Class 1

Goal:	Maximize Firm Value
Terminal Value	$Price^t + \Delta NWC - t^c(Price^t - BV^t)$

5 Principles of Investment Decisions

1)Decisions are based on cash flows, not accounting income.
2)Cash flows are based on opportunity costs.
3)The timing of cash flows is important
4)Cash flows are analyzed on an after-tax basis.
5)Financing costs are reflected in the project's required rate of return.

Class 2

Leverage	(Debt/(Debt+Equity)
Cost of Equity	$r^e=r^f B^e(r^m-r^f)$
WACC	weighted average of the cost of equity and the after-tax cost of debt.

((E/V)(Re) + [((D/V)(1-T)(Rd)]

E = Market value of the company's equity
D = Market value of the company's debt
V = Total Market Value of the company (E + D)
Re = Cost of Equity
Rd = Cost of Debt
T= Tax Rate

Class 3

EPS:	(Net Income)/(Shares Outstanding)
PE Ratio	(Market Price Per Share)/Earnings Per Share)
Equity Market Value	Share price x shares outstanding
Enterprice Value	equity market value + debt - cash
EV/EBITDA "Value-to-Earning	EV=Enterprise Value
Price/Book=	Book Value/Share

Class 3 (cont)

Backwards integration	A firm takes over a supplier.*An oil transporter buying an oil exploration and production company.*
Forwardsintegration	A firm takes over a customer.*An oil transporter buys a set of gasoline stations.*

Investment Growths

Organic (Slow growth) - growth is when a firm grows or develops a new product or capability in-house (less risky, less expensive)

Inorganic (M&A, Fast growth)
Acquisition: buying part of a company
Merger: entire target
(Fast growing, reduces competition)

Class 4

Beta Unleveled:

APV	1)$V^{unleveled}$ 2)Calulate PV(*SideEffects*) 3)TV

TRUE. When leverage increases beta increases.
TRUE. When a firm has no debt the unlevered cost of equity equals the levered cost of equity.
FALSE. When leverage changes sharply, using the same WACC from the previous period is still appropriate.
TRUE. Leverage represents a type of risk because it affects potential returns on investment

Class 5

Capital Structure	is the process of choosing how to finance a firm's investments.
Pecking Order Theory	of raising capital predicts managers will finance projects with retained earnings first, debt, then equity

Class 5 (cont)

Lifecycle Theory	predicts a firm's financing changes as it makes the transition from a start-up firm to a mature firm to a declining firm.Start-up firms use debt sparingly, then as cash flows from investments become more predictable, the growing firm begins to use more debt, then leverage peaks for the mature firm right before it declines
Modigliani Miller	predicts capital structure is irrelevant for firm value in a world with no taxes, no bankruptcy, no financing constraints (i.e., all firms borrow at same rate), no transaction costs, and no market frictions (i.e., efficient prices and no agency costs)
Trade-off Theory:	VL = VU + PV (tax shields) – PV (bankruptcy costs) – PV (risk-shifting) – PV (managerial risk aversion) + PV (disciplinary debt)

actual capital structure > optimal capital structure.

=overlevered= You want to decrease your debt levels.
Financing an investment with debt *Increase leverage*
Paying off debt with retained earnings *Decrease leverage*
Increasing your regular dividend *Increase leverage*
Cancelling a share repurchase plan *Decrease leverage*
Selling some of your assets and using the cash to pay down *Increase leverage*

Class 6

V^{AT}=
$Gain^{T}$=
$Gain^{S}$=

V^{AT}=the post-merger value of combined firm (acquirer + target)
V^{A}=the pre-merger value of acquirer
V^{T}= the pre-merger value of target (note: should be the trading price before any merger speculation caused the price to jump).
S=are estimated post-merger synergies
C= any cash paid by acquirer to target
TP= take over premium
P^{T}= the price paid for the target

Class 9

Dividends	a dividend is a cash distribution to shareholders that occurs at a regular frequency (e.g., quarterly, annual, etc...)
Repurchases	A repurchase of stock is a distribution in the form of the company buying back its stock from shareholders.
Special payout	large one-time dividend, in case for next class, a preferred stock with fixed dividends, etc...

In reality, excess cash is bad because it works against the goal of corporate finance:
1)It lowers return on assets (i.e., ROA or profitability).
2)It increases the cost of capital (why? cash is part of equity so will impact the WACC calculation).
3)It can create an overly confident, undisciplined management team.

If actual value > intrinsic value *don't invest*
If actual value < intrinsic value *invest*