Thammasat University
Faculty of Economics
Bachelor of Economics (International Program)

AC201
Fundamental Accounting

Semester 1/2012

Course Materials

Topic:

Chapters 12 Reporting and Interpreting Investments in Other Companies

Session:

Session #13

Instructor:

Assistant Professor Dr. Orapan Yolrabil

AC201 Fundamental Accounting

SCI: Interest revenue and Dividend revenue
SCI Equity income from associated company
SCI: Unrealized holding gain (loss) -- Trading

SFP: Equity
– Unrealized holding gain (loss) -- AFS

✓ FINANCIAL STATEMENTS
- ✓ Statement of Financial Position
- ✓ Statement of Income
- ✓ Statement of Changes in Equity
- Statement of Cash Flows

✓ ASSETS
- ✓ Cash
- Investments in debt and equity securities
- ✓ Accounts receivable
- ✓ Notes receivable
- ✓ Inventory
- ✓ Prepaid expenses
- ✓ Property, plant, and equipment
- ✓ Intangible assets
- ✓ Natural resources

We are here

✓ LIABILITIES
- ✓ Accounts payable
- ✓ Accrued liabilities
- ✓ Unearned revenues
- ✓ Notes payable
- ✓ Bonds payable

✓ EQUITY
- ✓ Capital share
  - ✓ Preferred share
  - ✓ ordinary share
- ✓ Retained earnings
  - ✓ Appropriated R/E
  - ✓ Unappropriated R/E
- ✓ Treasury share

✓ Accounting Cycle

Financial Statement Items

FINANCIAL STATEMENT ANALYSIS

AC201 Fundamental Accounting

CHAPTER 12: REPORTING AND INTERPRETING INVESTMENTS IN OTHER COMPANIES

Assistant Professor Dr. Orapan Yolrabil
Department of Accounting
Thammasat Business School
Thammasat University

Investment in Debt and Equity Securities

- Investments in securities can include both **debt** and **equity** securities.
  - ***Debt securities*** reflect a ***creditor*** relationship.
  - ***Equity securities*** result in an ***owner*** relationship.

Debt Securities

- Financial instruments issued by a company that carry with them a promise of interest payments and the repayment of principal.

Equity Securities

- Shares of ownership in a corporation that can change significantly in value and that provide for a return to investors in the form of dividends.

Accounting Basics for Debt Securities (1)

- **Acquisition:**
  - Debt securities are recorded at cost when purchased.
    - Music City paid 30,000 Baht on Sept. 1, 20X8, to buy Mega's 7%, two-year bonds payable with a 30,000 Baht par value. The bonds pay interest semiannually on Aug. 31 and Feb. 28.
    - The bonds will be matured on Aug, 31, 20X10.

20X8	Dr. Investments in Mega bonds [A+]	30,000	
Sept. 1	Cr. Cash [A-]		30,000
	To record the purchase of Mega's 7%, 2-year bonds for 30,000 Baht.		

Accounting Basics for Debt Securities (2)

- **Interest earned:**
  - Interest revenue for investments in debt securities is recorded when earned.
    - On Dec. 31, 20X8, at the end of its accounting period, Music City accrues interest receivable in the adjustment process.

20X8	Dr. Interest receivable [A+]	700	
Dec. 31	Cr. Interest revenue [REV+, E+] (30,000 Baht x 7% x 4/12		700
	To record accrued interest earned.		

Statement of Financial Position
- Investments in bonds
  - 30,000 Baht
- Interest receivable
  - 700 Baht

Statement of income
- Interest revenue
  - 700 Baht

Accounting Basics for Debt Securities (3)

- **Interest received:**
  - On Feb. 28, 20X9, Music City records the receipt of semiannual interest for 1,050 Baht.

20X9	Dr. Cash [A+]	1,050	
Feb. 28	Cr. Interest receivable [A-]		700
	Interest revenue [REV+, E+] (30,000 Baht x 7% x 2/12)		350
	To record the receipt of 6-month interest on bonds.		

- The same entry is made on succeeding interest payment dates:
  - Aug 31, 20x9
  - Feb 28, 20x10 and
  - Aug 31, 20x10

Accounting Basics for Debt Securities (4)

- **Disposition:**
  - When the bonds mature on Aug 31, 20X10, the receipt of the principal payment from the bond issuer is recorded.

20X10	Dr. Cash [A+]	30,000	
Aug. 31	Cr. Investment in Mega bonds [A-]		30,000
	To record the receipt of cash from matured bonds.		

Accounting Basics for Equity Securities (1)

- **Acquisition:**
  - Equity securities are recorded at cost when acquired, including commissions or brokerage fee paid.
    - Music City purchases for cash 1,000 shares of Sage’s common stock at par value for 86,000 Baht on Oct. 10, 20X8.

20X8	Dr. Investments in Sage stock [A+]	86,000	
Oct. 10	Cr. Cash [A-]		86,000
	To record the purchase of 1,000 shares of Sage's common stock at 86 Baht per share (1,000 shares x 86 Baht per share).		

Accounting Basics for Equity Securities (2)

- **Dividend earned:**
  - Any cash dividends received are credited to Dividend revenue and reported in the Statement of income.
    - On Sept. 30, Music City receives 1,720 Baht cash dividend on shares.

20X8	Dr. Cash [A+]	1,720	
Sept. 30	Cr. Dividend revenue [REV+, E+]		1,720
	To record the receipt of cash dividend of 1.72 Baht per share (1,000 shares x 1.72 Baht per share).		

- Investments in shares
  - 86,000 Baht

Statement of Financial Position

- Dividend revenue
  - 1,720 Baht

Statement of income

Accounting Basics for Equity Securities (3)

- **Disposition:**
  - When the securities are sold, sale proceeds are compared with the cost, and any gain or loss is recorded.
    - On Jan. 20, 20X9, Music City sells 500 shares for 45,000 Baht cash.

20X9	Dr. Cash [A+]	45,000	
Jan. 20	(500 shares x 90 Baht per share)		
	Cr. Investment in Sage stocks [A-]		43,000
	(500 shares x 86 Baht per share)		
	Gain on sale of investment in stocks [REV+, E+]		2,000
	To record the sales of 500 shares of Sage's common stock at 90 Baht per share.		

Categories of Investments

- Investments in the Securities of Other Companies:

Debt Securities	Equity Securities		
Debt Securities • Passive	**<20% of Outstanding share** • Passive	**20-50% of Outstanding share** • Significant influence	**>50% of Outstanding share** • Control
Passive or non-influential investment		Investment with significant influence	Investment with control

Classification and Reporting of Investments

Non-influential Investments				
❶Held-to-maturity	❷Trading	❸Available-for-sale	❹Significant influence	❺Controlling influence
Debt only	Debt or Equity	Debt or Equity	Equity only	Equity only
Debt securities intended to be held until maturity	Debt and noninfluential equity securities (<20%) that are actively traded	Debt and noninfluential equity securities (<20%)	Equity securities (20%-50%) with significant influence	Equity securities (>50%) with controlling influence
Amortized cost	Market value	Market value	Equity method	Consolidated financial statements

Classification of Investment in Debt Securities

Non-influential Investments:
Trading Securities

Non-influential Investments:
Held-to-Maturity Securities

Non-influential Investments:
Available-for-Sale Securities

Debt Securities

Classification of Investment in Equity Securities

Non-influential Investments:
Available-for-Sale Securities

Investments with Significant Influence:
Equity Method

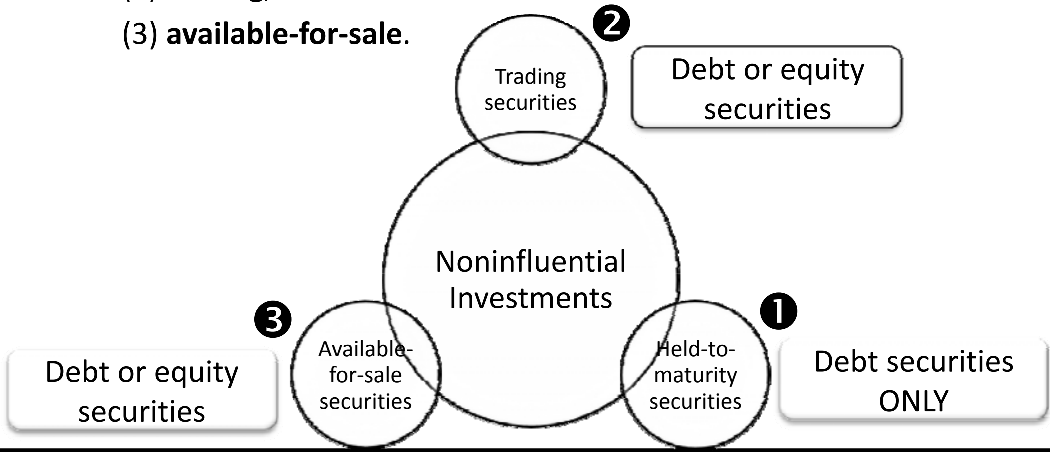
Non-influential Investments:
Trading Securities

Investments with Controlling Influence:
Consolidated Financial Statements

Equity Securities

Reporting of Non-influential Investments

- Companies must value and report most non-influential investments at fair market value.
  - The exact requirements depend on whether the investments are classified as
    (1) **held-to-maturity**,
    (2) **trading**, or
    (3) **available-for-sale**.



❶Held-to-Maturity Securities

- ***Held-to-maturity securities*** are debt securities a company intends and is able to hold until maturity. → *Intent* and *Ability*
  - Classification: **Current** VS **Noncurrent**
    - They are reported in ***current assets*** if their *maturity dates* are within one year or the operating cycle, whichever is longer.
    - HTM securities are reported in ***long-term assets*** when the *maturity dates* extend beyond one year or the operating cycle, whichever is longer.
  - All HTM securities are recorded **at cost** when purchased, and interest revenue is recorded when earned.
  - The portfolio of HTM securities is reported *at amortized cost*.

❶Held-to-Maturity Securities (Cont.)

- **Acquisition:**
  - On Jan. 1, 20X1, Music City purchased a 10%, 5-year, 500,000 Baht bond issued by Phoenix Corp. The interest payments are made *semiannually*. Assume the effective rate is 12%.
    - FV = 500,000, n = 10 periods, I = 6% per period, PV of 1 = 0.55839
    - PMT = 25,000, n = 10 periods, I = 6% per period, PV of annuity of 1 = 7.36009

Investment = PV of principal + PV of the semi-annual interest payments
= (500,000 x 0.55839) + (25,000 x 7.36009)
= 463,199

20X1	Dr. Investments in Phoenix Bonds - HTM [A+]	463,199	
Jan. 1	Cr. Cash [A-]		463,199
	To record the purchase of Phoenix's bonds to be held as HTM.		

Discount on Investment in Bonds
= 500,000 – 463,199
= 36,801

Amortized over bond's life

❶Held-to-Maturity Securities (Cont.)

- **Amortization of Premium or Discount on Investments in Bonds:**
  - **Effective-Interest Amortization:**
    - A method of systematically writing off a bond premium or discount that takes into consideration the time value of money and results in an equal rate of amortization for each period

Preferable

  - **Straight-Line Amortization:**
    - A method of systematically writing off a bond discount or premium in equal amounts each period until maturity

❶Held-to-Maturity Securities (Cont.)

Semiannual Interest Period	A Carrying Amount at Beginning of Period	B Semiannual Interest Revenue at 12% to Be Recorded (12% x 6/12 x A)	C Semiannual Cash Interest Receipt at 10% (500,000 x 10% x 6/12)	D Amortization of Discount in Investment in Bonds (B-C)	E Unamortized Discount at End of Period (E-D)	F Carrying Amount at End of Period (A-D)
0					36,801.00	463,199.00
1	463,199.00	27,791.94	25,000.00	2,791.94	34,009.06	465,990.94
2	465,990.94	27,959.46	25,000.00	2,959.46	31,049.60	468,950.40
3	468,950.40	28,137.02	25,000.00	3,137.02	27,912.58	472,087.42
4	472,087.42	28,325.25	25,000.00	3,325.25	24,587.33	475,412.67
5	475,412.67	28,524.76	25,000.00	3,524.76	21,062.57	478,937.43
6	478,937.43	28,736.25	25,000.00	3,736.25	17,326.33	482,673.67
7	482,673.67	28,960.42	25,000.00	3,960.42	13,365.91	486,634.09
8	486,634.09	29,198.05	25,000.00	4,198.05	9,167.86	490,832.14
9	490,832.14	29,449.93	25,000.00	4,449.93	4,717.94	495,282.06
10	495,282.06	29,717.94	25,000.00	4,717.94	-	500,000.00

❶Held-to-Maturity Securities (Cont.)

- **Amortization:**

20X1	Dr. Investments in Phoenix Bonds - HTM [A+]	2,792	
Jun. 30	Cash [A+]	25,000	
	Cr. Interest revenue [REV+, E+]		27,792
	To record interest revenue.		

Amortization of discount on investment in bonds increases investment in bonds balance.

- **Disposition:**

20X5	Dr. Cash [A+]	500,000	
Dec. 31	Cr. Investment in Phoenix Bonds -- HTM [A-]		500,000
	To record the receipt of cash from matured bonds.		

❷Trading Securities

- ***Trading securities*** are debt and equity securities that the company intends to actively manage and trade for profit.
  - Frequent purchases and sales are expected and are made to earn profits on short-term price changes.
- Valuing and reporting trading securities:
  - The entire portfolio of trading securities is reported at its *market value*; this requires a market adjustment from the cost of the portfolio.
    - The term **portfolio** refers to a group of securities.
  - Any **unrealized gain (or loss)** from a change in the market value of the portfolio of trading securities is reported on the ***Statement of income***.

❷Trading Securities (Cont.)

- **Acquisition:**
  - On Nov. 1, 20X8, Music City purchased a portfolio of trading securities at a total cost of 11,500 Baht.

20X8	Dr. Investment in trading securities [A+]	11,500	
Nov. 1	Cr. Cash [A-]		11,500
	To record the purchase of common stock to be held as trading securities.		

❷Trading Securities (Cont.)

- **Adjustments:**
  - Music City's portfolio of trading securities had a total cost of 11,500 Baht and a market value of 13,000 Baht on Dec. 31, 20X8, the first year it held trading securities.
    - The difference between the 11,500 Baht cost and the 13,000 Baht market value reflects a 1,500 Baht gain.
      - It is an unrealized gain because it is not yet confirmed by actual sales.
      - The market adjustment for trading securities is recorded with an adjusting entry at the end of each period to equal the difference between the portfolio's cost and its market value.

20X8 Dec. 31	Dr. Allowance to value at market -- Trading	1,500	
	[Asset adjustment account+, A+]		
	Cr. Net unrealized holding gain/loss -- Trading [REV+, E+]		1,500
	To reflect an unrealized gain in market values of trading securities.		

❷Trading Securities (Cont.)

Statement of Financial Position Dec. 31, 20X8

• Investment in trading securities (at cost)	11,500 Baht
• Add: Allowance to value at market – Trading	1,500 Baht
• Investment in trading securities (at market)	13,000 Baht
• OR	
• Investment in trading securities	
• (at market; cost is 11,500 Baht)	13,000 Baht

Statement of Income for 20X8

• Net unrealized holding gain/loss – Trading	1,500 Baht

❸Available-for-Sale Securities

- ***Available-for-sale securities*** are debt and equity securities not classified as trading or held-to-maturity securities.
  - AFS securities are purchased to yield interest, dividends, or increases in market value (called capital gain).
  - If the intent is to sell AFS securities within the longer of one year or operating cycle, they are classified as short-term investments. Otherwise, they are classified as long-term.
- Valuing and reporting available-for-sale securities.
  - As with trading securities, companies adjust the cost of the portfolio of AFS securities to reflect changes in *market value*.
  - Any **unrealized gain (or loss)** for the portfolio of AFS securities is one component of other comprehensive income (OCI), which is reported in Statement of Comprehensive Income. It is also reported in ***equity section of the Statement of Financial Position***.

❸Available-for-Sale Securities (Cont.)

- **Adjustments:**
  - The company must record year-end adjusting entry to record the market value of these investments.
    - Cost and market value of the investments in bonds and shares on Dec. 31, 20X8 are as follows:

	Cost	Market Value	Unrealized Gain (Loss)
Improv bonds	30,000	29,050	-950
Intex common stock, 500 shares	43,000	45500	2,500
Total	**73,000**	**74,550**	**1,550**

20X8	Dr. Allowance to value at market -- AFS	1,550	
Dec. 31	[Asset adjustment account+, A+]		
	Cr. Net unrealized holding gain/loss		1,550
	-- AFS [OCI+, E+]		
	To reflect an unrealized gain in market values of AFS securities.		

❸Available-for-Sale Securities (Cont.)

Assets

- Investment in AFS securities (at cost) 73,000 Baht
- Add: Allowance to value at market – AFS 1,550 Baht
- Investment in AFS securities (at market) 74,550 Baht
  - OR
- Investment in AFS securities (at market, cost is 73,000 Baht) 74,550 Baht

Liabilities

- None

Equity

- OCI: Net unrealized holding gain/loss – AFS 1,550 Baht

❸Available-for-Sale Securities (Cont.)

- **Adjustments (Cont.):**
  - Assume that at the end of its next calendar year (Dec. 31, 20X9), Music City's portfolio of investments in AFS securities has an 81,000 Baht cost and an 82,000 Baht market value.

20X9	Dr. Net unrealized holding gain/loss	550	
Dec. 31	-- AFS [OCI-, E-]		
	Cr. Allowance to value at market -- AFS		550
	[Asset adjustment account-, A-]		
	To reflect an unrealized loss in market values of AFS securities		

Allowance to value at market -- AFS			
B/L 12/31/08	1,550	*Adj. 12/31/09*	*550*
B/L 12/31/09	**1,000**		

Net unrealized Holding Gain/loss -- AFS (B/S)			
Adj. 12/31/09	*550*	B/L 12/31/08	1550
		B/L 12/31/09	**1,000**

Financial Statement Presentation – Investment in Debt and Equity Securities

Statement of Comprehensive Income

- Revenue
  - Interest revenue
  - Dividend revenue
- - Expenses
- +/- Unrealized holding G/L – TS
- = Profit or loss

+/- Other comprehensive income

OCI#1: Unrealized holding G/L -- AFS
OCI#2:
OCI#3:
OCI#4:
OCI#5:

= Total comprehensive income

Statement of Financial Position

- Assets
  - Investment in TS (@Mkt value)
  - Investment in AFS (@Mkt value)
  - Investment in HTM (@Amortized cost)
- Liabilities
- Equity
  - Share capital
  - Retained earnings
  - Unrealized holding G/L -- AFS

Example of Financial Statement Presentation & Disclosure: Investments

[Source: www.farmhouse.co.th]

BALANCE SHEETS

President Bakery Public Company Limited
As at 31 December 2010 and 2009

(Unit : Baht)

		Financial statements in which the equity method is applied		Separate financial statements	
	Note	2010	2009	2010	2009
Assets					
Non-current assets					
Investment in joint venture	10	8,442,283	7,753,495	5,850,000	5,850,000
Other long-term investment - net	11	-	-	-	-
Property, plant and equipment - net	12	2,660,925,587	2,473,725,139	2,660,925,587	2,473,725,139
Advance payments for purchase of assets		15,347,413	-	15,347,413	-
Intangible assets - net	13	1,294,434	1,440,643	1,294,434	1,440,643
Leasehold rights - net	14	2,323,734	2,651,113	2,323,734	2,651,113
Other non-current assets		6,541,253	5,805,162	6,541,253	5,805,162
Total non-current assets		2,694,874,704	2,491,375,552	2,692,282,421	2,489,472,057
Total assets		3,765,063,406	3,157,284,049	3,762,471,123	3,155,380,554

4.5 Investment

a) Investment in other company, which is non-marketable equity securities, is stated at cost. An allowance for impairment loss will be made when the net recoverable amount is lower than the cost of investment.

b) Investment in joint venture is accounted for in the financial statements in which the equity method is applied using the equity method.

c) Investment in joint venture is accounted for in the separate financial statements using the cost method.

The Siam Cement Public Company Limited and its Subsidiaries

Consolidated balance sheets

As at 31 December 2010 and 2009

in thousand Baht

Assets	Note	2010	2009
Current assets			
Cash and cash equivalents	6	63,827,071	28,937,114
Current investments		6,000,000	-
Trade accounts and notes receivable			
- Related parties	5, 7	2,640,924	3,406,356
- Other companies	7	22,767,262	19,651,879
Receivables from and short-term loans to related parties	5	1,357,919	1,019,229
Inventories	8	36,917,404	31,103,906
Other current assets		7,884,814	5,987,814
Total current assets		**141,395,394**	**90,106,298**

Example of Financial Statement Presentation & Disclosure: Investments

[Source: www.scg.co.th]

The Siam Cement Public Company Limited and its Subsidiaries

Consolidated balance sheets

As at 31 December 2010 and 2009

in thousand Baht

Assets	Note	2010	2009
Non-current assets			
Investments in associates	9	39,750,575	57,618,240
Investments in jointly-controlled entity	9	957,569	1,071,782
Other long-term investments	10	13,734,888	3,227,938
Long-term loans to related party	5	392,927	436,129
Long-term loans to other companies	31	139,194	1,569,430
Property, plant and equipment	11	151,399,494	150,152,215
Intangible assets	12	4,797,684	4,038,263
Deferred tax assets	13	2,504,331	3,211,563
Other non-current assets	14	4,146,810	4,560,012
Total non-current assets		**217,823,472**	**225,885,572**
Total assets		**359,218,866**	**315,991,870**

(e) ***Investments***

Investments in associates and jointly-controlled entity

Investments in associates and jointly-controlled entity are accounted for using the equity method.

Investments in other debt and equity securities

Debt securities and marketable equity securities held for trading are classified as current assets and are stated at fair value, with any resultant gain or loss recognised in the statement of income.

Debt securities that the Group has the positive intent and ability to hold to maturity are classified as held-to-maturity investments, which are stated at amortised cost less any impairment losses. The difference between the acquisition cost and redemption value of such debt securities is amortised using the effective interest rate method over the period to maturity.

Debt securities and marketable equity securities, other than those securities held for trading or intended to be held to maturity, are classified as available-for-sale investments. Available-for-sale investments are, subsequent to initial recognition, stated at fair value, and changes therein, other than impairment losses and foreign currency differences on available-for-sale monetary items, are recognised directly in equity.

Impairment losses and foreign exchange differences are recognised in the statement of income. When these investments are derecognised, the cumulative gain or loss previously recognised directly in equity is recognised in the statement of income. Where these investments are interest-bearing, interest calculated using the effective interest method is recognised in the statement of income.

Equity securities which are not marketable are stated at cost less any impairment losses.

The fair value of financial instruments classified as held-for-trading and available-for-sale is determined as the quoted bid price at the reporting date.

Disposal of investments

On disposal of an investment, the difference between net disposal proceeds and the carrying amount together with the associated cumulative gain or loss that was reported in equity is recognised in the statement of income.

If the Group disposes of part of its holding of a particular investment, the deemed cost of the part sold is determined using the weighted average method applied to the carrying value of the total holding of the investment.

CHAPTER 12 - EXERCISES

12-1 RECORDING A BOND INVESTMENT

Agapios Tools purchased $1,300,000, 8% bonds issued by Ares Technology on January 1, 2014. The purchase price of the bonds was $1,350,000. Interest is payable semiannually each June 30 and December 31. Record the purchase of the bonds on January 1, 2014.

GENERAL JOURNAL			
Date	Accounts Titles and Explanation	Debit	Credit

12-2 RECORDING BONDS HELD TO MATURITY

Macy's, Inc., operates over 850 Macy's and Bloomingdale's department stores nationwide. The company does more than $24 billion in sales each year.

Assume that as part of its cash management strategy, Macy's purchased $11.7 million in bonds at par for cash on July 1, 2012. The bonds pay 10 percent interest annually with payments June 30 and December 31 and mature in 5 years. Macy's plans to hold the bonds until maturity.

Required:

1. Prepare the journal entry to record the purchase of the bonds on July 1, 2012.

2. Prepare the journal entry to record the receipt of interest on December 31, 2012.

GENERAL JOURNAL			
Date	Accounts Titles and Explanation	Debit	Credit

12-3 RECORDING AVAILABLE-FOR-SALE SECURITIES TRANSACTIONS

During 2014, Yale Systems acquired some of the 50,000 outstanding shares of the common stock, par $12, of Carol Corporation as available-for-sale investments. The accounting period for both companies ends December 31.

Dec. 2 Purchased 6,250 shares of Carol common stock at $26 per share.
Dec. 15 Carol Corporation declared and paid a cash dividend of $3 per share.
Dec. 31 Determined the current market price of Carol stock to be $22 per share.

Prepare the journal entries for each of the above transactions that occurred during 2014.

GENERAL JOURNAL			
Date	Accounts Titles and Explanation	Debit	Credit

12-4 RECORDING TRADING SECURITIES TRANSACTIONS

Using the data in 12-3, assume that Yale Systems purchased the voting stock of Carol Corporation for the trading securities portfolio instead of the available-for-sale securities portfolio.

Prepare the journal entries for each of the above transactions that occurred during 2014.

GENERAL JOURNAL			
Date	Accounts Titles and Explanation	Debit	Credit

12-5 REPORTING TRANSACTIONS IN THE AVAILABLE-FOR-SALE SECURITIES PORTFOLIO

On June 30, 2014, Slick Books, Inc., purchased 9,000 shares of Syntax stock for $40 per share. Management recorded the stock in the securities available for sale portfolio. The following information pertains to the price per share of Syntax stock:

	Price
12/31/2011	$ 48
12/31/2012	58
12/31/2013	52

Slick Books sold all of the Syntax stock on February 14, 2017, at a price of $46 per share.

Prepare the journal entries that are required by the facts presented in this case.

GENERAL JOURNAL					
Date		Accounts Titles and Explanation		Debit	Credit

12-6 REPORTING TRANSACTIONS IN THE TRADING SECURITIES PORTFOLIO

Using the data in 12-5, assume that Slick Books, Inc. management purchased Syntax stock for the trading securities portfolio instead of the securities available for sale portfolio.

Prepare the journal entries that are required by the facts presented in this case.

GENERAL JOURNAL					
Date		Accounts Titles and Explanation		Debit	Credit