Experience Financial Accounting

with FedEx

FedEx Corporation began operations in 1973 with 14 jets that connected 25 U.S. cities. Some employees even used their own cars to deliver packages! As a pioneer of the hub and spoke model for overnight package delivery, FedEx is now the world's largest express transportation company with operations in over 220 countries. During this time, FedEx claims many industry ''firsts''—including being the first to offer next-day delivery by 10:30 a.m. and the first to offer Saturday delivery. With more than 143,000 employees, 669 aircraft, and 53,000 vehicles and trailers,[1] FedEx has the ability to ''absolutely, positively'' get a package delivered overnight.

While companies conduct business throughout the year, the accounting for business activities does not stop at the end of the year. The end of the fiscal year, or accounting period, is a busy time as companies make adjustments to the accounting information. These adjustments are necessary because a company's business activities often occur over several accounting periods. These adjustments are often quite significant. In its 2007 annual report as shown in

Exhibit 3-1

Excerpt from FedEx's Financial Statements

FedEx Corporation
Consolidated Income Statement (partial)
For the Year Ended May 31, 2007

(in millions)	
Revenues	$ 35,214
Operating expenses	(31,938)
Other income (expense)	(61)
Income before income taxes	$ 3,215
Income taxes	(1,199)
Net income	$ 2,016

Sample of expenses resulting from adjustment:	
Salaries and compensated absences	$ 755
Employee benefits	599
Insurance	548
Taxes other than income taxes	310
Depreciation and amortization	1,742
Other	561
Total (14% of Operating expenses)	$4,515

[1] Information obtained from FedEx's 2007 Annual Report.

Exhibit 3-1, FedEx's financial statements include many expenses that would not have been recognized without adjustments.

This sample of expenses, which doesn't include all the adjustments made, represents over 14 percent of the total expenses that FedEx reported on its 2007 income statement. When FedEx recognized these expenses (except for depreciation and amortization), it also recorded a liability for them. These liabilities represented 51% of FedEx's current liabilities. The adjustment to recognize depreciation and amortization expense resulted in a decrease in assets of $1.742 million. Clearly, the failure to adjust for these expenses would significantly affect FedEx's financial statements.

OBJECTIVE 1
Explain the difference between cash-basis and accrual-basis accounting.

Completing the Accounting Cycle

In the previous chapter, we examined how companies use the double-entry accounting system to record business activities that occur during the accounting period. However, accountants also make numerous adjustments at the end of accounting periods for business activities that occur over several accounting periods—activities like the performance of services for customers, the renting of office space, and the use of equipment. As shown in the opening scenario of this chapter, these adjustments can be significant.

Why are so many business activities recognized in the accounts through adjustments rather than through the normal journal entries recorded within the accounting period that we described in Chapter 2? The illustrations used in Chapter 2 excluded activities that were still underway at the end of the accounting period. Accrual accounting requires that any incomplete activities be recognized in the financial statements. This often requires estimates and judgments about the timing of revenue and expense recognition. The end result is that accountants must adjust the accounts to properly reflect these partially-completed business activities.

In this chapter, we will review the concepts that form the basis for adjustments—the time-period assumption, the revenue recognition principle, and the matching principle. We will then complete the accounting cycle that was introduced in Chapter 2 by exploring the preparation and effects of adjusting journal entries, preparing financial statements from the adjusted accounts, and closing the accounts in order to prepare for the next accounting period. We will address the following questions:

- What is the difference between the cash basis and the accrual basis of accounting?
- What is the purpose of adjusting entries?
- What types of transactions require adjustment and how are the adjustments recorded in the accounting system?
- Which accounts are closed at the end of the period and why is this necessary?

The recognition of business activities in financial accounting uses the accrual basis of accounting. In the following section, we will examine the differences between accrual-basis and cash-basis accounting. In addition, we will look at the three key concepts—the time-period assumption, the revenue recognition principle, and the matching principle—that underlie the accrual basis of accounting.

Accrual Versus Cash Basis of Accounting

If you were asked how much your income for the month was, what would you do? Most likely, you would go online and look at your bank activity for the month. You would then list the total of the deposits as revenue and the total of the withdrawals as expenses. The difference would be your income. This method of accounting is

called **cash-basis accounting**. Under cash-basis accounting, revenue is recorded when cash is received, regardless of when it is actually earned. Similarly, an expense is recorded when cash is paid, regardless of when it is actually incurred. Therefore, cash-basis accounting does not tie recognition of revenues and expenses to the actual business activity but rather the exchange of cash. In addition, by recording only the cash effect of transactions, cash-basis financial statements may not reflect all of the assets and liabilities of a company at a particular date. For this reason, most companies, except for the smallest, do not use cash-basis accounting.

Accrual-basis accounting (also called accrual accounting) is an alternative to cash-basis accounting that is required by generally accepted accounting principles. Under accrual accounting, transactions are recorded when they occur. Accrual accounting is superior to cash-basis because it ties income measurement to selling, the principle activity of the company. That is, revenue is recognized as it is earned and expenses are recognized when they are incurred. In contrast to cash-basis accounting, accrual accounting is a more complex system that records both *cash and noncash* transactions.

Key Elements of Accrual Accounting

OBJECTIVE 2
Explain how the time-period assumption, revenue recognition, and matching principles affect the determination of income.

As shown in Exhibit 3-2, an accrual accounting system rests on three elements of the conceptual framework that were introduced in Chapter 2—the time-period assumption, the revenue recognition principle, and the matching principle.

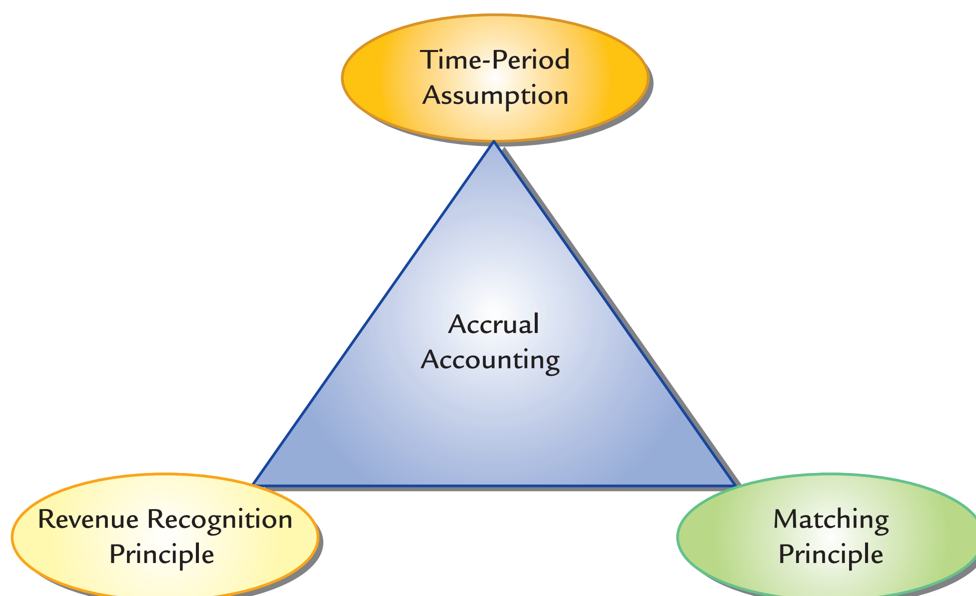
Time-Period Assumption

Investors, creditors and other financial statement users demand timely information from companies. For that reason, it is necessary for companies to report their financial results for specific periods of time—a month, a quarter, or a year. The **time-period assumption** allows companies to artificially divide their operations into time periods so that they can satisfy users' demands for information.

If all transactions occurred at a single point in time, the creation of financial reports for specific time periods would not be a problem. However, companies

Exhibit 3-2

Key Elements of Accrual Accounting



frequently engage in activities that continue for some period of time and affect more than one time period. For example, the aircraft and vehicles used by FedEx are purchased at a single point in time but are used over many years. In addition, FedEx often receives cash from a company to deliver products in one time period, although the actual delivery does not occur until a different time period. To properly record the use of these aircraft and the providing of its service, accrual accounting requires that FedEx assign the revenue and expenses to the proper time period. This is quite often a difficult task and is guided by the revenue recognition and matching principles.

The Revenue Recognition Principle

The **revenue recognition principle** is used to determine when revenue is recorded and reported. Under this principle, revenue is to be recognized or recorded in the period in which both of the following conditions are met:

- The revenue has been earned
- The collection of cash is reasonably assured.

These requirements are usually met when goods have been delivered to a customer or when services have been performed for a customer. At this point, the risks and rewards of ownership usually have been transferred from the seller to the buyer.[2] **Notice that revenue is recorded when these two conditions are met, regardless of when cash is received**.

To illustrate revenue recognition, assume that on March 31, FedEx picks up a computer from **Apple**'s distribution center and receives a cash payment of $30 to ship the computer to a customer. FedEx delivers the computer on April 2. Even though cash was received on March 31, FedEx will recognize the $30 of revenue on April 2, the date the computer is delivered to the customer. Notice that revenue is not recognized until it is earned by FedEx (delivery of the computer), and that the receipt of cash prior to the delivery does not affect when revenue is recognized. Exhibit 3-3 shows an excerpt of FedEx's revenue recognition policy that is disclosed in the notes to its financial statements.

The Matching Principle

Companies incur expenses for a variety of reasons. Sometimes expenses are incurred when an asset is used. In other instances, expenses are incurred when a liability is created. For example, FedEx incurs fuel expense as it uses fuel to delivers its packages. FedEx also incurs salary expense when its employees work but are not paid immediately. The key idea is that **an expense is recorded when it is incurred, regardless of when cash is paid.**

Expense recognition is the process of identifying an expense with a particular time period. Under accrual accounting, expenses are recognized following the

Exhibit 3-3

Annual Report Excerpt: FedEx's Revenue Recognition Policy

Note 1: Summary of Significant Accounting Policies (in part)

REVENUE RECOGNITION. We recognize revenue upon delivery of shipments for our transportation businesses and upon completion of services for our business services, logistics and trade services businesses. For shipments in transit, revenue is recorded based on the percentage of service completed at the balance sheet date.

[2] The Securities and Exchange Commission expanded upon this principle and stated that the revenue recognition criteria are normally met when (1) delivery has occurred or services have been rendered, (2) persuasive evidence of an arrangement exists, (3) the selling price is fixed or determinable, and (4) the collection of cash is reasonably assured.

matching principle, which requires that expenses be recorded and reported in the same period as the revenue that it helped to generate. Expenses for an accounting period should *include* only those costs used to earn revenue that was recognized in the accounting period. Expenses for an accounting period should *exclude* those costs used to earn revenue in an earlier period and those costs that will be used to earn revenue in a later period. Thus, the key to expense recognition is matching the expense with revenue.

ETHICS The revenue recognition and matching principles can and have been abused in recent years. As companies strive to meet or exceed Wall Street expectations, management may be tempted to recognize revenue that has not yet been earned or to hide expenses that should be recognized. In recent years, the Securities and Exchange Commission (SEC) has conducted numerous investigations involving the abuse of both revenue and expense recognition. Some notable cases are listed in Exhibit 3-4.

Exhibit 3-4

Instances of Accounting Abuses

Company	Action
Regina Vacuum	Backdated sales invoices, improperly recorded revenue on consignment sales that had not been earned, and hid unpaid bills in a filing cabinet to reduce expenses. Chairman, CEO, and president Donald Sheelen pleaded guilty to fraud, fined $25,000, and sentenced to one year in a work release program in Florida.
Miniscribe	Improperly recognized revenue through a variety of means, including packaging and shipping bricks as finished products. Chief executive Q.T. Wiles fined $250 million.
Sunbeam	Used a variety of techniques to improperly recognize revenue (e.g, bill and hold transactions, channel stuffing). CEO Al Dunlap fined $500,000 and barred from ever serving as an officer or director of a public company.
WorldCom	Improperly reduced operating expenses, which inflated income, by reversing (releasing) accrued liabilities and improperly classifying certain expenses as assets. Chief executive Bernie Ebbers was sentenced to 25 years in jail.

While the above actions were fraudulent and led to severe fines or jail time for many of the company executives, other innocent parties were also affected by these unethical actions. Stockholders, many of whom who had bought the stock at an inflated price, saw a significant drop in the stock's value after these actions were made public. In addition, innocent employees lost their jobs as the companies struggled to deal with the fraud that occurred. When faced with an ethical dilemma to manipulate the recognition of revenue or expense, make the decision that best portrays the economic reality of your company. It will be a decision that will let you sleep at night.◆

CONCEPT Q&A

Cash-basis accounting seems straightforward. Why do we complicate matters by introducing accrual accounting?

Possible Answer:

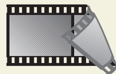
The fundamental objective of financial reporting is to provide information that is useful in making business and economic decisions. Most of these decisions involve predicting a company's future cash flows. The use of accrual accounting through the application of the revenue recognition and matching principles ties income recognition to the principal activity of the company, selling goods and services. Therefore, accrual accounting provides a better estimate of future cash flows than cash-basis accounting.

Applying the Principles

If you want to use the financial statements, it is important for you to understand how the revenue recognition and matching principles affect the amounts reported on the financial statements. To illustrate the effect of these principles, Cornerstone 3-1 compares how the application of these principles results in accrual-basis income that differs from cash-basis income.

Notice that accrual accounting follows the revenue recognition and matching principles. That is, revenue is recognized when it is earned and expenses are matched with

CORNERSTONE 3-1



HOW TO Apply the Revenue Recognition and Matching Principles

Concept:
Under accrual accounting, revenue is recognized when it is earned and the collection of cash is reasonably assured. Expenses are recognized in the same period as the revenue they helped generate.

Information:
The state of Georgia hired Conservation Inc., a consulting company specializing in the conservation of natural resources, to explore the state's options for providing water resources to the Atlanta metropolitan area. In November 2009, Conservation Inc. incurred $60,000 of expenditures, on account, investigating the water shortage facing the state. Conservation Inc. also delivered its recommendations to the state and billed the state $100,000 for its work.
In December 2009, Conservation Inc. paid the $60,000 of expenses.
In January 2010, Conservation Inc. received the state's check for $100,000.

Required:
1. Calculate income for November 2009, December 2009, and January 2010 using the cash-basis of accounting.
2. Calculate income for November 2009, December 2009, and January 2010 using the accrual-basis of accounting.

Solution:
1. Cash-basis income is computed as follows:

November 2009		December 2009		January 2010	
Revenue	$0	Revenue	$ 0	Revenue	$100,000
Expense	0	Expense	60,000	Expense	0
Net Income	$0	Net Income	$(60,000)	Net Income	$100,000
Performed Service		Paid Expenses		Received Payment	

2. Accrual-basis income is computed as follows:

November 2009		December 2009		January 2010	
Revenue	$100,000	Revenue	$0	Revenue	$0
Expense	60,000	Expense	0	Expense	0
Net Income	$ 40,000	Net Income	$0	Net Income	$0
Performed Service		Paid Expenses		Received Payment	

revenues. Even though Conservation Inc. did not receive the payment from the state of Georgia until January 2010, Conservation Inc. had performed services in November 2009 and appropriately recognized the revenue as the service was performed. The $60,000 of expenses were matched with revenues and also recognized in November 2009. If cash-basis accounting would have been used, the expenses, $40,000, would have been recognized in December 2009 (when the cash was paid), and revenue, $100,000, would have been recognized in January 2010 (when the cash was received). By following the revenue recognition and matching principles, net income was properly recognized in the period that the business activity occurred. In short, the difference between cash-basis and accrual-basis accounting is a matter of timing.

DECISION-MAKING & ANALYSIS

Recognition of a Security Service Contract

Secure Entry Inc., a security company, has a two-year contract with the Metropolis Stadium Authority to provide security services at its stadium gates. The contract was signed in April 2008 and is effective for calendar years 2009 and 2010. Under the terms of the contract, Metropolis Stadium Authority agrees to make 24 equal monthly payments to Secure Entry beginning in October 2008. Security services will begin to be performed in January 2009.

1. *When would Secure Entry Inc. record the contract?*

   Secure Entry would record the contract in October 2008, when Metropolis makes the first payment. At that time, Secure Entry would record an increase in cash for the amount of the payment received and an equal increase in a liability (Unearned Revenue) to recognize that future services are owed. Note that Secure Entry would not record the contract in its accounting system in April 2008 because the event does meet the recognition criteria discussed in Chapter 2.

2. *When would Secure Entry recognize revenue related to the contract?*

   Consistent with the revenue recognition principle, Secure Entry would begin recognizing revenue related to the contract in 2009, when services are performed.

3. *When would Secure Entry recognize the salary expense related to the security services provided at Metropolis Stadiums?*

   According to the matching principle, expenses related to the performance of security services should be matched against revenue from providing the security services. Because the revenue will be recognized monthly beginning in January 2009, the matching principle requires that the salary expense related to providing security services be recognized monthly beginning in 2009, as the security services are performed.

Accrual Accounting and Adjusting Entries

OBJECTIVE 3
Identify the kinds of transactions that may require adjustments at the end of an accounting period.

A company accounts for its activities using accrual accounting in order to produce financial statements that include the effects of the activities when they occur, regardless of when cash was received or paid. Accrual accounting requires that revenues be recognized when earned and expenses be recognized when incurred. In this section, we will examine the adjustments required to implement accrual accounting.

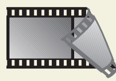
Which Transactions Require Adjustment?

If all accounting transactions occurred at a point in time, the application of accrual accounting would, like cash-basis accounting, be relatively straightforward. However, many activities continue for some period of time. Obvious examples include the use of rented facilities or interest on borrowed money.[3] Because entries in the accounting system are made at particular points in time rather than continuously, adjustments are needed at the end of an accounting period to record these partially complete activities. **Adjusting entries** are journal entries made at the end of an accounting period to record the completed portion of these partially completed transactions. Adjusting entries are necessary to apply the revenue recognition and matching principles and ensure that a company's financial statements include the proper amount for revenues, expenses, assets, liabilities, and stockholders' equity.

[3] The distinction between business activities requiring adjustment and those that do not depends to some extent on our ability and willingness to keep track of activities. Some activities may occur so frequently or are so difficult to measure individually that no record of individual activities is maintained. In such cases, the sequence of individual activities becomes, for all intents and purposes, a continuous activity. For example, the use of office supplies is often treated as a continuous business activity because it is too costly to maintain a record of each time supplies are used.

In Cornerstone 3-2, three representative transactions are described and the implications of the ''length'' of these transactions for recognition in the accounting system and for adjustment is discussed.

CORNERSTONE 3-2



HOW TO Determine Which Transactions Require Adjustment

Concept:
Adjusting journal entries are required for continuous transactions that are partially complete at the end of an accounting period.

Information:
Computer Town sells computer equipment as well as providing computer repair service. Sales are typically made in cash or on account. Repair service is provided under service contracts. Customers purchase a service contract for a specified period of time (two, three, or five years) and pay for this contract upfront. The customer pays nothing when the computer is brought in for repair.

Required:
1. How should Computer Town account for cash and credit sales of equipment?
2. How should Computer Town account for repair services provided under service contracts?
3. How should Computer Town account for the use of office supplies?

Solution:
1. Cash sales should be recorded as they occur and the equipment is delivered, often at a cash register that tracks total sales for the day. When orders are received from customers who want to purchase equipment on credit, the sale should be recorded when the equipment is delivered to the customer. In both situations, the sale is complete at a single point in time (the delivery of the equipment) and no adjusting entry is needed.
2. In contrast to both cash and credit sales of equipment, repair service contracts are continuous activities. At the end of the accounting period, a portion of the revenue associated with incomplete service contracts should be recognized as an adjustment. Revenue is earned as time passes under the service contract and should be recorded in proportion to the period of time that has passed since the contract became effective. The unexpired portion of the service contract should be recorded as a liability (unearned revenue) until earned. Any expenses associated with the repair services should be recognized as the repair service revenue is recognized (the matching principle).
3. The use of supplies can be viewed as a sequence of individual activities. However, the preparation of documents required to keep track of each activity individually would be too costly. Instead the use of supplies will be treated as a continuous transaction and recognized through an adjusting entry. Any supplies used will be reported as an expense while the unused portion of supplies is reported as an asset.

Notice that in the second and third situations, the continuous activities cannot be properly recorded by the normal journal entries made within the accounting period as described in Chapter 2. For these continuous transactions, the preparation of adjusting entries is necessary to get the account balances properly stated and up-to-date. These end-of-period adjustments can have significant effects on a company's financial statements, as we illustrated for FedEx at the beginning of this chapter.

Step 5: Adjusting the Accounts

OBJECTIVE 4
Prepare adjusting entries for accruals and deferrals.

Under accrual accounting, revenue is recognized when it is earned and the collection of cash is reasonably assured. Expenses are recognized in the same period as the revenue they helped generate. Adjustments are often necessary because timing differences exist between when a revenue or expense is recognized and cash is received or paid. These timing differences give rise to two categories of adjusting entries—accruals and deferrals. As shown in Exhibit 3-5, each category has two subcategories, which gives rise to four possible types of adjustments.

The purpose of all adjustments is to make sure that revenues and expenses get recorded in the proper time period. As the revenue and expense balances are adjusted, asset and liability balances will be adjusted also. Therefore, **all adjusting entries will affect at least one income statement account and one balance sheet account**. **Note that cash is never affected by adjustments.**

Exhibit 3-5

Types of Adjusting Entries

Accruals:
1. **Accrued revenues:** Previously unrecorded revenues that have been earned but for which no cash has yet been received
2. **Accrued expenses:** Previously unrecorded expenses that have been incurred but not yet paid in cash

Deferrals:
1. **Deferred revenues:** Liability arising from the receipt of cash for which revenue has not yet been earned
2. **Deferred expenses:** Asset arising from the payment of cash which has not been used or consumed by the end of the period

To assist you in making adjusting journal entries, a three-step procedure can be followed.

Step 1: Identify pairs of income statement and balance sheet accounts that require adjustment.

Step 2: Calculate the amount of the adjustment based on the amount of revenue that was earned or the amount of expense that was incurred during the accounting period.

Step 3: Record the adjusting journal entry.

Cornerstones 3-3 through 3-6, shown in the following sections, explain how to make each of the four types of adjustments that are necessary at the end of an accounting period.

CONCEPT Q&A

Why don't adjusting entries involve cash?

Possible Answer:

Cash receipts and cash payments occur at a specific point in time and are recorded through normal, within-period journal entries. Adjusting entries, on the other hand, record partially completed transactions. Adjusting entries are concerned with applying the revenue recognition and matching principles to these continuous activities. Because revenue and expense recognition does not depend on cash receipt or cash payment, adjusting entries for continuous revenue and expense activities will not involve cash.

Accrued Revenues

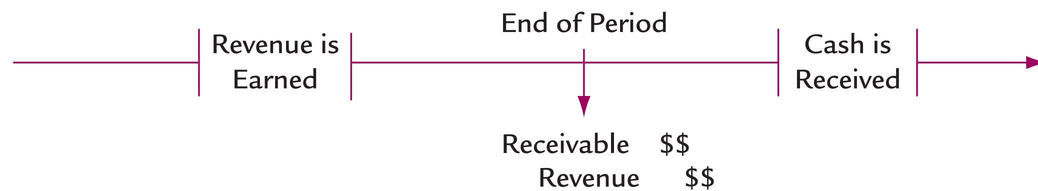
It is common for a company to engage in revenue-producing activities, yet not be paid until after the activity is complete. For example, FedEx recognizes revenue when it delivers a package, even though the customer may not be billed and will not pay for the service until later. In addition, some packages are in transit at the end of an accounting period, meaning that FedEx has only partially completed its service. These transactions for which FedEx has earned revenue but not received the cash are called **accrued revenues**. Other examples of accrued revenues include interest earned, but not yet received, on a loan that is made. While interest is earned as time passes, the company only

receives the cash related to interest periodically (e.g., monthly, semiannually, or annually). Therefore, an adjustment is necessary to record the amount of interest earned but not yet received.

For accrued revenues, an adjustment is necessary to record the revenue and the associated increase in a company's assets, usually an account receivable. Exhibit 3-6 demonstrates the process necessary to record accrued revenues. Note that the accrual of revenue is necessary because the revenue was earned prior to the receipt of cash.

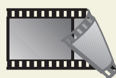
Exhibit 3-6

Accrued Revenues



The adjusting entry required to record accrued revenues is shown in Cornerstone 3-3.

CORNERSTONE 3-3



HOW TO Record Accrued Revenues

Concept:
Revenue is recognized when it is earned, regardless of when cash is received. The adjusting entry for an accrued revenue will result in an increase to a revenue account and an increase to an asset account.

Information:
Assume that Porter Properties, Inc., a calendar-year company, rented office space to the Tiger Travel Agency on November 1, 2009, for $5,000 per month to be occupied immediately. Porter Properties requires Tiger Travel to make a rental payment at the end of every three months. No payment was made on November 1.

Required:
1. Prepare the adjusting journal entry necessary on December 31, 2009, for Porter Properties.
2. Prepare the entry necessary on January 31, 2010, to record the receipt of cash.

Solution:
1. At the end of the accounting period, Porter Properties will perform the following three steps to prepare the adjusting entry:

   Step 1: Identify the accounts that require adjustment. Rental Revenue needs to be increased because Porter Properties has earned revenue from providing the office space. The revenue recognition principle requires revenue to be recognized when it is earned, regardless of when cash is collected. Because no payment was received, Porter Properties would need to increase Accounts Receivable to reflect their right to receive payment from Tiger Travel.
   Step 2: Calculate the amount of the adjustment. The amount of the adjustment would be $10,000, calculated as $5,000 per month times the two months that the office space was occupied by Tiger Travel.

CORNERSTONE 3-3 *(continued)*

Step 3: Record the adjusting journal entry. The adjusting journal entry at December 31, 2009, would be:

Date	Account and Explanation	Debit	Credit
Dec. 31, 2009	Rent Receivable	10,000	
	Rent Revenue		10,000
	(To record rent revenue earned in 2009 but not received)		

Assets	= Liabilities +	Stockholders' Equity
+10,000		+10,000

2. When the cash is received, Porter Properties will make the following entry:

Date	Account and Explanation	Debit	Credit
Jan. 31, 2010	Cash	15,000	
	Rent Revenue		5,000
	Rent Receivable		10,000
	(To record revenue earned in 2010 and the receipt of cash)		

Assets	= Liabilities +	Stockholders' Equity
+15,000		+5,000
−10,000		

The amount of cash received, $15,000, is calculated as $5,000 per month times the three months that the office space was rented. The $5,000 of Rent Revenue represents the one month earned in 2010.

If the adjusting entry on December 31, 2009, was not made, assets, stockholders' equity, revenues, and income would be understated. The adjusting journal entry recognizes two months of revenue (November and December 2009) in the accounting period in which it was earned and updates the corresponding balance in rent receivable. The revenue has been earned because Porter Properties has provided a service to Tiger Travel. Later, when cash is received, the remaining portion of the revenue that was earned in January 2010 is recognized and the receivable is reduced to reflect that it was paid. Consistent with the revenue recognition principle, revenue is recorded in the period that it is earned.

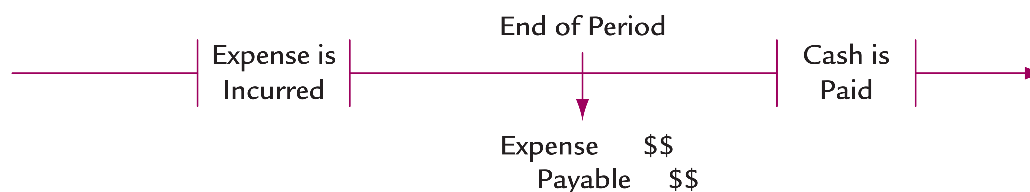
Accrued Expenses

Similar to the situation with accrued revenues, many companies will incur expenses in the current accounting period but not pay cash for these expenses until a later period. For example, in Exhibit 3-1, we showed you that FedEx reported $283 million of salary expense related to services performed by FedEx employees but not paid as of the end of the year. This situation is quite common for several operating costs such as payroll, taxes, utilities, rent, and interest. **Accrued expenses** are previously unrecorded expenses that have been incurred but not yet paid in cash.

For accrued expenses, an adjustment is necessary to record the expense and the associated increase in a company's liabilities, usually a payable. Exhibit 3-7 demonstrates the process necessary to record accrued expenses.

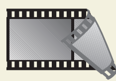
Exhibit 3-7

Accrued Expenses



Note that the accrual of the expense is necessary because the expense was incurred prior to the payment of cash. The adjusting entry required to record accrued expenses is shown in Cornerstone 3-4.

CORNERSTONE 3-4



HOW TO Record Accrued Expenses

Concept:
Expenses are recorded as they are incurred, regardless of when cash is paid. The adjusting entry for an accrued expense will result in an increase to an expense account and an increase to a liability account.

Information:
Assume that Porter Properties, Inc., a calendar-year company, paid its clerical employees every two weeks. Employees work five days a week for a total of 10 work days every two weeks. Also assume that December 31 is four days into a 10-day pay period for which these employees will collectively earn $50,000 every two weeks.

Required:
1. Prepare the adjusting journal entry necessary on December 31, 2009, for Porter Properties.
2. Prepare the entry necessary on January 10, 2010, to record the payment of salaries.

Solution:
1. At the end of the accounting period, Porter Properties will perform the following three steps to prepare the adjusting entry:

   Step 1: Identify the accounts that require adjustment. Salaries Expense needs to be increased because Porter Properties has incurred an expense related to its employees working for four days in December that needs to be matched against December revenues (an application of the matching principle). Because no payment to the employees was made, Porter Properties would need to increase Salaries Payable to reflect its obligation to pay its employees.
   Step 2: Calculate the amount of the adjustment. The amount of the adjustment would be $20,000, calculated as 4/10 of the $50,000 bi-weekly salaries.
   Step 3: Record the adjusting entry. The adjusting journal entry at December 31, 2009, would be:

Assets	= Liabilities +	Stockholders' Equity
	+20,000	−20,000

Date	Account and Explanation	Debit	Credit
Dec. 31, 2009	Salaries Expense	20,000	
	Salaries Payable		20,000
	(To record expenses incurred not paid)		

2. When the cash is paid, Porter Properties will make the following entry:

Assets	= Liabilities +	Stockholders' Equity
−50,000	−20,000	−30,000

Date	Account and Explanation	Debit	Credit
Jan 10, 2010	Salaries Expense	30,000	
	Salaries Payable	20,000	
	Cash		50,000
	(To record expense incurred in 2010 and the payment of cash)		

The amount of the salaries expense for the current year, $30,000, would be calculated as 6/10 of the $50,000 bi-weekly salaries. This would represent the six days worked in January.

If the adjusting journal entry on December 31, 2009, were not made, liabilities and expenses would be understated while income and stockholders' equity would be overstated. The adjusting journal entry recognizes the expense that was incurred during the accounting period and updates the balance in the corresponding liability. Later, when the cash is paid to the employees, the portion of the expense that was incurred in January 2010 is recognized and the previously created liability is reduced. Consistent with the matching principle, expenses are recorded in the period that they were incurred.

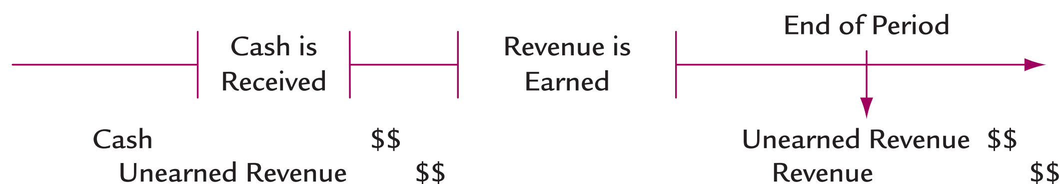
Deferred (Unearned) Revenues

A business may collect payment for goods or services that it sells before it delivers those goods or services. For example, FedEx often collects cash for a package delivery prior to the actual performance of the delivery service. When the cash is collected, the revenue recognition is deferred, or delayed, until the service is performed. Transactions for which a company has received cash but has not yet earned the revenue are called **deferred revenues**. Other examples of deferred revenues include rent received in advance, magazine or newspaper subscriptions received in advance, and tickets (e.g., for airlines, sporting events, concerts) sold in advance. In all of these situations, the receipt of cash creates a liability (called an **unearned revenue**) for the company to deliver goods or perform services in the future. The unearned revenue account delays, or defers, the recognition of revenue by recording the revenue as a liability until it is earned.

As the goods are delivered or the service is performed, an adjustment is necessary to reduce the previously recorded liability and to recognize the portion of the revenue that has been earned. The portion of revenue that has not been earned remains in the liability account, unearned revenue, until it is earned. Therefore, revenue recognition is delayed, or deferred, until the revenue is earned. Exhibit 3-8 demonstrates the process necessary to record deferred revenues.

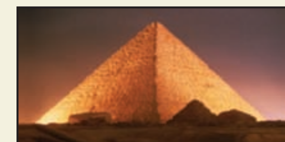
Exhibit 3-8

Deferred Revenues

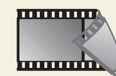


Note that the deferral of revenue is necessary because the revenue was not earned at the time of cash receipt. The adjusting entry recognizes the amount of revenue that has been earned from the time of cash receipt until the end of the accounting period. The adjusting entry required to adjust deferred revenues is shown in Cornerstone 3-5.

HOW TO Adjust Deferred (Unearned) Revenues



CORNERSTONE 3-5



Concept:

Revenues are recognized when earned, regardless of when cash is received. The adjusting entry for deferred revenue will result in an increase to a revenue account and a decrease to a liability account.

Information:

Assume that Porter Properties, Inc., a calendar-year company, rented office space to the Tiger Travel Agency for occupancy on November 1, 2009, for $5,000 per month. Porter Properties requires Tiger Travel to make a rental

CORNERSTONE 3-5 (continued)

payment every three months. If Tiger Travel pays its entire three-month rental in advance, Porter Properties has agreed to reduce the monthly rental to $4,500. Tiger Travel agrees and pays Porter Properties $13,500 for three months rental.

Required:
1. Prepare the entry on November 1, 2009, to record the receipt of cash.
2. Prepare the adjusting journal entry necessary on December 31, 2009, for Porter Properties.

Solution:
1. When the cash is received, Porter Properties will make the following entry to defer the revenue:

Assets	=	Liabilities	+	Stockholders' Equity
+13,500		+13,500		

Date	Account and Explanation	Debit	Credit
Nov. 1, 2009	Cash	13,500	
	Unearned Rent Revenue		13,500
	(To record receipt of cash for three months rent)		

2. At the end of the accounting period, Porter Properties will perform the following three steps to prepare the adjusting entry:

   Step 1: Identify the accounts that require adjustment. Rental Revenue needs to be increased because Porter Properties has earned revenue from providing the office space. Because a liability was previously recorded, Porter Properties would need to decrease the liability, Unearned Rent Revenue, to reflect the decrease in their obligation to perform the service.
   Step 2: Calculate the amount of the adjustment. The amount of the adjustment would be $9,000, calculated as $4,500 per month times the two months that the office space was rented.
   Step 3: Record the adjusting entry. The adjusting journal entry at December 31, 2009, would be:

Assets	=	Liabilities	+	Stockholders' Equity
		−9,000		+9,000

Date	Account and Explanation	Debit	Credit
Dec. 31, 2009	Unearned Rent Revenue	9,000	
	Rent Revenue		9,000
	(To record rent revenue earned in 2009)		

If the adjusting entry on December 31, 2009, was not made, liabilities (Unearned Rent Revenue) would be overstated while stockholders' equity and revenue would be understated. The adjusting journal entry recognizes two months of revenue (November and December 2009) in the accounting period in which it was earned and updates the corresponding balance in the liability, Unearned Rent Revenue. As a result of the adjusting entry, revenue is recorded in the period that it is earned.

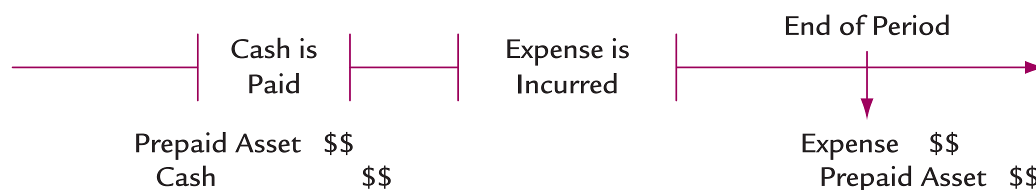
Deferred (Prepaid) Expenses

Companies often acquire goods and services before they are used. These prepayments are recorded as assets called **deferred (or prepaid) expenses**. For example, FedEx reports prepaid expenses of $244 million on its December 31, 2007, balance sheet. Common prepaid expenses include items such as supplies, prepaid rent, prepaid advertising, and prepaid insurance. The purchases of buildings and equipment also are considered prepayments.

As the prepaid asset is used to generate revenue, an adjustment is necessary to reduce the previously recorded prepaid asset and recognize the related expense. The portion of the prepaid asset that has not been used represents the unexpired benefits from the prepayment and remains in the asset account until it is used. Therefore, expense recognition is delayed, or deferred, until the expense is incurred. Exhibit 3-9 demonstrates the process necessary to record deferred expenses.

Exhibit 3-9

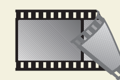
Deferred (Prepaid) Expenses



Note that the deferral of the expense is necessary because the initial cash payment did not result in an expense. Instead, an asset that provides future economic benefit was created. The adjusting entry recognizes the amount of expense that has been incurred from the time of the cash payment until the end of the accounting period. The adjusting entry required to adjust deferred expenses is shown in Cornerstone 3-6.

HOW TO Adjust Deferred (Prepaid) Expenses

CORNERSTONE 3-6



Concept:
Expenses are recognized when incurred, regardless of when cash is paid. The adjusting entry for deferred expenses will result in an increase to an expense account and a decrease to an asset account.

Information:
Assume that Porter Properties, Inc., a calendar-year company, had $4,581 of office supplies on hand at the beginning of November. On November 10, Porter Properties purchased office supplies totaling $12,365. The amount of the purchase was added to the Office Supplies account. At the end of the year, the balance in Office Supplies was $16,946 ($4,581 + $12,365) but a count of office supplies on hand indicated that $3,263 of supplies remained on hand.

Required:
1. Prepare the entry on November 10, 2009, to record the purchase of supplies.
2. Prepare the adjusting journal entry necessary on December 31, 2009, for Porter Properties.

Solution:
1. When the supplies are purchased, Porter Properties will make the following entry to defer the expense:

Date	Account and Explanation	Debit	Credit
Nov. 10, 2009	Office Supplies	12,365	
	Cash		12,365
	(To record purchase of office supplies)		

Assets	= Liabilities	+ Stockholders' Equity
+12,365		
−12,365		

CORNERSTONE 3-6 *(continued)*

2. At the end of the accounting period, Porter Properties will perform the following three steps to prepare the adjusting entry:

   Step 1: Identify the accounts that require adjustment. Office Supplies Expense needs to be increased because Porter Properties has used office supplies during November and December of 2009. The use of the supplies would also decrease the asset, Office Supplies.
   Step 2: Calculate the amount of the adjustment. The amount of the adjustment would be $13,683. This amount represents the cost of supplies used during November and December 2009. It is calculated as $16,946 of supplies available to be used minus $3,263 of supplies on hand (and, therefore, unused) at the end of the year.
   Step 3: Record the adjusting entry. The adjusting journal entry at December 31, 2009, would be:

Date	Account and Explanation	Debit	Credit
Dec. 31, 2009	Office Supplies Expense	13,683	
	Office Supplies		13,683
	(To record the use of office supplies during 2009)		

Assets	= Liabilities +	Stockholders' Equity
−13,683		−13,683

If the adjusting entry on December 31, 2009, was not made, assets, stockholders' equity, and net income would be overstated and expenses would be understated. The adjusting journal entry recognizes the expense incurred during November and December 2009 and updates the corresponding balance in the asset, Office Supplies. As a result of the adjusting entry, the expense is recorded in the period that it is incurred.

Depreciation While most deferred (prepaid) expenses are accounted for in a manner similar to that illustrated in Cornerstone 3-6, the purchase of long-lived assets such as buildings and equipment presents a unique situation. Recall from Chapter 1, that these types of assets are classified as property, plant, and equipment on the balance sheet. Because property, plant, and equipment helps to produce revenue over a number of years (instead of just one period), the matching principle requires companies to systematically assign, or allocate, the asset's cost as an expense in each period in which the asset is used. This process is called **depreciation**. This concept and the methods used to compute depreciation expense are discussed in Chapter 7.

The depreciation process requires an adjustment to recognize the expense incurred during the period and reduce the long-lived asset. The unused portion of the asset is reported as a component of property, plant, and equipment on the balance sheet. Therefore, the purchase of a long-lived asset is essentially a long-term prepayment for the service that the asset will provide.

Assume that Porter Properties purchased an office building on January 1, 2007, for $450,000. The depreciation expense on this building is $15,000 per year. Because depreciation is a continuous activity, Porter Properties would need to make the following adjustment at the end of 2009.

Assets	= Liabilities +	Stockholders' Equity
−15,000		−15,000

Date	Account and Explanation	Debit	Credit
Dec. 31, 2009	Depreciation Expense	15,000	
	Accumulated Depreciation		15,000
	(To record depreciation for 2009)		

Depreciation expense represents the portion of the cost of the long-lived asset that is matched against the revenues that the asset helped to generate. In addition, the depreciation process reduces the asset. Accountants normally use a contra-account to reduce the amount of a long-lived asset. **Contra accounts** are accounts that have a

Exhibit 3-10

Financial Statement Presentation of Accumulated Depreciation

Porter Properties Inc. Balance Sheet December 31, 2009	
Assets:	
Current assets	$ 370,000
Property, plant, and equipment (net)	1,450,000
Other assets	80,000
Total assets	$ 1,900,000
Liabilities	$ 825,000
Equity	1,075,000
Total liabilities and equity	$ 1,900,000

Sample of accumulated depreciation presentation:	
Building	$ 450,000
Less: Accumulated depreciation	(45,000)
Building (net)	$ 405,000

balance that is opposite of the balance in a related account. In this case, Accumulated Depreciation is a contra account to the building. Therefore, while the asset has a normal debit balance, the contra account has a normal credit balance. Contra accounts are deducted from the balance of the related asset account in the financial statements. Therefore, by increasing the contra account, the above journal entry reduces the balance in the asset account. Exhibit 3-10 shows the financial statement presentation of the accumulated depreciation account.

Notice that accumulated depreciation shows the total amount of depreciation taken in all years of the asset's life ($15,000 per year for 2007, 2008, and 2009). Therefore, the balance in the accumulated depreciation account will increase over the asset's life. The use of the contra account provides more information to users of the financial statements because it preserves both the original cost of the asset and the total cost that has expired to date.

Summary of Financial Statement Effects of Adjusting Entries

The effects of the adjustment process are summarized in Exhibit 3-11.

Exhibit 3-11

Effects of Adjusting Entries on the Financial Statements

Type of Adjustment	Asset	Liability	Stockholders' Equity	Revenue	Expense
Accrued Revenue	↑		↑	↑	
Accrued Expense		↑	↓		↑
Deferred Revenue		↓	↑	↑	
Deferred Expense	↓		↓		↑