Chapter 2

Recording Business Transactions

Chapter 2: Overview

The chapter introduces the account and then briefly describes specific asset, liability, and stockholders’ equity accounts. The chart of accounts is presented as a way to organize accounts, and the ledger is introduced as a tool for maintaining the accounts. The concept of double-entry accounting and the rules of debit and credit for increasing or decreasing assets, liabilities, and equity are described. The rules of debit and credit are then expanded to include specific types of equity accounts. The normal balances of accounts are explained. The T-account is illustrated. The accounting equation is tied to the rules of debit and credit.

The flow of accounting data is illustrated from the occurrence of a transaction through recording of the transaction. The process of recording transactions (journalizing) is presented. A series of entries are analyzed, journalized, and posted to T-accounts in the ledger. The four-column account is introduced. The trial balance is defined and illustrated. Some typical accounting errors revealed by a trial balance are described. How the debt ratio is used to evaluate business performance is discussed.

An Ethics feature helps give real-world perspective on the importance of source documents. The Tying It All Together feature focusses on Fry’s Electronics, Inc. A Decisions feature helps students see how the debt ratio can be used to make a real-world decision. The Review section includes Things You Should Know which highlights the information students should have acquired from the chapter. A Check Your Understanding reviews opening accounts, journalizing, posting, and preparing a trial balance. A list of Key Terms is provided. A Quick Check gives students a chance to assess their knowledge of the chapter learning objectives.

**Chapter 2: Learning Objectives**

1. Explain accounts as they relate to the accounting equation and describe common accounts
2. Define debits, credits, and normal account balances using double-entry accounting and T-accounts
3. Record transactions in a journal and post journal entries to the ledger
4. Prepare the trial balance and illustrate how to use the trial balance to prepare financial statements
5. Use the debt ratio to evaluate business performance

**Chapter 2: Teaching Outline with Lecture Notes**

1. Explain accounts as they relate to the accounting equation and describe common accounts
2. Review the accounting equation
3. Review the following terms and give examples of common accounts:
   1. Account
   2. Assets (Exhibit 2-1: Asset Accounts)
   3. Liabilities (Exhibit 2-2: Liability Accounts)
   4. Equity (Exhibit 2-3: Equity Accounts)
   5. Chart of accounts (Exhibit 2-4: Chart of Accounts—Smart Touch Learning)
   6. Ledger

Lecture Notes: An understanding of Chapter 2 is essential for student success in the remaining financial accounting chapters. Spend adequate time in the beginning with accounting terminology. Accounting is a “foreign” language to many students, and, as is the case with a real foreign language, you must start with the basics.

Students seem to understand assets and liabilities more easily than they understand equity. An asset can be touched, and a liability can be confirmed by looking at an invoice, but equity is conceptual. Equity is the residual stockholders’ claims to the business assets—what is left over after liabilities are subtracted from assets. Students may own a car or home that has an outstanding loan or mortgage, so it may be helpful to ask them to think about their personal equity for their car or home.

Suggested In-Class Exercise: E2-11

1. Define debits, credits, and normal account balances using double-entry accounting and T-accounts
2. Double-entry system
3. The T-account
4. The accounting equation and the rules of debit and credit
5. Increases and decreases in the accounts
6. Expanding the rules of debit and credit
7. The normal balance of an account
8. Exhibit 2-5: Rules of Debit and Credit and Normal Balances for Each Account Type
9. Determining the balance of a T-account

Lecture Notes: Keep it simple when discussing T-accounts and the rules of debit and credit. Emphasize that in accounting, *debit* means left side, and *credit* means right side—nothing more. Point out that students may have heard the terms used in other contexts, such as credit reports and debit cards, but these are different meanings of the words *debit* and *credit*. Furthermore, *debit* does not mean increase, and *credit* does not mean decrease. Increases and decreases depend on the account type.

Emphasize that *every* basic accounting transaction affects at least two accounts, with at least one account to be debited and at least one account to be credited. Every journal entry must balance (debits = credits) in order for the accounting system to accurately generate correct and useful information. An incorrect journal entry that is posted to the correct accounts will still produce incorrect information.

An account can have only one balance. Debits and credits within the same account are subtracted to determine the account balance, just like positives and negatives from a mathematical standpoint. The normal balance is the side used to record increases in the account.

Suggested In-Class Exercise: E2-13

1. Record transactions in a journal and post journal entries to the ledger
2. Define the following terms:
   1. Source documents
   2. Journal
   3. Posting
3. Exhibit 2-6: Flow of Accounting Data
4. Introduce the five steps of journalizing and posting
5. Journalize and post with 17 specific Smart Touch Learning examples
6. The ledger accounts after posting
7. Exhibit 2-7: Smart Touch Learning’s Accounts After Posting Journal Entries in November and December
8. The four-column account: An alternative to the T-account
9. Exhibit 2-8: T-Account Versus Four-Column Account

Lecture Notes: When discussing the posting process, emphasize the need to be very careful when transferring amounts to the ledger. It is common for students to reverse a posting and record a debit as a credit or vice versa. A debit is placed on the left side, and a credit is placed on the right side. Also, relate to them that transposing digits during the posting process is a common mistake. For example, a transaction might be for $630 and recorded in the journal as $630 but posted to the ledger as $360. If the trial balance doesn’t balance, it is common for students to have reversed a posting or transposed digits. For this reason, it is important to include dates and/or transaction numbers linking the journal entry to the ledger account to more easily trace those errors.

Suggested In-Class Exercises: E2-16, E2-17

1. Prepare the trial balance and illustrate how to use the trial balance to prepare financial statements
2. Define a trial balance
3. Exhibit 2-10: Trial Balance
4. Preparing financial statements from the trial balance
5. Exhibit 2-11: Smart Touch Learning’s Financial Statements
6. Correcting trial balance errors

Lecture Notes: It may be helpful for students to view the accounting system from both ends. The natural process is to journalize transactions, post entries, and prepare a trial balance. However, once the chapter content is discussed, you can also begin with the trial balance and have students trace back to the ledger and journal to find a specific transaction. They may also get experience doing this when correcting a trial balance that does not balance.

Suggested In-Class Exercise: E2-22

1. Use the debt ratio to evaluate business performance
2. Define the debt ratio and explain how it is calculated

Lecture Notes: Remind student about the accounting equation: Assets = Liabilities + Equity. This makes it clear that the debt ratio represents the proportion of the total assets that “belong” to the creditors of the business. Conversely, 1 – Debt ratio% is the proportion of the assets that belong to the owners (stockholders) of the business.

Suggested In-Class Exercise: E2-28

**Chapter 2: Handout for Student Notes**

1. What is an account?
   * Assets
   * Liabilities
   * Equity
   * Chart of accounts
   * Ledger
2. What is double-entry accounting?
   * The T-account
   * Increases and decreases in the accounts
   * Expanding the rules of debit and credit
   * The normal balance of an account
   * Determining the balance of a T-account
3. How do you record transactions?
   * Source documents—The origin of the transactions
   * Journalizing and posting transactions:
     + Transaction 1—Stockholder contribution
     + Transaction 2—Purchase of land for cash
     + Transaction 3—Purchase of office supplies on account
     + Transaction 4—Earning of service revenue for cash
     + Transaction 5—Earning of service revenue on account
     + Transaction 6—Payment of expenses with cash
     + Transaction 7—Payment on account (Accounts Payable)
     + Transaction 8—Collection on account (Accounts Receivable)
     + Transaction 9—Payment of cash dividend
     + Transaction 10—Prepaid expenses
     + Transaction 11—Payment of expense with cash
     + Transaction 12—Purchase of building with notes payable
     + Transaction 13—Stockholder contribution
     + Transaction 14—Accrued liability
     + Transaction 15—Payment of expense with cash
     + Transaction 16—Unearned revenue
     + Transaction 17—Earning of service revenue for cash
   * The ledger accounts after posting
   * The four-column account: An alternative to the T-account
4. What is the trial balance?
   * Preparing financial statements from the trial balance
   * Correcting trial balance errors
5. How do you use the debt ratio to evaluate business performance?

**Chapter 2: Student Chapter Summary**

1. Explain accounts as they relate to the accounting equation and describe common accounts

An account is a detailed record of all increases and decreases that have occurred in an individual asset, liability, or equity during a specific period. Common asset accounts include Cash, Accounts Receivable, Notes Receivable, Prepaid Expense, Land, Building, and Furniture. Common liability accounts include Accounts Payable, Notes Payable, Accrued Liability, and Unearned Revenue. Common equity accounts include Common Stock, Dividends, Revenues, and Expenses. A chart of accounts lists a company’s accounts along with account numbers. A ledger shows the increases and decreases in each account along with their balances.

1. Define debits, credits, and normal account balances using double-entry accounting and T-accounts

Double-entry accounting requires transactions to be recorded into at least two accounts. The T-account is shaped like a capital *T*,with debits posted to the left side of the vertical line and credits posted to the right side of the vertical line. T-accounts represent ledger accounts. In accounting, *debit* means left side of the account, and *credit* means right side of the account. Assets, Expenses, and Dividends are increased with a debit and decreased with a credit. Liabilities, Common Stock, and Revenues are increased with a credit and decreased with a debit. The normal balance of an account is the increase side of that account.

1. Record transactions in a journal and post journal entries to the ledger

Source documents provide the evidence and data for transactions. Transactions are recorded in a journal, and then the journal entries are posted (transferred) to the ledger. Transactions are journalized and posted using five steps:

1. Identify the accounts and the account type (asset, liability, and equity).
2. Decide whether each account increases or decreases, then apply the rules of debits and credits.
3. Record the transaction in the journal.
4. Post the journal entry to the ledger.
5. Determine whether the accounting equation is in balance.
6. Prepare the trial balance and use the trial balance to prepare financial statements

The trial balance summarizes the ledger by listing all the accounts with their balances. Assets are listed first, followed by liabilities, and then equity. The trial balance ensures that debits equal credits and is used to prepare the financial statements.

1. Use the debt ratio to evaluate business performance

The debt ratio, calculated as Total liabilities / Total assets, is used to evaluate a business’s ability to pay its debts.

**Chapter 2: Assignment Grid** **and Other Materials**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **LO 1** | **LO 2** | **LO 3** | **LO 4** | **LO 5** |
| S2-1 | X |  |  |  |  |
| S2-2 |  | X |  |  |  |
| S2-3 |  | X |  |  |  |
| S2-4 |  | X |  |  |  |
| S2-5 |  |  | X |  |  |
| S2-6 |  |  | X |  |  |
| S2-7 |  |  | X |  |  |
| S2-8 |  |  |  | X |  |
| S2-9 |  |  |  |  | X |
| E2-10 | X | X | X | X |  |
| E2-11 | X |  |  |  |  |
| E2-12 | X | X |  |  |  |
| E2-13 |  | X |  |  |  |
| E2-14 |  |  | X |  |  |
| E2-15 |  |  | X |  |  |
| E2-16 |  |  | X |  |  |
| E2-17 |  |  | X |  |  |
| E2-18 |  |  | X |  |  |
| E2-19 |  |  | X |  |  |
| E2-20 |  |  | X |  |  |
| E2-21 |  |  | X |  |  |
| E2-22 |  |  |  | X |  |
| E2-23 |  |  |  | X |  |
| E2-24 |  |  | X | X |  |
| E2-25 |  |  |  | X |  |
| E2-26 |  |  |  | X |  |
| E2-27 |  |  |  | X |  |
| E2-28 |  |  |  |  | X |
| P2-29A, P2-35B |  |  | X | X |  |
| P2-30A, P2-36B |  |  | X | X |  |
| P2-31A, P2-37B |  |  | X | X |  |
| P2-32A, P2-38B |  |  | X | X |  |
| P2-33A, P2-39B |  |  |  | X |  |
| P2-34A, P2-40B |  |  |  | X | X |

**S – Short Exercises (*Easy)***

**E – Exercises (*Moderate)***

**P – Problems (*Difficult)***

**Other End-of-Chapter Materials:**

|  |
| --- |
| Using Excel P2-41 |
| Continuing Problem P2-42 |
| Practice Set P2-43 |
| Tying It All Together Case 2-1 |
| Decision Case 2-1 |
| Ethical Issue 2-1 |
| Fraud Case 2-1 |
| Financial Statement Case 2-1 |
| Communication Activity 2-1 |

|  |  |
| --- | --- |
|  |  |

**CHAPTER 2**

**TEN-MINUTE QUIZ**

***Circle the letter of the best response.***

1. Which of the following is a collection of all the accounts, the changes in those accounts, and their balances?
2. Balance sheet
3. Ledger
4. Journal
5. Trial balance
6. Which of the following statements is correct?
7. Service Revenue is increased with a debit.
8. Accounts Receivable is decreased with a debit.
9. Unearned Revenue is increased with a credit.
10. Retained Earnings is decreased with a credit.
11. Suppose Howard Corporation has Furniture totaling $158,000, Cash of $18,000, and a $64,000 Note Payable. In addition, the business has Accounts Payable of $52,000 and Accounts Receivable of $43,000. How much is Howard’s stockholders’ equity?
12. $231,000
13. $145,000
14. $121,000
15. $103,000
16. Amada Company billed a customer for $5,500 of services provided on account. This transaction appears in T-accounts as follows:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| A. |  | Service Revenue | |  | Accounts Payable | |
|  |  | 5,500 |  |  |  | 5,500 |
|  |  |  |  |  |  |  |
| B. |  | Service Revenue | |  | Accounts Payable | |
|  |  |  | 5,500 |  | 5,500 |  |
|  |  |  |  |  |  |  |
| C. |  | Service Revenue | |  | Accounts Receivable | |
|  |  |  | 5,500 |  | 5,500 |  |
|  |  |  |  |  |  |  |
| D. |  | Service Revenue | |  | Accounts Receivable | |
|  |  | 5,500 |  |  |  | 5,500 |

1. Barstock, Inc., began the year with total assets of $177,000 and liabilities of $112,000. During the year, the business earned revenue of $103,000 and incurred expenses of $48,000. The stockholders received cash dividends of $24,000 and no additional stock has been issued. How much is stockholders’ equity at year-end?
2. $120,000
3. $96,000
4. $79,000
5. $31,000
6. Hughes Copies, Inc., erroneously recorded a purchase of equipment on account by debiting Equipment and crediting Cash. What will be an effect of this error on the trial balance?
7. Liabilities understated
8. Cash overstated
9. Equipment overstated
10. Equipment understated
11. Terry Baxter is a stockholder of Alpha Corp. In exchange for additional shares of common stock, Baxter provided Alpha Corp with $75,000 of computer equipment. The journal entry to record this transaction is as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Accounts and Explanations** | **Debit** | **Credit** |
| A. | Common Stock | 75,000 |  |
|  | Equipment Expense |  | 75,000 |
| B. | Equipment Expense | 75,000 |  |
|  | Common Stock |  | 75,000 |
| C. | Equipment | 75,000 |  |
|  | Common Stock |  | 75,000 |
| D. | Common Stock | 75,000 |  |
|  | Equipment |  | 75,000 |

1. Which journal entry records a $5,500 payment for office supplies that were previously purchased on account?

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Accounts and Explanations** | **Debit** | **Credit** |
| A. | Cash | 5,500 |  |
|  | Accounts Receivable |  | 5,500 |
| B. | Cash | 5,500 |  |
|  | Accounts Payable |  | 5,500 |
| C. | Accounts Receivable | 5,500 |  |
|  | Cash |  | 5,500 |
| D. | Accounts Payable | 5,500 |  |
|  | Cash |  | 5,500 |

1. What is the detailed record of all increases and decreases that have occurred in a specific individual asset, liability, or equity during a specific period?
2. Ledger
3. Trial balance
4. Account
5. Journal
6. A company has $72,000 in liabilities and $98,000 in equity. What is the debt ratio?
7. 26.5%
8. 42.4%
9. 73.5%
10. 136.1%

#### Answer Key to Ten-Minute Quiz:

1. B

2. C

3. D

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Assets** | | **=** | **Liabilities** | | **+** | **Stockholders’ Equity** | |
| Accounts Receivable | $ 43,000 |  | Accounts Payable | $ 52,000 |  |  |  |
| Cash | 18,000 |  | Note Payable | 64,000 |  |  |  |
| Furniture | 158,000 |  |  |  |  |  |  |
| Total | $ 219,000 |  | Total | $ 116,000 |  | Total | ? |

Assets = Liabilities + Stockholders’ equity; therefore, Stockholders’ equity = Assets −Liabilities  
  
Stockholders’ equity = $219,000 − $116,000 = $103,000

4. C

5. B  
Assets = Liabilities + Stockholders’ equity; therefore, Stockholders’ equity = Assets −Liabilities  
  
Stockholders’ equity at the beginning of the year = $177,000 − $112,000 = $65,000  
  
Since no common stock has been issued, Stockholder’s equity is made up of the balance in Retained earnings:

|  |  |  |
| --- | --- | --- |
| Retained earnings, beginning of year |  | $ 65,000 |
| Net income earned during the year (revenue − expenses) |  | 55,000 |
|  |  | 120,000 |
| Dividends |  | (24,000) |
| Retained earnings, end of year |  | $ 96,000 |

6. A

7. C

8. D

9. C

10. B  
Debt ratio = Total liabilities / Total assets\* = $72,000 / $170,000 = 42.4%  
\*Total assets = Liabilities + Equity = $72,000 + 98,000 = $170,000

**Extra Critical Thinking Questions**

Decision Case 2-2

Answer the following questions. Consider each question separately.

Requirements

1. Explain the advantages of double-entry bookkeeping instead of recording transactions in terms of the accounting equation to a friend who is opening a used book store.
2. When you deposit money in your bank account, the bank credits your account. Is the bank misusing the word credit in this context? Why does the bank use the term credit instead of debit to refer to your deposit?

Decision Case 2-2: Solution

**Requirement 1**

The advantage of double-entry bookkeeping it that it provides an arithmetic check on the accounting transactions; the total debits and total credits have to equal, and something is wrong if they don’t. Double-entry bookkeeping can also handle a higher number of transactions than using the accounting equation.

**Requirement 2**

The bank uses the term *credit your account* when you deposit money because it is crediting a liability on its books. It owes you the funds that you just deposited.

Team Project 2-1

Contact a local business and arrange with the owner to learn what accounts the business uses.

Requirements

1. Obtain a copy of the business’s chart of accounts.
2. Prepare the company’s financial statements for the most recent month, quarter, or year. (You may omit the statement of cash flows.) You may use either made-up account balances or balances supplied by the owner.

If the business has a large number of accounts within a category, combine related accounts and report a single amount on the financial statements. For example, the company may have several Cash accounts. Combine all Cash amounts and report a single Cash amount on the balance sheet. You will probably encounter numerous accounts that you have not yet learned about. Deal with them as best you can. Keep in mind that the financial statements report the balances of the accounts listed in the company’s chart of accounts, either by individual account or in summarized categories. Therefore, the financial statements must be consistent with the chart of accounts.

Team Project 2-1: Solution

**Requirements 1 and 2**

Student answers will vary widely, as the various groups use the charts of accounts of different businesses. The financial statements that the students prepare should be consistent with the business’s chart of accounts.