Integrating Debits and Credits

FINANCIAL ACCOUNTING

A Business Process Approach

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CHAPTER 5 ACQUISITIONS: PURCHASE AND USE OF BUSINESS ASSETS

Acquisition Costs (p. 173)

When a company buys a long-term asset, the asset account (e.g., Equipment, Machinery, or Furniture) is increased. This means you will debit the asset. If you pay cash, the credit will be to Cash. If you sign a note payable for the asset, you will credit Notes payable (a liability). All costs incurred to get the asset up and running will be debited to the asset account. For example, suppose you purchased a piece of equipment with a $30,000 note and paid $250 in cash to have it delivered. The journal entry to record the purchase would be:

Date	Transaction	Debit	Credit
	Equipment	$30,250	
	Notes payable		$30,000
	Cash		250

To record the purchase of equipment

STUDY BREAK 5-3 (p. 174)
SEE HOW YOU'RE DOING

Nebo Company paid $480,000 for a building and the land on which it is located. Independent appraisals valued the building at $400,000 and the land at $100,000. Prepare the journal entry to record the purchase of the building and land.

Depreciation and the Financial Statements

Straight-line Depreciation (pp. 175-6)

The journal entry to record Holiday Hotel's purchase of an orange juice machine ($11,500 plus $1,000 delivery) for cash:

Date	Transaction	Debit	Credit
	Equipment	$12,500	
	Cash		$12,500

To record the purchase of equipment

The journal entry to record one year's depreciation expense:

Date	Transaction	Debit	Credit
	Depreciation expense	$2,000	
	Accumulated depreciation		$2,000

To record a year's worth of depreciation on the equipment.

Each year, the Depreciation expense account is closed; but the Accumulated depreciation account, a contra-asset account, is a permanent account and will never be closed. Each year the balance in the Accumulated depreciation account will increase by the annual depreciation expense.

For example, after the machine has been used and depreciated for 2 years, here is what the general ledger accounts (we'll represent them with T-accounts) would look like before closing the revenue and expense accounts for year 2:

	Depreciation expense (Debit)	Depreciation expense (Credit)	
Yr. 1	$2,000	$2,000	(closed to Retained earnings)
Yr. 2	$2,000		

Accumulated depreciation (Debit)	Accumulated depreciation (Credit)	
	$2,000	Yr. 1
	$2,000	Yr. 2

Do you see that the depreciation expense account has a balance of $2,000 and that the accumulated depreciation account has a balance of $4,000? Each year, the depreciation expense account will have only one year's deprecation expense, while the accumulated depreciation account will have all of the expense recorded for the asset since its purchase.

On January 1, 2001 Access Company purchased a new computer system for $15,000. The estimated useful life was 5 years with an estimated residual value of $3,000. Using straight-line depreciation, prepare the journal entry to record the depreciation expense for the year ending December 31, 2003.

STUDY BREAK 5-4 (p. 177)
SEE HOW YOU'RE DOING

Activity (units of production) Depreciation (pp. 177-78)

No matter which method of depreciation is used, the journal entry includes a debit to Depreciation expense and a credit to Accumulated depreciation, for the calculated amount of depreciation expense.

Date	Transaction	Debit	Credit
	Depreciation expense	$1,800	
	Accumulated depreciation		$1,800

To record the depreciation expense (activity method) for the year

Hopper Company purchased equipment on January 1, 2005 for $44,000. The expected useful life is 10 years or 100,000 units of activity, and its residual value is $4,000. In 2005, the firm produced 3,000 units. In 2006, Hopper produced 14,000 units. Using activity depreciation, prepare the journal entries to record the depreciation expense for 2005 and 2006.

STUDY BREAK 5-5 (p. 178)
SEE HOW YOU'RE DOING

Declining Balance Method (pp. 178-9)

Again, no matter which method of depreciation is used, the journal entry looks the same. Using double-declining balance depreciation, the depreciation expense for the first year is $4,167. The journal entry would be:

Date	Transaction	Debit	Credit
	Depreciation expense	$4,167	
	Accumulated depreciation		4,167

To record the depreciation expense (double-declining balance method) for the year

If an asset cost $50,000, has a residual value of $5,000, and has a useful life of 5 years, prepare the journal entry to record the depreciation expense for the second year using the double-declining balance method.

STUDY BREAK 5-6 (p. 181)
SEE HOW YOU'RE DOING

Revising Estimates of Useful Life and Residual Value (pp. 183-4)

At the beginning of 2005, White Company hired a mechanic to perform a major overhaul on its main piece of equipment at a cost of $2,400. The equipment originally cost $10,000 at the beginning of 2001, and the book value of the equipment on the December 31, 2004 balance sheet was $6,000. At the time of the purchase, White Company estimated that the equipment would have a useful life of 10 years and no residual value. The overhaul at the beginning of 2005 extended the useful life of the equipment. White Company's new estimate is that the equipment will now last until the end of 2012 – a total of 8 years from the date of the overhaul. White uses straight-line depreciation for all its assets. Prepare the journal entries to record the capital expenditure and depreciation expense for 2006.

STUDY BREAK 5-7 (p. 184)
SEE HOW YOU'RE DOING

Selling a Long-Term Asset (pp. 185-6)

In this example, you have purchased an asset, let's say equipment, at a cost of $25,000 and estimated its useful life to be 10 years with no residual value. You are using straight-line depreciation. After 7 years, you sell the asset for $8,000.

To record the sale, you will remove the equipment and its accumulated depreciation from your accounting records. First, you must calculate the amount of accumulated depreciation you have recorded for the equipment. In this case, the depreciation expense has been $2,500 per year; and you have depreciated the asset for 7 years. Thus, the balance in the Accumulated depreciation account for this asset is $17,500. To remove the equipment from your records, you will (1) remove the equipment with a credit to the Equipment account; (2) remove the accumulated depreciation with a debit to the Accumulated depreciation-equipment account; (3) record the cash received for the sale; and (4) record the gain or loss to balance the journal entry. The journal entry for this example is as follows:

Date	Transaction	Debit	Credit
	Cash	$ 8,000	
	Accumulated depreciation	17,500	
	Equipment		$25,000
	Gain on sale of equipment		500

To record the sale of equipment for a gain of $500

Suppose you sold the equipment for exactly its book value of $7,500. The journal entry would then have no gain or loss:

Date	Transaction	Debit	Credit
	Cash	$ 7,500	
	Accumulated depreciation	17,500	
	Equipment		$25,000

To record the sale of equipment for its book value of $7,500

Perry Plants Company owned an asset that originally cost $24,000. The company sold the asset on January 1, 2003 for $8,000 cash. Accumulated depreciation on the day of sale amounted to $18,000. Prepare the journal entry to record the asset sale.

STUDY BREAK 5-8 (p. 186)
SEE HOW YOU'RE DOING

Summary Problem: Tom's Wear Expands in April 2001

Transaction 1
Purchased a delivery van for $25,000. Paid $5,000 for interior changes. Signed a 5-year 10% note payable. Interest is due each March 31, and $6,000 of principal is repaid each March 31.

Date	Transaction	Debit	Credit
4/1/2001	Equipment – Van	$30,000	
	Long-term notes payable		$30,000
To record the purchase of a delivery van			

Transaction 2
Hired an employee who won't start until May. No formal journal entry is required.

Transaction 3
Collected accounts receivable of $2,000 from customers from March.

Date	Transaction	Debit	Credit
4/1-4/15/2001	Cash	$2,000	
	Accounts receivable		$2,000
To record the collection of accounts receivable			

Transaction 4
Purchased 1,000 T-shirts at $4.00 each on account

Date	Transaction	Debit	Credit
4/1-4/15/2001	Inventory	$4,000	
	Accounts payable		$4,000
To record the purchase of 1,000 T-shirts at $4 on account			

Transaction 5
Rented a warehouse for $1,200 per month, beginning on April 15th. Paid a total of $2,400 rent for 2 months.

Date	Transaction	Debit	Credit
4/15/2001	Prepaid rent	$2,400	
	Cash		$2,400
To record prepayment of 2 month's rent at $1,200 per month			

Transaction 6
Contracted with several sporting goods stores to stock Tom's Wear shirts and sold 800 shirts for $10 each.

Date	Transaction	Debit	Credit
4/15/2001	Accounts receivable	$8,000	
	Sales		$8,000
To record the sale of 800 T-shirts, on account			
4/15/2001	Cost of goods sold	$3,200	
	Inventory		$3,200
To record the expense cost of goods sold and reduce the inventory by 800 x $4			

Transaction 7

Paid $300 for other operating expenses.

Date	Transaction	Debit	Credit
4/1- 4/30/2001	Other operating expenses	$300	
	Cash		$300
To record the payment of operating expenses			

Adjustment 1

On April 1, there was $75 worth of prepaid insurance on the balance sheet. Recall Tom's Wear purchased 3 months of insurance on February 15 for a total cost of $150 or $50 per month.

Date	Transaction	Debit	Credit
4/30/2001	Insurance expense	$50	
	Prepaid insurance		$50
To record insurance expense for April			

Adjustment 2

Prepaid rent must also be adjusted. Tom's Wear paid $2,400 for 2 month's rent beginning on April 15. On April 30, half a month's rent should be expensed.

Date	Transaction	Debit	Credit
4/30/2001	Rent expense	$600	
	Prepaid rent		$600
To record rent expense for April			

Adjustment 3

The $100 monthly depreciation expense on the computer needs to be recorded.

Date	Transaction	Debit	Credit
4/30/2001	Depreciation expense	$100	
	Accum. dep.- Computer		$100
To record April depreciation expense on the computer			

Adjustment 4

Depreciation expense for the new van needs to be recorded. It cost $30,000, has an estimated residual value of $1,000 and is being depreciated using the activity method based on an estimated 200,000 miles. During April, the van was driven 5,000 miles. The rate is $0.145 per mile ($29,000/200,000) x 5,000 = $725.

Date	Transaction	Debit	Credit
4/30/2001	Depreciation expense	$725	
	Accum. Dep. - Van		$725
	To record April depreciation expense on the van		

Adjustment 5

Interest expense on the note on the computer needs to be accrued. The 3 month, $3,000 note at 12% was signed on April 1. April interest will be $30 ($3.000 x 0.12 x 1.12)

Date	Transaction	Debit	Credit
4/30/2001	Interest expense	$30	
	Interest payable		$30
	To record the interest expense on the computer for April		

Adjustment 6

Interest expense on the note on the van needs to be accrued. The $30,000 note at 10% was signed on April 1. April interest will be $250 ($30.000 x 0.10 x 1.12).

Date	Transaction	Debit	Credit
4/30/2001	Interest expense	$250	
	Interest payable		$250
	To record the interest expense on the van for April		

T-accounts for Tom's Wear with April journal entries and adjustments

Cash

	Debit	Credit	
BB	$3,995	$2,400	5
3	2,000	300	7
	$3,295		

Accounts receivable

	Debit	Credit	
BB	$2,000	$2,000	3
6a	8,000		
	8,000		

Inventory

	Debit	Credit	
BB	$300	$3,200	6b
4	4,000		
	1,100		

Prepaid insurance

	Debit	Credit	
BB	$75	$50	Adj-1
	25		

Prepaid rent

	Debit	Credit	
5	$2,400	$600	Adj-2
	1,800		

Equipment - Computer

	Debit	Credit	
BB	$4,000		
	4,000		

Acc dep - Computer

	Debit	Credit	
		$100	BB
		100	Adj-3
		200	

Equipment - Van

	Debit	Credit	
1	$30,000		
	30,000		

Acc Dep - Van

	Debit	Credit	
		$725	Adj-4
		725	

Accounts payable

	Debit	Credit	
		$4,000	4
		4,000	

Interest payable

	Debit	Credit	
		$30	BB
		30	Adj-4
		250	Adj-6
		310	

Short-term notes payable

	Debit	Credit	
		$3,000	BB
		3,000	

Long-term notes payable

	Debit	Credit	
		$30,000	1
		30,000	

Common stock

	Debit	Credit	
		$5,000	BB
		5,000	

Retained earnings

	Debit	Credit	
		$2,240	BB
		2,240	

Sales

	Debit	Credit	
		$8,000	6a
		8,000	

Cost of goods sold

	Debit	Credit	
6b	$3,200		
	3,200		

Depreciation expense

	Debit	Credit	
Adj-3	$100		
Adj-4	725		
	825		

Other operating expenses

	Debit	Credit	
7	$300		
	300		

Insurance expense

	Debit	Credit	
Adj-1	$50		
	50		

Rent expense

	Debit	Credit	
Adj-2	$600		
	600		

Interest expense

	Debit	Credit	
Adj-5	$30		
Adj-6	250		
	280		

Tom's Wear, Inc.
Adjusted Trial Balance
April 30, 2001

	Debits	Credits
Cash	$3,295	
Accounts receivable	8,000	
Inventory	1,100	
Prepaid insurance	25	
Prepaid rent	1,800	
Equipment - Computer	4,000	
Accumulated depreciation - Computer		$200
Equipment - Van	30,000	
Accumulated depreciation - Van		725
Accounts payable		4,000
Interest payable		310
Short-term notes payable		3,000
Long-term notes payable		30,000
Common stock		5,000
Retained earnings		2,240
Sales		8,000
Cost of goods sold	3,200	
Depreciation expense	825	
Other operating expense	300	
Insurance expense	50	
Rent expense	600	
Interest expense	280	
Totals	*$53,475*	*$53,475*

Journal Entries for Study Break Questions

Date	Transaction	Debit	Credit	Study Break 5-3
	Building	$384,000		
	Land	96,000		
	Cash or Notes payable		$480,000	

To record the purchase of land and building

Date	Transaction	Debit	Credit	Study Break 5-4
12/31/2003	Depreciation expense	$2,400		
	Accumulated depreciation		$2,400	

To record straight-line depreciation expense for 2003

Date	Transaction	Debit	Credit	Study Break 5-5
12/31/2005	Depreciation expense	$1,200		
	Accumulated depreciation		$1,200	

To record activity-based depreciation expense for 2005

12/31/2006	Depreciation expense	$5,600	
	Accumulated depreciation		$5,600

To record activity-based depreciation expense for 2006

Date	Transaction	Debit	Credit	Study Break 5-6
	Depreciation expense	$12,000		
	Accumulated depreciation		$12,000	

To record double-declining balance depreciation
expense for year 2

Date	Transaction	Debit	Credit	Study Break 5-7
1/2005	Equipment	$2,400		
	Cash		$2,400	

To record the cost of overhauling equipment

12/31/2006	Depreciation expense	$1,050	
	Accumulated depreciation		$1,050

To record straight-line depreciation expense for 2006

Date	Transaction	Debit	Credit
1/1/2003	Cash	$ 8,000	
	Accumulated depreciation	18,000	
	Asset		$24,000
	Gain on sale		2,000
To record the asset sale			

Study Break 5-8

Short Exercises

SE5-5 Give the journal entry to record the purchase of equipment that cost $12,000, has a useful life of 5 years, and has an estimated salvage value of $2,000. Then, after calculating the annual straight-line depreciation expense for the equipment, give the journal entry that would need to be recorded at the end of each of the next five years.

Date	Account	Debit	Credit

SE5-9 For each of the following, give the journal entry to record the transaction. No explanations are required.

a. Paid $2,000 for routine repairs.
b. Paid cash dividends of $500 to shareholders.
c. Paid $6,000 for repairs that will extend the asset's useful life.
d. Purchased a patent for $5,000 cash.
e. Purchased a machine for $10,000 and gave a 2-year note.
f. Paid $50,000 for an addition to a building.
g. Paid $1,000 for routine maintenance on a machine.

Transaction	Account	Debit	Credit
a.			
b.			
c.			

d.			
e.			
f.			
g.			

SE5-14 A machine is purchased on January 2, 2005 for $50,000. It has an expected useful life of 10 years and no residual value. After eleven years, it was sold for $3,000 cash. Give the journal entry needed to record the sale of the asset.

Date	Account	Debit	Credit

Exercises

E5-2 Best-Goods Company purchased a delivery truck for $35,000 on January 1, 2002. It had an estimated useful life of 7 years or 210,000 miles. Best-Goods estimated the truck's salvage value to be $5,000. The truck was driven 16,000 miles in 2002 and 32,000 miles in 2003. Using journal entries, first record the purchase of the asset. Then, give the journal entries to record the depreciation expense for both 2002 and 2003 using the (1) straight-line method, and (2) the units of activity method of depreciation.

Purchase

Date	Account	Debit	Credit

Straight-line method

Date	Account	Debit	Credit

Activity method

Date	Account	Debit	Credit

E5-5 Zellwiger Plumbing bought a van for $44,000. The van is expected to have a 10-year useful life and a salvage value of $5,000.

a. Suppose Zellwiger sells the van after 3 years for $30,000. Give the journal entry to record the sale. (Assume the company has used straight-line depreciation.)
b. Suppose the van were sold for $30,000 after 6 years. Give the journal entry to record the sale.

After 3 years

Date	Account	Debit	Credit

After 6 years

Date	Account	Debit	Credit

Problems – Set A

P5–1A Pirate Print Shop purchased a new printing press in 2004. The invoice price was $158,500, but the manufacturer of the press gave Pirate a 3% discount for paying cash for the machine on delivery. Delivery costs amounted to $2,500, and Pirate paid $900 for a special insurance policy to cover the press while in transit. Installation cost $2,800; and Pirate spent $5,000 training the employees to use the new press. Additionally, Pirate hired a new supervisor at an annual salary of $75,000 to be responsible for keeping the press online during business hours. Give the journal entry to record the purchase of the asset.

Date	Account	Debit	Credit