Biotechnology, Second Edition: A Laboratory Course

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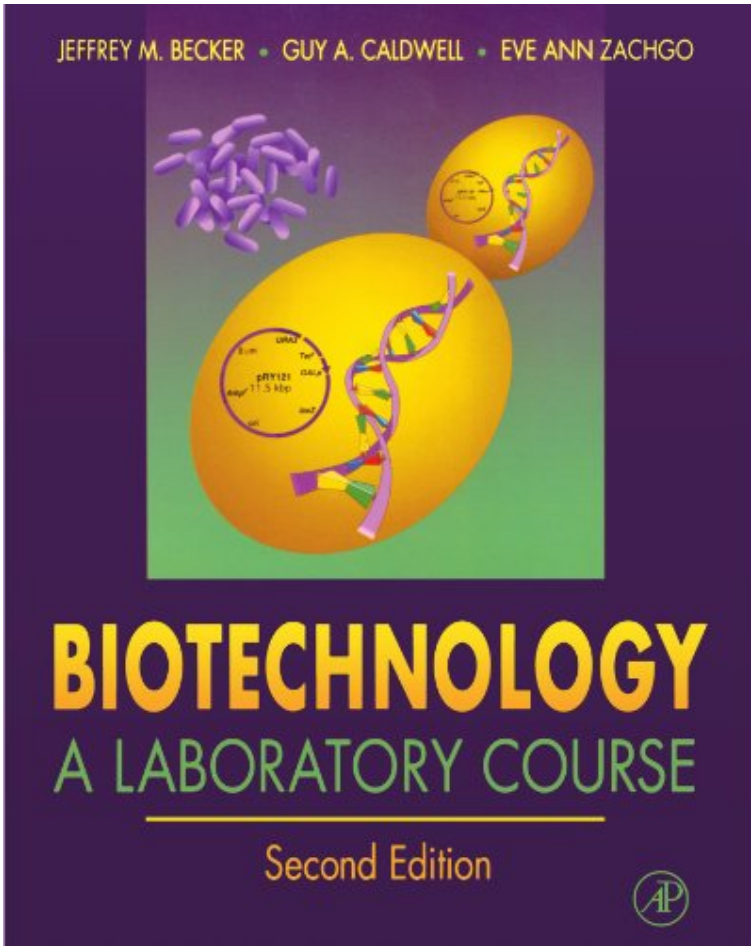

#2306433 in Books 1996-03-15Original language:EnglishPDF # 1 9.20 x .65 x 7.30l, 1.19 #File Name: 0120845628261 pages | File size: 56.Mb

From Academic Press : Biotechnology, Second Edition: A Laboratory Course before purchasing it in order to gage whether or not it would be worth my time, and all praised Biotechnology, Second Edition: A Laboratory Course:

5 of 5 people found the following review helpful. Best introductory molecular biology course out thereBy A CustomerThis is a real "course", not just a number of experiments in a row to introduce techniques. The course takes you from soup to nuts in making a "biotechnology" product, instructing the student in the most important of molecular biology techniques along the way. Safety and record keeping are stressed. The student will gain technical knowledge and also will really see and understand how a product, in this course an enzyme, can be made from a cloned gene. The idea of teaching techniques on a continuum is really a great idea. Though the second edition is now a few years old, the methods are tried and true and haven't changed so don't let the date stop you. The writing is succinct and there are helpful hints for the instructor for getting the lab classroom set up, etc. I think this course would be appropriate for an advanced high school biotech class, a post-secondary technial school or college, or undergrad college class. I highly reccommend this book.

The objectives of this Second Edition of Biotechnology: A Laboratory Course remain unchanged: to create a text that consists of a series of laboratory exercises that integrate molecular biology with protein biochemistry techniques while providing a continuum of experiments. The course begins with basic techniques and culminates in the utilization of previously acquired technical experience and experimental material. Two organisms, Sacchaomyces cerevisiae and Escherichia coli, a single plasmid, and a single enzyme are the experimental material, yet the procedures and principles demonstrated are widely applicable to other systems. This text will serve as an excellent aid in the establishment or instruction of introductory courses in the biological sciences.All exercises and appendixes have been updatedIncludes new exercises on: Polymerase chain reactionBeta-Galactosidase detection in yeast coloniesWestern blottingNew procedures introduced for: Large-scale plasmid isolationYeast transformationDNA quantitationNew appendixes added, one of which provides details on accessing biological information sites on the Internet (World Wide Web)Use of non-radioactive materials and easy access to microbial culturesLaboratory exercises student tested for seven years

"This is an excellent laboratory guide for a laboratory course in basic techniques in molecular biology. It is also an excellent course text for instructors who want experiments to work and obtain joy from seeing their students being excited from success and gaining confidence in the laboratory." --Kalidas Shetty in JOURNAL OF FOOD BIOCHEMISTRYFrom the Back CoverThe objectives of this Second Edition of Biotechnology: A Laboratory Course remain unchanged: to create a text that consists of a series of laboratory exercises that integrate molecular biology with protein biochemistry techniques while providing a continuum of experiments. The course begins with basic techniques and culminates in the utilization of previously acquired technical experience and experimental material. Two organisms, Sacchaomyces cerevisiae and Escherichia coli, a single plasmid, and a single enzyme are the experimental material, yet the procedures and principles demonstrated are widely applicable to other systems. This text will serve as an excellent aid in the establishment or instruction of introductory courses in the biological sciences. Key Features of this new edition All exercises and appendixes have been updatedIncludes new exercises on: Polymerase chain reactionBeta-Galactosidase detection in yeast coloniesWestern blottingNew procedures introduced for: Large-scale plasmid isolationYeast transformationDNA quantitationNew appendixes added, one of which provides details on accessing biological information sites on the Internet (World Wide Web)Use of non-radioactive materials and easy access to microbial culturesLaboratory exercises student tested for seven years