Chapter 2
Debits and Credits: Analyzing and Recording Business Transactions

Chapter Overview

This chapter transitions from analyzing transactions and listing each account in a potentially long accounting equation to double entry accounting. There are five steps used to analyze a transaction: 1) determining which accounts are affected; 2) determining which categories the accounts belong to (assets, liabilities, capital, withdrawals, revenue, or expenses); 3) determining whether the accounts increase or decrease; 4) using the debit and credit rules to determine if the result of steps 2 and 3 results in a journal entry debit or credit; and 5) computing the balance in the T account. T accounts are used to illustrate debits and credits and how to evaluate each account's balance. A T account is a simpler way to illustrate an account. It has a debit and credit side and can be used to compute the balance in that account. Several examples are used to illustrate transaction analysis and the resulting journal entry and T account balance. Next, how to use the balances in the T accounts to prepare a trial balance is illustrated. A trial balance is a listing of a company's accounts and its resulting debit or credit balance in the proper debit or credit column. The information from the trial balance is used to prepare financial statements. Finally, the interrelationship between the financial statements is emphasized. The income or loss from the income statement is carried to the statement of owner's' equity. The ending balance in the statement of owner's equity is carried to the balance sheet.

Learning Objectives

After studying Chapter 2, your students should gain proficiency in the following:

1. Explain T Accounts and How to Foot and Balance.

2. Use a Chart of Accounts to Record Transactions in T Accounts According to the Rules of Debits and Credits.

3. Prepare a Trial Balance and the Financial Statements.

Chapter 2 Assignment Grid

Assignment	Topic(s)	Learning Objective(s)	Estimated Time in Minutes	Level of Difficulty
Discussion Questions and Critical Thinking/Ethical Case				
1	Define ledger	1	5	Easy
2	Debit	1	5	Easy
3	Footings	1	5	Easy
4	Accounting cycle	2	5	Easy
5	Transaction Analysis Chart	2	5	Easy
6	Transaction Analysis Chart	2	5	Easy
7	Double Entry bookkeeping	2	5	Easy
8	Trial Balance	3	5	Easy
9	Financial Statements	3	5	Easy
10	Financial Statements	3	5	Easy
11	Trial Balance	3	5	Medium
Concept Checks				
1	The T account	1	5	Easy
2	Transaction Analysis	2	5	Easy
3	Transaction Analysis	2	5	Easy
4	Trial Balance	3	5	Easy
5	Trial Balance/ Financial Statements	3	10	Easy
Exercises (Set A)				
2A-1	Chart of accounts	2	10	Easy
2A-2	Transaction analysis	2	5	Easy
2A-3	Transaction analysis	2	5	Easy
2A-4	Account analysis	2	20	Medium
2A-5	Financial Statements	3	20	Medium
Exercises (Set B)				
2B-1	Chart of accounts	2	10	Easy
2B-2	Transaction analysis	2	5	Easy
2B-3	Transaction analysis	2	5	Easy
2B-4	Account analysis	2	20	Medium
2B-5	Financial Statements	3	20	Medium
Problems (Set A)				
2A-1	Transaction Analysis	2	20	Medium
2A-2	Transaction Analysis	2	20	Medium
2A-3	Trial Balance	1, 3	20	Medium
2A-4	Financial Statements	3	40	Hard
2A-5	Transactions, Trial Balance, & Financial Prep	2, 3	60	Hard
Problems (Set B)				
2B-1	Transaction Analysis	2	20	Medium
2B-2	Transaction Analysis	2	20	Medium
2B-3	Trial Balance	1, 3	20	Medium
2B-4	Financial Statements	3	40	Hard
2B-5	Transactions, Trial Balance, & Financial Prep	2, 3	60	Hard

Assignment Topic(s)	Learning Objective(s)	Estimated Time in Minutes	Level of Difficulty
Financial Report Problem			
Reading Amazon's Annual Report	2	5	Easy
Keeping It Real			
Suarez Computer Center	1, 2, 3	60	Medium

Learning Unit 2-1: The T Account and How to Foot and Balance

Summary: The T account is a tool to demonstrate the increases and decreases in each account. The T account is a skeleton version of a standard account. A **standard account** form is the formal structure required for each account. All T accounts have three parts: account title, **debit** (left) and **credit** (right). The T accounts are footed to determine the balance or ending balance for the specific account. Foot is to (sum) add all debits and add (sum) all credits, and **footing** is totaling each individual column. The column balances are subtracted to compute the final total or ending balance for each account. The ending balance is always presented on the bigger or **normal side.** To record transactions, the accountant determines which accounts are credited or debited utilizing the debit and credit rules. The double-entry bookkeeping is an accounting system in which the recording of each transaction affects two or more accounts. You must include at least one debit and one credit per transaction, and the total amount of debits is equal to the total amount of credits.

Key Concepts: account, standard account, ledger, T account, debit, credit, footings, ending balance

Lecture Outline:

1) Each transaction is recorded in the accounting equation under specific accounts: assets, liabilities, capital, withdrawals, revenue, expenses, and so on.
2) Accounts are used to record increases and decreases of business transactions relating to individual elements of the accounting equation:
   a) assets,
   b) liabilities,
   c) capital,
   d) withdrawals,
   e) revenue,
   f) and expenses.
3) The subdivisions or account categories (account classification) are:
   a) asset accounts,
   b) liability accounts,
   c) owner's equity accounts,
   d) revenue accounts,
   e) and expense accounts.
4) The standard account form includes:
   a) columns for date,
   b) explanation,
   c) posting reference,
   d) debit,
   e) credit,

f) and total columns.

5) The ledger has all the individual accounts, and all transactions affecting an account are recorded on the form.
   a) A ledger is a book of accounts that records data from business transactions.
   b) Prepared manually in a traditional accounting format.
   c) Ledger accounts in a computerized system are updated automatically by software.
6) For simplicity sake, use the T account form for demonstration purposes. T account simple form includes:
   a) the title, which expresses the name of the account
   b) debit (left) side or Dr.
   c) credit (right) side or Cr.
7) Footing: (the totals for each column)
   a) process of adding all items on the debit side,
   b) adding all items on the credit side
   c) calculate the T account ending balance.
   d) Balance the difference between the amounts on each side of the T account.
      i) Total the debits (Dr.)
      ii) Total the credits (Cr.)
      iii) Subtract the debits and credits
      iv) The ending balance will be on the side that has the greater number.

Teaching Tips/Strategy: Use the "Success Coach" LU 2-1 to assess the understanding of the following concepts: T account, rules of debit and credit, and the account normal balance. Explain the basic accounting equation elements (Assets = Liabilities + Equity) and how the debit and credits are presented. For example: items to the left of the equal sign are assets. Normally the assets will increase by the left or debit. Items to the right of the equal sign, such as liabilities and equity, increase by the right. The subdivisions of equity (revenue, expenses, capital and withdrawals) will increase or decrease based on their relationship to equity. The revenue or capital accounts, will increase the equity. Therefore, the account increases by the right or credit. If the account is an expense or a withdrawal, it decreases equity. The account increases by left or debit.

For lecture practice, utilize the Concept Check #1 to use T accounts to foot and balance each account.

Use the "Ten-Minute Quiz" question #2 to reinforce T accounting concepts.

Learning Unit 2-2: The Chart of Accounts: Recording Transactions in T Accounts According to Rules of Debits and Credits.

Summary: The accounting recording process starts with a business transaction, an exchange between two or more parties, sharing items of equal value. The double-entry analysis of transactions presents two or more accounts that are affected and the total of debits and credits that are equal**.** This double-entry system helps in checking the recording of business transactions. All business transactions are recorded in accounts. An **account** is a tool used to record and summarize the effects of the organization's transactions. The basic accounting equation contains the following account categories: assets, liabilities, capital, withdrawals, revenues and expenses. The chart of accounts is a system of accounts that summarizes increases and decreases of all individual accounts. This numbering system of accounts allows accounts to be located quickly. For example, 100s are assets, 200s are liabilities, 300s are equity, 400s are revenues and 500s are expenses (See Table 2.2). A **compound entry** is a transaction that involves more than one debit or more than one credit**.**

The debit and credit rules are: all assets increase by debit side (left) and decrease by credit side (right), liabilities increase by credit side (right) and decrease by debit side (left), and equity accounts increase by credit side (right) and decrease by debit side (left). The equity subdivisions or categories will use the debit and credit rules to present the effect on the organization's equity. The equity subdivision rules are:

1. Revenues increase the organization's equity in the business. Revenue accounts increase by credit and decrease by debit (same as the equity).
2. The expenses decrease the organization's equity. Therefore, all expense accounts will increase by debit and decrease by credit. (Note that any item that decreases the equity, the behavior is opposite to the main equity account.)
3. Capital accounts increase the organization's equity. Therefore, any capital transaction will increase by credit and decrease by debit. Withdrawals by owner decrease the organization's equity. Therefore, any withdrawal increases are recorded on the debit side.

Key Concepts: normal balance of an account, chart of accounts, compound entry, double-entry bookkeeping

Lecture Outline:

1) Refer to Table 2.1 for the rules of debit and credit using T accounts affecting the accounting equation.
   a) For assets increases are on the debit (left) side.
   b) For liabilities increases are on the credit (right) side.
   c) For capital increases are on the credit (right) side.
   d) For revenue increases are on the credit side which is the same as for capital.
   e) For withdrawals and expenses increases are on the debit side which is the opposite of how capital increases are.
   f) A normal balance of an account is the side that increases by the rules of debit and credit.
   g) The accounting equation balance must be maintained when transactions occur.
2) A chart of accounts is a numbered list of all of a business's accounts.
   a) Assets use 100s (as an example).
   b) Liabilities use 200s.
   c) Owner's Equity uses 300s.
   d) Revenues use 400s.
   e) Expenses use 500s.
3) Transaction analysis: five steps:
   a) Determine which accounts are affected.
   b) Determine which categories the accounts belong to: assets, liabilities, capital, withdrawals, revenue, or expenses.
   c) Determine whether the accounts increase or decrease.
   d) What do the rules of debit and credit say?
   e) What does the T account look like?
4) Compound entry is a transaction involving more than one debit or credit.
5) Double-entry bookkeeping refers to an accounting system in which the recording of each transaction affects two or more accounts, and the total of the debits is equal to the total of credits.

Teaching Tips/Strategy: Use the "Success Coach" LU 2-2 (end of the chapter) to review the debit and credit rules. After reviewing the concepts, complete the Concept Checks #2 and #3 to check the debit and credit rules. Exercises 2A-1, 2A-2, 2A-3, and 2A-4 are excellent classroom practice to reinforce the objective #2 concepts.

Use the "Ten-Minute Quiz" questions #1 - #5 to reinforce the Learning Objective #2.

Learning Unit 2-3: The Trial Balance and Preparation of Financial Statements

Summary: The **trial balance** is a list of all accounts with their balances in the same order as they appear in the chart of accounts. A trial balance is not a financial statement although it is used to prepare financial statements. A trial balance is a listing of each account with each account balance listed in its proper debit or credit column. Balances on the trial balance are taken directly from footings and ending balances on the T accounts. The total of the debit column should equal the total of the credit column.

The financial statements include: income statement, statement of owner's equity, and the balance sheet. All financial statements have two columns. The columns are used for subtotals and NOT for debit and credit format. There are no debits and credits on the financial statements. The income statement summarizes the revenues and expenses to calculate the net income or net loss. The statement of owner's equity updates the ending capital balance for the period. It includes the beginning and ending balances of capital accounts, the net income or net loss, and the withdrawals account. The balance sheet is the representation of the accounting equation as the last day of the period or as a "snapshot". The balance sheet includes all assets, liabilities, and the ending balance of equity.

Key Concepts: Trial balance

Lecture Outline:

2) The trial balance:
   a) is a list of all accounts with their balances,
   b) the order of accounts is the same as they appear in the chart of accounts,
   c) is not a financial statement but is a tool used to prepare financial statements,
   d) is a list of ending balances from the ledger,
   e) and the total of the debit column should equal the total of the credit column.
6) Preparing financial statements:
   a) All financial statements are related:
      i) the net income or net loss from the income statement flows to the statements of owner's equity,
      ii) the ending balance of capital on the owner's equity statement flows to the balance sheet.
   b) The dollar sign or currency sign is used at the top of each column and on the final total amounts.
   c) One underline represents a list to subtotal
   d) Two underlines represent the end of the statement or the final "bottom line" number.
7) The Income Statement: (is generally prepared first)
   f) includes revenues and expenses
   g) includes gains or losses
   h) Net Income – revenues are greater than expenses. (Revenues – Expenses)
   i) Net Loss – expenses are greater than revenues. (Expenses – Revenues)
   j) The net income or net loss is carried to the statement of owner's equity.
8) The Statement of Owner's Equity:
   a) Start with the capital balance as of the beginning of the period
   b) Add: Net income (from the income statement)
   c) Add: additional investments from the owners
   d) Deduct: Net Loss (from the income statement)
   e) Deduct: any withdrawals
   f) Calculate the new ending balance for the capital account or owner's equity.
   g) The new balance for owner's equity is carried to the Balance Sheet.
9) The Balance Sheet:

a) Lists all assets, liabilities and the new equity or capital account balance.
b) The total of assets = total of liabilities and equity.

Teaching Tips/Strategy: Use the "Success Coach" LU 2-3 to review trial balance and financial statement concepts. After reviewing the concepts, complete the Concept Checks #4 to illustrate the process needed to build a trial balance.

The instructor can use the Concept Check #5 as a demonstration exercise to explain the importance of accounts and the proper classification within the financial statements. Exercises 2A-5 and 2B-5 are excellent classroom practice to reinforce the objective #3 concepts.

Use the "Ten-Minute Quiz" questions #7, #8, #9 and #10 to reinforce the Learning Unit 2-3 concepts.

Teaching Tips/Strategy: Each chapter contains a Try It! at the end of each Learning Unit. The Try its! are intended as practice for students and/or as checking of student understanding. There is also a Demonstration Summary Problem with each chapter to provide an overview of all the chapter concepts. Students can study and review this problem to view how all the chapter concepts fit together.

Name_____Date_____Section_____

CHAPTER 2
TEN-MINUTE QUIZ

Circle the letter of the best response.

1. Although debits increase assets, they also
   a. increase revenues
   b. increase expenses
   c. increase owner's equity
   d. increase liabilities

2. The right side of a T account is the
   a. increase side
   b. decrease side
   c. credit side
   d. debit side

3. A compound entry is
   a. an entry involving more than one debit or credit
   b. an entry involving multiple transactions
   c. an entry involving more than one date
   d. an entry increasing and decreasing the same account

4. Which of the following accounts has a normal debit balance?
   a. Mia Wong, Capital
   b. Cash
   c. Accounts Payable
   d. Fees Earned

5. Which of the following accounts has a normal credit balance?
   a. Office Equipment
   b. Salaries Expense
   c. Accounts Receivable
   d. Accounts Payable

6. Payment of salaries to employees is recorded as a(n)
   a. asset
   b. liability
   c. revenue
   d. expense

7. The trial balance
   a. shows the income earned during the year
   b. shows the total amount of assets
   c. shows the accuracy of the general ledger
   d. is the first financial statement prepared

8. Which account is shown on the balance sheet?
   a. Cash
   b. Utilities Expense

c. Withdrawals by owner
d. Revenue

9. Which account is shown on the income statement?
   a. Equipment
   b. Owner, Capital Account
   c. Accounts Payable
   d. Rent Expense

10. Which account is shown on the statement of owner's equity?
   a. Fees Earned
   b. Accounts Receivable
   c. Owner, Withdrawals
   d. Accounts Payable

Answer Key to Chapter 2 Quiz

1. b
2. c
3. a
4. b
5. d
6. d
7. c
8. a
9. d
10. c