Chapter 14 – Long-term Liabilities

I. **Long-term debt** – consists of probable future sacrifices of economic benefit arising from economic obligations that are not payable within a year or less or the operating cycle

II. **Generally**, long-term debt has covenants or restrictions that protect the lenders or borrowers.
   a. **They specify: Issued amount, interest rate, due date, call provisions, sinking fund, property pledged as collateral, dividend restrictions, limitations regarding the assumption of additional debt.**

III. Issuing Bonds
   a. Consists of :
      i. Principal – sum of amount due at the maturity date
      ii. Interest – periodic interest at a specific rate.
      iii. Investments banks can away some of the bond risk by offering guarantees, essentially underwriting the bond(firm underwriting). Or they can accept commission based payments(best-efforts underwriting)

IV. Types of Bonds
   a. Secured and Unsecured Bonds-
      i. Secured bonds are collateral based
      ii. Bonds not backed by collateral are unsecured. An example of an unsecured bonds is a debenture bond.
   b. Term, serial bonds and callable bonds
      i. Bonds that mature on specific dates are called term bonds
      ii. Bonds that mature in installments are called serial bonds
         1. These are levied bonds such as those that receive money at different time periods such as schools, districts, and municipalities
   c. Convertible, Commodiy backed and deep discount bonds
      i. They are convertible to other types of securities at a point after their installments
      ii. Commodity based are redeemed using barrels of oil, tons of coal, or ounces of rare metal.
      iii. Deep-discount bonds – zero interest bonds – are sold at a discount and provide the buyer's total interest payoff at maturity.
   d. Registered and Bearer (Coupon Bonds) –
      i. Surrender of a certificate and issuance of a new certificate to complete the sale
   e. Income and revenue bonds –
      i. Income bonds pay no interest unless the issuing party is profitable
      ii. Revenue bonds have revenue paid from specific sources.
   f. Income and Revenue Bonds. Income Bonds

V. Valuation of bonds payable – Discount and Premium
   a. SEC approval, undergo audits and then issuance of a prospectus(bond informational with specific information related to the actual bond features)
   b. State of the economy, market conditions, buyer and supplier demand, interest rate, risk
   c. The investment community values a bond at the present value of future cash flows, which consist of interest and principal

d. The rate used to calculate the present values of cash flows is the interest rate.
e. The interest rate written in the terms of the bond indenture is known at the stated, coupon or nominal rate.
f. The stated rate is expressed as a percentage of the face value of the bonds(par value, principal amount or maturity value)
g. A difference in rate say employed by the buyers and sellers creates a difference in the value of the bond. The difference between the **present value** and **face value** causes a difference that may be a premium or discount :
    i. If the bond is less than the face value it sells at a discount
    ii. If the bond sells more than the face value it sells a premium
    iii. Effective or market rate is greater than the stated rate it is a discount
    iv. Effective or market rate is less than the stated rate that it is sold at a premium.
        1. There is an inverse relationship between the market rate and the present value of the bond.
        2. Present value of the principal + the present value of the interest
    v. Bonds selling less than the face value means that the investors demand a rate of interest higher than the stated rate.
    vi. They may pay the stated rate of the bond however the principal will be decreased making the overall effective rate higher than it would have been.
h. Bonds that are issued at PAR on the interest date
    i. Company issues at par a 10-year term bonds with a par value of 800,000, bearing an interest rate of 10% and semiannual payments 40,000(800000 X .5 X.10) :
        1. Cash 800,000
            a. Bonds Payable 800,000
        2. Interest expense 40,000
            a. Cash 40,000
        3. Interest expense 40,000
            a. Interest payable 40,000
i. Bonds issued at Discount or Premium on the Interest Date
    i. Cash(800,000 X .97) 776,000
    ii. Discount on bonds payable 24,000
        1. Bonds payable 800,000
j. Companies amortize the discount and charge it to interest expense over the period of time that bonds are outstanding
k. The bond discount of $24,000 is amortized over 20 years as interest expense
    i. At July 1:
    ii. Interest expense 41,200
        1. Discount on Bonds Payable 1200
        2. Cash 40000
    iii. At December 31:
        1. Interest expense 41,200
            a. Discount on bonds payable 1200
            b. Interest payable 40,000

l. Premium on Bonds Payable is accounted for in a manner similar to that for Discount on Bonds Payable
    i. Cash (800,000 X 1.03) 824,000
        1. Premium on bonds payable 24,000
        2. Bonds payable 800,000

m. July 1 2012

n. 800,000 X 10% X ½
    i. Interest expense 38800
    ii. Premium on Bonds payable 1,200
        1. Cash 40000

o. At December 31, 2012

    i. Interest expense 38800
    ii. Premium on Bonds payable 1,200
        1. Cash 40000

p. Amortization of a discount increases interest expense, amortization of a premium decreases interest expense

VI. Bonds issued between interest dates

a. Companies issue bonds on other than semiannual interest payment date, they will pay the amount of interest due plus the principal payment up to that date.
b. Cash 808000
    i. Bonds payable 800,000
    ii. Interest expense 8000
c. Interest expense 24000
    i. Cash 24000
d. 6% bonds at 102, its march 1 entry would be:
e. Cash (800,000X1.02) + (800,000X.06X2/12) 824000
        1. Bonds payable 800000
        2. Premium on bonds payable 16,000
        3. Interest expense 8000
f. [Carrying value X effective interest rate] – [face value X stated rate] = amortization

VII. Bonds issued at a Discount

a. Maturity value of bonds payable 100000
b. Present value of 100,000 in 5 years at 10% interest payable 61,391
c. Present value of 4000 interest payable semiannually for 5 yrs at 10% 30,887
d. Proceeds from sale of bonds -92,278
e. 7,722

VIII. Bonds issued at a discount(Pg 792)

a. Cash 92,278
b. Discount on bonds payable 7,722
    i. Bonds payable 100,000
c. Interest Expense 4,614 (4,614-4000)
    i. Discount on bonds payable 614
    ii. Cash 4000
d. Interest expense 4,645
    i. Interest payable 4000

ii. Discount on Bonds payable 645

IX. Bonds Issued At a Premium

a. Cash 108,530
   i. Premium on bonds payable 8,530
   ii. Bonds payable 100,000

b. Interest expense 3256
c. Premium on b/p 744
   i. Cash 4000

X. Accruing Interest

a. The company prorates the premium by the appropriate number of months to arrive at the proper interest expense
b. Interest accrual (4000X2/6) = 1,333.3
c. Premium amortized (744 X 2/6) = -248.00
d. Interest expense = 1085.33
   i. Interest expense 1085.33
   ii. Premium on B/P 248.00
      a. Interest payable 1333.33

XI. Classification of Discount and Premium

a. Discount on bonds payable is not an asset.
b. It reduces a liable and is therefore a valuation account.
c. It's a contra asset account.
d. Thus discounts and premiums are reported as a direct addition and subtraction to the face of the value of the account.

XII. Costs of Issuing Bonds

a. Concepts statement No. 6 – debt issue is not an asset because it provides no future benefit.
b. Unamortized bond issue costs are considered deferred revenue or amortized over the course of the debt.
c. Cash 20,550,000
d. Unamortized bond issue costs 245000
      a. Premium on bonds payable 795,000
      b. Bonds payable 20,000,000
e. Bond issue expense 24,500
   i. Unamortized bond issue costs 24,500

XIII. Extinguishment of Debt

a. It represents the payment of debt
b. Some cases companies pay the debt before its maturity date
   i. This is representative of the reacquisition price, amount paid on extinguishment, redemption before maturity.
   ii. Net carring amount is the amount due adjusted for unamortized premium or discount and cost of issuance.
   iii. Carrying amount – the reaquisition price = gain on extinguishment
   iv. Excess of the reacquisition price over the net carrying amount is the loss from extinguishment.

v. Recording the acquisition and cancellation of the bonds as follows:
    1. Bonds payable 800,000
    2. Loss on redemption of bonds 32,000
        i. Discount on bonds payable 14,400
        ii. Unamortized bond issue costs 9,600
        iii. Cash 808,000

vi. Reacquisition price 808,000
vii. Net carrying amount of bonds redeemed 800000
viii. Unamortized discount -14400
ix. Unamortized issue costs -9600
x. Loss on redemption 32000

XIV. Long-term Notes Payable
- i. Long-term notes are similar in substance to bonds in that both maturity dates and carry either a stated or implicit rate of interest.
- ii. Non corporate and small corporations issue long-term notes
- iii. Like a bond, a note is valued at the present value of future principal or interest cash flows. The company amortizes any discount or premium over the life of a note.
- iv. Ex effective and stated rate are the same
    1. Cash 10,000
        a. Notes Payable 10,000
    2. Interest expense 10,000
        a. Cash 10,000

b. Notes Not issued at face value
- i. Implicit interest rate equates to the cash received and the amount to be paid in the future.
- ii. The difference between the face amount and the present amount will be a discount that will be amortized to interest expense over the life of a note.
- iii. Recording the issuance of the note:
    1. Cash 7721.80
    2. Discount 2278.20
        a. Notes payable 10000
- iv. Interest expense is recorded using the effective – interest method:
    1. Interest expense (7721.80 X .09) 694.96
        a. Discount on Notes Payable 694.96
    2. In this example on page 799, the interest expense equates to the discount because the interest rate is 0.
- v. Interest bearing notes
    1. The effective rate of interest 12% is greater than the imputed of 10%
    2. The note is at a discount because of the inverse relationship between the amount of principal related to the rate.
    3. The note exchanged at a discount.
        a. Cash 9520
        b. Discount 480

1. Notes payable 10,000

4. Interest expense 1,142
    a. Discount on notes payable 142
    b. Cash 1000

vi. Special Notes payable situations – Notes issued for Property, Goods and Services – When exchanging the debt instrument for property, goods or services in a budgeted transaction entered into at arm's length, the stated interest rate is presumed to fair value unless:
    1. No interest rate is stated
    2. The stated interest rate is unreasonable
    3. The stated face of the debt instrument is materially different from the current cash sales price for the same or similar items or from the current fair value of the debt instrument.
        a. The difference between the face value and the property is the implied interest rate when you have an exchange of a note for a piece of property.

vii. If there is no stated rate of interest, amount of interest is the difference between the face amount of the note and the fair value of the property.

c. Choice of Interest Rate
    i. Imputation or interest rate imputation –
        1. When the fair value of a note is too difficult to surmise, you have to calculate an interest rate that differs from the stated rate.
    ii. Choice of Interest Rate

1. Face value of the note		550000
2. Present value of 550000 in 5 years	374319	
3. Present value of 11,000 interest Payable annuity for 5 years at 8%	43,920	
		-418,239
		131,761

d. Buildings(construction in process) 418,239
e. Discount on Notes payable 131, 761
    i. Notes Payable 550,000

f. Interest expense 33,459
    i. Discount on Notes Payable 22,459
    ii. Cash 11,000

XV. Mortgage Notes Payable
a. Mortgage notes payable is a promissory note secured by a mortgage.
b. Liability : mortgage notes payable or Notes Payable – secured
c. Fixed rate mortgage replaced with alternative mortgage arrangements
d. Variable rate mortgages – interest rates tied to the market.

XVI. Fair Value Option
a. Noncurrent notes such as bonds and notes payable are recorded at fair value with unrealized holding gains or losses reported as part of net income.

b. Unrealized holding gains or losses – the net change in the fair value of the liability from one period to another exclusive of interest expense recognized but not recorded.
    i. Issued 500,000 of 6% bonds at face value
    ii. The value of the bonds is now 480,000 because interest rates in the market have increased to 8 percent.
    iii. Bonds payable 20,000
        1. Unrealized holding gain or loss – income 20,000

XVII. Fair value controversy
a. If the credit worthiness of Edmonds company declines, then the value of its debt also declines.

XVIII. Reporting and Analyzing Long-term Debt
a. Long term debt that matures in one year should be reported as a current liability unless using noncurrent assets to accomplish retirement.
b. If the company plans to refinance debt, convert it into stock or retire it from a bond retirement fund then it is continued to be noncurrent.
c. Note disclosures for many issues including fair values, bond sinking funds, interest rates, conversion privileges

XIX. Analysis
a. Debt to total assets = total debt/total assets
b. Times interest earned = income before income taxes and interest expense/interest expense
c.