performance among the most commonly used strains of rats and mice and on several hamster species. An expanded discussion of diet formulation and preparation—including sample diets of both purified and natural ingredients. New information on mineral deficiency and toxicity, including warning signs. This authoritative resource will be important to researchers, laboratory technicians, and manufacturers of laboratory animal feed.

The Biology of Citrus

Biology of Citrus provides a concise and comprehensive discussion of all major developmental, genetic and horticultural aspects of citriculture in an easily readable text. The book deals with the history, distribution and climatic adaptation of the crop, followed by taxonomy and systematics, including a horticultural classification of edible citrus species. Subsequent chapters cover tree structure and function, reproductive physiology, including flowering, fruiting, productivity, ripening, post-harvest and fruit constituents. The main aspects of cultivated citrus, such as rootstocks, irrigation, pests, viruses and diseases are dealt with, leading to a concluding chapter that considers genetic improvement, including the use of tissue culture and plant biotechnology. The book includes many specially produced original

illustrations and the extensive reading lists will make it invaluable for students and citrus specialists.

University Physics

English is the language of science today. No matter which languages you know, if you want your work seen, studied, and cited, you need to publish in English. But that hasn't always been the case. Though there was a time when Latin dominated the field, for centuries science has been a polyglot enterprise, conducted in a number of languages whose importance waxed and waned over time—until the rise of English in the twentieth century. So how did we get from there to here? How did French, German, Latin, Russian, and even Esperanto give way to English? And what can we reconstruct of the experience of doing science in the polyglot past? With *Scientific Babel*, Michael D. Gordin resurrects that lost world, in part through an ingenious mechanism: the pages of his highly readable narrative account teem with footnotes—not offering background information, but presenting quoted material in its original language. The result is stunning: as we read about the rise and fall of languages, driven by politics, war, economics, and institutions, we actually see it happen in the ever-changing web of multilingual examples. The history of science, and of English as its dominant language, comes to life, and brings with it a new understanding not only of the frictions generated by a scientific community that spoke in many often mutually unintelligible voices, but also of the possibilities of the polyglot, and the losses that the dominance of English entails. Few historians of science write as well as Gordin, and *Scientific Babel* reveals his incredible command of the literature, language, and intellectual essence of science past and present. No reader who takes this linguistic journey with him will be disappointed.

Doc Scientia Physical Sciences. Chemistry

This book provides a unique path for graduate or advanced undergraduate students to begin studying the rich subject of functional analysis with fewer prerequisites than is normally required. The text begins with a self-contained and highly efficient introduction to topology and measure theory, which focuses on the essential notions required for the study of functional analysis, and which are often buried within full-length overviews of the subjects. This is particularly useful for those in applied mathematics, engineering, or physics who need to have a firm grasp of functional analysis, but not necessarily some of the more abstruse aspects of topology and measure theory normally encountered. The reader is assumed to only have knowledge of basic real analysis, complex analysis, and algebra. The latter part of the text provides an outstanding treatment of Banach space theory and operator theory, covering topics not usually found together in other books on functional analysis. Written in a clear, concise manner, and equipped with a rich array of interesting and important exercises and examples, this book can be read for an independent study, used as a text for a two-semester course, or as a self-contained reference for the researcher.

Physical Sciences

For undergraduate or graduate courses that include planning, conducting, and evaluating research. A do-it-yourself, understand-it-yourself manual designed to help students understand the fundamental structure of research and the methodical process that leads to valid, reliable results. Written in uncommonly engaging and elegant prose, this text guides the reader, step-by-step, from the selection of a problem, through the process of conducting authentic research, to the preparation of a completed report, with practical suggestions based on a solid theoretical

framework and sound pedagogy. Suitable as the core text in any introductory research course or even for self-instruction, this text will show students two things: 1) that quality research demands planning and design; and, 2) how their own research projects can be executed effectively and professionally.

Physical Sciences, Grade 12

"University Physics is a three-volume collection that meets the scope and sequence requirements for two- and three-semester calculus-based physics courses. Volume 1 covers mechanics, sound, oscillations, and waves. This textbook emphasizes connections between theory and application, making physics concepts interesting and accessible to students while maintaining the mathematical rigor inherent in the subject. Frequent, strong examples focus on how to approach a problem, how to work with the equations, and how to check and generalize the result."--Open Textbook Library.