# ACCOUNTING

27e

#### **Carl S. Warren**

Professor Emeritus of Accounting University of Georgia, Athens

#### James M. Reeve

Professor Emeritus of Accounting University of Tennessee, Knoxville

#### Jonathan E. Duchac

Professor of Accounting Wake Forest University



## **Brief Contents**

| Chapter 1  | Introduction to Accounting and Business                            | 2    |
|------------|--|------|
| Chapter 2  | Analyzing Transactions   | 56   |
| Chapter 3  | The Adjusting Process  | 110  |
| Chapter 4  | Completing the Accounting Cycle                                    | 160  |
| Chapter 5  | Accounting Systems   | 230  |
| Chapter 6  | Accounting for Merchandising Businesses                            | 280  |
| Chapter 7  | Inventories  | 344  |
| Chapter 8  | Internal Control and Cash  | 394  |
| Chapter 9  | Receivables  | 440  |
| Chapter 10 | Long-Term Assets: Fixed and Intangible                             | 486  |
| Chapter 11 | Current Liabilities and Payroll                                    | 536  |
| Chapter 12 | Accounting for Partnerships and Limited Liability Companies        | 584  |
| Chapter 13 | Corporations: Organization, Stock Transactions, and Dividends      | 628  |
| Chapter 14 | Long-Term Liabilities: Bonds and Notes                             | 675  |
| Chapter 15 | Investments and Fair Value Accounting                              | 719  |
| Chapter 16 | Statement of Cash Flows.   | 765  |
| Chapter 17 | FInancial Statement Analysis                                       | 823  |
| Chapter 18 | Introduction to Managerial Accounting                              | 883  |
| Chapter 19 | Job Order Costing  | 924  |
| Chapter 20 | Process Cost Systems   | 968  |
| Chapter 21 | Cost-Volume-Profit Analysis  | 1020 |
| Chapter 22 | Budgeting  | 1074 |
| Chapter 23 | Evaluating Variances from Standard Costs                           | 1124 |
| Chapter 24 | Decentralized Operations   | 1172 |
| Chapter 25 | DIfferential Analysis, Product Pricing, and Activity-Based Costing | 1218 |
| Chapter 26 | Capital Investment Analysis  | 1272 |
|            | Mornin' Joe  | MJ-1 |
| Appendix A | Interest Tables  | A-1  |
| Appendix B | International Financial Reporting Standards (IFRS)                 | B-1  |
| Appendix C | Revenue Recognition  | C-1  |
| Appendix D | Nike Inc., Form 10-K for the Fiscal Year Ended May 31, 2016        | D-1  |
|            | Glossary   | G-1  |
|            | Index  | I-1  |

### **Contents**

## Chapter 1 Introduction to Accounting and Business 2

#### **Nature of Business and Accounting 5**

Types of Businesses 5 Role of Accounting in Business 6 Role of Ethics in Accounting and Business 6

Integrity, Objectivity, and Ethics in Business: Bernie Madoff 9

Opportunities for Accountants 9

**Business Connection: Pathways Commission 10** 

#### **Generally Accepted Accounting Principles 10**

**Business Entity Concept 11** 

International Connection: International Financial Reporting Standards (IFRS) 11

Cost Concept 12

#### **The Accounting Equation 13**

**Business Connection: The Accounting Equation 13** 

## Business Transactions and the Accounting Equation 14

Summary 18

#### **Financial Statements 19**

Income Statement 20 Statement of Owner's Equity 21 Balance Sheet 21 Statement of Cash Flows 24 Interrelationships Among Financial Statements 25

Financial Analysis and Interpretation: Ratio of Liabilities to Owner's Equity 26

#### Chapter 2 Analyzing Transactions 56

#### **Using Accounts to Record Transactions 59**

Chart of Accounts 61

**Business Connection: The Hijacking Receivable 61** 

#### **Double-Entry Accounting System 62**

Balance Sheet Accounts 62 Income Statement Accounts 63 Owner Withdrawals 63 Normal Balances 63 Journalizing 64

Integrity, Objectivity, and Ethics in Business: Will Journalizing Prevent Fraud? 67

#### **Journalizing and Posting to Accounts 68**

Business Connection: Microsoft's Unearned Revenue 70

**Business Connection: Computerized Accounting Systems 72** 

#### **Trial Balance 77**

Errors Affecting the Trial Balance 78 Errors Not Affecting the Trial Balance 79

## Financial Analysis and Interpretation: Horizontal Analysis 80

### Chapter 3 The Adjusting Process 110

#### **Nature of the Adjusting Process 113**

Accrual and Cash Basis of Accounting 113 Revenue and Expense Recognition 114 The Adjusting Process 114 Types of Accounts Requiring Adjustment 115

#### **Adjusting Entries for Accruals 116**

Accrued Revenues 117 Accrued Expenses 118

Business Connection: Earning Revenues from Season Tickets 120

#### **Adjusting Entries for Deferrals 120**

Unearned Revenues 121 Prepaid Expenses 122

**Business Connection: Sports Signing Bonus 122** 

Integrity, Objectivity, and Ethics in Business: Free Issue 123

#### **Adjusting Entries for Depreciation 124**

#### **Summary of Adjusting Process 126**

Business Connection: Microsoft's Deferred Revenues 126

#### **Adjusted Trial Balance 130**

Financial Analysis and Interpretation: Vertical Analysis 131

## Chapter **4** Completing the **Accounting Cycle** 160

#### Flow of Accounting Information 163

#### **Financial Statements 165**

Income Statement 165

Integrity, Objectivity, and Ethics in Business: CEO's Health? 167

Statement of Owner's Equity 167 Balance Sheet 168

#### International Connection: International Differences 169

#### **Closing Entries 169**

Journalizing and Posting Closing Entries 170 Post-Closing Trial Balance 174

#### **Accounting Cycle 174**

#### Illustration of the Accounting Cycle 177

- Step 1. Analyzing and Recording Transactions in the Journal 177
- Step 2. Posting Transactions to the Ledger 179
- Step 3. Preparing an Unadjusted Trial Balance 179
- Step 4. Assembling and Analyzing Adjustment Data 180
- Step 5. Preparing an Optional End-of-Period Spreadsheet 180
- Step 6. Journalizing and Posting Adjusting Entries 180
- Step 7. Preparing an Adjusted Trial Balance 182
- Step 8. Preparing the Financial Statements 182
- Step 9. Journalizing and Posting Closing Entries 184
- Step 10. Preparing a Post-Closing Trial Balance 184

#### Fiscal Year 187

#### **Business Connection: Choosing a Fiscal Year 188**

## Financial Analysis and Interpretation: Working Capital and Current Ratio 188

#### **End-of-Period Spreadsheet 189**

- Step 1. Enter the Title 190
- Step 2. Enter the Unadjusted Trial Balance 190

- Step 3. Enter the Adjustments 191
- Step 4. Enter the Adjusted Trial Balance 192
- Step 5. Extend the Accounts to the Income Statement and Balance Sheet Columns 193
- Step 6. Total the Income Statement and Balance Sheet Columns, Compute the Net Income or Net Loss, and Complete the Spreadsheet 193

Preparing the Financial Statements from the Spreadsheet 194

#### **Reversing Entries 196**

#### Chapter **5** Accounting Systems **230**

#### **Basic Accounting Systems 232**

#### **Manual Accounting Systems 233**

Subsidiary Ledgers 233

Special Journals 233

Revenue Journal 235 Cash Receipts Journal 238

Accounts Receivable Control Account and

Subsidiary Ledger 240

Purchases Journal 240

Cash Payments Journal 243

Accounts Payable Control Account and Subsidiary Ledger 245

Business Connection: Accounting Systems and Profit Measurement 246

#### **Computerized Accounting Systems 247**

**Business Connection: TurboTax 249** 

#### E-Commerce 249

Integrity, Objectivity, and Ethics in Business: Online Fraud 250

Financial Analysis and Interpretation: Segment Analysis 250

## Chapter **6** Accounting for Merchandising Businesses 280

#### **Nature of Merchandising Businesses 282**

Operating Cycle 282 Financial Statements 283

**Business Connection: Comcast Versus Lowe's 284** 

#### **Merchandising Transactions 284**

Chart of Accounts for a Merchandising Business 284 Purchases Transactions 285 Sales Transactions 290

#### Integrity, Objectivity, and Ethics in Business: The Case of the Fraudulent Price Tags 294

Freight 295

Summary: Recording Merchandise Inventory

Transactions 297

Dual Nature of Merchandise Transactions 297

Sales Taxes and Trade Discounts 299

#### **Business Connection: Sales Taxes 300**

#### **The Adjusting Process 300**

Adjusting Entry for Inventory Shrinkage 300

#### Integrity, Objectivity, and Ethics in Business: The Cost of Employee Theft 301

Adjusting Entries for Customer Refunds, Allowances, and Returns 301

## Financial Statements for a Merchandising Business 303

Multiple-Step Income Statement 303 Single-Step Income Statement 305 Statement of Owner's Equity 305 Balance Sheet 305 The Closing Process 306

### Financial Analysis and Interpretation: Asset Turnover 307

#### **The Periodic Inventory System 309**

Chart of Accounts Under the Periodic Inventory System 309

Recording Merchandise Transactions Under the Periodic Inventory System 310

Adjusting Process Under the Periodic Inventory System 310

Financial Statements Under the Periodic Inventory System 311

Closing Entries Under the Periodic Inventory System 312

#### **Practice Set: Lawn Ranger Landscaping**

This set covers the complete accounting cycle for a service business operated as a sole proprietorship. Students follow a narrative of transactions to make general journal entries. Includes instructions for an optional solution with no debits and credits. This set can be completed manually or with the General Ledger software.

#### Chapter 7 Inventories 344

#### **Control of Inventory 346**

Safeguarding Inventory 346 Reporting Inventory 347

#### **Inventory Cost Flow Assumptions 347**

Business Connection: **Pawn Stars** and Specific Identification 349

## Inventory Costing Methods Under a Perpetual Inventory System 350

First-In, First-Out Method 350 Last-In, First-Out Method 351

International Connection: International Financial Reporting Standards (IFRS) 353

Weighted Average Cost Method 353

**Business Connection: Computerized Perpetual Inventory Systems 355** 

## Inventory Costing Methods Under a Periodic Inventory System 355

First-In, First-Out Method 355 Last-In, First-Out Method 356 Weighted Average Cost Method 357

#### **Comparing Inventory Costing Methods 358**

Integrity, Objectivity, and Ethics in Business: Where's the Bonus? 359

## Reporting Merchandise Inventory in the Financial Statements 359

Valuation at Lower of Cost or Market 359

#### **Business Connection: Good Samaritan 361**

Merchandise Inventory on the Balance Sheet 361 Effect of Inventory Errors on the Financial Statements 362

## Financial Analysis and Interpretation: Inventory Turnover and Days' Sales in Inventory 365

**Business Connection: Rapid Inventory at Costco 365** 

#### **Estimating Inventory Cost 368**

Retail Method of Inventory Costing 368 Gross Profit Method of Inventory Costing 369

## Chapter **8 Internal Control** and Cash 394

#### **Sarbanes-Oxley Act 396**

#### **Internal Control 398**

Objectives of Internal Control 398

#### **Business Connection: Employee Fraud 398**

Elements of Internal Control 398 Control Environment 399 Risk Assessment 400 Control Procedures 400

#### Integrity, Objectivity, and Ethics in Business: Tips on Preventing Employee Fraud in Small Companies 401

Monitoring 402 Information and Communication 402 Limitations of Internal Control 403

#### **Cash Controls over Receipts and Payments 403**

Control of Cash Receipts 404 Control of Cash Payments 406

**Business Connection: Mobile Payments 406** 

#### **Bank Accounts 407**

Bank Statement 407 Using the Bank Statement as a Control over Cash 409

#### **Bank Reconciliation 410**

Integrity, Objectivity, and Ethics in Business: Bank Error in Your Favor (or Maybe Not) 413

**Special-Purpose Cash Funds 413** 

**Financial Statement Reporting of Cash 415** 

**Business Connection: Managing Apple's Cash 415** 

Financial Analysis and Interpretation: Ratio of Cash to Monthly Cash Expenses 415

**Business Connection: Microsoft Corporation 417** 

#### Chapter 9 Receivables 440

#### **Classification of Receivables 442**

Accounts Receivable 442 Notes Receivable 442 Other Receivables 443

**Uncollectible Receivables 443** 

**Business Connection: Warning Signs 444** 

Direct Write-Off Method for Uncollectible Accounts 444

#### **Allowance Method for Uncollectible Accounts 445**

Integrity, Objectivity, and Ethics in Business: Collecting Past Due Accounts 446

Write-Offs to the Allowance Account 446

**Business Connection: Failure to Collect 448** 

Estimating Uncollectibles 448

Business Connection: Allowance Percentages Across Companies 453

Comparing Direct Write-Off and Allowance Methods 453

#### **Notes Receivable 454**

Characteristics of Notes Receivable 454 Accounting for Notes Receivable 456

**Reporting Receivables on the Balance Sheet 458** 

**Business Connection: Delta Air Lines 458** 

#### Financial Analysis and Interpretation: Accounts Receivable Turnover and Days' Sales in Receivables 459

## Chapter **10 Long-Term Assets:** Fixed and Intangible 486

#### **Nature of Fixed Assets 488**

Classifying Costs 488

#### **Business Connection: Fixed Assets 489**

The Cost of Fixed Assets 490 Leasing Fixed Assets 491

#### **Accounting for Depreciation 492**

Factors in Computing Depreciation Expense 492 Straight-Line Method 493 Units-of-Activity Method 495 Double-Declining-Balance Method 497 Comparing Depreciation Methods 499 Partial-Year Depreciation 499

#### **Business Connection: Depreciating Animals 500**

Revising Depreciation Estimates 501 Repair and Improvements 502

Integrity, Objectivity, and Ethics in Business: Capital Crime 503

#### **Disposal of Fixed Assets 504**

Discarding Fixed Assets 504 Selling Fixed Assets 505

**Business Connection: Downsizing 506** 

#### **Natural Resources 507**

#### **Intangible Assets 508**

Patents 508 Copyrights and Trademarks 509 Goodwill 509

International Connection: International Financial Reporting Standards (IFRS) 511

## Financial Reporting for Long-Term Assets: Fixed and Intangible 511

## Financial Analysis and Interpretation: Fixed Asset Turnover Ratio 512

Fixed Asset Turnover Ratio 512

Business Connection: Hub-and-Spoke or Point-to-Point? 513

#### **Exchanging Similar Fixed Assets 514**

Gain on Exchange 514 Loss on Exchange 515

## Chapter 11 Current Liabilities and Payroll 536

#### **Current Liabilities 538**

Accounts Payable 538 Current Portion of Long-Term Debt 538 Short-Term Notes Payable 539

#### **Payroll and Payroll Taxes 541**

Liability for Employee Earnings 541 Deductions from Employee Earnings 541 Computing Employee Net Pay 544 Liability for Employer's Payroll Taxes 545

#### Business Connection: The Most You Will Ever Pay 545

## Accounting Systems for Payroll and Payroll Taxes 545

Payroll Register 546
Employee's Earnings Record 549
Payroll Checks 550
Computerized Payroll System 551
Internal Controls for Payroll Systems 551

#### Integrity, Objectivity, and Ethics in Business: Overbilling Clients 552

#### **Employees' Fringe Benefits 552**

Vacation Pay 552
Pensions 553
Postretirement Benefits Other Than
Pensions 554
Current Liabilities on the Balance Sheet 554

## Business Connection: State Pension Obligations 555

#### **Contingent Liabilities 555**

Probable and Estimable 555 Probable and Not Estimable 556 Reasonably Possible 556 Remote 557

## Financial Analysis and Interpretation: Quick Ratio 557

#### **Practice Set: Fit & Fashionable**

This set is a merchandising business operated as a sole proprietorship. It includes a general journal, special journals, and source documents and can be completed manually or with the General Ledger software.

#### **Practice Set: Chic Events by Jada**

This set is a merchandising business operated as a proprietorship. It includes payroll transactions and purchases and sales with discounts, along with source documents. It can be completed manually or with the General Ledger software.

# Chapter 12 Accounting for Partnerships and Limited Liability Companies 584

## Proprietorships, Partnerships, and Limited Liability Companies 586

Proprietorships 586 Partnerships 587

#### Business Connection: Breaking Up Is Hard To Do 587

Limited Liability Companies 588 Comparing Proprietorships, Partnerships, and Limited Liability Companies 588

## Business Connection: Organizational Forms in the Accounting Industry 588

#### Forming a Partnership and Dividing Income 589

Forming a Partnership 589 Dividing Income 590

## Integrity, Objectivity, and Ethics in Business: Tyranny of the Majority 592

#### **Partner Admission and Withdrawal 593**

Admitting a Partner 593 Withdrawal of a Partner 598 Death of a Partner 598

#### **Liquidating Partnerships 599**

Gain on Realization 600 Loss on Realization 601 Loss on Realization—Capital Deficiency 603

#### **Statement of Partnership Equity 606**

## Financial Analysis and Interpretation: Revenue per Employee 606

# Chapter 13 Corporations: Organization, Stock Transactions, and Dividends 628

#### Nature of a Corporation 630

Characteristics of a Corporation 630 Forming a Corporation 631

Business Connection: Alphabet (Google)'s Bylaws 632

#### Stockholders' Equity 633

#### Paid-In Capital from Stock 634

Characteristics of Stock 634 Classes of Stock 635

#### **Business Connection: You Have No Vote 635**

Issuing Stock 636 Premium on Stock 637 No-Par Stock 638 Integrity, Objectivity, and Ethics in Business: The Professor Who Knew Too Much 639

#### **Accounting for Dividends 639**

Cash Dividends 639 Stock Dividends 641

#### **Stock Splits 642**

**Business Connection: Buffett on Stock Splits 643** 

#### **Treasury Stock Transactions 644**

Business Connection: Treasury Stock or Dividends? 645

#### **Reporting Stockholders' Equity 645**

Stockholders' Equity on the Balance Sheet 645 Reporting Retained Earnings 647 Statement of Stockholders' Equity 648

#### International Connection: IFRS for SMEs 649

Reporting Stockholders' Equity for Mornin' Joe 649

## Financial Analysis and Interpretation: Earnings per Share 651

#### Practice Set: My Place, House of Décor

This set is a service and merchandising business operated as a corporation. It includes narrative for six months of transactions to be recorded in a general journal. The set can be completed manually or with the General Ledger software.

## Chapter **14 Long-Term Liabilities: Bonds and Notes 675**

#### **Financing Corporations 677**

#### **Nature of Bonds Payable 679**

Bond Characteristics and Terminology 680 Proceeds from Issuing Bonds 680

Business Connection: Investor Bond Price Risk 681

#### **Accounting for Bonds Payable 681**

Bonds Issued at Face Amount 681 Bonds Issued at a Discount 682 Amortizing a Bond Discount 683

#### **Business Connection: U.S. Government Debt 684**

Bonds Issued at a Premium 685 Amortizing a Bond Premium 686

#### **Business Connection: Bond Ratings 687**

Bond Redemption 687

#### **Installment Notes 688**

Issuing an Installment Note 689 Annual Payments 689

#### Integrity, Objectivity, and Ethics in Business: The Ratings Game 691

#### **Reporting Long-Term Liabilities 691**

#### Financial Analysis and Interpretation: Times Interest Earned Ratio 691

## Present Value Concepts and Pricing Bonds Payable 693

Present Value Concepts 693 Pricing Bonds 696

#### **Interest Rate Method of Amortization 697**

Amortization of Discount by the Interest Method 697 Amortization of Premium by the Interest Method 698

## Chapter **15** Investments and Fair Value Accounting 719

#### **Why Companies Invest 721**

Investing Cash in Current Operations 721 Investing Cash in Temporary Investments 722 Investing Cash in Long-Term Investments 722

#### **Accounting for Debt Investments 722**

Purchase of Bonds 723 Interest Revenue 723 Sale of Bonds 724

#### **Accounting for Equity Investments 725**

Cost Method: Less Than 20% Ownership 725 Equity Method: Between 20%–50% Ownership 727 Consolidation: More Than 50% Ownership 729

Business Connection: More Cash Means More Investments for Drug Companies 730

#### Valuing and Reporting Investments 730

Trading Securities 730

## Integrity, Objectivity, and Ethics in Business: Socially Responsible Investing 732

Available-for-Sale Securities 732 Held-to-Maturity Securities 734 Summary 734

Business Connection: Warren Buffett: The Sage of Omaha 736

#### **Fair Value Accounting 737**

Effect of Fair Value Accounting on the Financial Statements 737

### Financial Analysis and Interpretation: Dividend Yield 737

**Comprehensive Income 739** 

#### Chapter 16 Statement of

#### Cash Flows 765

#### **Reporting Cash Flows 767**

Cash Flows from Operating Activities 768

#### **Business Connection: Cash Crunch! 770**

Cash Flows from (Used for) Investing Activities 770 Cash Flows from (Used for) Financing Activities 770 Noncash Investing and Financing Activities 770 Format of the Statement of Cash Flows 771 No Cash Flow per Share 771

#### Preparing the Statement of Cash Flows— The Indirect Method 772

Net Income 773 Adjustments to Net Income 774

#### Integrity, Objectivity, and Ethics in Business: Credit Policy and Cash Flow 777

Dividends and Dividends Payable 778
Common Stock 779
Bonds Payable 779
Building and Accumulated
Depreciation—Building 780
Land 780
Preparing the Statement of Cash Flows 781

#### **Business Connection: Growing Pains 782**

#### Preparing the Statement of Cash Flows— The Direct Method 782

Cash Received from Customers 783
Cash Payments for Merchandise 783
Cash Payments for Operating Expenses 784
Gain on Sale of Land 785
Interest Expense 785
Cash Payments for Income Taxes 785
Reporting Cash Flows from Operating
Activities—Direct Method 786

### International Connection: IFRS for Statement of Cash Flows 786

### Financial Analysis and Interpretation: Free Cash Flow 787

### Spreadsheet (Work Sheet) for Statement of Cash Flows—The Indirect Method 789

Analyzing Accounts 789 Retained Earnings 789 Other Accounts 791 Preparing the Statement of Cash Flows 791

#### **Chapter 17 Financial Statement**

#### Analysis 823

## Analyzing and Interpreting Financial Statements 825

The Value of Financial Statement Information 825 Techniques for Analyzing Financial Statements 826

#### **Basic Analytical Methods 826**

Horizontal Analysis 826 Vertical Analysis 829 Common-Sized Statements 830

#### **Analyzing Liquidity 831**

Current Position Analysis 832 Accounts Receivable Analysis 834 Inventory Analysis 835

#### **Business Connection: Flying off the Shelves 837**

#### **Analyzing Solvency 837**

Ratio of Fixed Assets to Long-Term Liabilities 838 Ratio of Liabilities to Stockholders' Equity 838 Times Interest Earned 839

#### **Business Connection: Liquidity Crunch 840**

#### **Analyzing Profitability 840**

Asset Turnover 840 Return on Total Assets 841 Return on Stockholders' Equity 842

#### **Business Connection: Gearing for Profit 843**

Return on Common Stockholders' Equity 843 Earnings per Share on Common Stock 844 Price-Earnings Ratio 845 Dividends per Share 846 Dividend Yield 847

#### **Business Connection: Investing for Yield 847**

Summary of Analytical Measures 847

#### **Corporate Annual Reports 849**

Management Discussion and Analysis 849 Report on Internal Control 849

#### Integrity, Objectivity, and Ethics in Business: Characteristics of Financial Statement Fraud 849

Report on Fairness of the Financial Statements 850

#### **Unusual Items on the Income Statement 850**

Unusual Items Affecting the Current Period's
Income Statement 850
Unusual Items Affecting the Prior Period's
Income Statement 852

## Chapter **18** Introduction to Managerial Accounting **883**

#### **Managerial Accounting 885**

Differences Between Managerial and Financial Accounting 885 The Management Accountant in the Organization 886 The Management Process 888

#### **Business Connection: Line and Staff for Service** Companies 888

Uses of Managerial Accounting Information 889

#### **Manufacturing Operations: Costs and Terminology 890**

Direct and Indirect Costs 891 Manufacturing Costs 892

**Business Connection: Overhead Costs 893** 

#### **Sustainability and Accounting 896**

Sustainability 897 Eco-Efficiency Measures in Managerial Accounting 897

Integrity, Objectivity, and Ethics in Business: **Environmental Managerial Accounting 898** 

#### **Financial Statements for a Manufacturing Business 898**

Balance Sheet for a Manufacturing Business 898 Income Statement for a Manufacturing **Business** 898

Service Focus: Managerial Accounting in the Service **Industry 903** 

#### Chapter 19 Job Order Costing 924

#### **Cost Accounting Systems Overview 926**

Job Order Cost Systems 926 Process Cost Systems 926

#### **Job Order Cost Systems for Manufacturing Businesses 927**

Materials 927

*Integrity, Objectivity, and Ethics in Business:* **Phony Invoice Scams** 929

Factory Labor 930

**Business Connection: 3D Printing 931** 

Factory Overhead 931

#### **Business Connection: Advanced Robotics 932**

Work in Process 936 Finished Goods 937 Sales and Cost of Goods Sold 938 Period Costs 938 Summary of Cost Flows for Legend Guitars 938

#### **Job Order Costing for Decision Making 940**

#### **Job Order Cost Systems for Service Businesses 941**

Types of Service Businesses 941 Flow of Costs in a Service Job Order Cost System 942

Service Focus: Job Order Costing in a Law Firm 943

#### **Practice Set: Hydro Paddle Boards**

This practice set is a manufacturing business operated as a corporation. This set uses a job order cost system and includes subsidiary ledgers and job cost records. This set can be solved manually or with the General Ledger software.

#### Chapter **20** Process Cost Systems 968

#### **Process Cost Systems 970**

#### Integrity, Objectivity, and Ethics in Business: On Being Green 970

Comparing Job Order and Process Cost Systems 971 Cost Flows for a Process Manufacturer 973

**Business Connection: Sustainable Papermaking 975** 

#### **Cost of Production Report 976**

- Step 1: Determine the Units to Be Assigned Costs 976
- Step 2: Compute Equivalent Units of Production 978
- Step 3: Determine the Cost per Equivalent **Unit 981**
- Step 4: Allocate Costs to Units Transferred Out and Partially Completed Units 982

Preparing the Cost of Production Report 984

#### **Journal Entries for a Process Cost System 985**

Service Focus: Costing the Power Stack 988

#### **Using the Cost of Production Report for Decision Making 989**

Cost per Equivalent Unit Between Periods 989 Cost Category Analysis 989 Yield 990

#### **Lean Manufacturing 991**

Traditional Production Process 991 Lean Production Process 992

#### **Average Cost Method 993**

Determining Costs Using the Average Cost Method 993 The Cost of Production Report 995

#### Chapter 21 Cost-Volume-Profit

#### Analysis 1020

#### **Cost Behavior 1022**

Variable Costs 1022 Fixed Costs 1024 Mixed Costs 1024 Summary of Cost Behavior Concepts 1027

#### **Business Connection: Booking Fees 1028**

#### **Cost-Volume-Profit Relationships 1028**

Contribution Margin 1029 Contribution Margin Ratio 1029 Unit Contribution Margin 1030

## Mathematical Approach to Cost-Volume-Profit Analysis 1031

Break-Even Point 1031 Target Profit 1035

**Business Connection: Airline Industry Break-Even 1036** 

Integrity, Objectivity, and Ethics in Business: Orphan Drugs 1037

## **Graphic Approach to Cost-Volume-Profit Analysis 1037**

Cost-Volume-Profit (Break-Even) Chart 1037 Profit-Volume Chart 1039 Use of Computers in Cost-Volume-Profit Analysis 1042 Assumptions of Cost-Volume-Profit Analysis 1042

Service Focus: Profit, Loss, and Break-Even in Major League Baseball 1042

#### **Special Cost-Volume-Profit Relationships 1042**

Sales Mix Considerations 1043 Operating Leverage 1044 Margin of Safety 1046

#### **Variable Costing 1047**

#### Chapter 22 Budgeting 1074

#### **Nature and Objectives of Budgeting 1076**

Objectives of Budgeting 1076 Human Behavior and Budgeting 1077

Integrity, Objectivity, and Ethics in Business: Budget Games 1078

#### **Budgeting Systems 1078**

Static Budget 1079

Service Focus: Film Budgeting 1080

Flexible Budget 1080 Computerized Budgeting Systems 1081

#### **Master Budget 1082**

#### **Operating Budgets 1082**

Sales Budget 1082
Production Budget 1084
Direct Materials Purchases Budget 1084
Direct Labor Cost Budget 1086
Factory Overhead Cost Budget 1088
Cost of Goods Sold Budget 1088
Selling and Administrative Expenses Budget 1090

#### **Business Connection: Mad Men 1091**

Budgeted Income Statement 1091

#### **Financial Budgets 1092**

Cash Budget 1092 Capital Expenditures Budget 1095 Budgeted Balance Sheet 1096

## Chapter **23** Evaluating Variances from Standard Costs 1124

#### Standards 1126

Setting Standards 1126 Types of Standards 1127 Reviewing and Revising Standards 1127

Integrity, Objectivity, and Ethics in Business: Company Reputation: The Best of the Best 1127

Criticisms of Standard Costs 1127

Business Connection: Standard Costing in Action: Expanding Brewing Operations 1128

#### **Budgetary Performance Evaluation 1128**

Budget Performance Report 1129 Manufacturing Cost Variances 1129

#### **Direct Materials and Direct Labor Variances 1131**

Direct Materials Variances 1131

Service Focus: Standard Costing in the Restaurant Industry 1133

Direct Labor Variances 1134

#### **Factory Overhead Variances 1136**

The Factory Overhead Flexible Budget 1136 Variable Factory Overhead Controllable Variance 1138 Fixed Factory Overhead Volume Variance 1139 Reporting Factory Overhead Variances 1141 Factory Overhead Account 1142

## Recording and Reporting Variances from Standards 1143

#### **Nonfinancial Performance Measures 1146**

### Chapter **24** Decentralized

#### **Operations 1172**

#### **Centralized and Decentralized Operations 1174**

Advantages of Decentralization 1174 Disadvantages of Decentralization 1175

Business Connection: Dover Corporation: Many Pieces, One Picture 1175

Responsibility Accounting 1175

#### **Responsibility Accounting for Cost Centers 1176**

#### **Responsibility Accounting for Profit Centers 1178**

Service Department Charges 1178 Profit Center Reporting 1180

### Responsibility Accounting for Investment Centers 1181

Return on Investment 1182

#### Business Connection: Coca-Cola Company: Go West Young Man 1184

Residual Income 1185 The Balanced Scorecard 1187

#### Service Focus: Turning Around Charles Schwab 1188

#### **Transfer Pricing 1188**

Market Price Approach 1189 Negotiated Price Approach 1190 Cost Price Approach 1192

Integrity, Objectivity, and Ethics in Business: The Ethics of Transfer Prices 1193

# Chapter **25 Differential Analysis, Product Pricing, and Activity-Based Costing 1218**

#### **Differential Analysis 1220**

Lease or Sell 1222
Discontinue a Segment or Product 1223
Make or Buy 1225
Replace Equipment 1226
Process or Sell 1228
Accept Business at a Special Price 1229

**Business Connection: 60% Off! 1230** 

#### **Setting Normal Product Selling Prices 1231**

Service Focus: Revenue Management 1232
Product Cost Concept 1232

Integrity, Objectivity, and Ethics in Business: Price Fixing 1234

Target Costing 1234

#### **Production Bottlenecks 1235**

#### **Activity-Based Costing 1237**

Estimated Activity Costs 1237 Activity Rates 1238 Overhead Allocation 1238

**Business Connection: The ABC's of Schwab 1239** 

Dangers of Product Cost Distortion 1240

## **Total and Variable Cost Concepts to Setting Normal Price 1241**

Total Cost Concept 1241 Variable Cost Concept 1244

## Chapter **26** Capital Investment Analysis 1272

#### Nature of Capital Investment Analysis 1274

Business Connection: Business Use of Investment Analysis Methods 1275

#### **Methods Not Using Present Values 1275**

Average Rate of Return Method 1275 Cash Payback Method 1276

#### **Methods Using Present Values 1278**

Present Value Concepts 1278

Net Present Value Method and
Index 1281

Internal Rate of Return Method 1283

Business Connection: Panera Bread Rate of Return 1285

#### Additional Factors in Capital Investment Analysis 1286

Income Tax 1286 Unequal Proposal Lives 1286 Lease Versus Purchase 1288 Uncertainty 1288

## Service Focus: If You Build It, They Will Come 1288

Changes in Price Levels 1289 Qualitative Considerations 1289 Capital Investment for Sustainability 1289

Integrity, Objectivity, and Ethics in Business: Assumption Fudging 1290

**Capital Rationing 1290** 

#### Mornin' Joe MJ-1

Financial Statements for Mornin' Joe MJ-2 Financial Statements for Mornin' Joe International MJ-5

Appendix A: Interest Tables A-1

Appendix B: International Financial Reporting Standards (IFRS) B-1

Appendix C: Revenue Recognition C-1

Appendix D: Nike Inc., Form 10-K for the Fiscal Year Ended May 31, 2016 D-1

Glossary G-1 Index I-1