## CHAPTER 3

### **The Adjusting Process**

#### **Chapter Overview**

This chapter introduces the student to the adjusting process. Cash and accrual accounting are illustrated and differentiated. The accounting period concept, the revenue and matching principles, and the timeperiod concept are explained. Adjusting entries are defined. Prepaids and accruals are compared. The five categories of adjusting entries—prepaid expenses, depreciation, accrued expenses, accrued revenues, and unearned revenues—are illustrated and described in detail. The text provides examples of adjusting entries for prepaid rent, supplies, and depreciation of furniture. Accumulated depreciation and book value are explained. The text then provides examples of accrued salaries, accrued interest expense, accrued service revenue, and unearned service revenue. A comparison of the timing of both prepaids and accruals along with a summary of the adjusting process concludes the discussion of adjusting entries.

The last part of the chapter focuses on the financial statements. Students learn how to prepare an adjusted trial balance and then use it to prepare the financial statements. The relationship among the financial statements is emphasized. Following a discussion of ethical issues in accrual accounting, decision guidelines help students through the adjusting process. Decision guidelines feature important questions about measuring business income, the accounting process and the adjusted trial balance. A summary problem reviews adjusting entries, the adjusted trial balance, and preparation of the financial statements. An appendix covers an alternate way to record prepaid expenses and unearned revenues directly into an income statement account.

## **Chapter 3: Teaching Outline**

- 1) Distinguish between accrual basis versus cash-basis accounting.
  - a) Exhibit 3-1 Accrual Accounting Versus Cash-Basis Accounting
- 2) Explain other accounting principles.
  - a) The Accounting Period
  - b) The Revenue Principle
  - c) Exhibit 3-2 Recording Revenue: The Revenue Principle
  - d) The Matching Principle
  - e) Exhibit 3-3 Recording Expenses: The Matching Principle
  - f) The Time Period Concept
- 3) Explain the purpose of adjusting entries.
  - a) Exhibit 3-4 Unadjusted Trial Balance
- 4) Distinguish between prepaids and accruals.
- 5) Journalize and post adjusting entries.
  - a) Prepaid Expenses
    - i) Prepaid Rent
    - ii) Supplies
  - b) Depreciation
    - i) Exhibit 3-5 Plant Assets on the Balance Sheet of Smart Touch Learning (May 31)
  - c) Accrued Expenses
    - i) Accruing Salary Expense
    - ii) Accruing Interest Expense
  - d) Accrued Revenues

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- e) Unearned Revenue
- f) Exhibit 3-6 Prepaid and Accrual Adjustments
- g) Exhibit 3-7 Summary of Adjusting Entries
- h) Exhibit 3-8 Journalizing and Posting the Adjusting Entries of Smart Touch Learning
- 6) Explain and prepare the adjusted trial balance.
  - a) Exhibit 3-9 Preparation of Adjusted Trial Balance
- 7) Prepare the financial statements from the adjusted trial balance.
  - a) Income Statement
  - b) Statement of Owner's Equity
  - c) Balance Sheet
- 8) Explain the relationship between the financial statements.
  - a) Exhibit 3-10 Preparing the Income Statement from the Adjusted Trial Balance
  - b) Exhibit 3-11 Preparing the Statement of Owner's Equity from the Adjusted Trial Balance
  - c) Exhibit 3-12 Preparing the Balance Sheet from the Adjusted Trial Balance

## **Chapter 3: Summary Handout for Students**

- 1. Accrual versus cash-basis accounting:
  - o Accrual accounting records the effect of each transaction as it occurs.
    - Revenues are recorded when earned.
    - Expenses are recorded when incurred.
  - Cash-basis accounting records only cash receipts and cash payments.
    - Cash receipts are treated as revenues.
    - Cash payments are treated as expenses.
- 2. Other accounting principles:
  - The Accounting Period
  - The Revenue Principle
  - The Matching Principle
  - The Time-Period Concept
- 3. Five types of adjusting entries ensure that balances are correct for the financial statements.
  - Prepaid expenses are advance payments of expenses. Prepaid expenses are assets until they are used. The portion of the asset used up becomes an expense (e.g., prepaid rent, prepaid insurance, supplies).
  - Depreciation allocates a plant asset's cost to expense. Note that land is not depreciated.
    - Accumulated depreciation holds the sum of all depreciation recorded for the asset over its useful life. It is a contra asset account so has a normal credit balance.
  - Accrued expenses (e.g., accrued salary expense, accrued interest expense) are expenses incurred, but not yet paid for.
  - Accrued revenue is revenue that has been earned, but not yet collected in cash.
  - Unearned revenue (a.k.a. deferred revenue) is a liability that is created when cash is collected from a customer before the business performs the service or delivers the goods.
- 4. Adjusting entries always affect a revenue or an expense, and an asset or a liability.
  - Adjusting entries do not affect cash.
- 5. The adjusted trial balance gives the adjusted account balances.
  - A work sheet can be used to combine the trial balance amounts plus or minus the adjustments to prepare the adjusted trial balance.
- 6. Relationships among financial statements:

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- Net income or net loss from the income statement affects owner's equity so it is carried to the statement of owner's equity.
- The ending balance in the owner's capital account goes to the equity section of the balance sheet.
- 7. Work sheets to print for in-class practice (bookmatch), as specified by your instructor.
- 8. Myaccountinglab.com homework algorithmic assignments:
  - E3-14; E3-15; E3-18; E3-19; E3-20; E3-24; E3-26; P3-28A; P3-30A; P3-32A. For Appendix: P3A-3A

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## **Lecture Outline Tips: Key Topics**

When explaining cash versus accrual accounting, it may be helpful to list examples of cash and accrual transactions side by side in order to point out the differences. For example, journalize a cash revenue and an accrual revenue transaction, or a cash expense and an accrual expense transaction side by side. The first potential stumbling block in accounting for many students is debits and credits. The second potential stumbling block is adjusting entries. Many students can relate to cash transactions in their personal lives, but may not have the same experience with accrual transactions.

It helps to explain to students that accountants have several accounting principles or concepts that guide them in recording financial information. Some of the principles, in addition to accrual accounting versus cash-basis accounting, include the accounting period concept and the revenue principle. It may be helpful to discuss when various types of businesses fiscal years might end for the concept of accounting periods. The revenue principle is important for students' understanding of adjusting entries related to revenue recognition. Relating the revenue principle to the payment of rent to a landlord may aid their understanding as many students rent apartments or even rooms on campus.

To indicate why the accrual method is the more "correct" method, you can provide a simple example of a company with two (or more) transactions—one with cash revenue and one with accrued expense for example, and ask students to compute net income under the cash basis and accrual basis. Note the differences and ask students which computation provides a true picture of the company's operations and follows the matching principle.

Emphasize that adjusting entries are simply a kind of journal entry and MUST balance—debits equal credits. Another good check figure with adjusting entries is that the income statement AND the balance sheet are always affected. It is helpful to point out that adjusting entries DO NOT affect the cash account. It may be helpful to provide several adjusting entry examples and ask students which account affects the balance sheet and which affects the income statement.

Some students have difficulty with adjusting the unearned revenue account. Explain that the purpose of the adjusting entry is to record the revenue that was earned DURING the period, not the amount related to work to be performed in the future.

It may be helpful when explaining accruals and deferrals to point out that someone's accrual is always someone else's deferral. For example, a tenant's rent payment recorded as prepaid rent has been recorded by the landlord as unearned revenue.

Ask students to be careful when calculating adjusted trial balance totals. Not every adjustment is an addition or subtraction; it depends on the account type. Debits are added to debits, but are subtracted from credits, for example.

When explaining the relationships among financial statements, point out the date differences. The income statement and statement of owner's equity are for the time period, but the balance sheet is for one day. Students may want to report the balance sheet for the time period, which is impossible. For example, you cannot compute a cash balance for an entire time period; it is computed for each day, and will change from day to day. Also, point out the owner's capital balance in the balance sheet is for the END of the period, not the beginning.

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# **ASSIGNMENT GRID**

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Assignment		Learning )bjective(s)	Estimated Time in Minutes	Level of Difficulty
			in mutures	Difficulty
Short Exercise				
S3-1	Comparing accrual cash-basis accounting	1	5	Easy
S3-2	Comparing accrual and cash-basis accounti		5	Easy
S3-3	Applying the revenue principle	2	5	Easy
\$3-4	Applying the matching principle	2	5	Easy
S3-5	Identifying types of adjusting entries	3	5	Easy
83-6	Journalizing adjusting entries	4	5	Easy
S3-7	Posting adjusting entries	4	5	Easy
S3-8	Accruing interest expense and posting to			
	T-accounts	4	10	Easy
53-9	Accounting for unearned revenues	4	5-10	Easy
53-10	Preparing an adjusted trial balance	5	10	Easy
53-11	Preparing an income statement	6	10-15	Easy
83-12	Preparing a balance sheet	6	5	Easy
Exercises				
E3-13	Comparing accrual and cash basis			
	accounting, and applying the revenue princ	iple 1 2	5-10	Medium
E3-14	Comparing accrual and cash basis	·P·•,·,-	0 10	
	accounting, preparing adjusting entries, and	1		
	preparing income statements	1, 4, 6	15–25	Easy
E3-15	Accrual accounting concepts and principles		5-10	Easy
E3-16	Applying accounting principles and prepari		5 10	Eusy
25 10	journal entries for prepaid rent	2,4	10-15	Medium
E3-17	Categorizing and journalizing adjusting ent	· ·	10–15	Medium
E3-17 E3-18		11055, 4	10-13	Medium
E3-10	Recording adjustments in T-accounts and	4	10.20	Medium
F2 10	calculating ending balances		10–20	Medium
E3-19	Preparing adjusting entries and preparing an		10 15	
	adjusted trial balance	4, 5	10–15	Medium
E3-20	Using an adjusted trial balance to prepare		10	
	adjusting journal entries	4, 5	10	Medium
E3-21	Using an adjusted trial balance to determine			
	adjusting journal entries	4, 5	10-15	Medium
E3-22	Journalizing adjusting entries and determin	-		
	their effect on the income statement	4,6	5-10	Medium
E3-23	Using adjusting journal entries and			
	computing financial statement amounts	4, 6	10-20	Medium
E3-24	Using an adjusted trial balance to prepare			
	financial statements	5,6	10	Medium
E <b>3-25</b>	Preparing the financial statements	6	20	Medium
E3-26	Preparing the income statement	6	15	Difficult
E3-27	Preparing the statement of owner's equity	6	10–15	Difficult

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Problems (G	roup <u>A)</u>			
P3-28A	Comparing accrual and cash basis accounting	ng,		
	preparing adjusting entries, and preparing	0,		
	income statements	1, 4, 6	15-25	Easy
P3-29A	Journalizing adjusting entries	4	15–25	Easy
P3-30A	Analyzing and journalizing adjustments	4	15-20	Medium
P3-31A	Journalizing and posting adjustments to	-		
	T-accounts; preparing the adjusted trial bala	ince 4.5	45-60	Difficult
P3-32A	Preparing and posting adjusting journal entr			
	preparing an adjusted trial balance and	;		
	financial statements	4, 5, 6	45-60	Medium
P3-33A	Prepare an adjusted trial balance and	., ., .		
10 0011	financial statements	5,6	45-60	Medium
P3-34A	Preparing financial statements from an	5,0	15 00	Wiedium
1 5-5-11	adjusted trial balance	6	20-30	Difficult
	adjusted that balance	0	20 50	Dimeun
Problems (G	roun B)			
P3-35B	Comparing accrual and cash basis accountir	ıσ		
1 5-550	preparing adjusting entries, and preparing	15,		
	income statements	1, 4, 5	15-25	Easy
P3-36B	Journalizing adjusting entries	4	15–25	Easy
P3-37B	Analyzing and journalizing adjustments	4	15–25	Medium
P3-38B	Journalizing and posting adjustments to	4	13-20	Medium
F 3-36D		maa 1 5	45–60	Difficult
P3-39B	T-Accounts; preparing an adjusted trial bala	ince 4, 5	43-00	Difficult
P3-39D	Preparing and posting adjusting journal			
	entries; preparing an adjusted trial balance and financial statements	156	45 60	Madium
D2 40D		4, 5, 6	45–60	Medium
P3-40B	Prepare an adjusted trial balance and	5 (	15 (0)	
D2 41D	financial statement	5, 6	45–60	Medium
P3-41B	Preparing financial statements from an	ſ	20.20	D:00 1
	adjusted trial balance	6	20-30	Difficult
<i>a</i>				
Continuing		- 4 -		
P3-42	Adjusting the accounts, post to the T-account		15 20	Γ
	and prepare an adjusted trial balance	4, 5	15–20	Easy
<i>c</i>				
Continuing				
P3-43	Journalize transactions, post to T-accounts,			
	prepare a trial balance and work sheet, prepa	are		
	and post adjusting entries, and prepare		<b>5</b> 0 (0	
	financial statements	4, 5, 6	50-60	Difficult
<b>D</b>				
<u>Practice Set</u>				
	Prepare adjusting entries and an adjusted		15.00	N 6 11
	trial balance	4, 5	15-20	Medium
Decision Ca				
Case 1	Valuing a business on the basis of its			
	net income	5,6	40–50	Medium
Case 2	Completing the accounting cycle to compute			
	net income	4, 5, 6	30	Difficult

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Ethical Issue				
<u>Financial Stat</u>				
	Journalizing and posting transactions and tracing account balances to the financial			
	statements	4, 5, 6	20–30	Medium
<u>Team Project</u>				
Exercises (Ap	<u>pendix)</u>			
E3A-1	Preparing adjusting entries	4	10-15	Medium
E3A-2	Preparing adjusting entries	4	15-25	Medium
P3A-3A	Preparing adjusting entries	4	25-35	Medium
P3A-4B	Preparing adjusting entries	4	25–35	Medium
<u>DemoDoc</u>	Preparation of adjusting entries, adjusted			
	trial balance, and financial statements	3, 4, 5, 6	45-60	Medium

## End of Chapter Exercises and Problems Available in Alternate Accounting Software

#### Programs:

Excel Templates: P3-29A; P3-30A; P3-32A QuickBooks: P3-29A; P3-30A; P3-32A Peachtree: P3-29A; P3-30A; P3-32A General Ledger: P3-29A; P3-30A; P3-32A

# <u>Pre-Test Questions on MyAccountingLab:</u> S3-1 (1), S3-4 (2), S3-5 (3), S3-6 (4), S3-10 (5), S3-11 (6). For Appendix: E3A-1 (4); E3A-2 (4)

#### Post-Test Questions on MyAccountingLab: P4-31B. For Appendix: P4A-1B

## Answer Key to Chapter 3 Quiz

1.	В	6. A	
2.	В	7. B	)
3.	С	8. D	)
4.	А	9. C	( /
5.	С	10. <i>A</i>	ł

Name

Date

Section

#### CHAPTER 3 TEN-MINUTE QUIZ

#### Circle the letter of the best response.

- The Smallwood Company began operations on January 1, 2011. During 2011, Smallwood collected \$92,000 for management services. Twelve thousand dollars of the amount collected was from a contract to provide management services for one year beginning November 1, 2011. An additional \$20,000 of management services had been earned but not collected by year end. The amount of revenue that should be reported for 2011 under the cash-basis is
  - A. \$80,000.
  - B. \$92,000.
  - C. \$100,000.
  - D. \$112,000.
- 2. Refer to the information in the previous question. The amount of revenue that should be reported for 2011 under accrual accounting is
  - A. \$80,000.
  - B. \$102,000.
  - C. \$100,000.
  - D. \$112,000.
- 3. During 2011, Bustamante Co. incurred salary expense of \$240,000. Beginning and ending Salary payable was \$4,000 and \$8,000, respectively. In 2011, Bustamante paid salaries of
  - A. \$248,000. C. \$236,000.
  - B. \$240,000. D. \$244,000.
- 4. Which of the following statements is *false*?
  - A. The time-period concept requires companies to prepare financial statements at least quarterly.
  - B. According to the revenue principle, revenue should be recorded when a product or service has been delivered to the customer.
  - C. When possible, expenses that can be linked to a specific revenue should be deducted from revenue in the same period that the revenue is recorded.
  - D. The time-period concept, the revenue principle, and the matching principle all support the practice of preparing adjusting entries.
- 5. On October 1, 2011, the Jernigan Company paid \$4,800 for a one-year insurance policy. On December 31, 2011, the adjusting entry would include a
  - A. debit to Insurance expense, \$3,600.
  - B. credit to Insurance payable, \$1,200.
  - C. credit to Prepaid insurance, \$1,200.
  - D. debit to Insurance expense, \$4,000.

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6. Failure to record an adjusting entry for an accrued expense will result in which of the following:

	<b>Liabilities</b>	<u>Net Income</u>
A.	understate	overstate
B.	overstate	understate
C.	understate	no effect
D.	no effect	understate

- 7. An adjusting entry could contain all of the following except a
  - A. debit to Unearned revenue.
  - B. credit to Cash.
  - C. debit to Interest receivable.
  - D. credit to Salary payable.
- 8. The 2011 income statement showed Rent expense of \$6,100. The related balance sheet account, Prepaid rent, had a beginning balance of \$1,400 and an ending balance of \$1,200. The amount of cash paid for rent during 2011 is

A.	\$6,100.	C.	\$6,300.
B.	\$1,200.	D.	\$5,900.

	Table 3-1		
	Lemon Car Rental Unadjusted Trial Balan December 31, 2011	ce	
Cash	\$ 7,450		
Prepaid insurance	1,600		
Equipment	19,000		
Accumulated depreciation		\$ 4,200	
Accounts payable		5,000	
J. Lemon, Capital		15,600	
J. Lemon, Withdrawals	6,000		
Rental revenue		23,400	
Insurance expense	7,000		
Salary expense	4,000		
Repair expense	3,150		
	\$ <u>48,200</u>	\$ <u>48,200</u>	
Adjusting entries include:			
(1) Prepaid insurance used	\$ 1,600		
(2) Depreciation	1,300		
	\$ <u>2,900</u>		

9. Refer to Table 3-1. The credit column of the *adjusted* trial balance should total

A.	\$45,300.	C.	\$49,500.
B.	\$49,300.	D.	\$51,100.

10. Refer to Table 3-1. After posting adjusting entries, net income

- A. will be \$6,350.
- B. will be \$9,250.
- C. will be \$7,950.
- D. cannot be determined from the given information.

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## **Reference Document 3-1**

#### SALARY ACCRUAL

#### Reference: The Time-Period Concept

You can present the following illustration to students to explain why this adjusting journal entry might be required. Students often make the mistake of accruing the amount of salaries allocated to the NEW month rather than the month just ended. Seeing the calendar and showing the dollar amounts representing the employees' wages for each day helps students visualize this abstract concept.

Smart Touch Learning has three employees who **each** earn \$100 per day. The employees work Monday through Friday and are paid every Friday for that week's work. May 31, 2010 falls on a Wednesday.

<u>Sun.</u>	Mon.	<u>MAY</u> <u>Tues.</u>	Weds.	<u>JUNE</u> <u>Thurs.</u>	<u>Fri.</u>	<u>Sat.</u>	
28	29	30	31	1	2	3	
Payroll (3 employees x \$100/day)	\$300	\$300	\$300	\$300	\$300		
	May	Expense \$900	+	June	Expense \$600	=	Weekly Payroll \$1,500

The last salary payment in May was made on 05/26/10-\$1,500 for the week ended May 26, 2010, and is as follows:

05/26/10Salary Expense	1,500	
	Cash	1,500

#### To record salaries paid on Friday, 05/26/10.

Nine hundred dollars of salary expense, the amount earned by your employees for May 29–31, has been incurred but unpaid in May. The expense must be matched (reported in the same time period) as the related revenue. Smart Touch is also liable for the salaries earned by the employees, even though Smart Touch does not have to pay them until Friday. Therefore, the adjusting entry on page 137 must be recorded:

To accrue the salaries expense for 5/29/10-5/31/10.

NOTE: A special liability account, Salary payable, is used for obligations to employees, rather than Accounts payable, which is used for Smart Touch's suppliers.

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## **Reference Document 3-2**

#### **STEPS IN THE ADJUSTING PROCESS**

Reference: Exhibit 3-8

This chapter tends to be one of the most challenging for students. If we can present them with a methodology, a step-by-step approach to preparing adjusting journal entries, it will seem less overwhelming. With practice, students will find it is not that difficult.

The following steps can help to make the adjusting process easier:

- 1) Determine if a REVENUE account (increase in equity created by delivering goods or services to customers) should be credited OR an EXPENSE account (using up assets or creating liabilities in the course of operating a business) should be debited.
- 2) After entering the previous information, determine whether a debit or credit is needed to complete the journal entry. The second account MUST be an ASSET (economic resource that will benefit the business in the future) OR a LIABILITY (debt).
  - a) If a debit is required then *either* an asset account must be increased or a liability account decreased.
  - b) If a credit is required then *either* an asset account must be decreased or a liability account increased.

*NOTE:* Cash must NEVER be in an adjusting journal entry.

Using these steps, the entry can be determined with thoughtful analysis instead of memorization. An illustration of this thought process, using the information provided on page 150, Exhibit 3-8, PANEL A follows:

(a)	Prepaid rent expired, \$1,000		<u>Dr</u> .	<u>Cr.</u>
(1)	EXPired always is an EXPense.	Rent expense (E)	1,000	
		?		Х

(2) The missing credit must be either a decrease to an asset account or an increase to a liability account. Since it is a prepayment, there is no debt and, therefore, Prepaid rent should be decreased with a Cr.

(b) Supplies on hand, \$600			
(1) Assets are <i>used up</i> ; it is an expense.	Supplies expense (E)	100	
\$700 of supplies is on the unadjusted trial ba	alance	?	Х
and \$600 is left; \$100 was used up.			

(2) Either an asset must be decreased or a liability increased. There is no obligation for payments, but there is \$100 less supplies. Therefore, the Supplies (Asset) account must be credited.

(c) Depreciation on furniture, \$300

(1) Depreciation is a using up of assets; expense. Depreciation expense (E) 300

Х

(2) A liability would not be increased because a company used depreciable assets. Accumulated depreciation (a contra-asset account) must be credited to reflect the loss of usefulness of the asset.

(d) Depreciation on building, \$200 (1) Depreciation is a using up of assets, an expense. Depreciation expense (E) 200 Х ?

(2) A liability would not be increased because a company used depreciable assets. Accumulated depreciation (a contra-asset account) must be credited to reflect the loss of usefulness of the asset.

(e) Accrued salary expense, \$900			
(1) Clearly an Expense should be debited.	Salary expense (E)	900	
	?		Х

(2) There is no asset that needs to be reduced. REMEMBER, NEVER DR. OR CR. CASH. Accrued salary expense means that employees have worked and have not been paid yet; therefore, a liability should be credited. (Salary payable)

(f) Accrued interest expense, \$100			
(1) Clearly an Expense should be debited.	Interest expense (E)	100	
	?		Х

(2) There is no asset that needs to be reduced. REMEMBER, NEVER DR. OR CR. CASH. Accrued interest expense means that interest expense has been incurred on the note but has not been paid yet; therefore, a liability should be credited (Interest payable).

(g) Accrued service revenue, \$400			
(1) Clearly revenue should be credited.	?	Х	
		Service revenue (R)	400

(2) Should an asset be increased or a liability decreased? Since it is an accrual, no receipt of cash has taken place. If you earned it you should receive the money in the future; Accounts receivable should be debited.

(f) Service revenue that was collected in advance and now has been earned, \$200. (1) Clearly earnings indicate revenue. ? Х 200 Service revenue (R)

(2) Should an asset be increased or a liability decreased? There is no need to record a receivable if the money was already collected. "Service revenue that was collected in advance" indicates that there is an Unearned service revenue account (liability) balance. Some of that liability should be reduced because it has been earned; Unearned service revenue should be debited.

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