

Chapter 3

Course outline content # 4

Accrual Accounting
應計制或權責發生制

Learning Objective

1. Explain how accrual accounting differs from cash-basis accounting
2. Apply the revenue and Expense Recognition principles
3. Adjust the accounts
4. Close the books

Learning Objective 1

Explain how accrual accounting differs from cash-basis accounting

Accrual vs. Cash-Basis Accounting

ACCRUAL

【权责发生制】是一种用于处理经济业务的制度

- Records business transactions when they occur
 - When sale is made
 - When bill is received
- Complies with GAAP
- Presents accurate financial picture

CASH

【收付实现制】是以款项是否已经收到或付出作为计算标准。

- Records transactions only when cash is received or paid
 - When customer **pays** for product or service
 - When bills are **paid**
- Only used by very small businesses
- Omits important info

Accrual Accounting

- Records both cash and noncash transactions

Cash transactions	Noncash transactions
Collecting payments from customers	Sales on account
Receiving interest earned	Purchases on account
Borrowing money 借貸	Accrual of expenses not yet paid
Paying expenses	Depreciation expense
Paying off loans	Usage of prepaid expenses
Issuing stock 發行股票	Earning of revenue when cash was collected in advance

Time-Period Concept

- Businesses do not stop operations to measure financial transactions
- Accountants prepare financial statements at regular intervals定期 to measure performance
- Companies select a twelve-month period for reporting purposes:
 - Calendar year
 - Fiscal year (會計年度)
- **The Time-Period Concept ensures that accounting information is reported at regular intervals**

Learning Objective 2

Apply the revenue and Expense Recognition principles

Revenue Principle

When to record

- After revenue is earned:
 - When good or service has been delivered to customer

Amount to record

- Cash value of goods or services transferred to customer

Illustration

- A customer pays Dp world \$1,000 on March 15 for a shipment in April.
1. Has Dp World earned revenue on March 15?
 2. When will Dp world earn the revenue?

Answers:

Expense Recognition Principle



Identify
expenses
incurred

Measure the
expenses

Recognize along
with related
revenues

Expenses



- May be paid in cash
 - **E.g. Paying monthly rent**
- May arise from using up an asset
 - **E.g. Using supplies previously purchased**
- May arise from creating a liability
 - **E.g. Receive a bill from a supplier**

Illustration

- Dp world pays \$4,500 on July 1 for office rent for the next three months. Has Dp world incurred an expense on July?
- Answers

The matching principle

- Expenses are recognized when related revenues are recognized.

Matching Principle

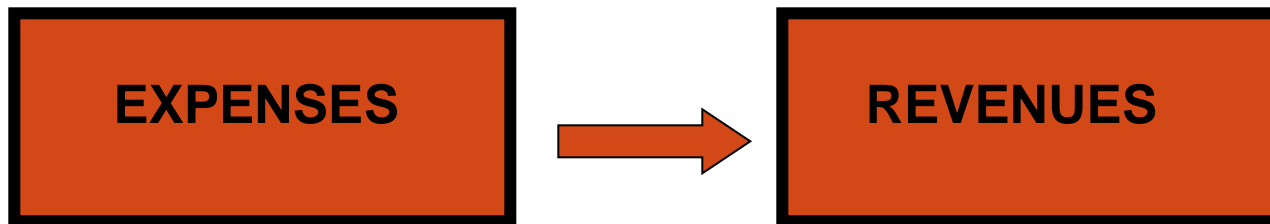
Match expenses with revenues in the period when the company makes efforts to generate those revenues.

"Let the expenses follow the revenues."



The matching principle

- Expenses are incurred to help produce revenue
- Expenses should be recorded in the time period in which they are incurred
- Expenses should be matched to the revenues they help produce



To *match* expenses against revenues

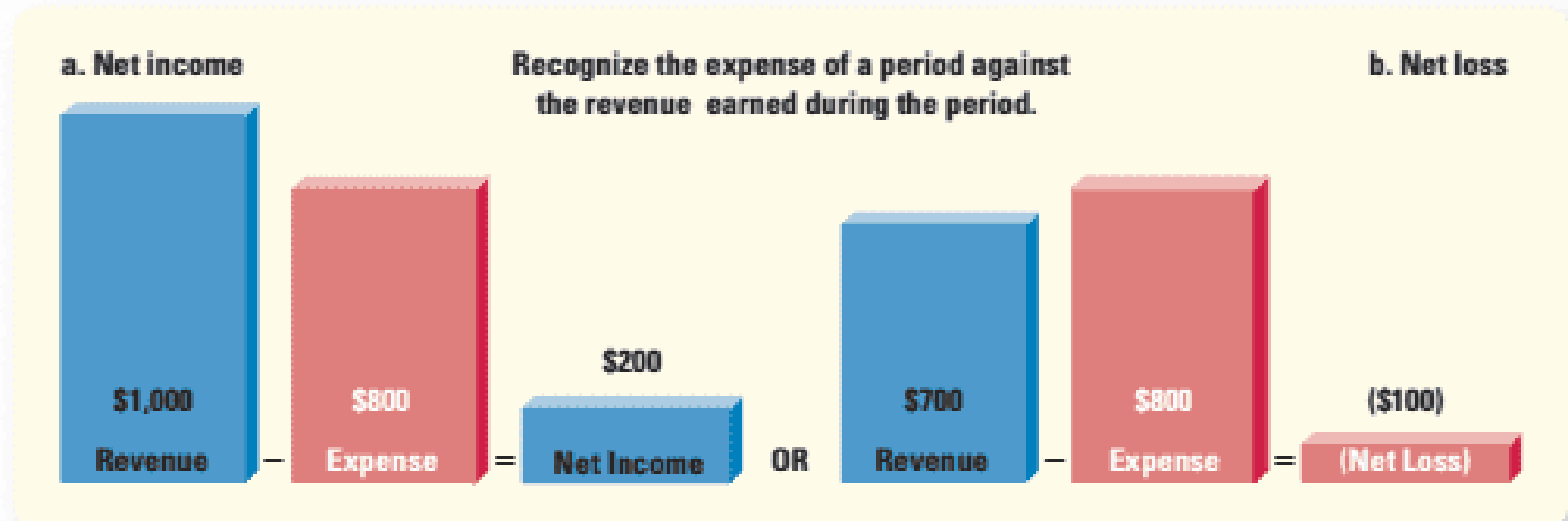
The matching principle is the basis for recording and recognizing expenses.

Two steps:

1. Identify all the expenses incurred during the accounting period.
2. Measure the expenses, and match expenses against the revenues earned.

To *recognize* expenses along with related revenues means to subtract expenses from related revenues to compute net income or net loss. Exhibit 3-2 illustrates the expense recognition (sometimes referred to as matching) principle.

Exhibit 3-2 | The Expense Recognition Principle



Test your understanding

- 1. Under cash basis accounting, when are revenues recognized?
- 2. Under cash basis accounting, when are expenses recognized?
 - .
- 3. When are revenues recognized under **accrual basis** accounting?
 - .
- 4. Under **accrual basis** accounting, when are expenses recognized?
 - .
- 5. What is the name of principle that is applied when expenses are recognized under accrual basis accounting?

Try It

- (1) A customer pays \$3,133 on March 15 via the Disney World website for ten 4-day passes to Disney World for a vacation on the days of June 1–4. Has The Walt Disney Company earned revenue on March 15? When will the company earn the revenue?
- (2) The Walt Disney Company pays \$60,000 on July 1 for advance rental on a Disney Store building for the next six months. Has The Walt Disney Company incurred an expense on July 1? When will the company recognize rent expense?

Learning Objective 3

Adjust the accounts

The Adjustment Process

- At the end of the period, a business prepares financial statements
- Ensures that:
 - All **revenue** that has been earned has been **recorded**
 - All **expenses** that have been incurred are **matched to revenues**
 - **Asset and liability** accounts are **up-to-date**

Accounts don't need to be Adjusted

- Accounts which are up-to-date and need no adjustment at the end of the period.
- Cash, Equipment, Accounts payable, share capital and dividends are basis on the day-to-day transactions provide all the date for these accounts. ie. up-to-date and need no adjustment at the end of the period.

Accounts need to be Adjusted

- Accounts Receivable, supplies, prepaid rent etc.
- Because certain transactions have not yet been recorded
 - For example
 - During June, a car wash company used cleaning supplies to wash cars. But the company didn't make any money. Instead, the company waits until the end of the period and then records the supplies used up during the entire month.
 - The cost of supplies used up is an expense. An adjusting entry at the end of June updates both Supplies (an asset) and Supplies Expense.
- **We must adjust all accounts whose balances are not yet up-to-date**

Categories of Adjustments

1. Deferrals

- 遞延款項

3. Depreciation

- 折舊

2. Accruals

- 應計項目

1. Deferrals

- Business has paid or received cash in advance
- Related expense or revenue has not yet been recorded

A. Prepaid expense

預付費用

- Recorded as an asset when purchased
- Expensed when used or expired

B. Unearned revenue

預付費用

- Recorded as a liability when payment is received
- Recorded as revenue when earned

A. Prepaid Expenses

- Expenses paid in advance
- Include prepaid rent and supplies
- Asset is recorded when purchased
- Adjustment needed to record amount used

A.1 Prepaid Rent Example

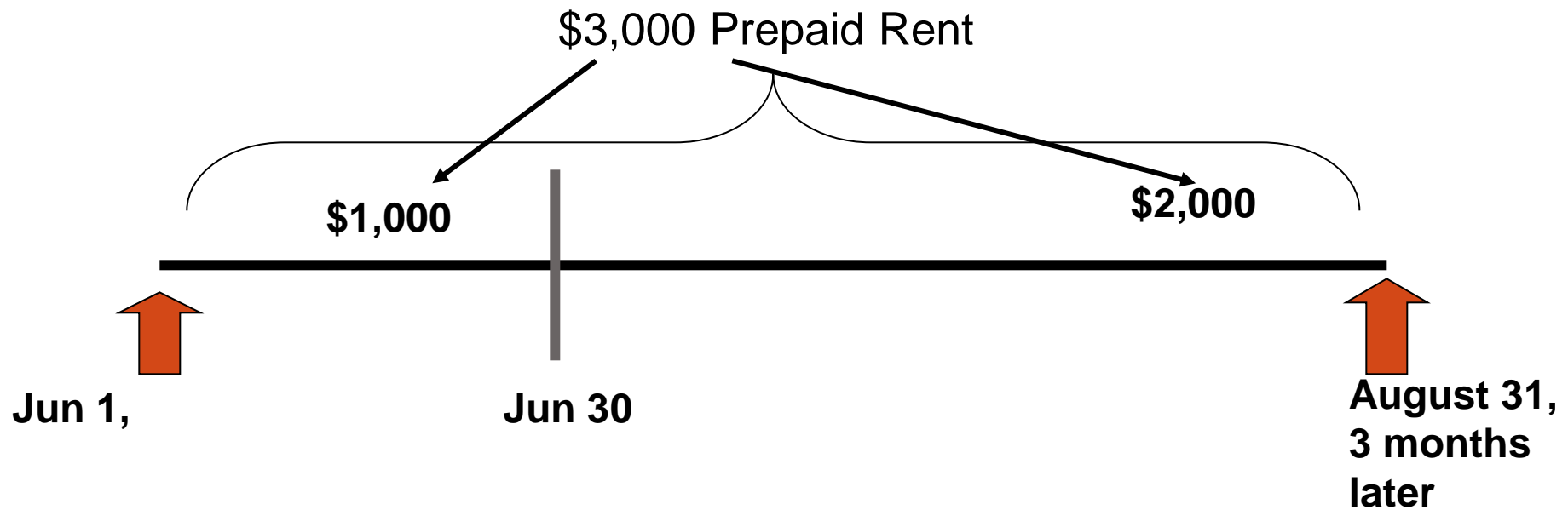
- Suppose on June 1 on Alladin Travel Inc., paid three month's store rent (\$3,000) in advance. The entry for the prepayment of three months' rent debits prepaid rent as follows.

JOURNAL

Date	Accounts	Debit	Credit

Prepaid Rent Example

- Now, it's June 30,
- The amount of rent that has expired must be recorded
- This amount is recorded as rent expense
- Prepaid rent (asset) needs to be reduced so it reflects the amount of rent remaining



Jun 1 to Jun 30 = 1 month

**2 out of 3 months of
rent remains**

1 out of 3 months of rent has expired

$$1/3 \times \$3,000 = \$1,000$$

$$2/3 \times \$3,000 = \$2,000$$

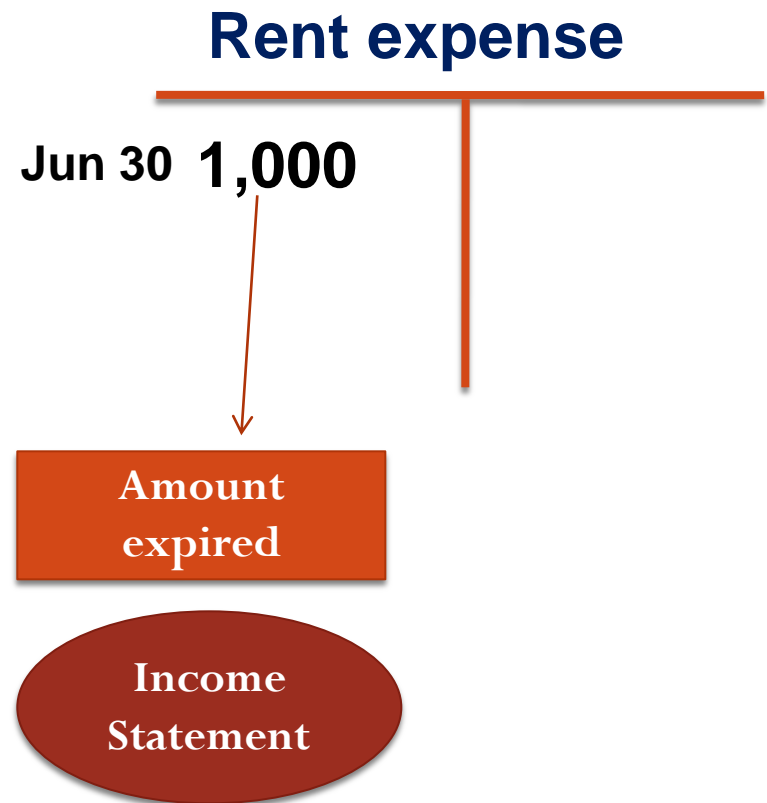
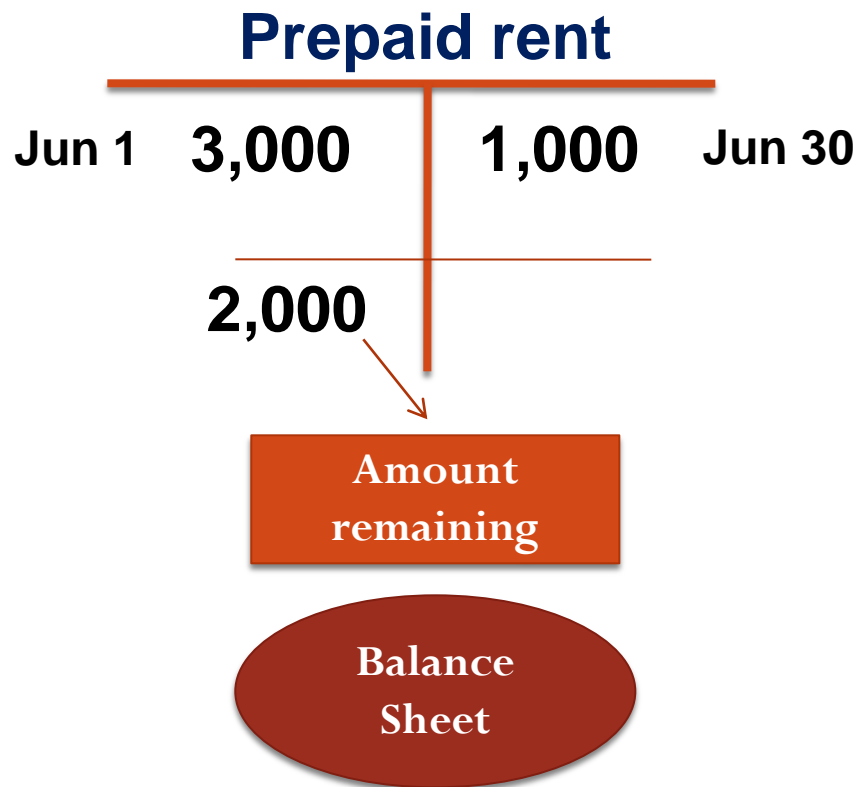
Prepaid Rent Example

- Jun – Adjust Prepaid Rent account for amount expired

JOURNAL

Date	Accounts	Debit	Credit

Prepaid Rent



A.2 Supplies Example

- Suppose Alladin Travel paid cash of \$700 for cleaning supplies
 - The asset “supplies” was debited for each purchase
- At the end of the months, a physical count reveals \$400 of supplies remain.

JOURNAL			
Date	Accounts	Debit	Credit

Supplies Example

Supplies

Balance per ledger	\$700
Balance per physical count	\$400

What amount of supplies was used?

Subtract the balance per count from the balance per ledger

Supplies Example

- Jun 30 – Adjust Supplies account for amount used

The adjusting entry need has a debit to supplies expense and a credit to supplies for \$300.

JOURNAL

Date	Accounts	Debit	Credit

<u>Assets</u>	<u>=</u>	<u>Liabilities</u>	<u>+</u>	<u>Stockholders' Equity</u>
700	=	0	+	0
- 700				

The cost of the supplies Alladin Travel used is Supplies Expense. To measure June's supplies expense, the business counts the supplies on hand at the end of the month. The count shows that \$400 of supplies remain. Subtracting the \$400 of supplies on hand from the supplies available (\$700) measures supplies expense for the month (\$300):

<u>Asset Available During the Period</u>	<u>-</u>	<u>Asset on Hand at the End of the Period</u>	<u>=</u>	<u>Asset Used (Expense) During the Period</u>
\$700	-	\$400	=	\$300

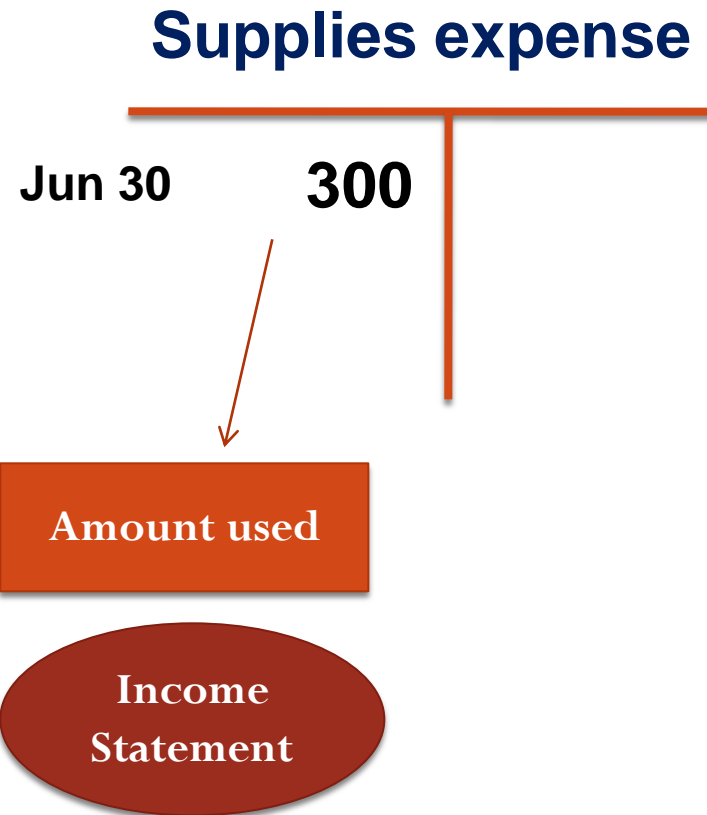
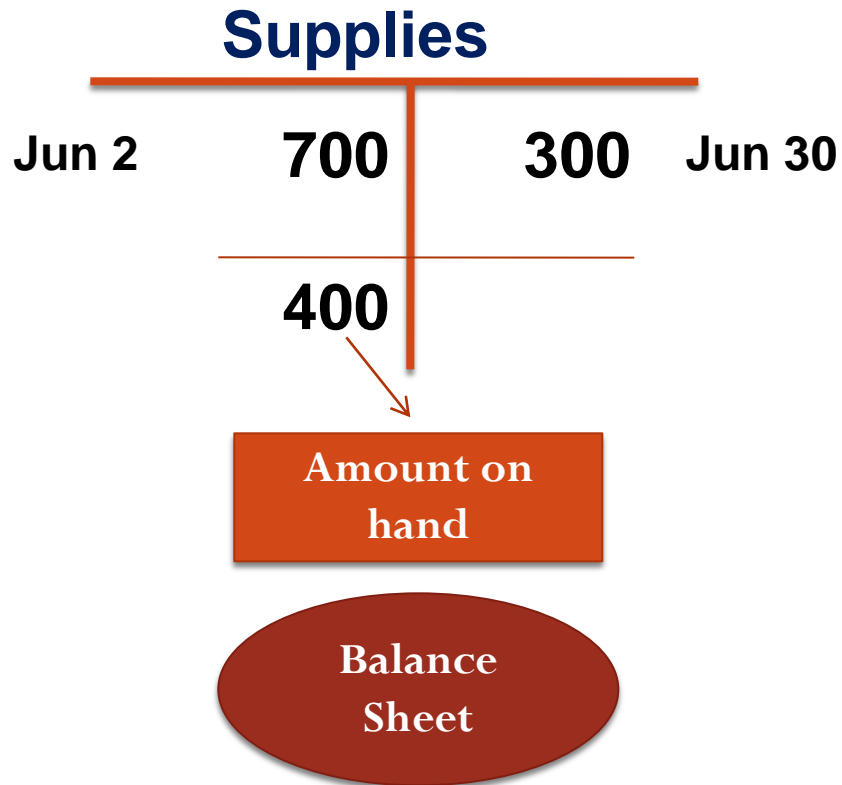
Prepaid Expenses

Expensed when expired or used

JOURNAL

Date	Accounts	Debit	Credit

Supplies



B. Unearned Revenues

- Recorded as a liability when company receives payment
 - Company owes customer product or service
- Revenue is not recorded until earned
 - When company provides product or service
- An adjusting entry is made to transfer amount from unearned revenue to revenue

Unearned Revenue Example

- Assume that the Disneyworld resort in Orlando, Florida, engages a large group of travel agencies, including Alladin Travel, Inc., paying them commissions in advance to book clients in Disney resort hotels.
- Assume Disneyworld Resort pays Alladin Travel, \$400 monthly, beginning immediately, if it books up to eight clients into the resort within a 30 day period.
- If Alladin Travel collects the first amount on June 15, then alladin Travel records this transaction as follows:

Unearned Revenue Example

- Jun 15 – Record advance payment received by customer

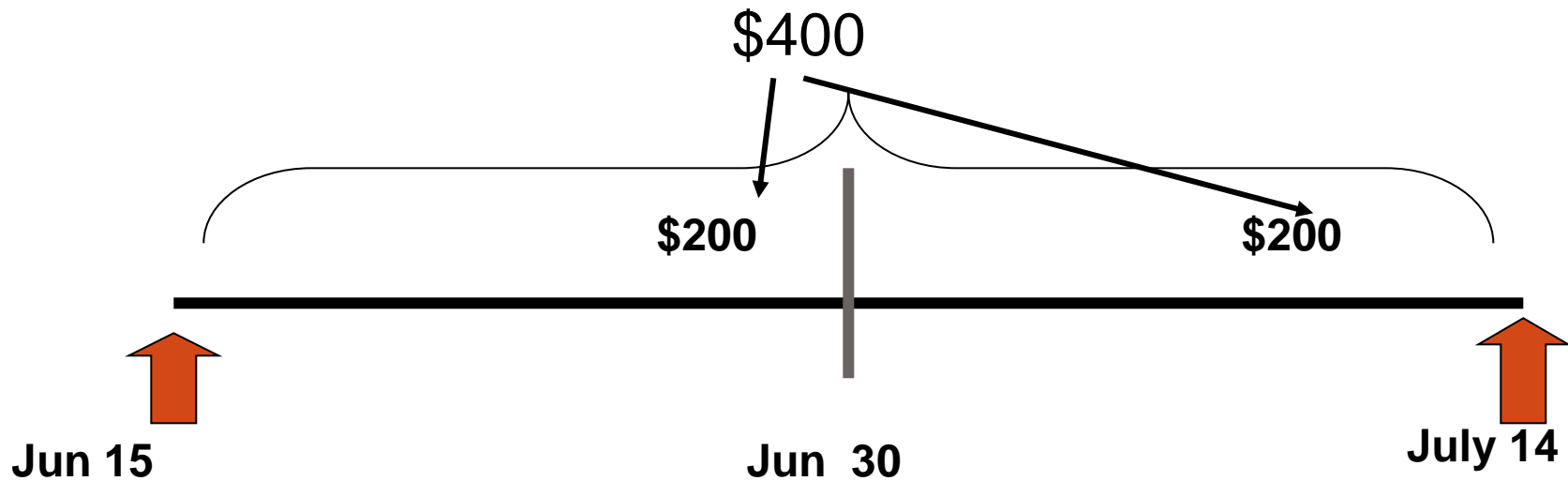
JOURNAL

Date	Accounts	Debit	Credit

Assets	=	Liabilities	+	Stockholders' Equity
400	=	400	+	0

After posting, the liability account appears as follows:

Unearned Service Revenue	
Jun 15	400



**\$400 commission in advance is paid by
Disneyworld Resort on Jun 15, of the
next 30 days**

**15 out of 30 days
remains unearned**

**15 out of 30 days of
revenue has been earned**

$$1/2 \times \$400 = \$200$$

$$1/2 \times \$400 = \$200$$

Unearned Revenue Example

- Jun 30 – Record portion of unearned revenue that has been earned

JOURNAL

Date	Accounts	Debit	Credit

Unearned Service Revenue

Jun 30	\$200	Jun 15	\$400
			\$200
		Represents amount earned	

Service Revenue

Jun 30	\$200
	Represents amount unearned

**All revenues collected in advance are accounted for this way.
An unearned Revenue is a liability, not a revenue.**

Accrued Revenues Example

- Jun 30 – Record accrued revenue

JOURNAL

Date	Accounts	Debit	Credit

Revenue increases both total assets and stockholders' equity:

Assets	=	Liabilities	+	Stockholders' Equity	+	Revenues
300	=	0				+ 300

2. Accrued Expenses

- Expense incurred before cash is paid
- Result in a liability
- Common accrued expenses:
 - A. Salaries
 - B. Interest
 - C. Taxes

A. Accrued Salaries

Most companies pay their employees at set times. Suppose a company pays its employees a monthly salary of \$1,800, half on the 15th and half on the last day of the month.

June							
Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	
						1	
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	Pay day
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	
Pay day	30						

Accrued Salaries

JOURNAL

Date	Accounts	Debit	Credit

- On 15 June, the company paid its employees the first half-month salary of \$900 and made the first entry.
- Because June 30, the second payday of the month, falls on a **Sunday**, the second half-month amount of \$900 will be paid **on Monday, July 1**.
- At June 30, therefore, the company adjusts for additional salary expense and salary payable of \$900.

Accrued Salaries

Salary Payable

900	Jun 30
900	

Amount owed

Balance
Sheet

Salary Expense

Jun 15	900
Jun 30	900
	1,800

June's salary

Income
Statement

Accrued Revenue

- Revenue earned but not yet received
- Increases receivables and revenue

a company is hired on June 15 to clean equipment for \$600 per month, receiving the first payment on July 15. As of June 30, half of the fee will be earned. The entry to record the revenue that has been earned is shown below.

JOURNAL

Date	Accounts	Debit	Credit

Unearned Revenue

- collect cash from customers before earning the revenue
- Creates a liability called unearned revenue
- Only when the job is completed does the business earn the revenue
- Suppose a real estate management firm engages a company to clean its office building, agreeing to pay the company \$400 monthly, beginning immediately. If the cleaning company collects the first amount on June 15, then it records this transaction as shown below.

JOURNAL			
Date	Accounts	Debit	Credit

Unearned Revenue

- When revenue is earned
 - Liability is reduced
 - Revenue is increased
- During the last 15 days of the month, the company will earn one-half of the \$400, or \$200. On June 30, the company makes the adjustment shown in this slide. This adjusting entry shifts \$200 of the total amount received (\$400) from liability to revenue.

JOURNAL

Date	Accounts and explanation	Debit	Credit

Prepaids and Accruals

PREPAIDS –CASH FIRST

	FIRST		LATER	
Prepaid expenses	Prepaid expense		Expense	
		Cash		Prepaid expense
Unearned revenues	Cash		Unearned revenue	
		Unearned revenue		Revenue

ACCRUALS – CASH LATER

	FIRST		LATER	
Accrued expenses	Expense		Payable	
		Payable		Cash
Accrued revenues	Receivable		Cash	
		Revenue		Receivable

Summary of the Adjusting Process

- Two purposes of adjusting process
 - Measure income
 - Update balance sheet
- Every adjusting entry affects at least one:
 - Revenue or expense
 - Asset or liability

Summary of Adjusting Entries

Category of Adjustment	Type of Account	
	Debit	Credit
Prepaid expense	Expense	Asset
Depreciation	Expense	Contra asset
Accrued expense	Expense	Liability
Accrued revenue	Asset	Revenue
Unearned revenue	Liability	Revenue

Depreciation of Plant Assets

- Allocation of plant assets cost over their useful lives
- Results in a debit to an expense
 - Depreciation Expense
- Corresponding credit
 - Accumulated Depreciation
- Examples of plant assets:
 - Buildings
 - Equipment
 - Furniture

Accumulated Depreciation

- Account that shows the sum of depreciation expense of the plant asset
- Contra-asset
 - Always has a companion account
 - Normal credit balance

Illustration - depreciation

Straight-line depreciation

- Alladin Travel purchases equipment for \$24,000 on credit on Jun 3.
- The estimated useful life of the equipment is five years

$$24,000/5 \text{ years} = \text{\$4,800 annual depreciation}$$

**That would be $\$4800/12 = \$ 400$
for depreciation each month**

Depreciation

JOURNAL			
Date	Accounts	Debit	Credit

Depreciation

Equipment

Jun 3	24,000
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Depreciation Expense

Jun 30	400
--------	-----

Balance Sheet

Income Statement

Accumulated Depreciation

400 Jun 30

Accumulated Depreciation

- Sum of all depreciation expense
 - Increases over asset's life
- Contra-asset
 - Normal credit balance
 - Companion account is asset
- Book value
 - Cost of plant asset less accumulated depreciation

Book Value

Partial Balance Sheet June 30, 2012

Equipment		
Less: Accumulated Depreciation		
Book value		

Book Value

The net amount of a plant asset
(cost minus accumulated depreciation)

Learning Objective 4

Close the books

Closing the Books

- Done after financial statements are prepared
- Set temporary accounts to zero
- Transfers balances to retained earnings account
- Journalizes activity in Statement of Retained Earnings

Temporary and Permanent Accounts

Temporary

- Revenues, Expenses and Dividends
- Closed
- Balances represent a period of time

Permanent

- Asset, liability and equity accounts
- Not closed
- Ending balance of one period carries over to following period

Closing Entries

- Debit each Revenue account for the amount in its credit balance
 - Retained earnings is credited
- Credit each Expense account for the amount in its debit balance
 - Retained earnings is debited
- Credit Dividends for the amount in its debit balance
 - Retained earnings is debited

R E D

Retained earnings

		\$18,800	Balance 06-30
Expenses	\$4,600	\$7,500	Revenues
Dividends	\$3,200		
		\$18,500	Balance 06-30

**Determine net income.
Remember revenues
minus expenses**

Classifying Assets & Liabilities

- Current and long-term classifications are based on liquidity
 - How quickly item is converted to in cash
- Current assets will be converted to cash, sold or used during the next year
- Long-term assets include plant assets
- Current liabilities must be paid in the next 12 months
- Long-term liabilities have due dates more than one year from balance sheet date

Classified Balance Sheet

- Places assets into meaningful categories
- Categories:
 - Current assets
 - Long-term investments
 - Property, plant and equipment
 - Intangible assets
 - Other assets

Balance Sheet Formats

- Report format
 - Assets at the top
 - Followed by liabilities and stockholders' equity
- Account format
 - Assets on the left
 - Liabilities and stockholders' equity on the right

Income Statement Formats

- Single-step
 - All revenues and gains grouped together
 - All expenses and losses grouped together
- Multi-step
 - Includes useful subtotals
 - Gross profit
 - Net revenues minus cost of goods sold
 - Income from operations
 - Net income

End of Chapter Three