

# ΕΡΓΑΣΤΗΡΙΑΚΕΣ ΑΣΚΗΣΕΙΣ ΒΙΟΧΗΜΕΙΑΣ

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## Abstract

This book was written in order to be the main textbook of the laboratory exercises for the students of the Department of Nutrition and Dietetics in the context of the undergraduate courses of Biochemistry. However, the book is written in such a way so as to appeal to a wider audience (students and teachers), mainly from health sciences schools, who are interested in gaining a basic background in the analysis and study of biomolecules. The book focuses both on the theoretical background of the most important physicochemical techniques, on which the main biochemical analysis techniques are based, and on the basic methodological approaches to the study of the most important biomolecules. The laboratory exercises listed in the last part of the book allow the student to acquire basic laboratory skills

and understand theoretical knowledge through practice. The book consists of three parts. In the first part, the basic laboratory techniques used in a biochemical laboratory are described, with the aim of acquiring knowledge of the theoretical background of these techniques. In the second part, the basic principles of analysis of proteins, carbohydrates, lipids and vitamins, metals and trace elements are described, with the aim of obtaining a global picture of how these biomolecules are studied at the experimental level. The third part includes the detailed description (protocols) of the laboratory exercises in which the student will practice. At the end of each exercise, directions for processing the results are included, as well as evaluation criteria aimed at developing critical perception.

