

ΓΕΩΠΟΝΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ

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### MBA in Food & Agribusiness Financial Management

#### Measuring Business Income

# **Accrual Accounting**

• Revenues and expenses are recorded in the periods in which they occur rather than in the periods when cash is received

or paid

#### HOW?

✓ Recording revenues when **earned** 

✓ Recording expenses when **incurred** 

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✓ Adjusting the accounts

# The Adjustment Process

#### Balance sheet

		Asset	Liability
statement	Exp'n	1 Allocating recorded costs between two or more accounting periods	2 Recognizing unrecorded expenses
Income	Rev'n	4 Recognizing unrecorded earned revenues	3 Allocating recorded unearned revenues between two or more accounting periods

## Prepaid Rent Adjustment Illustrated

On July 3, Treadle Website Design paid two months' rent in advance, \$3,200. The amount was recorded in the Prepaid Rent account.

	Prepaio	d Rent	Rent E	Expense
July 3	3,200			

By July 31, half of the prepaid rent has expired and should be treated as an expense

This is the Y/E

## Prepaid Rent Adjustment Illustrated

Adjustment July 31: Prepaid rent of \$1,600 has expired for July. Adjust account by allocating the amount to the Rent Expense account.

	Prepa	id Rent			Rent Exp	pense	
July	y 3 3,200	July 31 1,600	)	July 31	1,600		
Bal	. 1,600						_
	The account no prepaid August		The according to the second se	ount now expense	reflects the amount		
	July 31 Re	nt Expense Prepaid Rent			Dr. 1,600	Cr. 1,600	

**P 3.** The trial balance for Financial Strategies Service on December 31, 20xx, is as follows:

Trial Balance December 31, 20xx		
Cash	\$ 16,500	
Accounts Receivable	8,250	
Office Supplies	2,662	
Prepaid Rent	1,320	
Office Equipment	9,240	
Accumulated Depreciation-Office Equipment		\$ 1,540
Accounts Payable		5,940
Notes Payable		11,000
Unearned Service Revenue		2,970
L. Gang, Capital		24,002
L. Gang, Withdrawals	22,000	
Service Revenue		72,600
Salaries Expense	49,400	
Rent Expense	4,400	
Utilities Expense	4,280	
	\$118,052	\$118,052

The following information is also available:

- a. Ending inventory of office supplies, \$264.
- b. Prepaid rent expired, \$440.
- c. Depreciation of office equipment for the period, \$660.
- d. Accrued interest expense at the end of the period, \$550.
- e. Accrued salaries at the end of the period, \$330.
- f. Service revenue still unearned at the end of the period, \$1,166.
- g. Service revenue earned but unrecorded, \$2,200.

#### Required

- 1. Open T accounts for the accounts in the trial balance plus the following: Interest Payable; Salaries Payable; Office Supplies Expense; Depreciation Expense–Office Equipment; and Interest Expense. Enter the balances shown on the trial balance.
- 2. Determine the adjusting entries and post them directly to the T accounts.
- 3. Prepare an adjusted trial balance.
- 4. User Insight: Which financial statements do each of the above adjustments affect? Which financial statement is *not* affected by the adjustments?

Cash				Accounts Receivable			Office Supplies				
Bal.	16.500			Bal.	8.250			Bal.	2.662	(a)	2.398
				(g)	2.200			Bal.	264		
				Bal.	10.450						
								Accu	umulated	Depre	ciation
	Prepai	d Ren	t		Office Ed	quipm	ent		Office Ed	, quipme	ent
Bal.	1.320	(b)	440	Bal.	9.240					Bal.	1.540
Bal.	880									(C)	660
										Bal.	2.200

Accounts Payable				Notes Payable				Interest Payable				
		Bal.	5.940			Bal.	11.000			(d)	550	
Salaries Payable			ole	Unearned Service Revenue				L. Gang, Capital				
		(e)	330	(f)	1.804	Bal.	2.970			Bal.	24.002	
						Bal.	1.166					
L. Gang, Withdrawals			wals		Service Revenue			Salaries Expense				
Bal.	22.000					Bal.	72.600	Bal.	49.400			
						(f)	1.804	(e)	330			
						(g)	2.200	Bal.	49.730			
						Bal.	76.604					
Rent Expense			е	Utilities Expense				Of	Office Supplies Expense			
Bal.	4.400			Bal.	4.280			(a)	2.398			
(b)	440					•				<b>!∎</b> I		
Bal.	4.840											

De	epreciatio	n Exp	ense					
	Office Ec	quipm	ent	Interest Expense				
(C)	660			(d)	550			

# The T account illustrated



Financial Strategies Servi	Ce				
Adjusted Trial Balance					
December 31, 20xx					
Cash	\$ 16.500				
Accounts Receivable	10.450				
Office Supplies	264				
Prepaid Rent	880				
Office Equipment	9.240				
Accumulated DepreciationOffice Equipment		\$ 2.200			
Accounts Payable		5.940			
Notes Payable		11.000			
Interest Payable		550			
Salaries Payable		330			
Unearned Service Revenue		1.166			
L. Gang, Capital		24.002			
L. Gang, Withdrawals	22.000				
Service Revenue		76.604			
Salaries Expense	49.730				
Rent Expense	4.840				
Utilities Expense	4.280				
Office Supplies Expense	2.398				
Depreciation ExpenseOffice Equipment	660				
Interest Expense	550				
	\$121.792	<u>\$121.792</u>			
1					

# **Double Entry System**



#### CREDIT

EXPENSE ASSET DIVIDEND

#### LIABILITIES INCOME CAPITAL

 $\mathbf{DR} = \mathbf{CR}$ 

#### LO2, LO3 Preparing Adjusting Entries

- P7. On November 30, the end of the current fiscal year, the following information is available to assist Pinder Company's accountants in making adjusting entries:
  - a. Pinder Company's Supplies account shows a beginning balance of \$2,174. Purchases during the year were \$4,526. The end-of-year inventory reveals supplies on hand of \$1,397.

b. The Prepaid Insurance account shows the following on November 30:

Beginning balance	\$3,580		-60	14	.0	. * G	9 <u>)</u> ,	60	ch.
July 1	4,200	~ ~>	5	( ***)	(a)	₽ ¥-	(free 1	7, 7	, <sup>4</sup> 4)
October 1	7,272	• 	2		<sup>رومی</sup> در م	Contraction of the second seco	r∳⊳.	frank (	$c \circ c$

The beginning balance represents the unexpired portion of a one-year policy purchased in September of the previous year. The July 1 entry represents a new one-year policy, and the October 1 entry represents additional coverage in the form of a three-year policy.

c. The following table contains the cost and annual depreciation for buildings and equipment, all of which Pinder Company purchased before the current year:

Account	Cost	Annual Depreciation
Buildings	\$286,000	\$14,500
Equipment	374,000	35,400

- d. On September 1, the company completed negotiations with a client and accepted an advance of \$16,800 for services to be performed in the next year. The \$16,800 was credited to Unearned Services Revenue.
- e. The company calculated that as of November 30, it had earned \$4,000 on an \$11,000 contract that would be completed and billed in January.
- f. Among the liabilities of the company is a note payable in the amount of \$300,000. On November 30, the accrued interest on this note amounted to \$15,000.
- g. On Saturday, December 2, the company, which is on a six-day workweek, will pay its regular salaried employees \$12,300.
- h. On November 29, the company completed negotiations and signed a contract to provide services to a new client at an annual rate of \$17,500.

#### Required

- 1. Prepare adjusting entries for each item listed above.
- 2. Explain how the conditions for revenue recognition are applied to transactions e and h.

a.	Nov.	30	Supplies Expense	5.303	
			Supplies		5.303
			To record supplies used		
			\$2.174 + \$4.526 œ \$1.397		
			= \$5.303		
b.		30	Insurance Expense	5.734	
			Prepaid Insurance		5.734
			To record expired insurance		
			\$3.580		
			1.750 [( \$4.200 <sub>÷</sub> 12 months)		
			x 5 months ]		
			<u>404</u> [( \$7.272 <sub>÷</sub> 36 months)		
			x 2 months ]		
			\$5.734		
C.		30	Depreciation ExpenseBuildings	14.500	
			Depreciation ExpenseEquipment	35.400	
			Accumulated DepreciationBuildings		14.500
			Accumulated DepreciationEquipment		35.400
			To record annual depreciation		

d.	30	Unearned Services Revenue	4.200	
		Service Revenue		4.200
		To record service revenue earned for		
		which payment was received in advance		
		( \$16.800 <sub>÷</sub> 12 months )		
		x 3 months = \$4.200		
e. 30 A		Accounts Receivable	4.000	
		Service Revenue		4.000
		To record service revenue earned on		
		a contract to be billed in January		
f.	30	Interest Expense	15.000	
		Interest Payable		15.000
		To record accrued interest on note		
		payable		

g.	Nov.	30	Sa	lari	es E	Expense		8.200					
				Sa	lario	es Payable							8.200
					То	record acc	crue	d sal	aries				
					(	\$12.300	÷	6	days) x	4	days		
					=	\$8.200	I	1		1			
h.			No	en	try								

#### Inventories (IAS 2)

# Inventory Cost under the Periodic Inventory System (collectief)

Inventory <u>cost</u> is determined using one of the following generally accepted methods, each based on a different assumption of cost flow:

- 1. Specific identification method
- 2. Average-cost method
- 3. First-in, first-out (FIFO) method
- 4. Last-in, first-out (LIFO) method



# Basic Data

Inventory D	ata			
June 1	Inventory	80 units	@ \$10.00	\$ 800
June 6	Purchase	220 units	@ \$12.50	2,750
June 25	Purchase	200 units	@ \$14.00	2,800
Goods available for sale		500 units	_	\$6,350
Sales		280 units		
On hand Ju	une 30	<u>220 units</u>	_	

# First-In, First-Out (FIFO) Method

	Inventory	Inventory Data							
	June 1	Inventory	80 units	@ \$10.00	\$ 800				
	June 6	Purchase	220 units	@ \$12.50	2,750				
	June 25	Purchase	200 units	@ \$14.00	2,800				
attact a Market	Goods av	ailable for sale	500 units	-	\$6,350				
	Sales		280 units						
	On hand	June 30	220 units	-					
$\underbrace{First-In, F}_{200 \text{ units } @ \$14.00 \text{ f}}_{20 \text{ units } @ \$12.50 \text{ f}}_{220 \text{ units at a cost of}}$	First-Out ( From purcl From purcl	(FIFO) Method hase of June 25 hase of June 6	$\frac{1}{5}$ \$2,80 $\frac{25}{3.05}$	0 <u>0</u> 0					
			<u> </u>	<u> </u>					
		Cost of good Less June 30	ls avail. for ) inventory	r sale	\$6,350 3,050				
		Cost of good	ls sold		\$3,300				

Inventory is priced at the price of the **last** items purchased

# Last-In, First-Out (LIFO) Method

	Inventory	Data			
	June 1	Inventory	80 units	@ \$10.00	\$ 800
	June 6	Purchase	220 units	@ \$12.50	2,750
	June 25	Purchase	200 units	@ \$14.00	2,800
of line of House	Goods av	ailable for sale	500 units	-	\$6,350
	Sales		280 units		
	On hand .	June 30	220 units	-	
Last-In, 80 units @ \$10.00 f 140 units @ \$12.50 220 units at a cost o	First-Out from June from pur	t (LIFO) Mether 1 inventory chase of June	od \$ 6 <u>1,</u> <u>\$2,</u>	800 750 550	
		Cost of good	ds avail. for	: sale	\$6,350
		Less June 30	) inventory		2,550
		Cost of good	ds sold		\$3,800

Inventory is priced at the price of the **first** items purchased

#### LO1, LO3 Periodic Inventory System and Inventory Costing Methods



**P 2.** The inventory, purchases, and sales of Product ISO for March and April listed below. The company closes its books at the end of each month uses the periodic inventory system.

Mar.	1	Beginning inventory	60 units @ \$49
	10	Purchase	100 units @ \$52

Mar.	19	Sale	90 units
	31	Ending inventory	70 units
Apr.	4	Purchase	120 units @ \$53
	15	Purchase	50 units @ \$54
	23	Sale	200 units
	25	Purchase	100 units @ \$55
	30	Ending inventory	140 units

#### Required

- 1. Compute the cost of the ending inventory on March 31 and April 30 using the average-cost method. In addition, determine cost of goods sold for March and April. Round unit costs to cents and totals to dollars.
- 2. Compute the cost of the ending inventory on March 31 and April 30 using the FIFO method. Also determine cost of goods sold for March and April.
- 3. Compute the cost of the ending inventory on March 31 and April 30 using the LIFO method. Also determine cost of goods sold for March and April.
- 4. User Insight: Do the cash flows from operations for March and April differ depending on which inventory costing method is used—average-cost, FIFO, or LIFO? Explain.

# Answer P2 - Weighted Average 1

		Unit	
	Units	Price	Amount
March 1 beginning inventory	60	\$49,00	\$ 2.940
Purchase			
March 10	100	52,00	5.200
Cost of goods available for sale*	160	50,88	\$ 8.140
Sales			
March 19	90		
March 31 ending inventory*	70	50,88	3.562
Cost of goods sold for March			\$ 4.578

# Answer P2 - Weighted Average 2

Ар	April 1 beginning inventory					\$50,88	\$ 3.562
			Unit				
		Units	Price	Amount			
Pu	rchases						
	April 4	120	\$53	\$6.360			
	April 15	50	54	2.700			
	April 25	100	55	5.500	270		14.560
Co	st of goods available	for sale			340	53,30	\$18.122
Sa	les						
	April 23				200		
April 30 ending inventory					140	53,30	7.462
Co	Cost of goods sold for April						\$10.660

## Answer P2 – FIFO 1

		Unit	
	Units	Price	Amount
March 1 beginning inventory	60	\$49	\$ 2.940
Purchase			
March 10	100	52	5.200
Cost of goods available for sale	160		\$ 8.140
Sales			
March 19	90		
March 31 ending inventory*	70	52	3.640
Cost of goods sold for March			\$ 4.500
*From purchase on March 10			

# Answer P2 – FIFO 2

Арі	April 1 beginning inventory					\$52	\$ 3.640
			Unit				
	-	Units	Price	Amount			
Pu	rchases						
	April 4	120	\$53	\$6.360			
	April 15	50	54	2.700			
	April 25	100	55	5.500	270		14.560
Co	st of goods available for	r sale			340		\$18.200
Sal	es						
	April 23				200		
Арі	ril 30 ending inventory*				140		7.660
Co	st of goods sold for Apr	il					\$10.540
			-				
*	From April 15 purchase	e:   40	units x	\$54   =	\$2.160		
	From April 25 purchase	e: 100	units x	\$55 =	5.500		
					\$7.660		

# Answer P2 – LIFO 1

			Unit	
		Units	Price	Amount
March 1 beginning inventory	60	\$49	\$ 2.940	
Purchase				
March 10		100	52	5.200
Cost of goods available for sale		160		\$ 8.140
Sales				
March 19		90		
March 31 ending inventory*		70		3.460
Cost of goods sold for March				<u>\$ 4.680</u>
* March 1 beginning inventory	\$2.940			
( 60 units x \$49 )				
March 10 purchase	520			
( 10 units x \$52 )	\$3.460			

# Answer P2 – LIFO 2

April 1 begi	nning inve	ntory		70	\$ 3.460
	Units	Unit Price	Amount		
Purchases					
April 4	120	\$53	\$6.360		
April 15	50	54	2.700		
April 25	100	55	5.500	270	14.560
Cost of goo	ds availab	le for sale	, <u> </u>	340	\$18.020
Sales					
April 23				200	
April 30 end	ling invent	ory*		140	7.170
Cost of goo	ds sold fo	r April			<u>\$10.850</u>
* March 1	beginning	j inventor	y: \$2.940		
( 60	units x	\$49 )			
March 10 purchases:			520		
( 10	units x	\$52 )			
April 4 purchases:			3.710		
( 70	units x	\$53 )	\$7.170		