**General Accounting**
Accounting is a system that measures, processes, and communicates financial information about a business entity. Accounting is often referred to as “the language of business.”

A business entity will engage in operating, investing, and financing activities. Operating activities include the buying and selling of goods and services. Investing activities include the purchase and sale of assets. These include property, plant, and equipment, as well as investments in other corporations. Financing activities include obtaining funds by issuing stock and obtaining long-term or short-term debt. It also includes the paying of dividends to shareholders and purchasing treasury stocks.

**Business Types**
There are three main types of organizations that businesses can form. These are sole proprietorships, partnerships, and corporations.

Sole proprietorships are businesses with one owner. The advantage of this type of business is that it is easy to form. The major disadvantage is the unlimited personal liability of its owner for payment of all of the debts of the business.

A partnership is a business with two or more owners. The advantage of a partnership is ease of formation while the major disadvantage is that all partners are personally liable for the debts of the partnership.

A corporation is a separate entity owned by stockholders. Ownership in a corporation is evidenced by shares of stock. The major advantage of forming a corporation is limited liability; the stockholders are only liable for the amount of their investments. A disadvantage is that the corporation is subject to double taxation. The corporation is subject to corporate income tax and the after-tax profits (dividends) distributed to the owners are subject to personal income tax.

Sole proprietorships and partnerships can offset the unlimited personal liabilities by forming **limited liability corporations** (LLCs) or **partnerships** (LLPs). For tax purposes, the LLC can be taxed as a sole proprietorship if there is only one owner; or it can be taxed as a partnership if there are two or more owners, yet maintain the privilege of limited personal liability.

**Double-Entry System**
Each accounting transaction must be recorded with at least one debit (DR) and one credit (CR). A debit is an increase in the left side of the accounting equation (assets = liabilities + stockholders’ equity) while a credit is an increase in the right side of the equation. An increase in an asset or expense is a debit and a decrease in an asset or expense is a credit. An increase in a liability, equity, or revenue is a credit; and a decrease in a revenue, liability, or equity is a debit. Assets and expenses are normally debit balances. Revenue, liabilities, and equity are normally credit balances. A reminder that may be used for helping you recall normal debit and credit balances is **DEAD CLEaR**.

D = Debit  
E = Expenses  
A = Assets  
D = Dividend

C = Credit  
L = Liabilities  
E = Equity  
a = and  
R = Revenues
The basic accounting journal entry looks like the following with the debit or credit being the name of the account affected by the transaction or adjustment creating the journal entry: The DR entry is always first and always on the left-hand margin or side of the column.

<table>
<thead>
<tr>
<th>Debit</th>
<th>$$$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit</td>
<td>$$$</td>
</tr>
</tbody>
</table>

For example, when cash is paid for equipment in the amount of $1,000, the journal entry would be:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>1,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Note in the entry above the equipment and cash are both assets. The overall total asset value remains the same. What has happened is the cash asset was used up to acquire the equipment asset.

**Accounting Cycle**

The accounting cycle begins by analyzing the information from a business transaction. A source document or documents provide information about the transaction which is used to record the debits and credits using a general journal entry. The process of analyzing the transaction and recording an entry to the journal is called journalization. The journal entry is then entered into the general ledger which contains the balances of all the accounts: Assets, liabilities, equities, revenues, and expenses. This process is called posting. From the general ledger, we create an unadjusted trial balance by listing all of the general ledger accounts and the debit or credit balance. The accounts are then analyzed, and adjusting entries are made to record the usage of assets that are not automatically expensed, such as depreciation, prepaid expenses, payables, and unearned revenue. Once all of the adjustments are completed, an adjusted trial balance is created from the adjusted general ledger balances. Financial statements are then created and published.

After the financial statements are created, all temporary accounts are closed. Temporary accounts are all of the revenue, expense, and withdrawal accounts as well as the income summary account. This closing process essentially moves the net income or net loss to the owners’ or stockholders’ equity accounts. The income accounts begin a new accounting period with zero balances.

**Accounting Concepts**

There are certain concepts, principles, and assumptions that are relevant to the accounting process. The matching principle is the most pervasive principle in accounting. It recognizes expenses in the same period as the revenues it helps to generate. The historical cost principle states that most assets and liabilities are recorded at their acquisition price. The going concern assumption assumes that the company will have an indefinite life. The monetary unit assumption means that stable money is the common unit for economic activity. Revenue recognition states that revenue is recognized (recorded) when it is earned and realized, and the matching principle states that expenses should be matched to the period when the revenues that created the expense were incurred.

There can be exceptions to these principles based on special circumstances. For example, a firm in bankruptcy or reorganization is temporarily in the trust of the courts. The going concern assumption would not apply since the firm is obviously in distress. Also, certain inventory items held for resale may become obsolete or damaged. When that happens, the cost must be readjusted to lower of cost or market. This means the cost will be written down to a level at which it can be sold.

**Accrual Accounting**

The cash basis of accounting states that revenue is recognized when cash is received and expenses are recognized when cash is paid. The accrual basis of accounting states that revenue is recognized when it is earned and realized (not received), and expense is matched to the revenue in the period in which the revenue was earned and realized. This concept creates prepaid expenses, unearned revenues, expenses payable (or accrued), and revenues receivable (or accrued).
Prepaid amounts are expense amounts that are recorded initially as an asset and are expensed in the future as they are matched to appropriate revenue. For example, rent paid ahead of time would be recorded as a debit to prepaid rent and a credit to cash. When the rent becomes due, the resulting entry would be a debit to prepaid rent and a credit to prepaid rent. Unearned revenues are receipts that are recorded initially as a liability and then adjusted to revenue as the amount becomes earned. An example would be insurance premiums collected ahead of time by an insurance company, which would be a debit to cash and a credit to unearned premiums. When the premiums are earned, the resulting entry would be a debit to unearned premiums and a credit to premium revenue.

Payables are amounts owed to an entity that are expensed prior to the cash payment, such as a debit to wages expense and a credit to wages payable. When these amounts are paid, the debit is to wages payable and the credit is to cash. Receivables are assets that are created prior to the actual amount of revenue being received. For example, interest that has been earned but not yet received would be recorded as a debit to interest receivable and a credit to interest revenue. When the amount is collected, the journal entry would be a debit to cash and a credit to interest receivable.

At year end, prepaid expenses, unearned revenues, accrued payables, and accrued receivables are often adjusting entries journalized and then posted to the ledger. In addition to these items being adjusted, depreciation, depletion, and amortization expenses are part of year-end adjustments.

Other Important Accounting Information
FASB – This is an independent, private body that has primary responsibility for establishing generally accepted accounting principles (GAAP) in the United States.

IASB – This is the international accounting standard-setting body responsible for the convergence of worldwide accounting standards. This body issues international financial reporting standards (IFRS).

Sarbanes-Oxley Act (SOX) – This act provides regulation of auditors and the types of services they furnish to clients, increased accountability of corporate executives, addresses conflicts of interest for securities analysts, and provides for significant criminal penalties for violators.

Financial Statements
There are four major financial statements required to be filed with the Securities and Exchange Commission (SEC): The income statement, the statement of retained earnings or statement of stockholders’ equity, the balance sheet, and the statement of cash flows.

The income statement is the first statement prepared and is a summary of revenues and expenses over a period of time, usually one year. There are two primary formats – the single-step and multiple-step. A single step income statement is shown as:

Total Revenues
- Total Expenses
Net Income

The basic format of the multiple step income statement is:

Sales
- Sales returns and allowances
- Sales discounts
Net Sales
- Cost of Goods Sold
Gross Profit
- Operating Expenses
Income from Operations,
+/- Other Revenue/Expense
Income before Income Tax
- Income Tax
Net Income

Regardless of the income statement format that is used, the result is the same amount of net income. The difference is in presentation of the income statement numbers.

Revenues are the increase in stockholders’ equity as a result of business activity, while expenses are the decrease in stockholders’ equity as a result of business activity.

The statement of owners’ equity summarizes the changes in each stockholders’ equity account as well as in total stockholders’ equity and the accounting value of the company to stockholders (owners):

<table>
<thead>
<tr>
<th>Common Stock</th>
<th>Retained Earnings</th>
<th>Total Stockholders Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning balances + Issuance of common stock +/− Net Income (Loss) - Dividends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ending balances</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The statement of retained earnings is prepared by a corporation and summarizes the changes to retained earnings. The statement’s basic format is:

- Beginning balance
- +/- Net income (loss)
- - Dividends
- Ending balance

Retained earnings are defined as the cumulative profits generated by the business and kept in the business. Dividends are the distribution of profit back to the corporate owners.

The balance sheet is a summary of the assets, liabilities, and stockholders’ equity of a business at a point in time. This relationship (also known as the “accounting equation”) is expressed as assets equal liabilities plus stockholders’ equity (A = L + SE). Assets are the resources owned by the business. They will be used to generate revenue. As revenue is generated, expenses are incurred signifying the use of assets. Liabilities are defined as obligations (claims on assets) of the business or what is owed to outsiders (creditors). Stockholders’ equity is the residual, after liabilities are subtracted from assets. Liabilities and stockholders’ equity signify what resources were used to purchase the assets and how those purchases were financed.

In a classified balance sheet, assets are divided into current assets and long term assets. Current assets include cash, marketable securities, accounts receivable, inventory, and prepaid items. Long-term assets include property, plant, and equipment, investments, intangibles, and natural resources. The liabilities are classified as current and long term. Current liabilities include accounts payable, accrued liabilities, and notes payable within the operating cycle or one year, whichever is longer. Long-term liabilities include bonds payable and mortgages payable beyond one year. Stockholders’ equity is composed of contributed capital and retained earnings. Retained earnings are the accumulated earnings over the life of an entity that has not been distributed to the entity’s owners.

The statement of cash flows shows the sources and uses of cash from operating, investing, and financing activities. Operating activities include sources or uses of cash from revenues, expenses, and changes in current assets and current liabilities, including interest income and expense. Investing activities include sources and uses of cash due to purchases or sales of long-term assets. Financing activities include sources and uses of cash from changes in long-term liabilities, equity, and dividends.
There are two different methods for calculating cash flow: The direct and indirect methods. The direct method is preferred by the Financial Accounting Standards Board (FASB) but is not required. The indirect method is used by the majority of reporting companies. The differences occur in the operating section. The indirect method starts with net income and adjusts for depreciation and other non-cash items and then determines the changes in all current asset and current liability accounts during the current accounting period. The direct method reports operating sources of cash, such as cash received from customers, and deducts uses of cash on accounts, such as merchandise payments, payments for operating expenses, and the like. No matter which method is used, the bottom line is the cash balance as shown on the balance sheet.

**Basic Ratios**

In the analysis of financial statements, certain ratios are used. The following table lists several of the most common ratios and defines their usage.

<table>
<thead>
<tr>
<th>Solvency/Liquidity Measures</th>
<th>Method of Computation</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Capital</td>
<td>Current Assets – Current Liabilities</td>
<td>Short-term debt paying ability</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>Current Assets</td>
<td></td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>Current Liabilities</td>
<td>Quick Assets</td>
</tr>
<tr>
<td>Accounts Receivable Turnover</td>
<td>Net Sales</td>
<td>To indicate instant debt-paying ability</td>
</tr>
<tr>
<td>Number of Days’ Sales in Receivables</td>
<td>Average Accounts Receivable</td>
<td>365 Accts Receivable Turnover Ratio</td>
</tr>
<tr>
<td>Inventory Turnover</td>
<td>Cost of Goods Sold</td>
<td>Average Inventory</td>
</tr>
<tr>
<td>Number of Days’ Sales in Inventory</td>
<td>Average Inventory</td>
<td>Average Daily Cost of Goods Sold</td>
</tr>
<tr>
<td>Ratio of Fixed Assets to Long-Term Liabilities</td>
<td>Fixed Assets (net)</td>
<td>To indicate the margin of safety to long-term investors</td>
</tr>
<tr>
<td>Ratio of Liabilities to Stockholders’ Equity</td>
<td>Total Liabilities</td>
<td>To indicate the margin of safety of creditors</td>
</tr>
<tr>
<td>Number of Times Interest Charges are Earned</td>
<td>Income Before Income Tax + Interest Expense</td>
<td>365 Interest Expense</td>
</tr>
<tr>
<td>Profitability Measures</td>
<td>Ratio of Net Sales to Assets</td>
<td>To assess the effective use of assets.</td>
</tr>
<tr>
<td>Rate Earned on Total Assets</td>
<td>Net Income + Interest Expense</td>
<td>Average Total Assets</td>
</tr>
<tr>
<td>Rate Earned on Stockholders’ Equity</td>
<td>Net Income</td>
<td>Average Total Stockholders’ Equity</td>
</tr>
<tr>
<td>Rate Earned on Common Stockholders’ Equity</td>
<td>Net Income – Preferred Dividends</td>
<td>Average Common Stockholders’ Equity</td>
</tr>
<tr>
<td>Earnings Per Share on Common Stock (EPS)</td>
<td>Net Income – Preferred Dividends</td>
<td>Shares of Common Stock Outstanding</td>
</tr>
<tr>
<td>Price-Earnings Ratio</td>
<td>Market Price per Share of Common Stock</td>
<td>To indicate future earnings prospects based on the relationship between market value of common stock and earnings.</td>
</tr>
</tbody>
</table>
### Sales and Purchases

When merchandise is sold, it is recorded as a sale in the accounts of the business making the sale. The terms of sale define the contract between the seller and the purchaser. The sales discount determines the amount of discount, if any, allowed by the seller. For example, the invoice terms “2/10, n/30” means that the purchaser can take a 2% discount if the invoice is paid within 10 days. After the 10-day discount period, the full amount must be paid and is due by day 30. This discounted amount is recorded as “sales discount” by the seller and is a reduction of net sales. When items are returned, they are debited to an account called *sales returns and allowances* with an offsetting amount credited to *accounts receivable*. This DR also reduces net sales.

FOB shipping point means that the freight is paid by the buyer since ownership of the goods is with the buyer once it is shipped. FOB destination means that the freight is paid by the seller since ownership is with the seller until it arrives at the buyer’s destination.

Merchandise purchased for resale is recorded to either a merchandise inventory account (perpetual system) or to a purchases account (periodic system) depending on the type of inventory system used. If the inventory accounting system is periodic, then the purchases account is debited. During the course of the accounting period, cost of goods sold cannot be determined since the inventory is not known without taking a physical inventory. Once the physical inventory is complete, cost of goods sold is determined by:

\[
\text{Beginning Inventory} + \text{Purchases} + \text{Freight In} - \text{Purchases Returns and Allowances} - \text{Purchases Discounts} - \text{Ending Inventory} = \text{Cost of Goods Sold}
\]

The other type of inventory accounting system is the one we are most familiar with when we check out of a store and a scanner is used. When using the perpetual system, all new merchandise is debited to the merchandise inventory account; and when a sale is made, the cost of merchandise (goods) sold is recorded for each sale and the inventory balance is credited. Management can review the inventory balance and cost of merchandise (goods) sold throughout the accounting period. Each sales transaction is recorded as follows:

\[
\begin{align*}
\text{Accounts Receivable (or Cash)} & \quad \text{Sales} \\
\text{Cost of Merchandise (Goods) Sold} & \quad \text{Merchandise Inventory}
\end{align*}
\]

A physical inventory is taken in the perpetual inventory system at least once per accounting period to verify the inventory balances. Usually this is accomplished with the annual audit performed by the company’s CPA firm.
Inventory

Inventory is classified as goods held for resale. If a perpetual inventory system is used, when the goods are sold, an amount is transferred from the inventory account to a cost of goods sold (COGS) account. The inventory amount is valued using specific identification, average cost, LIFO, or FIFO.

Using specific identification, each item is uniquely identified and the cost of that item is used to determine the amount of COGS and inventory. Average cost uses a weighted average cost (periodic system) or moving-average cost (perpetual system) of the inventory items to calculate the value of the inventory and COGS. LIFO stands for last-in, first-out. LIFO assumes that the values of the last items acquired are assigned to COGS while the remainder is assigned to ending inventory. FIFO stands for first-in, first-out. FIFO assumes that the values of the first items acquired are assigned to COGS while the remainder is assigned to ending inventory. In an inflationary economy, LIFO will show the highest cost of goods sold on the income statement and the lowest goods inventory on the balance sheet. Conversely, FIFO will show the lowest cost of goods sold on the income statement and the highest goods inventory on the balance sheet.

At the end of the period, COGS can be calculated by using the COGS statement. This statement is prepared using a similar form:

\[
\text{Beginning Inventory} + \text{Net Purchases} - \text{Ending Inventory} = \text{Cost of Goods Sold}
\]

*Net Purchases = gross purchases less (purchase discounts and returns and allowances) plus freight in

This form can be used to determine the cost of goods sold in the periodic inventory system or to verify the cost of goods sold account in the perpetual inventory system.

Cash and Accounts Receivable

Current assets are assets that will become cash in one year or one operating cycle, whichever is greater. Cash usually consists of currency, coin, and deposits in checking and savings accounts. Credit card sales are also treated as cash. However, the card processor takes a percentage of the sales as a fee for providing credit.

Bank reconciliation is the process of reconciling the difference between the balance on the bank statement and the balance recorded on the company books. Start with the balance per bank statement and add deposits sent to the bank but not yet included in the bank statement. These are called deposits in transit. Subtract outstanding checks to get to the adjusted balance. Then adjust the balance per your ledger. Record any deposits the bank has received on your behalf, deduct non-sufficient funds (NSF) checks, bank service charges, or any other deposits or charges you did not know about and that were not recorded in your ledger. Also, there may be a check or deposit entered on the books incorrectly; that needs to be corrected. Sometimes, but rarely, the bank makes an error, in which case the bank has to be contacted to correct its error.

From here we take the balance per books, add items added by the bank statement, and subtract items subtracted on the bank statement per our bank reconciliation analysis. The two adjusted balances should equal. If we listed any adjustments to our bank ledger balance, a journal entry must be made to correct our ledger balance. This is the only time we adjust our cash balance with a general journal entry. The result is the company’s one and only cash balance.
**Bank Reconciliation**

<table>
<thead>
<tr>
<th>Cash Balance on Bank Statement</th>
<th>Cash Balance on Depositor’s Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Deposits in Transit</td>
<td>+ Collections made recorded by bank</td>
</tr>
<tr>
<td>- Checks that have not cleared</td>
<td>- NSF checks</td>
</tr>
<tr>
<td>+/− Bank errors</td>
<td>+/− Depositor’s errors</td>
</tr>
<tr>
<td>Adjusted balance*</td>
<td>Adjusted balance*</td>
</tr>
</tbody>
</table>

*These will agree

Accounts receivable are the result of giving credit to customers and allowing the customers to pay at a later date for purchases of service or merchandise. Accounts receivables are normally current assets. Net accounts receivable is equal to the accounts receivable balance less the allowance for bad debt (sometimes called doubtful accounts or uncollectible accounts). The allowance for bad debts is calculated using either of two different methods: The percent of sales or the percent of receivables. The percent of sales method calculates bad debt expense by multiplying sales by a predetermined percent; this is the income statement approach, correcting the bad debt expense as matched against the sales and adjusting the allowance account as needed. The percent of receivables method calculates the allowance amount based on a percentage of the receivables or an analysis of the aged receivables to correct the amount of the allowance. This is the balance sheet approach, correcting the allowance account and adjusting the bad debt expense as necessary. The general journal entry for bad debts expense is:

```
Bad Debts Expense     $$$
Allowance for Bad Debts $$$
```

**Investments**

Investments can be either short-term or long-term. Short-term investments include held-to-maturity, trading, and available-for-sale securities. Long-term include investments that are influential but non-controlling and controlling.

**Trading securities** are held to be resold in the near term and are initially recorded at cost. At the balance sheet date, trading securities are valued at current market amount and an unrealized gain or loss is recorded in the income statement. **Available-for-sale securities** can be either short-term or long-term and are initially recorded at cost. At the balance sheet date, available-for-sale securities are valued at current market amount and an unrealized gain or loss is recorded in the balance sheet as part of comprehensive income.

Long-term investments include securities in which the ownership is influential but non-controlling (between 20% and 50% generally). The accounting treatment for this security is the equity method; initially recorded at cost and subsequently adjusted for investor’s share of net income/ (loss) and reduced by any dividends received. Controlling investments (more than 50%) are treated as part of consolidated financial statements where the two company’s financial statements are merged as if they were just one entity of multiple legal companies.

**Long-Term Assets**

Long-term assets are assets that have a useful life of over one year. These include tangible assets, intangible assets, and natural resources.

Tangible assets are assets that have a physical substance such as land, building, furniture, and equipment. These assets are expensed using a periodic allocation called depreciation (except for land, which is not depreciated). Depreciation is an expense created by allocating the cost of plant and
equipment to periods in which they are used. Common depreciation methods include straight line, declining balance, and units of production depreciation. Note that land is not depreciated. Book value of an asset is equal to the cost of the asset less its accumulated depreciation (contra asset account). Accumulated depreciation is the summation of all depreciation expenses for the years of ownership of that asset. The journal entry to record depreciation expense is a debit to depreciation expense and a credit to accumulated depreciation. Accumulated depreciation is also known as a contra asset account because it has a credit balance but is reported in the asset section as a reduction to the corresponding long-term asset account.

The annual depreciation expense using the straight-line depreciation method is calculated by subtracting the estimated salvage value from the asset’s cost. This result is the depreciable value. Divide the depreciable value by the estimated useful life of the asset. The result is the annual depreciation expense. An optional calculation is to determine the depreciation rate by using the reciprocal of the useful life. For example, an asset with a useful life of 5 years will have a straight-line depreciation rate of 1/5 or 20%. Multiply this rate times the depreciable value and you will calculate the annual depreciation expense. The units of production depreciation method calculates annual depreciation expense by taking cost and subtracting salvage value, then dividing the depreciable value by total estimated usage or production amount.

The double declining balance method calculates the annual depreciation expense by multiplying the straight line rate by two. Then the carrying value is multiplied by the depreciation rate. As the book value of the asset is reduced, the depreciation expense is also reduced. This method is known as an accelerated method because earlier years’ depreciation expense is higher than later years’ depreciation expense.

Intangible assets are assets that have no physical substance with value based on rights of owners. Intangible assets include patents, copyrights, trademarks, franchises, leaseholds, and goodwill. The periodic allocation of intangibles is called amortization and is usually done on a straight-line basis. Amortization expense is debited and the intangible asset is reduced by the amount of amortization expense. The book value of an intangible will be its original cost less the amount of amortization taken (expensed) during its useful life. Note the intangible asset called goodwill is not amortized. However, goodwill may be impaired because the business purchased that generated the goodwill is not performing as expected. This causes goodwill to be written down to an amount that reflects the value of the purchased entity.

Natural resources are assets that can be taken from the land. These include oil and gas, mineral deposits, timberlands, and other items extracted from the land. The allocation basis for natural resources is called cost depletion and is done on the units of production basis. The cost of the mineral rights or leases are divided by the estimated amount of the mineral that can be extracted per ton, barrel, ounce, or some unit common to that particular extraction industry. This unit cost is multiplied times the units of the mineral extracted in a given year to calculate the cost depletion annually. The depreciable asset cannot be depleted below cost.

Different methods of depreciation, amortization, and depletion may be available for tax purposes creating some temporary tax timing difference between the accounting net income and the taxable income for the entity.

Current Liabilities
Current liabilities are liabilities that must be paid within one year or within the current operating cycle, whichever is longer. Current liabilities include accounts payable, notes payable, accrued liabilities, unearned revenues, and payroll liabilities.

Accounts payable are the amounts owed to suppliers in the normal business environment. The terms of sale (2/10, n/30) are also appropriate for accounts payable, just as they were for accounts receivable. Accrued liabilities include wages payable, taxes payable, interest payable, and any other accrued payable. These are usually amounts accrued for various reasons that must be paid within one year.
Estimated liabilities are obligations where exact dollar amounts are not known. These are amounts that are probable and that are reasonably estimated. Examples include vacation pay liabilities and product warranty liability. An estimated amount is entered in the financial statements when the expense is assured but the actual amount is not yet known. Contingent liabilities are liabilities that may arise from past transactions if certain events occur in the future. The accounting for contingent liabilities depends on the following two factors:

1. Likelihood of occurring: Probable, reasonably possible, or remote.

If the result of the event produces a contingent liability that is both probable and estimable, it is recorded and disclosed. In other cases, except for remote, information about the contingent liability is recorded in the footnotes. If it is remote, no disclosure in the footnotes or financial statements is required. Common examples of contingent liabilities are lawsuits and environmental matters.

**Long-Term Liabilities**

Long-term liabilities are obligations that will be paid in more than one year. These include bonds payable, mortgages, and leases. Long-term liabilities are usually recorded at their principal or face value. If a portion of a note must be paid in the current accounting period, that portion of long-term debt is listed with current liabilities.

Types of bonds include unsecured, secured, term, serial, callable, convertible, registered, and coupon bonds. Unsecured bonds are issued only with the backing of the company. Secured bonds have a payment guaranteed by securing them with an asset of the company. Term bonds become due all at one time while serial bonds mature in different time periods. Callable bonds can be purchased back by the issuing company while convertible bonds can be exchanged for stock of the issuing company. Registered bonds have ownership recorded by the company, which keeps track of owners, while coupon bonds are not recorded and ownership is determined by whomever holds the bond.

Bonds usually have a face value of $1,000 and are listed for sale as a percentage of their face amount. Bonds are issued at par when the stated interest rate is equal to the market interest rate and will be listed for sale at 100. Bonds are issued at a discount when the stated interest rate of the bond is less than the market interest rate and will be listed for sale at less than 100. Bonds are issued at a premium when the stated interest rate of the bond is more than the market interest rate and will be listed for sale at greater than 100. The premium and discount is amortized over the life of the bond using the straight line method or the effective interest method. The effective interest method is preferred.

**Contributed Capital**

Capital stock or stockholders’ equity are ownership rights issued by a corporation. The corporation’s stockholders’ equity contains two sections: Contributed capital and retained earnings. Stocks are issued at par (or stated value) or no-par. Par, or stated value, has no real relationship to the initial issue price of the stock and does not determine the market value at which the shares will be sold. The number of shares is classified as authorized, issued, and outstanding. Authorized shares are the maximum amount allowed to be sold by the corporate charter. Issued shares are all the shares actually sold by the corporation. Outstanding shares are issued shares that have not been repurchased by the firm as treasury stock. Treasury stock is issued shares of stock that have been repurchased by a corporation and are recorded in a contra-equity account.

The two basic types of contributed capital (stock) are common stock and preferred stock. Preferred stockholders have preferential treatment as to payment of dividends (dividends paid are a set amount) and to liquidation. Common stockholders receive the remainder of the dividends after the preferred holders are paid their predetermined share (par value x stated percentage rate x number of preferred shares outstanding).
Cash or property dividends are distributions back to owners from the net profits of the current year and from past years (retained earnings) of the corporation. There are three dates relating to dividends: The declaration date, the record date, and the payment date. The declaration date creates a liability, and the journal entry is shown as:

\[
\begin{align*}
\text{Retained Earnings} & \quad $$$ \\
\text{Dividends Payable} & \quad $$$
\end{align*}
\]

Distribution in excess of current earnings and retained earnings are a return of contributed capital to the shareholders. The record date simply denotes that the registered owner of the stock on that date will be the recipient of the dividend when paid. The payment date is when the actual dividend check is sent to the record date shareholder, and the journal entry is shown as:

\[
\begin{align*}
\text{Dividends Payable} & \quad $$$ \\
\text{Cash} & \quad $$$
\end{align*}
\]

Stock dividends are extra shares of stock distributed instead of a cash dividend. Small stock dividends (less than 20% to 25%) are valued at the stock’s market price, while large stock dividends (more than 20% to 25%) are valued at the stock’s par or stated value. The value of the stock dividend is a reduction of retained earnings.

Stock splits occur when a corporation increases the number of shares and proportionally decreases the par value of the stock. The value of contributed capital, retained earnings, and total market capitalization do not change due to a stock split. Shareholders exchange their current shares of stock for more new shares with a lower par or stated value.

**Cost Concepts and Cost Allocation**

Cost behavior can be classified as either variable cost or fixed cost. When operating in the relevant range, variable cost changes in direct proportion to total production levels while fixed cost is constant in relationship to total production levels. Also, variable costs are fixed in regard to unit cost, and fixed costs change in relation to unit production amounts (total fixed costs / # of units produced = fixed cost / unit). Some costs can be mixed—partially fixed and partially variable.

Costs can also be classified as direct and indirect. Direct costs can be conveniently and economically traced to a cost object (while indirect costs cannot) and are normally allocated as factory overhead.

Other cost classifications are product costs and period costs. Product costs are the direct and indirect costs to produce inventory. Product costs are direct materials, direct labor, and factory overhead. Period costs are assigned as expenses to the period incurred but are not product costs. These are often referred to as selling and administrative costs.

The elements of product costs are direct materials cost, direct labor costs, and overhead costs. Direct material costs are expenditures on materials that can be traced directly to the product being produced. Direct labor costs are those expenditures for labor that can be traced directly to the product being produced. Overhead costs include indirect material, indirect labor, and other manufacturing overhead costs, such as depreciation and utilities. Other classifications of costs include prime and conversion costs. Prime costs are direct material and direct labor costs. Conversion costs include direct labor and overhead costs. Note you cannot add prime and conversion costs since direct labor costs would be counted twice.

There are three inventories associated with manufacturing. They are raw materials inventory, work-in-process inventory, and finished goods inventory. These amounts are needed to calculate cost of goods manufactured (COGM) and cost of goods sold (COGS).

To calculate the cost of goods manufactured, begin by calculating direct materials used.

Beginning direct material inventory
+ Material purchased
- Ending direct material inventory
Direct Material Used

Beginning work-in-process inventory
+ Direct material used
+ Direct labor
+ Manufactured overhead applied
Total Manufacturing Cost
- Ending work-in-process inventory
Cost of Goods Manufactured (COGM)
+ Beginning finished goods inventory
- Ending work-in-process inventory
Cost of Goods Sold

In retailing or wholesaling there is only one inventory, called merchandise inventory. The COMS is calculated by:

Beginning merchandise inventory
+ Net purchases *
- Ending merchandise inventory
Cost of Merchandise Sold

*Purchases less (purchase discounts and purchase returns and allowances) plus freight in.

Cost allocation is the process of assigning indirect cost to a cost object (product, service, sales territory, or other object). A predetermined overhead rate is calculated by dividing the estimated overhead costs (cost pool) by the estimated operating activity (cost driver). Common manufacturing cost drivers are total labor hours or machine hours. This cost per activity is used to allocate overhead costs to the specific cost object.

**Job Order and Process Costing**

The two major types of costing systems are job-order and process costing. A job-order costing system is used in companies that produce special orders or unique products or services, such as vehicles, computers, and jewelry. A process system is used when the products are similar, or it is used with continuous production. Some companies use a combination of both job order and process.

In a **job-order costing system**, costs are assigned directly to the job on a job-order cost sheet. Direct material and direct labor are recorded to the cost sheet for the actual amount used. Overhead is allocated to the cost sheet using a predetermined rate. This entire amount is accumulated in the work-in-process account. As such, the amount of work-in-process would include all costs of the job order cost sheet for items still in production that have not been transferred out to finished goods inventory. When the job is finished, it moves to finished goods inventory. Finished goods inventory would include all job cost sheets for items no longer in production that have not yet been sold. When sold, the cost of the job is transferred from finished goods inventory to COGS.

The journal entries in a job order costing system are as follows:

Raw materials inventory $\text{\$}\text{\$}$
Cash or Accounts payable $\text{\$}\text{\$}$
To record the purchase of raw materials

Work in process inventory $\text{\$}\text{\$}$
Manufacturing overhead $\text{\$}\text{\$}$
Raw materials inventory $\text{\$}\text{\$}$
To record the issuance of direct and indirect materials
In a **process costing system**, the costs are accumulated by process or department. Material, labor, and overhead are recorded in the process accounts. At the end of the period, equivalent units of production are calculated for direct material and conversion costs (labor + overhead). An equivalent unit is a factor that applies a percentage to partially completed units. Using one method, FIFO or average-cost, costs are allocated to both ending inventory units and completed units. Completed units are assigned to the next process or department. When they are completed in the last process or department, such costs and inventory are transferred to finished goods.

The journal entries under a process costing system are similar to those under a job costing system. The primary exception is that under a process costing system, there are additional entries from one process to another prior to the transfer to finished goods inventory. These are illustrated below:

- Work in process (A) $\$$
- Work in process (B) $\$$
- Work in process (C) $\$$
- Finished Goods Inventory $\$$

**Activity Based Costing**

Activity based costing (ABC) is a method of assigning indirect costs to products and services based on the activities they require. ABC is a process that calculates a more accurate product cost than traditional methods. Traditional methods often apply overhead to production based on a single cost driver for all overhead. The cost drivers have often been direct labor or machine hours. In today’s environment, overhead has become a large portion of total manufacturing cost. Although ABC was actually suggested in the 1930s, it was not applied until computers made the application more cost effective. The major steps
in ABC include identifying each specific activity used, estimating the cost for each activity, identifying a unique cost driver for each activity, and then calculating and assigning the cost to the cost object. ABC can be used for manufacturing activities, selling, and administrative activities.

Cost Behavior
Variable costs vary directly with the level of production while fixed costs do not change as production changes. Mixed costs have both variable and fixed components. A common approach to analyzing mixed costs is the high-low method. In this method, total cost is graphed with cost on the y-axis and activity on the x-axis. The highest and the lowest point are used to calculate cost per activity. This amount is the variable cost per unit. Using the equation for a straight line, the y-intercept is calculated and is determined to be the fixed cost. Also, regression analysis can be used to determine variable and fixed costs from a collection of data points. With regression available easily to anyone with a computer and a spreadsheet program, or a hand held business calculator, it would be the preferred method of determining the cost behavior or cost formula for an expense rather than the high-low method. Regression is mathematically more accurate than the high-low method.

Cost-volume-profit (C-V-P) analysis is a management accounting process to demonstrate how specific accounting information interrelates. The basic equation is: Sales Revenue – Variable Costs – Fixed Costs = Profit. Sales Revenue is Price times Quantity (SP x Q). Variable Cost is Unit Variable Cost times Quantity (VC x Q). Fixed Costs are the identified fixed costs for the relevant range of production. When profits are set to zero, the quantity can be calculated: and this is known as the breakeven point: (SP(Q) - VC(Q) – FC = 0). Another tool in C-V-P is the contribution margin (CM) which is equal to SP(Q) - VC(Q), or (SP - VC) x Q. Contribution margin shows what remains to cover fixed costs and yield a profit, if any, after variable costs are covered. The CM ratio (CM / SP(Q)) shows what percentage of each $1 of sales becomes profit if the sales level is above the break-even point.

In C-V-P costing, net income is determined by:

Sales Revenue
- Total VC
CM
- Total FC
Profit before Taxes.

To target an after-tax profit, divide the targeted after-tax profit by (1-TR), where TR is the income tax rate.

In full absorption costing, used in preparing financial statements, sales less COGS (both variable and fixed) equal gross profit. Subtract selling and administrative costs to get income before taxes, less income tax expense is net income. In full-absorption costing, many period costs are assigned to the products that remain in inventory. These costs are not recognized until the finished goods inventory is sold.

Budgeting
Budgeting is the process of gathering information about a business' future activity. Budgets can be long term (strategic planning) or short-term (tactical and operational planning). A master budget is the set of budgets and financial plans for a given period.

The operating budget process in a profit-making entity starts with the sales budget that identifies the expected sales for the accounting period. After the sales budget has been completed, the other operating budgets can be created. These include the production budget, the materials purchase, direct labor, and manufacturing overhead budgets. Next, the cost of goods sold budget, selling and administrative budget, and the budgeted income statement.

After completing the operating budgets, the proposed/pro-forma financial budgets can be prepared. These include the cash budget, capital expenditures budget, and the budgeted balance sheet. In order to prepare the cash-budget-expected capital expenditures, interest expense and interest income need to be
known. Capital expenditures are usually found on a capital expenditures budget, which is a long range budget for additions and replacements of property, plant, and equipment.

**Standard Costing and Variance Analysis**
Standard costs are estimates of costs based on past and projected costs. Standard costs are used for budgetary purposes and for preparing performance reports for more effective production management.

Standard Direct Material Cost = Direct Material Price per Unit X Direct Material Quantity Standard per Unit.

Standard Direct Labor Cost = Direct Labor Rate Standard per Unit X Direct Labor Time Standard per Unit.

Standard Variable Overhead Rate = \( \frac{\text{Total Budgeted Variable Overhead Costs}}{\text{Expected Number of Standard Units of Production}} \)

Standard Fixed Overhead Rate = \( \frac{\text{Total Budgeted Fixed Overhead Costs}}{\text{Normal Capacity in Terms of Standard Basis}} \)

Total Direct Material Cost Variance = Material Price Variance plus Material Quantity Variance.

Direct Material Price Variance = (Standard Price – Actual Price) X Actual Quantity Used.

Direct Material Quantity Variance = (Standard Quantity – Actual Quantity Used in Production) X Standard Material Price per Unit.

Direct Labor Rate Variance = (Standard Rate – Actual Rate) X Actual Hours Used in Production.

Direct Labor Efficiency Variance = (Standard Hours Required for the Production Output – Actual Hours Used in Production) X Standard Labor Rate Per Hour.

Total Direct Labor Cost Variance = Direct Labor Rate Variance + the Labor Efficiency Variance.

Variable Overhead Spending Variance = (Standard Variable Rate per Unit X Actual Hours Worked*) – Actual Variable Overhead Costs.

Variable Overhead Efficiency Variance = Standard Variable Rate per Unit X (Standard Hours required for the production output – Actual Hours Used in Production).

Fixed Overhead Budget Variance = Budgeted Fixed Overhead – Actual Fixed Overhead.

Fixed Overhead Volume Variance = Budgeted Fixed Overhead Costs – Costs Applied to Production using Standard Fixed Overhead Rate.

*The overhead cost driver listed is direct labor hours. The cost driver could be other measurements like machine hours or direct labor costs. In activity-based costing, there may be multiple bases for allocation of variable and fixed overhead costs.

**Decision-Making Analysis**
In the process of decision making, the concept of incremental analysis is very important. Incremental analysis means that only costs and revenues that differ between alternatives are relevant. Costs that are the same for each decision are not relevant to the decision, such as sunk costs—money already spent. Also important is the concept of opportunity cost. Opportunity cost is the benefit lost when one alternative is chosen over another.

In a make-or-buy decision, incremental analysis is used to determine if a product should be made internally or purchased from an outside source. All revenue and expenses that will change due to the
decisions are summed to determine the best alternative. Other types of decisions that are made from this concept include special order decisions and sell or process further decisions.

In addition to quantitative analysis, all decisions must consider qualitative factors. For example, a special order quantitative analysis determines that accepting the special order will cause the company to lose money. If the special order is in a new market for the firm, perhaps the loss should be incurred to establish new relationships with potential new clients in a new market. In short, the known risk (the loss) is worth doing for the possibility of a new potential source of new income. However, if the quantitative analysis determines that outsourcing a manufacturing process is financially feasible, what consideration should be given to the morale of the remaining employees? How will the market accept the outsourcing? As many of the qualitative and quantitative factors as possible must be considered when making decisions.

**International Accounting**

The international accounting standards committee (IASC) was created in 1973. The goal was to develop a set of accounting standards that would be accepted globally. The original members were accounting bodies from nine countries. These were Australia, Canada, France, Japan, Mexico, the Netherlands, the United Kingdom, the United States, and West Germany. In 2001, the IASC was replaced by the International Accounting Standards Board (IASB). The IASB in concert with national standard setters is making every effort to accelerate convergence between national accounting standards and international accounting standards. Currently, the IASB issues international accounting standards (IAS) and international financial reporting standards (IFRS).

International business operations are becoming commonplace for even small businesses. When conducting business overseas (we consider the U.S. the base for this discussion), there are two major accounting challenges in addition to several risk factors that must be considered. The two major accounting challenges are: accounting for sales and purchases in a foreign currency and preparing consolidated financial statements with international subsidiaries.

If the sales or purchase transaction is in U.S. dollars (USD), then the transaction is recorded as usual in USD. The problem arises when the sale or purchase transaction is in a foreign currency; then we must consider the current exchange rate and track changes in the rate. For example, when we sell something in a foreign currency denomination, we record the sale in USD at the present exchange rate and note that calculation in the description of the journal entry. As the rates change, we have to record either a gain or loss on the transaction due to exchange rate fluctuation since our customers will be paying in their currency.

When preparing consolidated financial statements for a U.S. based corporation, the foreign subsidiary’s financial statements must first be converted to USD. The corporation is responsible for selecting the proper exchange rate and converting the statements.

Additionally, risks doing business overseas must be considered in addition to recording transactions. Companies must consider the exchange rate risk when selling and purchasing items overseas. Significant exchange rate variances can either adversely affect or assist the trade. The corporation should also consider the stability of the government. Risk is much higher in a country that has a history of frequent coups and terrorist activity than in one of the Western European countries or modern Asian countries, such as Hong Kong or Singapore. A third consideration is the ethos of the country. Proper preparation, research, and planning are a requisite for successful overseas operations.