

The background of the cover is a dark, textured blue. A prominent feature is a large, bright blue, triangular shape that tapers towards the bottom left, resembling a stylized 'V' or a funnel. To the left of this shape, there are vertical, slightly curved lines in shades of blue and red, creating a sense of depth and movement. The overall aesthetic is modern and geometric.

COLLEGE ACCOUNTING

Fourth Edition 1-15

McQuaig

College Accounting

FOURTH EDITION 1-15

Douglas J. McQuaig

Wenatchee Valley College

HOUGHTON MIFFLIN COMPANY Boston
Dallas Geneva, Illinois Palo Alto Princeton, New Jersey

This text and its related materials are dedicated to the students who will use them. My dream is to give them a tool that is both practical and understandable.

This book is written to provide accurate and authoritative information concerning the covered topics. It is not meant to take the place of professional advice.

Cover image by Slide Graphics of New England, Inc.

Copyright © 1989 by Houghton Mifflin Company. All rights reserved.

No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system without the prior written permission of Houghton Mifflin Company unless such copying is expressly permitted by federal copyright law. Address inquiries to College Permissions, Houghton Mifflin Company, One Beacon Street, Boston, MA 02108.

Printed in the U.S.A.

Library of Congress Catalog Card No.: 88-81345

ISBN: 0-395-36918-5

BCDEFGHIJ-VH-9543210/89

Preface

The goals for the fourth edition of *College Accounting* are the same as they have been for the previous editions: To provide students with a sound basic knowledge of accounting terms, concepts, and procedures, always taking into consideration students' widely varying objectives:

- Preparation for students entering the job market in accounting
- A practical background in accounting for students embarking on other careers, such as clerical, secretarial, technical, sales, and management positions.
- Preparation and background for students planning more advanced studies in accounting.

Based on more than 30 years teaching experience, the author has developed a method of presentation that reflects the need for an understandable and teachable basic accounting text that is logically organized, liberally illustrated, and paced in such a manner that it is easy for students to read and understand. This same approach has made previous editions successful with many teachers and students. At the same time, however, based on extensive reviews, campus visits, and conversations with many accounting teachers, the author has updated, revised, and improved both the text and the ancillary materials.

The accounting principles described are those endorsed by the Financial Accounting Standards Board and its predecessor, the Accounting Principles Board. Pertinent areas of the Tax Reform Act are included in the appropriate chapters.

CHARACTERISTICS OF COLLEGE ACCOUNTING

Accent on the Fundamentals

College Accounting, Fourth Edition presents the fundamentals of accounting in a practical, easy-to-understand manner that students can understand. Appropriate repetition enables students to develop confidence in themselves and to make progress in easy stages. This repetition is accomplished through extensive use of examples and illustrations.

Since an understanding of accounting fundamentals is based on understanding accounting transactions, great stress is devoted to analysis of transactions. Each newly introduced transaction is fully illustrated and supported with T account examples. Comprehensive reviews of T accounts, organized in relation to the fundamental accounting equation, appear after Chapters 6 and 10 to assist students as they review material during their course of study.

Reading Comprehension

College Accounting, Fourth Edition is a very readable text. Capitalizing on a direct approach, the author writes in short sentences that are supported by many illustrations that help students to understand the discussion. Each chapter is limited to the presentation of one major concept, which is well illustrated with business documents and report forms. As terms are introduced, they are defined thoroughly and are used in subsequent examples. Comprehension is also enhanced through the use of unique “Remembers.” These short, marginal notes present a learning hint or a capsule summary of a major point made in preceding paragraphs. New end-of-chapter summaries also enhance comprehension.

Terminology

The author firmly believes that accounting is the language of business and that learning new terminology is an important part of a first course. Each key term is printed in red and is explained when it is first introduced. The end-of-chapter glossary repeats the definitions of the terms presented in the chapter.

Questions, Exercises, and Problems

College Accounting, Fourth Edition provides a wealth of exercise and problem material that is fully supported by the Working Papers, offering instructors a wide choice for classroom illustrations and assignments. Each chapter ends with comprehensive review and study material consisting of a chapter summary, a glossary, eight discussion questions, eight exercises, and two sets of comparable A and B problems. Exercises and problems have been rewritten for this edition.

- **Questions** Eight questions, based on the main points in the text, are included at the end of each chapter.
- **Classroom Exercises** For practice in applying concepts, eight exercises are provided with each chapter.
- **Problems** Each chapter contains four A problems and four B problems. The A and B problems are parallel in content and level of difficulty. They are arranged in order of difficulty, with Problems 1A and 1B in each chapter being the simplest and the last problem in each series being the most comprehensive.

NEW FOUR-COLOR PEDAGOGY

The author, in conjunction with Houghton Mifflin Company, has developed a color-coded pedagogy that is designed to help students recognize and remember key points, understand the flow of accounting data, recognize different types of documents and reports used in accounting,

The Use of Color in McQuaig

Red	Green	Blue
Inputs	Process	Outputs
Source Documents Bank Statements and Reconciliations Tax Forms	Trial Balances Journals Ledgers Work Sheets Schedules Registers Inventory, Plant, and Equipment Records	Financial Statements Income Statements Statements of Owner's Equity Balance Sheets Statements of Retained Earnings Statements of Cash Flows
<i>Also</i> Learning Objectives Tables Key Terms Emphasis		<i>Also</i> Chapter Heads Remembers Computers at Work

identify the learning objectives for each chapter, see how each exercise and problem relates to the learning objectives for the chapter, and review material efficiently and effectively.

- **Learning objectives** are set in red throughout the text. They are listed at the beginning of each chapter and restated alongside the narrative related text discussion. They are referenced by learning objective number in the chapter summary and in the exercises and problems.
- **Key terms** are highlighted in red. They are defined in the text and repeated in a glossary at the end of the chapter.
- **Remembers**, which are printed in blue, are learning hints or summaries placed in the margin of the text. These marginal notes often alert students to common pitfalls and help them complete their work successfully.
- **Tables** are highlighted with a red screen, helping students quickly identify material that must be examined as a unit and is not part of running text.

The fourth edition's innovative use of color extends to the treatment of accounting forms, financial statements, and documents in the text and end-of-chapter assignments.

- **Working papers, journals, ledgers, trial balances, and other forms and schedules** used as part of the internal accounting process are shown in green.
- **Financial statements**, including balance sheets, income statements, statements of owners equity, and statements of cash flows, are shown in blue.

- **Source documents**, such as invoices, bank statements, facsimiles, and other material that originates with outside sources, are shown in red.

This distinctive treatment differentiates these elements and helps students to see where each element belongs in the accounting cycle. Seeing these relationships helps students understand how accountants transform data into useful information.

CHAPTER COVERAGE

College Accounting, Fourth Edition is designed primarily for use in a course extending two or three quarters or two semesters. The text may be divided into modules: Chapters 1–6 cover the full accounting cycle for a sole proprietorship service business. Chapters 7–10 cover bank accounts and payroll accounting. Chapters 11–15 cover the full accounting cycle for a merchandising firm.

Three appendixes expand content coverage and increase the instructor's options for structuring the course.

- **Appendix A: Methods of Depreciation** (after Chapter 5) Briefly describes methods of depreciation, including the Modified Accelerated Cost Recovery System.
- **Appendix B: Bad Debts** (after Chapter 8) Briefly describes the allowance and specific charge-off methods.
- **Appendix C: Financial Statement Analysis** (after Chapter 15) Briefly describes percentages and ratios used to interpret information in financial statements.

SPECIAL FEATURES

- **Extended Example** Paul's Auto Body, a fictional company, is used throughout Chapters 1–6 to illustrate accounting concepts
- **Accounting Cycle Review Problem** This mini-practice set, following Chapter 6, involves the full accounting cycle for a fictional company called Parkland Bumper Boats.
- **Representative T Accounts and Transactions** Simple charts organize this information for Chapters 1–6, 7–10, and 11–15.
- **Chapter 7: Accounting for Professional Enterprises** This optional chapter emphasizes the combined journal. (An alternative set of achievement tests that omits the combined journal is available for those instructors who do not use this chapter.)

COMPUTERS AT WORK

Microcomputers have brought major changes to the work environment in which today's graduates will be expected to function. The new *Com-*

puters at Work boxes, highlighted in blue, offer instructors a springboard for explaining the impact of these changes to students. Topics have been selected for their relevance to accounting and include:

- Types of Computers
- Parts of a Computer
- Computerized Accounting
- Pegboards—Manual and Computerized
- Payroll
- Sales and Inventory
- Integrated Accounting Software

CONTENT CHANGES IN THE FOURTH EDITION

The author has carefully revised and updated the entire text and the end-of chapter materials. Changes include an increased emphasis on explaining transactions and a step-by-step approach to transaction analysis and error correction. The learning objectives have been analyzed and improved by adding new learning objectives and breaking down complex learning objectives to increase student comprehension and understanding. In addition, a three-column purchases journal is introduced in Chapter 12.

Much care has been taken to make sure that *College Accounting, Fourth Edition* is as current as possible. The text discussion and examples that involve such topics as depreciation schedules, bad debt write-offs, and tax rates have been revised in light of the Tax Reform Act of 1986. The payroll chapters have been brought up to date and expanded in light of new tax laws. Appendixes have been replaced or updated. Appendix B, Bad Debts, which follows Chapter 8, illustrates write-offs of uncollectible accounts using the allowance and specific charge-off methods. Practice sets have been completely revised to reflect business situations with inherent appeal to today's students.

QUALITY CONTROL

Successful use of an accounting text depends on more than the interesting and memorable presentation of material by the instructor and the text. The overall quality of the examples, illustrations, end-of-chapter questions, exercises and problems, and ancillary materials are critical to learning and retention of the facts and concepts covered in the course. Instructors and students must be assured that these materials are complete, consistent, and accurate.

The author and the publisher of *College Accounting, Fourth Edition* have taken a multistep approach to ensure quality materials for classroom use. The quality control system begins with in-depth reviews of the

original manuscript and concludes with accuracy reviews of page proof provided by academics teaching the course and by the international accounting firm of Arthur Young & Company.

SUPPLEMENTARY LEARNING AIDS FOR STUDENTS

For the fourth edition we have assembled the most comprehensive package of student and instructor aids to complement a wide variety of teaching styles and course emphases.

Working Papers

The Working Papers now include the learning objectives for each chapter, chapter summaries, lists of key terms, self-study review questions, an extended demonstrations problem and solution for each chapter (which is reproduced in the Instructor's Manual), forms for A and B problems and for the Accounting Cycle Review Problem, and answers to the self-study review questions, a list of check figures, and additional blank working paper forms. Working Papers 1–15 also includes a Review of Business Mathematics.

Manual Practice Sets

College Accounting, Fourth Edition is accompanied by the largest selection of manual practice sets available. These practice sets offer many different choices depending on student needs.

After Chapter 4 *Sailsports* is a unique exercise that requires students to work through seven months of business activity for a sole proprietorship sailboard rental company. Each month brings home to students the reality of paper handling, as they annotate, manage, file and retrieve source documents.

After Chapter 7 *Plaza Fitness Center* (new), a pegboard practice set, introduces the student to one-write accounting systems.

With Chapters 9 and 10 *Island Floral* (new) requires students to complete four payrolls—two months, semimonthly. The payrolls include the last month of one quarter and the first month of the next, giving students the opportunity not only to complete the current payroll month, but also to prepare the end-of-quarter tax work.

After Chapter 10 Three practice sets are available. Each covers the basic accounting cycle, cash management, and payroll for one month in the life of a sole proprietorship service business. All three are published in a business-papers format for the sake of realism.

- *Here's Video* (new) permits instructors to choose either a combined journal or a general journal.
- *C. W. Hale, M.D.*, has medical forms and business papers. A combined journal is used.
- *M. T. Chandler, Attorney at Law*, has legal forms and business papers. A combined journal is used.

After Chapter 15

- *Lakeside Water Scooters* (new) features business papers and special journals. It covers a one-month accounting cycle for a merchandising firm.
- *The Oak Shoppe: An Audit Problem with Business Papers*. This unique exercise requires students to detect and correct errors in one month's worth of financial records and to generate a set of corrected financial statements for a retail furniture merchandising business.
- *The Book Loft: A Cumulative Shoebox Practice Set with Business Papers*. In this realistic exercise the student/bookkeeper is "hired" by a sole proprietorship retail bookstore to organize a disordered set of source documents representing one month's financial activity, bring order to the company's books, and complete all year-end accounting tasks including formulating and recording adjusting and closing entries and preparing financial statements.

Computer-Assisted Practice Sets and Simulations

After Chapter 6 *Sounds Abound*, a computer practice set for one month in the life of a sole proprietorship service business, requires only two hours of computer time.

After Chapter 10 A computer job simulation for Payroll Clerk at Lawson's Supply Center.

After Chapter 11 A computer job simulation for Accounts Receivable Clerk at Lawson's Supply Center.

After Chapter 12 A computer job simulation for Accounts Payable Clerk at Lawson's Supply Center.

After Chapter 13 A computer job simulation for Cash Clerk at Lawson's Supply Center.

After Chapter 15 Two practice sets are available in addition to a computer job simulation for a General Ledger Clerk at Lawson's Supply Center.

- *Denton Appliance and Air Conditioning*, a computer practice set for a merchandising firm. Students begin the set by hand, using a general journal; they then key the entries into the computer.
- *Cook's Solar Energy Systems*, a computer practice set for one month in the life of a sole proprietorship merchandising firm.

Computer Applications for College Accounting: A General Ledger Package



This easy-to-use general ledger package offers complete coverage of accounting concepts and procedures, including graduated problems, exercises, and tutorials. Selected problems from *College Accounting, Fourth Edition* can be completed with this package. The icon in the margin identifies these problems in the text. A template disk is available to adopters.

Computerized Demonstration Problems: A Tutorial Approach

This exciting new program enables students to test their knowledge of accounting procedures by examining the demonstration problems from the Working Papers that accompany the McQuaig text. Unlike practice sets that require students to enter problem data and then print out the results, this tutorial prompts students to answer true-false or multiple-choice questions on a series of accounting procedures. As students respond to these questions, the program dynamically demonstrates—through moving displays of ledgers and journals—how transaction data flow through an accounting system and impact accounts.

Lotus Problems for Accounting: A Working Papers Approach

This innovative accounting software allows students to solve end-of-chapter problems using the Lotus 1-2-3 spreadsheet software. Students can select from 20 prepared templates and use them to solve most end-of-chapter problems. A template guide is included in the Instructor's Manual and Working Papers.

SOFTWARE SOLUTIONS SERIES

The Software Solutions Series offers a choice from seven popular application software packages. These inexpensive tutorial manuals and educational versions of popular software provide hands-on experience for your students. The seven manuals include:

Using PageMaker®
Using Lotus 1-2-3® Version 2.0
Using dBASE III Plus™
Using SuperCalc® 4
Using WordStar® 4.0
Using WordPerfect™ 4.2
Using Microsoft® Works

SUPPLEMENTARY TEACHING AIDS FOR INSTRUCTORS

Instructor's Manual with Solutions

This instructor's manual includes teaching suggestions for each chapter as well as complete solutions to all questions and exercises. Solutions to all A and B problems are shown on the same forms used in the Working Papers.

New to this edition are lecture outlines, key terms, learning objectives, chapter summaries, and a duplicate of the demonstration problems that appear in the Working Papers, as well as a cross-reference for each problem to the corresponding page of the Working Papers. Also new is a template guide for *Lotus Problems for Accounting: A Working Papers Approach*.

Teaching and Solutions Transparencies

Two sets of mylar transparencies are available to adopters. The improved two-color, typeset solutions cover every exercise and problem. Approximately 50 teaching and supplemental blank transparencies are also provided in this improved format.

Test Bank

For this edition, the number of questions has increased, and they are presented on a chapter-by-chapter basis. True-false, multiple-choice, and matching questions, as well as short problems are offered for each chapter. Final examinations with answers are presented in two versions.

The test problems, including the forms, and final examinations are presented in a format suitable for copying and distributing to classes. Also included are achievement test facsimiles. A microcomputer-based version of the main test bank and a call-in testing service are available. Final examinations covering Chapters 1–10, Chapters 1–15, and Chapters 16–29 are provided in ready-to-reproduce format.

Instructor's Resource Kit 1–15

The Instructor's Manual with Solutions (1–15), Teaching and Solutions Transparencies (1–15), and Test Bank are available in an attractive, durable case, which may be used to organize and store classroom support materials.

Achievement Tests

Preprinted tests are ready for class use. Each test covers two to three chapters in the text. Series A, which covers Chapters 1–15 and Chapters 16–29, provides 32 copies of each test. Series B is an alternative set of tests covering the same material.

The Video Workshop

New to this edition, a professionally prepared VHS video tape is available. Video Workshop presents key accounting topics and survival skills for students. A Video Guide with teaching tips is included.

Grade Performance Analyzer

Provided free to instructors, this computerized gradebook program for IBM PC and Apple II microcomputers facilitates orderly recordkeeping, calculation, and posting of student grades.

ACKNOWLEDGMENTS

Again, I would sincerely like to thank the editorial staff of Houghton Mifflin for their continuous support. I am still deeply appreciative of the assistance given to me during the preparation of the first edition of this text by Professors Hobart Adams, University of Akron, and Joseph Goodman, Chicago State University. The cooperation of my colleagues, Professors Audrey Chan-Nui, Geneva Knutson, and John Wisen, has been most helpful. Also, I want to thank my many students at We-natchee Valley College for their observations and evaluations. Especially, I want to thank Donna L. Randall Lacey, Bunker Hill Community College, and Suzanne M. Williamson, Williamson and Associates, for their diligent and comprehensive reviews. Patricia A. Bille, Highline Community College, provided invaluable help in her role as consulting editor. Her work in developing the Computers at Work boxed inserts is particularly appreciated.

During the writing of the fourth edition, I visited many users of the text throughout the country. Their constructive suggestions are reflected in the changes that have been made. Unfortunately, space does not permit mention of all those who have contributed to this volume. Some of those, however, who have been supportive and have influenced my efforts are:

Joseph F. Adamo, Cazenovia College
Stanley Augustine, Santa Rosa Junior College
Catherine Berg, Nassau Community College
Linda J. Block, Embry-Riddle Aeronautical University
Kenneth W. Brown, College of Technology, University of Houston—
University Park
Anita Brownstein, Drake Business School
Howard Bryan, Santa Rosa Junior College
Theresa Capretta, North Harris County College
Clairmont P. Carter, University of Lowell
Michael S. Chaks, Riverside Community College
John Chestnutt, Allan Hancock College
Trudy Chiaravalli, Lansing Community College
Dana Crismond, Mt. Empire Community College
Martha J. Curry, Huston-Tillotson College
Leonard Delury, Portland Community College—Sylvania Campus
Irving Denton, Northern Virginia Community College
Allan Doyle, Pima Community College
Jerry Sue Dyess, San Jacinto College—Central Campus
William Evans, Cerritos College
Mary Foster, Illinois Central College
Walter A. Franklin, Palm Beach Junior College
Alan Fraser, Rio Hondo College
William French, Albuquerque Technical-Vocational Institute
Stuart M. Fukushige, Leeward Community College

Helen Gerrard, Miami University—Hamilton and Middletown Regional
Campuses
Steven R. Graham, Vincennes University
Charles Grant, Skyline College
Marie Gressel, Santa Barbara City College
Robert E. Hartzell, Colorado Mountain College—Timberlane Campus
C. Robert Hellmer, Milwaukee Area Technical College
Joyce Henzel, Rogers State College
Carol Holcomb, Spokane Falls Community College
Donald L. Holloway, Long Beach City College
Janis Hutchins, Lamar University—Port Arthur
George Ihorn, El Paso Community College
Thomas Jackson, Cerritos College
Eugene Janner, Blinn College
Edward H. Julius, California Lutheran University
Andre E. Kelton, American Business Institute, New York
Jimmy King, McLennan Community College
Lydia C. K. Kinoshita, Cannon's Business College
Bobbie Krapels, Branell College
Frances Kubicek, Kalamazoo Valley Community College
Ronald Kulhanek, Great Lakes Junior College
Nathan R. Larsen, Ricks College
Elliott S. Levy, Bentley College
Loren Long, Elgin Community College
Joyce Loudder, Houston Community College
Donald MacGilvra, Shoreline Community College
Paul C. Maziarz, Bryant & Stratton Business Institute, Buffalo
Robert Mills, Texarkana Community College
Elizabeth Barnard Miller, Columbus Technical Institute
V. Eva Molnar, Riverside Community College District
Donald Morehead, Henry Ford Community College
Robert Nash, Henry Ford Community College
M. Salah Negm, Prince George's Community College
Dolores Osborn, Central Washington University
Vincent Pelletier, College of DuPage
Paul T. Ryan, Jackson State Community College
John T. Saleh, Tyler Junior College
H. Lee Schlorff, Bentley College
Steven Schmidt, Butte College
Nelda Shelton, Tarrant County Junior College
Eliot H. Sherman, Northeastern University
Elaine Simpson, St. Louis Community College at Florissant Valley
Sharon Smith, Texas Southmost College
Gary Stanton, Erie Community College—City
Mary E. Retterer, San Bernardino Valley College
Harold Steinhauer, Rock Valley Community College
Rahmat Tavallali, Wooster Business College

Alan Tucker, Everett Community College
Catherine P. Varca, Bryant & Stratton Business Institute, Buffalo
William G. Vendemia, Youngstown State University
Russell Vermillion, Prince George's Community College
Florence G. Waldman, Kilgore College
Emma Watts, Westark Community College
Robert Weaver, Malcolm X College
Penny Westerfeld, North Harris County College
Maxine Wilson, Los Angeles City College

A special note of thanks to the individuals who contributed greatly by reviewing and checking the end-of-chapter questions, exercises, and problems.

Carmela C. Caputo, Empire State College
Janet Cassagio, Nassau Community College
Carl Dauber, Southern Ohio College
Vicky C. Dominguez, Clark County Community College
Marlin Gerber, Kalamazoo Valley Community College
Ann King, Branell College, Riverdale Campus
Jan Mardon, Green River Community College
Bernard Piwkiewicz, Laney College
Joseph Stoffel, Waubonsee Community College
Ron Summers, Oklahoma City Community College
Stan Weikert, College of the Canyons

As always, I would like to thank my family for their understanding and cooperation. Without their support, this text would never have been written. My heartfelt appreciation is extended to my wife, Beverlie, for her detailed proofreading and for her willingness to put up with me. Pertinent suggestions for updating the material were given by my daughter, Judith Britton, C.P.A., of Bunday, Britton, and Horikawa; my son, John McQuaig, C.P.A., of McQuaig and Welk; and my son-in-law, Christopher Britton, C.P.A., of Touche Ross.

Douglas J. McQuaig

Contents

Preface	ix
1 Analyzing Business Transactions: Asset, Liability, and Owner's Equity Accounts	1
Definition of Accounting / Career Opportunities in Accounting / Assets, Liabilities, and Owner's Equity / The Balance Sheet	
2 Analyzing Business Transactions: Revenue and Expense Accounts	21
Revenue and Expense Accounts / Major Financial Statements / Computers at Work: Types of Computers: Mainframes, Minis, and Micros	
3 Recording Business Transactions in T Account Form; The Trial Balance	47
The T Account Form / Recording Transactions in T Account Form / Left Equals Right / Debit and Credit Sides / The Trial Balance / Computers at Work: Parts of a Computer	
4 The General Journal and the General Ledger	83
The General Journal / Posting to the General Ledger / Correction of Errors / Computers at Work: Computerized Accounting	
Practice Set: Sailsports	
Computer Applications for College Accounting: A General Ledger Package	
5 Adjustments and the Work Sheet	121
Fiscal Period / The Accounting Cycle / The Work Sheet / Adjustments / Journalizing Adjusting Entries	
Appendix A: Methods of Depreciation	156