Basic Accounting

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Learning Objectives

- Define/differentiate the terms accounting, auditing and bookkeeping
- Define/differentiate the accrual and cash methods of recording transactions
- Define/differentiate revenue and expenses
- Define/recognize asset, liability and owner equity accounts

Learning Objectives

- Explain the fundamental accounting equation
- Record transactions in “T” accounts
- Define debit and credit
- Explain which transactions affect owners equity

Learning Objectives

- Journalize and post transactions
- Define/differentiate fixed and current assets
- Explain and perform adjusting entries
- Perform both unadjusted and adjusted trial balances

Learning Objectives

- Understand the measurement of income
- Describe the purpose of the income statement
- Name/recognize accounts in the income statement
- Name/describe the six sections of the income statement

Learning Objectives

- Explain why/when/how closing entries are made
- Describe the purpose of the balance sheet
- Name/recognize accounts in the balance sheet
- Name/recognize the five sections of the balance sheet

Accounting

The process of collecting, recording, summarizing, and using financial data

Auditing

A special area of accounting that deals with verifying the records that are kept and any computations that are made

Bookkeeping

The process that documents the:

- Flow of resources ($, goods) into the business
- Flow of resources out of the business
- Claims of creditors and owners to those resources

Transactions

The fiscal/financial events that are recorded

Accounting Period

- The period of time over which transactions are recorded, at the end of which income is measured
- Most common accounting period: 1 year
- Calendar vs. fiscal

Methods of Recording Transactions

- Accrual
- Cash

Accrual

Transactions are recorded at the time they occur

Cash

Transactions are recorded when cash transfers hands

Illustration

Customer purchases an item on Dec. 10th and plans to actually make payment on Jan. 10th

Dec.10 Dec.31 Jan.10

Accrual

Cash

Illustration

Customer purchases an item on Dec. 10th and plans to actually make payment on Jan. 10th

	Dec.10	Dec.31	Jan.10
Accrual	x		
Cash			x

Illustration

Customer purchases an item on Dec. 10th and plans to actually make payment on Jan. 10th

	Dec.10	Dec.31	Jan.10
Accrual	x		
Cash			x

Matching Principle

Use the accrual system because it matches revenue earned to expenses incurred to generate the revenue

Illustration

Customer purchases an item on Dec. 10th and plans to actually make payment on Jan. 10th

	Dec.10	Dec.31	Jan.10
Accrual	x		
Cash			x

Revenue

The measurement of goods sold or services rendered for which the business receives “cash” or “the promise of cash” (or something else of value)

Expenses

The measurement of resources used up during a period of time in order to earn revenue

Types of Accounts

- Assets
- Liabilities
- Owner Equity

Assets

Resources owned by the business

Examples of Asset Accounts

- Cash
- Accounts receivable
- Building
- Inventory
- Equipment
- Prepaid insurance

Liabilities

Debts owed by the business to creditors

Liabilities Arise When the Business:

- Borrows cash (takes out a loan with the bank)
- Purchases goods (inventory or equipment) or services on credit

Examples of Liability Accounts

- Notes payable
- Accounts payable

Owners Equity

The claim of the owners to the assets of the business, after the creditors have been paid (also called NET WORTH)

$$OE = A - L$$

What Transactions Affect OE?

- OE is increased when the owners make investments in the business
- OE is increased when revenue is earned
- OE is decreased when expenses are paid

Examples of OE Accounts

- Contributed capital
- Sales revenue
- Service revenue
- Expense accounts

Business Example

Assets		Liabilities		OE
				(OE=A-L)
Cash 10,000		Truck note payable 1,000		
Other 100,000				
-----------------		------------------		
110,000 (In dollars)	-	1,000	=	109,000

Prior to Capital Contribution

Assets		**Liabilities**		**OE**
				(OE=A-L)
Cash 10,000		Truck note payable 1,000		
Other 100,000				
-------------------		------------------		
110,000	-	1,000	=	109,000
(In dollars)				

Owner Puts $500 Into Business

Assets

Cash 10,500

Other 100,000

\-

Liabilities

Truck note
payable 1,000

1,000

=

OE

(OE=A-L)

Owner Puts $500 Into Business

Assets	**Liabilities**	**OE**
		(OE=A-L)
Cash 10,500	Truck note payable 1,000	
Other 100,000		
-------------------	------------------	
110,500	- 1,000	=

Owner Puts $500 Into Business

Assets		**Liabilities**		**OE**
				(OE=A-L)
Cash 10,500		Truck note payable 1,000		
Other 100,000				
-------------------		-----------------		
110,500	-	1,000	=	109,500

Prior to Earning Sales Revenue

Assets		**Liabilities**		**OE**
				(OE=A-L)
Cash 10,500		Truck note payable 1,000		
Other 100,000				
------------------		-------------------		
110,500	-	1,000	=	109,500

Earns Sales Revenue $500

Assets		**Liabilities**		**OE**
				(OE=A-L)
Cash 11,000		Truck note payable 1,000		
Other 100,000				
-----------------		------------------		
	-	1,000	=	

Earns Sales Revenue $500

Assets		**Liabilities**		**OE**
				(OE=A-L)
Cash 11,000		Truck note payable 1,000		
Other 100,000				
-----------------		-----------------		
111,000	-	1,000	=	

Earns Sales Revenue $500

Assets		**Liabilities**		**OE**
				(OE=A-L)
Cash 11,000		Truck note payable 1,000		
Other 100,000				
----------------		-----------------		
111,000	-	1,000	=	**110,000**

Prior to Paying Expense

Assets		**Liabilities**		**OE**
				(OE=A-L)
Cash 11,000		Truck note payable 1,000		
Other 100,000				
-----------------		------------------		
111,000	-	1,000	=	110,000

Pays Phone Expense ($100)

Assets

Cash 10,900

Other 100,000

\-

Liabilities

Truck note
payable 1,000

1,000

=

OE

(OE=A-L)

Pays Phone Expense ($100)

Assets		**Liabilities**		**OE**
				(OE=A-L)
Cash 10,900		Truck note payable 1,000		
Other 100,000				
----------------		--------------------		
110,900	-	1,000	=	

Pays Phone Expense ($100)

Assets		Liabilities		OE
				(OE=A-L)
Cash 10,900		Truck note payable 1,000		
Other 100,000				
110,900	-	1,000	=	109,900

Commit to Memory

- OE is increased when the owners make investments in the business
- OE is increased when revenue is earned
- OE is decreased when expenses are paid

Accounting Equations

- Rearrange algebraically

$$OE = A - L$$

- Fundamental accounting equation

$$A = L + OE$$

Accounting Equations

A	**=**	**L**	**+**	**OE**
Cash		Bank note payable		Contributed capital
AR		Wholesaler AP		Sales Revenue
Fixture		Auto note payable		Operating Expenses
Inventory				

Dual Effects of Accounting

Every time a transaction occurs, it has to be recorded in the proper accounts

Buy Computer System for $28,000 Cash

A	=	L	+	OE
- 28,000				
+28,000				

Owner Invests $10,000 Cash in Business

A	=	L	+	OE
+10,000				+10,000

Business Borrows $5,000 from Bank

A	=	L	+	OE
+5,000		+5,000		

Cash Sales for the Day Total $1,000

A	=	L	+	OE
+1,000				+1,000

Credit Sales for the Day Total $2,000

A	=	L	+	OE
+2,000				+2,000

Do Assets Really Equal Liabilities Plus OE?

A	=	L	+	OE
-28,000				
+28,000				+10,000
+10,000		+5,000		
+5,000				
+1,000				+1,000
+2,000				+2,000
18,000	=	5,000	+	13,000

Commonly Asked Question

Why doesn't the purchase of an Asset increase OE?

- $OE = \underset{\uparrow\,\downarrow}{A} - L$
- $OE = \underset{\uparrow}{A} - \underset{\uparrow}{L}$

Commonly Asked Question

Why doesn't decreasing a Liability increase OE?

- $OE = \underset{\downarrow}{A} - \underset{\downarrow}{L}$

Commonly Asked Question

Why isn’t an Expense a Liability?

Expenses are the measure of resources used up. They require the immediate payment of cash for the amount in full.

Summary

- Expenses paid in advance are resources and are classified under ASSETS
- Expense account titles appear under OE. When expenses occur, they are recorded in these accounts
- When expenses can’t be paid with cash we create a LIABILITY

Rules and Steps Involved in Recording Transactions

"T" Accounts

A = L + OE

Cash

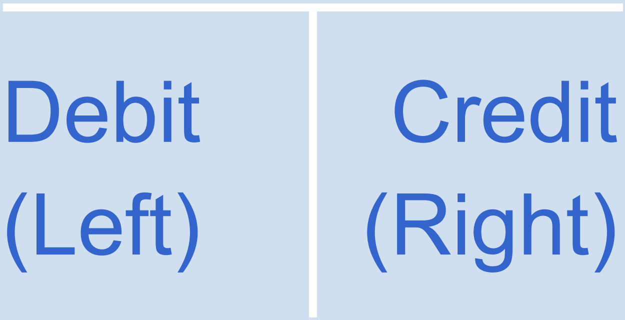
Accts Rec

Bank
Note Payable

Cont Cap

Sales Revenue

“T” Account



Debit

(Left)

Credit

(Right)

For Asset Accounts

- Increases to the account are placed on the debit side
- Decreases to the account are placed on the credit side

+ -

Debit (Left)

Credit (Right)

For Liability and OE Accounts

- Increases are placed on the credit side
- Decreases are placed on the debit side

Fundamental Accounting Equation

\+ -   - +   - +

A = L + OE

Balancing Feature

Debits = Credits

To Record Transactions, Ask:

1. What accounts are affected?
   Locate these accounts under their proper headings (A, L, or OE)
2. How is the heading (A, L, OE) affected?
   This tells you whether to place numbers on the debit or credit side of the account
3. After placing numbers in accounts, do debits = credits?

Typical Transactions

See Supplemental Materials

Transactions: a, b & c

$$^{+}A^{-} \quad = \quad {}^{-}L^{+} \quad + \quad {}^{-}OE^{+}$$

Cash

a) 500	
c) 50	

Sales Revenue

	a) 500
	b) 300
	c) 100

Accounts Receivable

b) 300	
c) 50	

Transactions: d, e & f

$^{+}A^{-}$ = $^{-}L^{+}$ + $^{-}OE^{+}$

Cash	
	d) 100
	f) 3,000

Salary Payable	
	e) 3,000
f) 3,000	

Phone Exp.	
d)100	

Salary Exp.	
e) 3,000	

Transactions: g, h & i

$^{+}A^{-} = {}^{-}L^{+} + {}^{-}OE^{+}$

Cash

	g) 5,000
	i) 7,000

Computer AP

	h) 8,000

Fixtures

g) 5,000	

Auto AP

	i) 7,000

Computer

h) 8,000	

Automobile

i) 14,000	

Transactions: j & k

$^{+}A^{-} = {}^{-}L^{+} + {}^{-}OE^{+}$

Cash

j) 50,000	
	k) 25,000

Bank Note Payable

	j) 50,000
k) 25,000	

Transactions: I

$$^{+}A^{-} \quad = \quad {}^{-}L^{+} \quad + \quad {}^{-}OE^{+}$$

Accounts Receivable

2,000	
	I) 1,000

Sales Revenue

	2,000

Cash

I) 1,000	

Transaction: m

${}^{+}A^{-}$ = ${}^{-}L^{+}$ + ${}^{-}OE^{+}$

Cash	
m) 10,000	

Contributed Capital	
	m) 10,000

Steps for Recording Transactions

1. Mental analysis
2. Journalizing
3. Posting
4. Trial balance

For the “Typical Transactions”

1. **Mental analysis**
2. Journalizing
3. **Posting**
4. Trial balance

Jones Pharmaceutical Center

1. **Mental analysis**
2. Journalizing
3. Posting
4. Trial balance

a. Dr. Jones invested $25,000 in the pharmaceutical center

+A- = -L+ + -OE+

b. Paid one month’s rent of $1,200 on the building

+A- = -L+ + -OE+

c. Paid $4,000 for a computer

+A- = -L+ + -OE+

d. Purchased fixture (product display case) for cash ($1,200)

+A- = -L+ + -OE+

e. Purchased more fixtures (counseling area walls/furniture, etc.) on account in the amount of $3,150 from Pharmacy Equipment Company

+A- = -L+ + -OE+

f. Paid pharmacy equipment company $400

+A- = -L+ + -OE+

g. Bought $9,600 in drugs (inventory) from United States Drugs and paid cash for the total

+A- = -L+ + -OE+

h. Recorded cash sales of $200

+A- = -L+ + -OE+

i. Recorded charge sales of $600

+A- = -L+ + -OE+

j. Paid telephone bill of $120

+A- = -L+ + -OE+

k. Billed third parties for cognitive services totaling $400

+A- = -L+ + -OE+

Jones Pharmaceutical Center

1. Mental analysis
2. **Journalizing**
3. Posting
4. Trial balance

Journal Entry

Date	Account title & explanation	Folio	Db	Cr
2/1	Cash	101	25,000	
	Jones, Capital investment	501		25,000

Owner investment in the business

Journal Entry

Date	Account title & explanation	Folio	Db	Cr
2/1	Cash	101	25,000	
	Jones, Capital investment	501		25,000

Owner investment in the business

Journal Entry

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Owner investment in the business

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Owner investment in the business

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Owner investment in the business

Journal Entry

Date	Account title & explanation	Folio	Db	Cr
2/1	Cash	101	25,000	
	Jones, Capital investment	501		25,000

Owner investment in the business

Jones Pharmaceutical Center

1. Mental analysis
2. Journalizing
3. **Posting**
4. Trial balance

Jones Pharmaceutical Center

1. Mental analysis
2. Journalizing
3. Posting
4. **Trial balance**

Taking a Trial Balance

- Take the balance of each T account
- Note whether each balance is on the debit or credit side

Sample Account Balance (Jones Pharmaceutical Center)

Cash

a)	25,000	b)	1200
h)	200	c)	4000
		d)	1200
	25,200	e)	400
		g)	960
		j)	120
	8,680		16,520

Unadjusted Trial Balance
Jones Pharmaceutical Center

Account	Debit	Credit
Cash	8,680	
Computer	4,000	
Fixtures	4,350	
Inventory	9,600	
Accounts Receivable	1,000	
Accounts payable		2,750
Jones, capital investment		25,000
Rent expense	1,200	
Sales revenue		800
Service revenue		400
Telephone expense	120	
Total	**28,950**	**28,950**

Unadjusted Trial Balance

The last day of the accounting period has not been reached

Income

Income = Revenue - Expenses

Typical Adjusting Entries

- Inventory
- Salary
- Depreciation
- Prepaid expenses

Adjusting Entry for Inventory

- Throughout the accounting period, we have recorded inventory flowing into the business, but not inventory leaving the business
- The inventory that was sold was an expense (a resource used up)
- This expense must be recorded

Scenario

+A- = -L+ + -OE+

Inventory	
1/1) 5,000	
3/1) 2,000	
5/1) 2,000	
7/1) 5,000	
9/1) 2,000	
11/1)2,000	
18,000	

Cost of Goods on Hand

- On the last day of the accounting period we conduct a physical inventory to determine the cost of goods on hand, i.e., the cost of the inventory that was not sold
- Computer systems can provide the cost of goods on hand amount because they keep a perpetual inventory
- Scenario: Cost of Goods on Hand = $3,000

How to Calculate Cost of Goods Sold (Inventory Expense)

Balance of the Inventory Account	($18,000)
(minus)	
Cost of Goods on Hand	($3,000)
Cost of the Goods Sold	($15,000)

Recording Cost of Goods Sold (Inventory Expense)

+A- = -L+ + -OE+

Inventory

1/1)	5,000	12/31)	15,000
3/1)	2,000		
5/1)	2,000		
7/1)	5,000		
9/1)	2,000		
11/1)	2,000		
	3,000		

Inventory Expense

12/31)	15,000	

Adjusting Entry for Salary

- Salary is an expense the business incurs to generate revenue
- Often the end of an accounting period falls in the middle of a pay period
- The amount of salary owed employees on the last day of the accounting period must be recorded

Recording Salary Expense

+A- = -L+ + -OE+

Salary Payable

	12/31) 1,000

Salary Expense

12/31) 1,000	

Two Types of Assets

- Fixed Assets: Tangible, long-lived resources used in the operation of the business (Bldg, Machinery, Fixtures, Equipment)
- Current Assets: Resources owned by the business which are expected to be realized in cash, sold, or consumed in one year (Cash, Accounts Receivable, Inventory)

Adjusting Entry for Depreciation

- Businesses are allowed to consider the wear and tear that occurs on fixed assets as an expense called depreciation expense
- With the exception of land, fixed assets are depreciated over their useful life

Depreciation Can Be Calculated in Different Ways:

- Figure greater wear/tear in early life of the asset
- Figure greater wear/tear in later life of the asset
- Straight-line depreciation: equal wear/tear each year of useful life

Scenario

+A- = -L+ + -OE+

Cash

	1/1)100,000

Fixtures

1/1)100,000	

Recording Depreciation Expense

+A- = -L+ + -OE+

Cash

	1/1)100,000

Fixtures

1/1)100,000	

Acc. Dep. Fixtures

	12/31)1,000

Depreciation Expense

12/31)1,000	

Contra Accounts

- Contra (offset) accounts reside directly below the fixed asset account to which they pertain
- For depreciating fixed assets, contra accounts should be used for the credit entry so that the balance in the fixed asset account will retain its initial value

Adjusting Entry for Prepaid Expenses

- Prepaid expenses are assets because they are resources (owned by the business) that have not yet been used up
- On the last day of the accounting period, the amount of a prepaid expense that has been used must be determined and recorded as an expense

Scenario

+A- = -L+ + -OE+

Cash

	1/1)2,000

Prepaid Insurance

1/1)2,000	

Recording of Prepaid Expense Used Up

+A- = -L+ + -OE+

Prepaid Insurance	
	12/31)1,000

Insurance Expense	
12/31)1,000	

Stone Drug Co.

- Adjusting entries
- One month accounting period

Stone Drug Co.: Inventory in Stock Amounts to $5800

+A- = -L+ + -OE+

Inventory

	1/31)16,000

Inventory Expense

1/31)16,000	

Inventory
4,000
9,000
7,000
+ 1,800
21,800

21,800
- 5,800
16,000

Stone Drug Co.: Owe $800 Salary to an Employee

+A- = -L+ + -OE+

Salary Payable

	1/31) 800

Salary Expense

1/31) 800	

Stone Drug Co.: Used Up 1/12th of the Prepaid Insurance

+A- = -L+ + -OE+

Prepaid Insurance

	1/31) 83

Insurance Expense

1/31) 83	

Stone Drug Co.: Record 1/12th of Building's Yearly Depreciation

+A- = -L+ + -OE+

Bldg.

100,000	

Acc. Dep. Bldg.

	1/31) 83

Dep. Expense

1/31) 83	

Stone Drug Co.

Adjusted Trial Balance

(see Supplemental Materials)

The Last Day of the Accounting Period

- Income statement
- Recording of closing entries
- Construction of the balance sheet

Example: Fictitious Business

+A- = -L+ + -OE+

Cash

20,000	9,000
40,000	

Accts. Receivables

10,000	

Fixtures

22,000	

Acc. Dep. Fixtures

	1,000

Note Payable

	20,000

Cont. Capital

	20,000

Sales Revenue

	50,000

Operating Expenses

9,000	

Depreciation Expense

1,000	

Income = 50,000 – (9,000 + 1,000)
= 40,000

Financial Statements

- Income statement
- Balance sheet

Income Statement

- Summary of income earned during accounting period
- The result of operations for the accounting period
- To construct, use revenue and expense account balances

Income Statement

- Six sections
- Example: Stone Drug Company

Heading

Stone Drug Co.

Income Statement

Month ending January 31st, current year

Revenue

Sales	$20,650	
Service	$ 8,600	
		$29,250

Cost of Goods Sold

Inventory expense	$16,000	
Transportation expense	$600	
		$16,600

Gross Margin

Gross Margin **$12,650**

Gross Margin = Revenue – COGS

(29,250 – 16,600)

Remaining Expenses

Expenses

Salary expense	$2,800	
Advertising expense	$ 400	
Phone expense	$ 75	
Insurance expense	$ 83	
Depreciation expense	$ 83	
		$3,441

Net Profit, i.e., Income

Net Profit $9,209

Revenue – All Expenses

29,250 – (16,600 + 3,441)

Gross Margin – Remaining Expenses

12,650 – 3,441

Net Profit vs. Net Income

- Net = final
- Corporations pay income tax

  Net profit – income tax = net income
- Sole proprietorships and partnerships do not pay income tax

  Net profit = Net income

Closing Entries

- Made after income measured, i.e., after income statement made
- Empty out revenue and expense accounts
- Transfer income to retained earnings, an OE account
- Dated last day of accounting period

Closing Entries

Are made to empty out revenue and expense accounts so that the business can begin measuring income for the new accounting period

Mechanics of Closing Entries – Step 1

+A- = -L+ + -OE+

Sales Revenue

	50,000

Operating Expenses

9,000	

Depreciation Expense

1,000	

Take the balance of each revenue and expense account

Mechanics of Closing Entries – Step 2

+A- = -L+ + -OE+

If account has a credit balance, debit the account for that amount, and credit retained earnings for that amount

Sales Revenue

	50,000
12/31 50,000	

Operating Expenses

9,000	

Depreciation Expense

1,000	

Retained Earnings

	12/31 50,000

Mechanics of Closing Entries – Step 3

+A- = -L+ + -OE+

If account has a debit balance, credit the account for that amount, and debit retained earnings for that amount

Sales Revenue

	50,000
12/31 50,000	

Operating Expenses

9,000	**12/31 9,000**

Depreciation Expense

1,000	**12/31 1,000**

Retained Earnings

	12/31 50,000
12/31 9,000	
12/31 1,000	

Closing Entries Transfer Income to Retained Earnings

+A- = -L+ + -OE+

Sales Revenue

	50,000
12/31 50,000	

Operating Expenses

9,000	12/31 9,000

Depreciation Expense

1,000	12/31 1,000

Retained Earnings

	12/31 50,000
12/31 9,000	
12/31 1,000	
	40,000

Closing Entries for Stone Drug Co.

See Supplemental Materials

Balance Sheet

- Presents the financial position of a business at a particular point in time
- To construct use all asset accounts, all liability accounts, and OE accounts of contributed capital and retained earnings (The revenue and expense accounts have been closed)

Balance Sheet

- Five sections
- Example: Stone Drug Company

Heading

Stone Drug Company

Balance Sheet

January 31st, “current year”

Assets

Current assets:	
Cash	$ 21,125
Accounts receivable	$ 5,250
Inventory	$ 5,800
Prepaid Insurance	$ 917
TOTAL CURRENT ASSETS	$33,092
Fixed assets:	
Building	$100,000
Less Accum. Depr.	$ 83
TOTAL FIXED ASSETS	$ 99,917
TOTAL ASSETS	**$133,009**

Liabilities

Current liabilities:

Salary payable	$ 800
Accounts payable	$3,000
TOTAL CURRENT LIABILITIES	$3,800
TOTAL LIABILITIES	**$3,800**

Owners Equity

Contributed capital, Stone	$120,000	
Retained earnings	$ 9,209	
Total Owners Equity		$129,209

Liabilities + OE

Total Liabilities and Owners Equity	133,009

Retained Earnings

Link between income statement and balance sheet

Accounting Cycle

Throughout accounting period:

1. Record transactions

Last day of accounting period:

2. Adjusting entries
3. Income statement
4. Closing entries
5. Balance sheet