Lecture Notes:

- **Introduction:**
- Businesses must prepare 2 types of financial statements, income statements and balance sheets. Both must use the same rules and methods: Generally Accepted Accounting Principles (GAAP).
- **Income Statement:**
- Also known as "Statement of profit and loss" or "Statement of earnings".
- Its purpose is to:
    - Show revenue from sales
    - Show the cost of making the product
    - Show the cost of running business
    - Show the profit the business made
- It is like a movie as it has a beginning, middle and end.
- It tells us the following information:
    - **Revenue/Sales:**
        - It is the value of products or services sold.
        - The purpose of business is to satisfy customer needs.
        - Revenue or sales shows business doing something right.
        - It is stated at the beginning of an income statement.
        - Revenue should increase year-to-year.
        - Growing revenue indicates more customers and/or more spending.
        - Falling revenue indicates less customers and/or less spending.
    - **Cost of Goods Sold:**
        - It is the cost of making the product.
        - Also known as "Cost of Sales".
        - It is the cost of the materials and labour that go directly into making the product. (Analogous to "variable cost" in BreakEven analysis)
    - **Gross Profit:**
        - Revenue - Cost of Sales = Gross Profit
        - Gross Profit = profit from making & selling the product
    - **Operating Expenses:**
        - It is the cost of running the business. (Analogous to Fixed Cost in BreakEven analysis)
        - Also called "Selling and general expense".
        - An example is depreciation and amortisation.
        - Operating expenses should not vary with sales. Doubling sales should not lead to doubling everyone's salary or doubling the rent paid at the head office.
    - **Operating Income:**
        - Shows the profits made from operating a business.
        - **Operating profit** is the profit made from operating a business that sells products.
        - Operating profit = Gross profit - Operating expenses
    - **Interest Expense:**
        - It is the cost of borrowed money.
        - **Note:** The loan is not considered revenue or expense since you have to pay it back in full. However, the interest you pay on top of the principle is considered an expense.
        - E.g. $500,000 @ 8% interest = $40,000
    - **Income Tax:**
        - Everyone must pay tax. It's the law.

        - Everyone must tell the government their income or go to jail.
        - Sole proprietors and general partnerships treat any income derived from their employment as personal income, so they'll pay taxes at their marginal personal rate.
        - Corporations are separate legal entities from their owners, so corporations pay taxes in their own name.
        - In Canada business income tax = 15% to 40%
    - **Net Income:**
        - Also called: "Net Profit" or "Net Earnings".
        - Net Income is "the bottom line" of the income statement.
        - It is the result after all expenses are deducted.
        - Net Income = Revenues – All Expenses
        - Net Income = Benefit of owning business
    - **Profit (or Loss):**
        - Was it worth it?
- **Balance Sheet:**
- It shows the value of an organization's accumulated possessions, also known as **assets**, as well as a business's liabilities and equity.
  It can show if a business is big or small and if a business is growing or shrinking.
- It is like a snapshot. It shows information about the business at one, frozen, moment in time.
- **Assets** are possessions available to a business (I.e. Things that can be sold or given away). In accounting, people are not assets. Generally, assets are good to have as they are a store of value and are a potential source of cash.
- **Liabilities** are money that is borrowed or owed.
- Liability is one of two ways of acquiring an asset.
- E.g. To buy a house, you get a mortgage.
- **Equity** is the money from your earnings or savings that you put towards purchasing an asset.
- E.g. To buy a house, you make a down payment.
- Equity is the second way of acquiring an asset.
- **Accounting Equation:** Assets = Liabilities + Equity (The two sides must balance.)
- Assets are things owned. You can pay for assets either through liabilities (borrowing money) or equity (putting down your own money).
- Typical business assets:
    - Cash – bank accounts, petty cash
    - **Accounts receivable** - money owed to you by your customers that is to be paid within the month.
    - Inventory - products ready to be sold
    - Property and equipment
- Typical business liabilities:
    - Short term borrowing - bank line of credit
    - **Accounts payable** - money owed to suppliers. It is usually paid within the month.
    - **Accrued liabilities** - unpaid bills for rent, phone, hydro, etc
    - **Term loans** - truck and car loans
    - Mortgages
- A business gets its equity from either:
    - **share capital** - shareholders invest money to start a business
    - **earnings** - business makes profit, buys more assets

  E.g. Walmart's equity = shares/stock + retained earnings

- A balance also shows when assets are likely to become cash and when liabilities must be paid.
- **Current Assets:** Assets you hope to cash in < 1 year.
- **Current Liabilities:** Liabilities you must pay in < 1 year.
- If a business has a lot of liabilities, this is exciting but risky.
- If the owners use a lot of their resources, this is safe but limiting.

Textbook Notes (Chapter 9):

- **The Income Statement:**
- The **income statement** is a financial statement that shows how much revenue the business generated, and the costs incurred in the course of making and selling products.
- The purpose of an income statement is to show how the business performed in the course of the prior year.
- It is also known as the "Statement of Profit and Loss", frequently referred to as the "P and L".
- It is laid out in a logical fashion:
    1. It starts with revenue.
    2. It then deducts various categories of costs, including the cost of making the good or service sold, the cost of running the business and any taxes paid.
    3. It ends by showing the profit after taxes which is the net benefit to the owners from operating the business.

E.g.

Paul's Guitar Shop, Inc. Income Statement For the Year Ended December 31, 2015		
Revenues		
Merchandise Sales	$ 24,800	
Music Lesson Income	3,000	
Total Revenues:		$ 27,800
Expenses		
Cost of Goods Sold	10,200	
Depreciation expense	2,000	
Wage expense	750	
Rent expense	500	
Interest expense	500	
Supplies expense	500	
Utilities expense	400	
Total Expenses:		14,850
Net Income		$ 12,950

- **Revenue:**
- The first item on an income statement shows the value of revenues that the business generates by selling its goods and services.
- Recall that the purpose of a business is to sell products and services to customers in order to satisfy customer needs. Therefore, the ability to generate revenues is evidence that the business is doing something right.
- If a business's revenue is growing over time, it suggests that customers are buying more products. Falling revenue suggests fewer customers buying less products or the business has to reduce its prices to maintain sales.

- To judge a business's progress, its revenues should be viewed in terms of a 3 to 5 year trend. However, most public corporations use a 5 year trend. Furthermore, GAAP dictates that businesses must compare their income statement for the current year to the year before, for the same reason.
- Revenue should grow by at least the growth rate of the national GDP. Revenue that doesn't keep up with GDP growth means that the business is growing less quickly than the economy generally.
- While growth in revenue is good, a business should not grow faster than its ability to create and deliver products that maintain their quality. Investors and lenders are suspicious of businesses that promise or display sudden, huge increases in revenue.
- Unexplained or unexpected spurts in revenue suggests that either products are underpriced or sales managers are promising more than the operations managers can deliver. If this is the case, quality will fail.
- **Cost of Sales:**
- **Cost of sales** is the cost of making the product itself, and omits all of the administrative costs of running the business.
- **Gross Profit:**
- **Gross Profit** is Revenue - Cost of Sales. It is the profit that comes from selling its products.
- Gross profit shows if business is making a profit from selling its products.
- If a business fails to make gross profit, managers must either:
    - Increase the price of their products. This can be managed by more effective promotion, and advertising.
    - Reduce the cost of making their products. This can be done by buying cheaper materials and employing less people.
    - **Note:** Both have costs. Spending more on promotion & advertising may not generate more sales. Buying cheaper materials will make the quality of your products worse and employing less employees may force customers to wait a long time to purchase your products.
- **Operating Expense:**
- **Operating expense** is the cost of running the business organization as opposed to the cost of making the product. (It is the fixed expenses.)
- It is also known as the "General and Administrative Expense".
- Lenders and shareholders tend to monitor a business's operating expense carefully because the ability to control costs is a sure way to attain profit.
- **Operating Profit:**
- **Operating profit** is the profit made from operating a business that sells products. Operating profit = Gross profit - Operating expenses
- It is also known as "Earnings before Interest and Taxes" or "EBIT".
- If a business has a positive gross profit but a negative operating profit, it usually means that their fixed costs are too high.
- **Interest Expense:**
- **Interest expense** is the interest costs of borrowing money to finance the business.
- The cost of borrowing money does not include the loan amount itself. The loan is neither revenue or a cost since we end up repaying the amount. However, the interest accrued on the loan is an expense.
- **Profit Before and After Tax:**
- Every individual and organization in Canada that earns an income or makes a profit must pay tax.
- Sole proprietors and general partnerships treat any income derived from their employment as personal income, so they'll pay taxes at their marginal personal rate.

- Corporations are separate legal entities from their owners, so corporations pay taxes in their own name.
- **Pre-tax profit** is a company's operating profit after interest on debt has been paid plus any unusual items, but before taxes are paid.
- Also known as “Earnings before taxes” and “EBT”.
- **Net Profit:**
- **Net profit** is the result after all of the business’ costs and expenses (including tax) deducted from its revenues. It represents the benefit, or the return, from owning a business.
- Also known as “The bottom line” as it is the last line in the income statement.
- **The Balance Sheet:**
- The purpose of a **balance sheet** is to show how much capital a business has accumulated and to show how the business has used that capital.
- The balance sheet is like a snapshot as it provides information about the business at a moment in time.
- A balance sheet is a financial statement that reports a company's assets, liabilities and shareholders' equity at a specific point in time.
- **Assets** are the resources owned or acquired by an organization from which benefits are expected to flow.
- Assets include things that can be sold or can be used to create products. Therefore, an asset represents a potential future source of cash. For this reason, assets are generally good to have.
- **Depreciation** is the gradual decline in asset’s value because of age, use or obsolescence.
- **Appreciation** is the increase in market value for an asset.
- **Note:** While employees are a benefit for a business, people are not assets because they cannot be sold to another company. As for sports where it seems like players are sold/bought, they are really buying/selling the player’s contracts. The contract is the asset.
- Example of a balance sheet:

Example Company
Balance Sheet
December 31, 2017

ASSETS	
Current assets	
Cash	$ 2,100
Petty cash	100
Temporary investments	10,000
Accounts receivable - net	40,500
Inventory	31,000
Supplies	3,800
Prepaid insurance	1,500
Total current assets	89,000
Investments	36,000
Property, plant & equipment	
Land	5,500
Land improvements	6,500
Buildings	180,000
Equipment	201,000
Less: accum depreciation	(56,000)
Prop, plant & equip - net	337,000
Intangible assets	
Goodwill	105,000
Trade names	200,000
Total intangible assets	305,000
Other assets	3,000
Total assets	$ 770,000

LIABILITIES	
Current liabilities	
Notes payable	$ 5,000
Accounts payable	35,900
Wages payable	8,500
Interest payable	2,900
Taxes payable	6,100
Warranty liability	1,100
Unearned revenues	1,500
Total current liabilities	61,000
Long-term liabilities	
Notes payable	20,000
Bonds payable	400,000
Total long-term liabilities	420,000
Total liabilities	481,000
STOCKHOLDERS’ EQUITY	
Common stock	110,000
Retained earnings	220,000
Accum other comprehensive income	9,000
Less: Treasury stock	(50,000)
Total stockholders’ equity	289,000
Total liabilities & stockholders’ equity	$ 770,000

The notes to the sample balance sheet have been omitted.

- Types of Assets Commonly Owned in Businesses:
    - **Cash** - Cash is used to buy other assets, and pay bills.
    - **Account Receivable** - Money that a business is legally owed, and is expecting to receive. Most account receivables are not due from customers. They are mostly due from other businesses in the supply chain.
    - **Raw Materials** - Businesses need raw materials to produce goods and services. Warehouses full of parts, supplies, and natural resources have value.
    - **Finished Goods** - Once built or assembled, a company hopes and intends to sell the finished products. **Inventory** is finished goods ready to be bought.
    - **Machinery and Capital Equipment** - Businesses can't operate without machinery plant and equipment. While machines and equipment can be rented or leased by businesses, they are often owned.
    - **Buildings and Real Estate** - While many businesses rent or lease their offices, often they are owned.
    - **Intangible Assets** - A resource or possession that has little to no tangible value, but can bring financial benefit. Examples include sports player's contract, trademarks, patents and copyrights.
- **Owner's Equity:**
- **Owner's equity** is the value of the capital put into a business by its owner.
  E.g. If you start a tutoring business and you buy a $400 colour printer for your business, the money you paid for the asset represents your financial commitment to the business. It is your owner's equity.
- Usually, the founder's capital is limited. Once the entrepreneurs have exhausted their own capital, they must find investors.
- A balance sheet splits the owner's equity into 2 parts:
    1. **Paid-in capital** is capital that business owners actively pay into the business.
       If a sole proprietor or partners will use their own money to buy assets, then on the balance sheet, it will say "owner's capital" on the balance sheet.
       If a shareholder purchases shares of a company and the corporation uses the capital to buy assets, then it will say "share capital" on the balance sheet.
    2. **Retained earnings** are the profits that a business accumulates as it grows. These are used to buy more assets, hire new employees and create more profit in future.
- At the end of each fiscal year, the accounts prepare the business's financial statements and calculate the profits. At that point, the owners of the business have every right to take that profit as cash. Every partner, limited partner, or shareholder could demand that they take their money, but most don't because of investment.
- **Investment** is a decision not to spend one's capital for immediate consumption, but to put it to work so that it might produce more capital in the future.
- Business owners not only put capital into a business. Their intent is to keep capital in business as long as it grows to make more profit.
- **Liabilities:**
- **Liabilities** are money that a business has borrowed or money that it owes.
- Liability is another way of saying loan, obligation or debt.
  E.g. Mortgage
- Businesses can raise capital from one of 2 sources:
    1. Owner's Equity
    2. Borrowing Money/Capital (Liabilities)
- Types of liabilities commonly owed by most businesses:
    - **Bank line of credit** - These are loans from a bank. Many of these loans are short in duration. A **line of credit** is an agreement between a bank and a borrowing

customer that the customer can withdraw money up to an agreed amount as long as the loan is repaid fully at some point during the year. Lines of credit are used by businesses that make large purchases but don't want to negotiate separate loans each time. Your personal credit card is a line of credit.

  - **Accounts payable** - Money that a business legally owes, and is expecting to have to pay. It is usually paid within the month. These are mostly due to other businesses in the supply chain.
    E.g. An ice cream factory purchases a large quantity of milk from a farmer and promises to pay the farmer at a later date.
  - **Tax payable** - Money owing to a municipal, provincial or federal government.
  - **Loans payable** - Loans due to be repaid in next 12 months.
  - **Term loans** - Loans that must be repaid eventually but not within the next 12 months.
  - **Mortgages** - These are loans to pay for buildings like warehouses, factories and offices. The borrower must hand over ownership of the building if payments on the loans are not made.
- **Accounting Equation:**
- **Accounting Equation:** Assets = Owner's Equity + Liabilities
- **Liquidity:**
- **Liquidity** is the ease and speed with which an asset can be converted into cash.
- The reason why liquidity is important is because at the end of the day, businesses need cash and some assets can be hard to sell/turn to cash while other assets can be easily turned to cash. For example, if a company has a lot of machinery and equipment, but not enough cash to pay its taxes or debts, it will be in trouble.
- Assets are used to generate revenue but most assets aren't cash and can't be used to buy things. A business needs money to pay day-to-day bills. That's why we care about a business's current assets and current liabilities.
- Cash is the most liquid asset.
- **Current Assets:**
- **Current assets** are assets that an organization hopes or expects to convert into cash within the current year, in other words, the next 12 months.
- The most liquid asset is cash itself followed by any short term bank deposits. Cash is the most liquid because we can use it right away. With other assets, we have to wait some time to convert it into cash. For example, accounts receivable, money owed to you by your customers, is usually due to be paid within 30 days.
- List of current assets includes:
  - **Cash** - By definition cash is a perfectly liquid asset.
  - **Accounts Receivable** - Money owed to the business which is normally due within a month.
  - **Finished Goods Inventory** - These are the products ready and available for sale.
  - **Work in Progress** - These are the products that will soon be available for sale.
  - **Raw Materials** - Inputs to products which are scheduled to be created and made available for sale.
- **Fixed assets** are assets that aren't intended for immediate sale. Examples include machinery, equipment, parts, trucks and buildings. These items are assets because they are used in the creation of goods and services, but they generate cash indirectly.
- **Current Liabilities:**
- Liabilities, like assets, are not all the same.
- Some liabilities are paid in the short term while others are paid in the long term.

- E.g. If you get a mortgage to buy your house, you may spend 20-25 years paying it off. However, you pay credit card debts at the end of each month.
- **Measures of Liquidity:**
- **Cash** - The quickest, surest source of liquidity. This is followed by having a bank account.
- **Working capital** = Current Assets - Current Liabilities. It is the difference between an organization's current assets and current liabilities or anticipated inflows and outflows for the next 12 months. Working capital is intended to help the organization understand its ability to pay bills during the period
- **Current ratio** = Current assets / current liabilities. It shows the relative difference between current assets and liabilities. The purpose of the current ratio is the same as working capital, to understand an organization's ability to pay its bills during the current year. It is a more useful measure for managing short term cash flows.
- **Leverage:**
- **Leverage** is the ratio of how much borrowing a business does, relative to the owners' equity.
- Leverage is important because while borrowing allows business to get more assets, it also means they have to pay more interest and the more risk they are taking. Furthermore, the more capital a company/business borrows, the more they are asking others to take the risk.
- Banks look at a company/business's leverage before approving another loan for that company/business.
- **Debt to equity ratio** = Total liabilities / total owners' equity.
- Debt to equity ratio is important because banks and other lenders place limits on what the ratio should be.
- It was previously stated that Canadian Banks will lend home buyers only 75% of purchase price of property. They limit the debt to equity ratio on mortgage lending to 75% : 25% or 3:1.
- While there is no limit to what the ratio should be but banks and other lenders usually provide no more than 80% or a 4:1 ratio to any enterprise, no matter how reputable it is.
- Both the income statement and the balance sheet show how the business has done and where it currently stands and tells the reader about the profit made relative to the capital risked.
- **Return on Investment:**
- **Return on investment (ROI)** is the profit generated by a business relative to the amount of capital invested by the owners at the beginning of the year.
  ROI = (Net Profit / Owners' Equity) x 100%
- This final piece of information from financial statements combines the information from the income statement with information from the balance sheet.

Textbook Definitions (Chapter 9):

- **Accounting Equation:** Assets = Owner's Equity + Liabilities
- **Accounts payable:** Money that a business legally owes, and is expecting to have to pay. It is usually paid within the month.
- **Accounts receivable:** Money that a business is legally owed, and is expecting to receive. It is usually paid within the month.
- **Appreciation:** The increase in market value for an asset.
- **Assets:** The resources owned or acquired by an organization from which benefits are expected to flow.
- **Balance sheet:** The financial statement that shows how much capital has been made available to the business and how the business has used that capital.
- **Cash:** The quickest, surest source of liquidity.

- **Cost of sales:** The cost of making the product itself, and omits all of the administrative costs of running the business.
- **Current assets:** Assets that an organization hopes or expects to convert into cash within the current year, in other words, the next 12 months.
- **Current ratio** = Current assets / current liabilities.
- **Debt to equity ratio** = Total liabilities / total owners' equity.
- **Depreciation**: The gradual decline in asset's value because of age, use or obsolescence.
- **Fixed assets:** Assets that aren't intended for immediate sale.
- **Gross Profit:** Revenue - Cost of Sales. It is the profit that comes from selling its products.
- **Income statement:** A financial statement that shows how much revenue the business generated, and the costs incurred in the course of making and selling products.
- **Intangible assets:** A resource or possession that has little to no tangible value, but can bring financial benefit.
- **Interest expense:** The interest costs of borrowing money to finance the business.
- **Inventory:** Finished goods ready to be bought.
- **Investment:** A decision not to spend one's capital for immediate consumption, but to put it to work so that it might produce more capital in the future.
- **Leverage:** The ratio of how much borrowing a business does, relative to the owners' equity.
- **Liabilities:** Money that a business has borrowed or money that it owes.
- **Line of credit:** An agreement between a bank and a borrowing customer that the customer can withdraw money up to an agreed amount as long as the loan is repaid fully at some point during the year.
- **Liquidity:** The ease and speed with which an asset can be converted into cash.
- **Net profit:** The result after all of the business' costs and expenses (including tax) deducted from its revenues. It represents the benefit, or the return, from owning a business.
- **Operating expense:** The cost of running the business organization as opposed to the cost of making the product.
- **Operating profit:** The profit made from operating a business that sells products.
  Operating profit = Gross profit - Operating expenses.
- **Owner's equity:** The value of the capital put into a business by its owner.
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- **Pre-tax profit:** A company's operating profit after interest on debt has been paid plus any unusual items, but before taxes are paid.
- **Retained earnings:** The profits that a business accumulates as it grows. These are used to buy more assets, hire new employees and create more profit in future.
- **Return on investment (ROI):** The profit generated by a business relative to the amount of capital invested by the owners at the beginning of the year.
  ROI = (Net Profit / Owners' Equity) x 100%
- **Working capital:** It is the difference between an organization's current assets and current liabilities or anticipated inflows and outflows for the next 12 months.
  Working capital = Current Assets - Current Liabilities.