ACC250: Intro to Financial Accounting
Ch4. Adjustments & Financial Statements

Jaeyoon Yu, Ph.D.
Central Michigan University

Table of Contents

Recall: Cost Principle (Ch2) for Asset Valuation

Cost Principle

Assets are initially recorded at their **acquisition cost**, which includes all costs necessary to acquire the asset and prepare it for its intended use.

Implications for long-term assets (e.g., Property, Plant, and Equipment (PPE)):

- When paying cash for PPE, it is **not an expense**, but an **asset**.
- PPE is recorded at their **acquisition cost**.

EX. Buying equipment for $10M that will be used for 5 years. No residual value.

PPE (+A)	10M	
Cash (-A)		10M

Recall: Matching Principle (Ch3) for Expense Recognition

Matching Principle

- Expenses should be recognized **in the same period as the revenues** they help to generate, regardless of when cash is paid. In other words,
- Expenses should be recognized when the resources are **used up** to generate the revenues.

Implications for long-term assets (e.g., Property, Plant, and Equipment (PPE)):

- When paying cash for PPE, it is **not an expense**, but an **asset**.
- The cost of PPE is allocated over its useful life (i.e., depreciation).

EX. Buying equipment for $10M that will be used for 5 years. No residual value.

- On the purchase date, the equipment is recorded as an asset.
- The cost of the equipment is allocated over its useful life (i.e., depreciation).
- $2M is the depreciation expense for every year.

Table of Contents

What is Expenditure?

Expenditure

- The outflow of cash (or assets) to settle a liability or acquire goods and services.
- Mostly, it is a **cash outflow**.
- Examples include:
  1. paying utilities
  2. paying cash to suppliers
  3. buying equipment

- Expenditure might **NOT** be an expense given the matching principle.
- Check if the expenditure is used to generate revenues in the **same period**.
  1. If it is, then it is an **expense**.
     $\rightarrow$ **Operating Expenditure (OPEX)**
  2. If it is not, then it is an asset as it will be used to generate revenues in the future.
     $\rightarrow$ **Capital Expenditure (CAPEX)**

OPEX

Operating Expenditure (OPEX)

Expenditure that is used to operate the business.

- Recurring costs that are used to operate the business.
- Examples:
  - Salaries and wages paid to employees
  - Rent for business premises
  - Utility bills (electricity, water, etc.)
- Accounting rule: **Expense** the OPEX immediately.

CAPEX

Capital Expenditure (CAPEX)

Expenditure that is used to acquire long-term assets.

- Investments in long-term assets that provide long-term benefits.
- Examples:
  - Purchasing equipment
  - Building a new office
  - Prepaid insurance
- Accounting rule:
  1. **Capitalize** the CAPEX as an **Asset** (**Cost Principle**).
  2. **Expense** the **Capitalized Asset** over multiple periods (**Matching Principle**).
  3. The process of allocating the cost of the asset over its useful life is called **depreciation**.

*Note: We say **"Capitalized"** when an expenditure is recorded as an asset instead of an expense.

OPEX vs CAPEX: Summary

- **OPEX**, for recurring costs, is **expensed immediately**.
- **CAPEX**, for long-term investments, is **capitalized** as an asset and **expensed** over multiple periods.

Depreciation Process

Depreciation

The process of allocating the cost of a long-term, tangible asset over its useful life.

- **Depreciation expense** is recorded on the income statement.
- **Depreciation expense** is cumulated in the **accumulated depreciation** account.
- **Accumulated depreciation** **decreases** the **carrying value** of the asset.

Carrying Value (Book Value)

Carrying Value or Book Value

The value of an asset reported on the balance sheet.

- Assets are recorded at their **acquisition cost**.
- Carrying value of assets are **adjusted** (e.g., depreciation) over **the asset's useful life**.

Depreciation Expense and Accumulated Depreciation

Depreciation Expense (DepExp, Expense)

The amount of the tangible asset's cost that is allocated to the current accounting period.

Accumulated Depreciation (AccDep, Contra Asset, xA)

The total amount of depreciation expense that has been recorded against the asset since it was acquired.

Contra Asset Accounts

Contra Asset (xA)

- An account that is used to reduce the value of an asset.
- It is recorded on the balance sheet as a contra asset account (xA).

Accumulated Depreciation (xA)

- It is used to reduce the value of PPE.
- It is recorded on the balance sheet, right after PPE.
- The initial book value less accumulated depreciation is the **carrying value** of the asset.

Example: CAPEX

Suppose we purchase equipment for \$10M, with an expected useful life of 5 years. Our company prepares financial statements on Dec 31.

Question	**Answer**
Will the asset be used to generate revenues over 5 years?	____
Will it be capitalized as a long-term asset when purchased?	____
Will expenses be recognized over 5 years?	____
Will the value of the asset decrease over time?	____
If depreciation is distributed equally, how much per year?	_____

Journal entries on:

Jan 1, 2031:	Equipment (+A)	____	
	Cash (-A)		____

Dec 31, 2031:	Depreciation Expense (+E)	___	
	Accumulated Depreciation (+xA, -A)		___

At the end of 2031,

- The depreciation expense is ____.
- The accumulated depreciation is ____.
- The carrying value of the asset is ____.

At the end of Year 1

PPE (at Cost)	____
Less: Accum.Dep.	____
PPE, net	____

Journal entries on:

Dec 31, 2032:	Depreciation Expense (+E)	___
	Accumulated Depreciation (+xA, -A)	___

At the end of 2032,

- The depreciation expense is ____.
- The accumulated depreciation is ____.
- The carrying value of the asset is ____.

At the end of Year 2

PPE (at Cost)	____
Less: Accum.Dep.	____
PPE, net	____

Suppose we purchase equipment for **$10M**, with an expected useful life of 5 years. Our company prepares financial statements on Dec 31.

	Purchased	Depreciation Expense	Accumulated Depreciation	Carrying Value
Jan 1, 2031	____			____
Dec 31, 2031		___	___	___
Dec 31, 2032		___	___	___
Dec 31, 2033		___	___	___
Dec 31, 2034		___	___	___
Dec 31, 2035		___	____	_

- $2M is the depreciation expense for every year.
- Depreciation expense is cumulated over the years.
- Carrying value of the asset is the remaining value of the asset at the end of the year.

Table of Contents

Adjustments

Adjustments

- Adjustment journal entries (AJEs) are needed at the end of each reporting period to ensure that all of the accounts (A,L, SHE, R, and E) have the correct balance.
- Adjustments are required because of mismatch between the timing of the recognition of revenues or expenses and the timing of the payment of cash.
- Adjustments should be carefully checked at the end of each reporting period.

To figure out how much to adjust, we need to compare:

- **where we were** before the adjustment.
- **where we are supposed to be** after the adjustment.

EX. Adjustment to Prepaid Rent:

- Paid \$7,200 for September, October, and November's rent in advance.
- Recorded as **Prepaid Expense (Asset!)** initially.

How much do we need to adjust at the end of the september?

- Where we were before the adjustment: ______.
- Where we are supposed to be after the adjustment: ______.
  → We need to adjust ______.

Deferral Adjustments

Deferral Adjustments

Adjustments required because REV and EXP are deferred to a future period while cash is paid/received earlier.

Examples:

Type	**What is Deferred?**
Deferred revenues (L)	Revenues
Supplies (A)	Supplies Expense
Prepaid expenses (A)	Prepaid Expense

Adjustments to Deferred Revenues

- ABC corp. collected cash in January and delivered smartphones in February.

January:

February (Adjustment Journal Entry):

Due to the adjustment in February,

- The balance of Deferred Revenues becomes **$0**.
- $10,000 of Deferred Revenues are recognized as Sales Revenues.

Adjustments to Supplies

- ABC corp. purchased supplies for $2,000 in January and used the half of them in February.

January:

February (Adjustment Journal Entry):

Due to the adjustment in February,

- The balance of Supplies becomes **$1,000**.
- $1,000 of Supplies are recognized as Supplies Expense.

Adjustments to Prepaid Expenses

- ABC corp. purchased a 12-months insurance plan ($12,000) at the beginning of January.

January 1:

January 31 (Adjustment Journal Entry):

Due to the adjustment in January,

- The balance of Prepaid Insurance becomes **$11,000**.
- $1,000 of Prepaid Insurance are recognized as Insurance Expense.

Table of Contents

Accrual Adjustments

Adjustments required because REV and EXP are recognized in the current period while cash will be paid/received later.

Examples:

Variable Name	**What is Accrued?**
Interest Receivable (A)	Interest earned but not yet received
Wages Payable (L)	Wages incurred but not yet paid
Income Taxes Payable (L)	Income taxes incurred but not yet paid

Adjustments to Interest Receivable

- ABC corp. earned $1,000 of interest in January but did not receive the cash until February.

January (Adjustment Journal Entry):

February:

Due to the adjustment in January,

- The balance of Interest Receivable becomes **$1,000**.
- There is no cash received in January, but interest is earned.
- Accountants should carefully adjust the balance of Interest Receivable to match the interest earned.

Adjustments to Wages Payable

- ABC corp.'s employees worked for the firm in January and received $5,000 in February.

January (Adjustment Journal Entry):

February:

Due to the adjustment in January,

- The balance of Wages Payable becomes **$5,000**.
- There is no cash paid in January, but wages are incurred.
- Accountants should carefully adjust the balance of Wages Payable to match the wages incurred.

Risks related to Accrual Adjustments

- There is **no cash inflows/outflows** when accural adjustments are made.
- It is **easy to make mistakes** by not making adjustments when they should be made.
- Accountants should **check all assets and liability balances** at the **end of the reporting period** to ensure they are correct.

Previous Transactions (Ch2 and Ch3)

1. Ch2-(h): Noodlecake receives supplies costing $600 on account.

2. Ch2-(d): Noodlecake purchases and receives $9,600 in computers, printers, and desks, in exchange for its promise to pay $9,600 at the end of the month.

3. Ch2-(g): Noodlecake receives the $9,000 of app game code ordered in (f), pays $4,000 cash, and promises to pay the remaining $5,000 next month.

1. Ch3-(f): On September 1, Noodlecake paid $7,200 in advance for September, October, and November rent.

2. Ch3-(b): Noodlecake issued three $100 gift cards at the beginning of September.

Noodlecake – Adjusting Journal Entries (Deferrals)

1. Of the $600 in supplies previously received, $250 remain on hand at September 30.

2. Three months of rent were prepaid on September 1 for $7,200, but one month has now expired, leaving only two months prepaid at September 30.

3. The computer equipment ($9,600), which was estimated to last two years, has now been used for one month, representing an estimated expense of $400.

4. The app software developed for Noodlecake ($9,000), estimated to have three years of usefulness, has now been used for one month at an estimated expense of $250.

5. Noodlecake customers redeemed $100 of previously issued gift cards as payment for game downloads.

Noodlecake – Adjusting Journal Entries (Accruals)

6. Noodlecake provided $3,250 of consulting services to other app developers in September, with payment to be received in October.

7. Noodlecake owes $1,950 of wages to employees for work done in the last six days of September.

8. Noodlecake has not paid or recorded the $100 interest that it owes for this month on its note payable.

9. Noodlecake pays income tax at an average rate equal to 20 percent of the company's income before taxes. Income Tax Expense for this month is $200.

T-accounts

- In Ch2, we went through transactions in August.
- In Ch3, we went through transactions in September.
- In Ch4, we are **still in September**.
- So far, we went through adjustment journal entries required at the end of September.
- We now need to post them to the T-accounts.
- We will start from the T-accounts in Ch3.
- Two types of T-accounts:
  - Type 1: T-accounts for those NOT affected by AJEs (e.g., Cash)
  - Type 2: T-accounts for **those affected by AJEs** (e.g., Deferred Revenues)

Cash (Type 1)

Unadj. Bal. 16,900	
Adj. Bal. 16,900	

Deferred Revenues (Type 2)

	Unadj. Bal. 300
AJE 100	
	Adj. Bal. 200

Transaction 1

Of the $600 in supplies previously received, $250 remain on hand at September 30.

Supplies Expense (+E, -SE)	350	
Supplies (-A)		350

Supplies Expense (E)

Unadj. Bal. 0	
350 (AJE)	
Adj. Bal. 350	

Supplies (A)

Unadj. Bal. 600	
	350 (AJE)
Adj. Bal. 250	

Transaction 2

Three months of rent were prepaid on September 1 for $7,200, but one month has now expired, leaving only two months prepaid at September 30.

Rent Expense (+E, -SE)	2,400	
Prepaid Rent (-A)		2,400

Rent Expense (E, SE)

Unadj. Bal. 0	
2,400 (AJE)	
Adj. Bal. 2,400	

Prepaid Rent (A)

Unadj. Bal. 7,200	
	2,400 (AJE)
Adj. Bal. 4,800	

Transaction 3

The computer equipment ($9,600), which was estimated to last two years, has now been used for one month, representing an estimated expense of $400.

Depreciation Expense (+E, -SE)	400	
Accum. Dep. (+XA, -A)		400

Depreciation Expense (E)

Unadj. Bal. 0	
400 (AJE)	
Adj. Bal. 400	

Accum. Dep. (XA)

	Unadj. Bal. 0
	400 (AJE)
	Adj. Bal. 400

Equipment (A)

Unadj. Bal. 9,600	
Adj. Bal. 9,600	

Transaction 4

The app software developed for Noodlecake ($9,000), estimated to have three years of usefulness, has now been used for one month at an estimated expense of $250.

Amortization Expense (+E, -SE)	250	
Accum. Amortization (+XA, -A)		250

Amortization Expense (E)

Unadj. Bal. 0	
250 (AJE)	
Adj. Bal. 250	

Accum. Amortization (XA)

	Unadj. Bal. 0
	250 (AJE)
	Adj. Bal. 250

Software (A)

Unadj. Bal. 9,000	
Adj. Bal. 9,000	

Transaction 5

Noodlecake customers redeemed $100 of previously issued gift cards as payment for game downloads.

Deferred Revenues (-L)	100	
Sales Revenues (+R, +SE)		100

Revenues (R)

	Unadj. Bal. 12,000
	100 (AJE)
	Adj. Bal. 12,100

Deferred Revenues (L)

	Unadj. Bal. 300
100 (AJE)	
	Adj. Bal. 200

Transaction 6

Noodlecake provided app development services of $3,250 to a customer at the end of September. The customer will pay in October.

Accounts Receivable (+A)	3,250	
Service Revenue (+R, +SE)		3,250

Accounts Receivable (A)

Unadj. Bal. 500	
3,250 (AJE)	
Adj. Bal. 3,750	

Service Revenue (R)

	Unadj. Bal. 0
	3,250 (AJE)
	Adj. Bal. 3,250

Transaction 7

Noodlecake owes $1,950 of wages to employees for work done in the last six days of September.

Wages Expense (+E, -SE)	1,950	
Wages Payable (+L)		1,950

Wages Expense (E)

Unadj. Bal. 7,800	
1,950 (AJE)	
Adj. Bal. 9,750	

Wages Payable (L)

	Unadj. Bal. 0
	1,950 (AJE)
	Adj. Bal. 1,950

Transaction 8

Noodlecake has not paid or recorded the $100 interest that it owes for this month on its note payable.

Interest Expense (+E, -SE)	100
Interest Payable (+L)	100

Interest Expense (E)	
Unadj. Bal. 0	
100 (AJE)	
Adj. Bal. 100	

Interest Payable (L)	
	Unadj. Bal. 0
	100 (AJE)
	Adj. Bal. 100

Transaction 9

Noodlecake pays income tax at an average rate equal to 20 percent of the company's income before taxes. Income Tax Expense for this month is $200.

Income Tax Expense (+E, -SE)	200	
Income Tax Payable (+L)		200

Income Tax Expense (E)	
Unadj. Bal. 0	
200 (AJE)	
Adj. Bal. 200	

Income Tax Payable (L)	
	Unadj. Bal. 0
	200 (AJE)
	Adj. Bal. 200

Unadjusted Trial Balance to Adjusted Trial Balance

- Update accounts that are affected by AJEs.

Unadjusted Trial Balance

Account Title	Debit ($)	Credit ($)
Cash	16,900	
Accounts Receivable	500	
Supplies	600	
Prepaid Rent	7,200	
Equipment	9,600	
Logo & Trademarks	300	
Software	9,000	
Accounts Payable		10,700
Deferred Revenues		300
Notes Payable		20,000
Common Stock		10,000
Retained Earnings		0
Sales Revenue		12,000
Wages Expense	7,800	
Utilities Expense	600	
Advertising Expense	500	
Total		

Adjusted Trial Balance

Account Title	Debit ($)	Credit ($)
Cash	16,900	
Accounts Receivable	**3,750**	
Supplies	**250**	
Prepaid Rent	**4,800**	
Equipment	9,600	
Accum. Dep.		**400**
Logo & Trademarks	300	
Software	9,000	
Accum. Amort.		**250**
Accounts Payable		10,700
Deferred Revenues		**200**
Notes Payable		20,000
Wages Payable		**1,950**
Interest Payable		**100**
Income Tax Payable		**200**
Common Stock		10,000
Retained Earnings		0
Sales Revenue		**12,100**
Service Revenue		**3,250**
Wages Expense	**9,750**	
Rent Expense	**2,400**	
Utilities Expense	600	
Advertising Expense	500	
Supplies Expense	**350**	
Depreciation Expense	**400**	
Amortization Expense	**250**	
Interest Expense	**100**	
Income Tax Expense	**200**	
Total		

Relationship between Financial Statements

Noodlecake, Inc.
Income Statement
For the Month Ended September 30, 2025

Revenues	
Sales Revenue	$12,100
Service Revenue	3,250
Total Revenues	**15,350**
Expenses	
Wages Expense	$9,750
Rent Expense	2,400
Utilities Expense	600
Advertising Expense	500
Supplies Expense	350
Depreciation Expense	400
Amortization Expense	250
Interest Expense	100
Income Tax Expense	200
Total Expenses	**14,550**
Net Income	**$800**

Noodlecake, Inc.
Statement of Retained Earnings
For the Month Ended September 30, 2025

Beg. Retained Earnings	$0
+) **Net Income**	**800**
-) Dividends	0
End. Retained Earnings	**$800**

Noodlecake, Inc.
Balance Sheet
As of September 30, 2025

Assets	
Cash	$16,900
Accounts Receivable	3,750
Supplies	250
Prepaid Rent	4,800
Total Current Assets	**$25,700**
Equipment	
Less: Accum. Dep.	
Equipment, net	9,200
Software	
Less: Accum. Amort.	
Software, net	8,750
Logo & Trademarks	300
Total Assets	**$43,950**
Liabilities	
Accounts Payable	$10,700
Deferred Revenues	200
Wages Payable	1,950
Income Tax Payable	200
Interest Payable	100
Total Current Liabilities	**$13,150**
Notes Payable	20,000
Total Liabilities	**$33,150**
Shareholders' Equity	
Common Stock	$10,000
Retained Earnings	800
Total Shareholders' Equity	**$10,800**
Total Liabilities & Equity	**$43,950**

Recall: Temporary and Permanent Accounts

- **I/S accounts** reflect the financial effects of transactions in the current period.
- **I/S accounts** are temporary.

- **Paying dividends** is cash distribution to shareholders.
- **Dividend** is a temporary account.

- **B/S accounts** reflect the financial effects of transactions in all periods.
- **B/S accounts** are permanent.

Closing Process

Retained Earnings Equation

End. RE = Beg. RE + Net Income - Dividends

Closing Process: Close all temporary accounts.

- **Revenues** increase Retained Earnings.
- **Expenses** decrease Retained Earnings.
- **Dividends** decrease Retained Earnings.

In the rest of the packet:

- We briefly go over the closing process for Revenues and Expenses.
- We do not cover the closing process for Dividends.
- We do not cover the closing journal entries for all temporary accounts.

Closing Process for Revenues and Expenses

Income Statement Equation

Net Income = Revenues - Expenses

- Revenues = 12,100 + 3,250 = ______
- Expenses = 9,750 + 2,400 + 600 + 500 + 350 + 400 + 250 + 100 + 200 = ______
- Net Income = 15,350 - 14,550 = ___
- Revenue and Expense accounts are closed to Retained Earnings.
  - Revenue and Expense accounts are initialized to _.
  - Retained Earnings are increased by ____.

Post Closing Trial Balance

- REV (15,350) and EXP (14,550) accounts are closed to Retained Earnings (800).

Adjusted Trial Balance

Account Title	Debit ($)	Credit ($)
Cash	16,900	
Accounts Receivable	3,750	
Supplies	250	
Prepaid Rent	4,800	
Equipment	9,600	
Accum. Dep.		400
Logo & Trademarks	300	
Software	9,000	
Accum. Amort.		250
Accounts Payable		10,700
Deferred Revenues		200
Notes Payable		20,000
Wages Payable		1,950
Interest Payable		100
Income Tax Payable		200
Common Stock		10,000
Retained Earnings		0
Sales Revenue		12,100
Service Revenue		3,250
Wages Expense	9,750	
Rent Expense	2,400	
Utilities Expense	600	
Advertising Expense	500	
Supplies Expense	350	
Depreciation Expense	400	
Amortization Expense	250	
Interest Expense	100	
Income Tax Expense	200	
Total		

Post Closing Trial Balance

Account Title	Debit ($)	Credit ($)
Cash	16,900	
Accounts Receivable	3,750	
Supplies	250	
Prepaid Rent	4,800	
Equipment	9,600	
Accum. Dep.		400
Logo & Trademarks	300	
Software	9,000	
Accum. Amort.		250
Accounts Payable		10,700
Deferred Revenues		200
Notes Payable		20,000
Wages Payable		1,950
Interest Payable		100
Income Tax Payable		200
Common Stock		10,000
Retained Earnings		800
Sales Revenue		0
Service Revenue		0
Wages Expense	0	
Rent Expense	0	
Utilities Expense	0	
Advertising Expense	0	
Supplies Expense	0	
Depreciation Expense	0	
Amortization Expense	0	
Interest Expense	0	
Income Tax Expense	0	
Total		

Post-Closing Trial Balance

In total, we check trial balances three times.

- Trial balance before making adjustments (Ch 3).
- Trial balance after making adjustments (Ch 4).
- Trial balance after closing temporary accounts (Ch 4).

Table of Contents

Conclusion of the Process

1. Analyzing transactions (Ch2)
2. Recording journal entries (Ch2)
3. Posting to T-accounts (Ch2)
4. Unadjusted trial balance (Ch3)
5. **Adjustments (accruals and deferrals)** (Ch4)
6. Adjusted trial balance (Ch4)
7. Income statement
8. Statement of retained earnings
9. Balance sheet
10. Closing process (Ch4)
11. Post-closing trial balances (Ch4)

*Ch.No. refers to the chapter where the topic is first introduced.