

## CFA L1 | Syllabus | 2024

### Subjects

Reading No.	Subject	Chapters	LOS		Weightage	No. of Questions
			Average	Total		
	Quantitative Methods - Pre-requisites	7	8	55	-	-
1-11	Quantitative Methods	11	3	38	6-9%	11-16
	Economics - Pre-requisites	7	7	48	-	-
12-19	Economics	8	4	30	6-9%	11-16
20-21	Portfolio Management (Part One)	2	8	16	8-12%	14-22
85-88	Portfolio Management (Part Two)	4	6	24		
22-28	Corporate Issuers	7	3	22	6-9%	11-16
	Financial Statement Analysis - Pre-requisites	9	6	57	-	-
29-40	Financial Statement Analysis	12	4	53	11-14%	20-25
41-48	Equity	8	8	66	11-14%	20-25
49-67	Fixed Income	19	3	51	11-14%	20-25
68-77	Derivatives	10	2	22	5-8%	9-14
78-84	Alternative Investments	7	3	22	7-10%	13-18
88-93	Ethics	5	4	21	15-20%	27-36
	<b>TOTAL</b>	<b>116</b>	<b>69</b>	<b>525</b>	<b>100%</b>	<b>180</b>

# SYLLABUS

## Chapters

Subject	Reading No 2024	Reading Name	No. of LOS
Quantitative Methods - Pre-requisites	PR1	Interest Rates, Present Value, and Future Value	6
	PR2	Organizing, Visualizing, and Describing Data	11
	PR3	Probability Concepts	8
	PR4	Common Probability Distributions	12
	PR5	Sampling and Estimation	4
	PR6	Basics of Hypothesis Testing	10
	PR7	Appendices	4
Quantitative Methods	1	Rates and Returns	5
	2	Time Value of Money in Finance	3
	3	Statistical Measures of Asset Returns	4
	4	Probability Trees and Conditional Expectations	3
	5	Portfolio Mathematics	3
	6	Simulation Methods	3
	7	Estimation and Inference	3
	8	Hypothesis Testing	3
	9	Parametric and Non Parametric Tests of Independence	2
	10	Simple Linear Regression	6
	11	Introduction to Big Data Techniques	3
Economics - Pre-requisites	PR8	Topics in Demand and Supply Analysis	5
	PR9	Introduction to the Firm and Market Organization	6
	PR10	Aggregate Output, Prices, and Economic Growth	15
	PR11	Introduction to Business Cycles	6
	PR12	Monetary and Fiscal Policy	6
	PR13	International Trade and Capital Flows	6
	PR14	Currency Exchange Rates	4
Economics	12	The Firm and Market Structures	5
	13	Understanding Business Cycles	3
	14	Fiscal Policy	4
	15	Monetary Policy	4
	16	Introduction to Geopolitics	6
	17	International Trade	3
	18	Capital Flows and the FX Market	3
Portfolio Management (Part One)	19	Exchange Rate Calculations	2
	20	Portfolio Risk and Return-Part I	7
Financial Statement Analysis - Pre-requisites	21	Portfolio Risk and Return-Part II	9
	PR15	Introduction to Financial Reporting	5
	PR16	Income Statements	9
	PR17	Balance Sheets	6
	PR18	Cash Flow Statements	4
	PR19	Inventories	12
	PR20	Long-Lived Assets	7
	PR21	Income Taxes	6
	PR22	Non-Current Long-Term Liabilities	3
PR23	Applications of Financial Statement Analysis	5	

Subject	Reading No 2024	Reading Name	No. of LOS
Corporate Issuers	22	Organizational Forms, Corporate Issuer Features, and Ownership	3
	23	Investors and Other Stakeholders	3
	24	Corporate Governance-Conflicts, Mechanisms, Risks, and Benefits	3
	25	Working Capital and Liquidity	3
	26	Capital Investments and Capital Allocation	4
	27	Capital Structure	4
	28	Business Models	2
Financial Statement Analysis	29	Introduction to Financial Statement Analysis	5
	30	Analyzing Income Statements	5
	31	Analyzing Balance Sheets	5
	32	Analyzing Statements of Cash Flows I	4
	33	Analyzing Statements of Cash Flows II	2
	34	Analysis of Inventories	3
	35	Analysis of Long-Term Assets	3
	36	Topics in Long-Term Liabilities and Equity	3
	37	Analysis of Income Taxes	4
	38	Financial Reporting Quality	8
	39	Financial Analysis Techniques	6
	40	Introduction to Financial Statement Modeling	5
Equity	41	Market Organization and Structure	12
	42	Security Market Indexes	11
	43	Market Efficiency	7
	44	Overview of Equity Securities	8
	45	Company Analysis-Past and Present	5
	46	Industry and Competitive Analysis	5
	47	Company Analysis-Forecasting	5
	48	Equity Valuation-Concepts and Basic Tools	13
Fixed Income	49	Fixed-Income Instrument Features	2
	50	Fixed-Income Cash Flows and Types	2
	51	Fixed-Income Issuance and Trading	3
	52	Fixed-Income Markets for Corporate Issuers	3
	53	Fixed-Income Markets for Government Issuers	2
	54	Fixed-Income Bond Valuation-Prices and Yields	3
	55	Yield and Yield Spread Measures for Fixed-Rate Bonds	2
	56	Yield and Yield Spread Measures for Floating-Rate Instruments	2
	57	The Term Structure of Interest Rates-Spot, Par, and Forward Curves	3
	58	Interest Rate Risk and Return	3
	59	Yield-Based Bond Duration Measures and Properties	2
	60	Yield-Based Bond Convexity and Portfolio Properties	3
	61	Curve-Based and Empirical Fixed-Income Risk Measures	4
	62	Credit Risk	3
	63	Credit Analysis for Government Issuers	1
	64	Credit Analysis for Corporate Issuers	3
	65	Fixed-Income Securitization	2
	66	Asset-Backed Security Instrument and Market Features	4
	67	Mortgage-Backed Security Instrument and Market Features	4
Derivatives	68	Derivative Instrument and Derivative Market Features	2
	69	Forward Commitment and Contingent Claim Features and Instruments	3
	70	Derivative Benefits, Risks, and Issuer and Investor Uses	2
	71	Arbitrage, Replication, and the Cost of Carry in Pricing Derivatives	2
	72	Pricing and Valuation of Forward Contracts and for an Underlying with Varying Market Value	2
	73	Pricing and Valuation of Futures Contracts	2
	74	Pricing and Valuation of Interest Rates and Other Swaps	2
	75	Pricing and Valuation of Options	3
	76	Option Replication Using Put-Call Parity	2
	77	Valuing a Derivative Using a One-Period Binomial Model	2

Subject	Reading No 2024	Reading Name	No. of LOS
Alternative Investments	78	Alternative Investment Features, Methods, and Structures	3
	79	Alternative Investment Performance and Returns	2
	80	Investments in Private Capital-Equity and Debt	3
	81	Real Estate and Infrastructure	4
	82	Natural Resources	3
	83	Hedge Funds	3
	84	Introduction to Digital Assets	4
Portfolio Management (Part Two)	85	Portfolio Management-An Overview	6
	86	Basics of Portfolio Planning and Construction	8
	87	The Behavioral Biases of Individuals	3
	88	Introduction to Risk Management	7
Ethics	89	Ethics and Trust in the Investment Profession	8
	90	Code of Ethics and Standards of Professional Conduct	3
	91	Guidance for Standards I–VII	3
	92	Introduction to the Global Investment Performance Standards	5
	93	Ethics Application	2

# SYLLABUS

## Learning Outcome

Reading No.	Reading Name	LOS	Learning Outcome
<b>Quantitative Methods- Pre-requisites</b>			
PR1	Interest Rates, Present Value, and Future Value	a	interpret interest rates as required rates of return, discount rates, or opportunity costs
		b	explain an interest rate as the sum of a real risk-free rate and premiums that compensate investors for bearing distinct types of risk
		c	calculate and interpret the future value (FV) and present value (PV) of a single sum of money, an ordinary annuity, an annuity due, a perpetuity (PV only), and a series of unequal cash flows
		d	demonstrate the use of a time line in modeling and solving time value of money problems
		e	calculate the solution for time value of money problems with different frequencies of compounding
		f	calculate and interpret the effective annual rate, given the stated annual interest rate and the frequency of compounding
PR2	Organizing, Visualizing, and Describing Data	a	identify and compare data types
		b	describe how data are organized for quantitative analysis
		c	interpret frequency and related distributions
		d	interpret a contingency table
		e	describe ways that data may be visualized and evaluate uses of specific visualizations
		f	describe how to select among visualization types
		g	calculate and interpret measures of central tendency
		h	evaluate alternative definitions of mean to address an investment problem
		i	calculate quantiles and interpret related visualizations
		j	calculate and interpret measures of dispersion
		k	calculate and interpret target downside deviation
PR3	Probability Concepts	a	define a random variable, an outcome, and an event
		b	identify the two defining properties of probability, including mutually exclusive and exhaustive events, and compare and contrast empirical, subjective, and a priori probabilities
		c	describe the probability of an event in terms of odds for and against the event
		d	calculate and interpret conditional probabilities
		e	demonstrate the application of the multiplication and addition rules for probability
		f	compare and contrast dependent and independent events
		g	calculate and interpret an unconditional probability using the total probability rule
		h	identify the most appropriate method to solve a particular counting problem and analyze counting problems using factorial, combination, and permutation concepts
PR4	Common Probability Distributions	a	define a probability distribution and compare and contrast discrete and continuous random variables and their probability functions
		b	calculate and interpret probabilities for a random variable given its cumulative distribution function
		c	describe the properties of a discrete uniform random variable, and calculate and interpret probabilities given the discrete uniform distribution function
		d	describe the properties of the continuous uniform distribution, and calculate and interpret probabilities given a continuous uniform distribution
		e	describe the properties of a Bernoulli random variable and a binomial random variable, and calculate and interpret probabilities given the binomial distribution function
		f	explain the key properties of the normal distribution
		g	contrast a multivariate distribution and a univariate distribution, and explain the role of correlation in the multivariate normal distribution
		h	calculate the probability that a normally distributed random variable lies inside a given interval
		i	explain how to standardize a random variable
		j	calculate and interpret probabilities using the standard normal distribution
		k	describe the properties of the Student's t-distribution, and calculate and interpret its degrees of freedom
		l	describe the properties of the chi-square distribution and the F-distribution, and calculate and interpret their degrees of freedom

Reading No.	Reading Name	LOS	Learning Outcome
PR5	Sampling and Estimation	a	identify and describe desirable properties of an estimator
		b	contrast a point estimate and a confidence interval estimate of a population parameter
		c	calculate and interpret a confidence interval for a population mean, given a normal distribution with 1) a known population variance, 2) an unknown population variance, or 3) an unknown population variance and a large sample size
		d	describe the issues regarding selection of the appropriate sample size, data snooping bias, sample selection bias, survivorship bias, look-ahead bias, and time-period bias
PR6	Basics of Hypothesis Testing	a	define a hypothesis, describe the steps of hypothesis testing, and describe and interpret the choice of the null and alternative hypothesis
		b	compare and contrast one-tailed and two-tailed tests of hypotheses
		c	explain a test statistic, Type I and Type II errors, a significance level, how significance levels are used in hypothesis testing, and the power of a test
		d	explain a decision rule and the relation between confidence intervals and hypothesis tests, and determine whether a statistically significant result is also economically meaningful
		e	explain and interpret the p-value as it relates to hypothesis testing
		f	describe how to interpret the significance of a test in the context of multiple tests
		g	identify the appropriate test statistic and interpret the results for a hypothesis test concerning the population mean of both large and small samples when the population is normally or approximately normally distributed and the variance is (1) known or (2) unknown
		h	identify the appropriate test statistic and interpret the results for a hypothesis test concerning the equality of the population means of two at least approximately normally distributed populations based on independent random samples with equal assumed variances
		i	identify the appropriate test statistic and interpret the results for a hypothesis test concerning the mean difference of two normally distributed populations
		j	identify the appropriate test statistic and interpret the results for a hypothesis test concerning (1) the variance of a normally distributed population and (2) the equality of the variances of two normally distributed populations based on two independent random samples
PR7	Appendices	a	Cumulative Probabilities for a Standard Normal Distribution
		b	Table of the Student's t-Distribution (One-Tailed Probabilities)
		c	Values of X <sup>2</sup> (Degrees of Freedom, Level of Significance)
		d	Table of the F-Distribution
<b>Quantitative Methods</b>			
1	Rates and Returns	a	interpret interest rates as required rates of return, discount rates, or opportunity costs and explain an interest rate as the sum of a real risk-free rate and premiums that compensate investors for bearing distinct types of risk
		b	calculate and interpret different approaches to return measurement over time and describe their appropriate uses
		c	compare the money-weighted and time-weighted rates of return and evaluate the performance of portfolios based on these measures
		d	calculate and interpret annualized return measures and continuously compounded returns, and describe their appropriate uses
		e	calculate and interpret major return measures and describe their appropriate uses
2	Time Value of Money in Finance	a	calculate and interpret the present value (PV) of fixed-income and equity instruments based on expected future cash flows
		b	calculate and interpret the implied return of fixed-income instruments and required return and implied growth of equity instruments given the present value (PV) and cash flows
		c	explain the cash flow additivity principle, its importance for the no-arbitrage condition, and its use in calculating implied forward interest rates, forward exchange rates, and option values
3	Statistical Measures of Asset Returns	a	calculate, interpret, and evaluate measures of central tendency and location to address an investment problem
		b	calculate, interpret, and evaluate measures of dispersion to address an investment problem
		c	interpret and evaluate measures of skewness and kurtosis to address an investment problem
		d	interpret correlation between two variables to address an investment problem

Reading No.	Reading Name	LOS	Learning Outcome
4	Probability Trees and Conditional Expectations	a	calculate expected values, variances, and standard deviations and demonstrate their application to investment problems
		b	formulate an investment problem as a probability tree and explain the use of conditional expectations in investment application
		c	calculate and interpret an updated probability in an investment setting using Bayes' formula
5	Portfolio Mathematics	a	calculate and interpret the expected value, variance, standard deviation, covariances, and correlations of portfolio returns
		b	calculate and interpret the covariance and correlation of portfolio returns using a joint probability function for returns
		c	define shortfall risk, calculate the safety-first ratio, and identify an optimal portfolio using Roy's safety-first criterion
6	Simulation Methods	a	explain the relationship between normal and lognormal distributions and why the lognormal distribution is used to model asset prices when using continuously compounded asset returns
		b	describe Monte Carlo simulation and explain how it can be used in investment applications
		c	describe the use of bootstrap resampling in conducting a simulation based on observed data in investment applications
7	Estimation and Inference	a	compare and contrast simple random, stratified random, cluster, convenience, and judgmental sampling and their implications for sampling error in an investment problem
		b	explain the central limit theorem and its importance for the distribution and standard error of the sample mean
		c	describe the use of resampling (bootstrap, jackknife) to estimate the sampling distribution of a statistic
8	Hypothesis Testing	a	explain hypothesis testing and its components, including statistical significance, Type I and Type II errors, and the power of a test.
		b	construct hypothesis tests and determine their statistical significance, the associated Type I and Type II errors, and power of the test given a significance level
		c	compare and contrast parametric and nonparametric tests, and describe situations where each is the more appropriate type of test
9	Parametric and Non Parametric Tests of Independence	a	explain parametric and nonparametric tests of the hypothesis that the population correlation coefficient equals zero, and determine whether the hypothesis is rejected at a given level of significance
		b	explain tests of independence based on contingency table data
10	Simple Linear Regression	a	describe a simple linear regression model, how the least squares criterion is used to estimate regression coefficients, and the interpretation of these coefficients
		b	explain the assumptions underlying the simple linear regression model, and describe how residuals and residual plots indicate if these assumptions may have been violated
		c	calculate and interpret measures of fit and formulate and evaluate tests of fit and of regression coefficients in a simple linear regression
		d	describe the use of analysis of variance (ANOVA) in regression analysis, interpret ANOVA results, and calculate and interpret the standard error of estimate in a simple linear regression
		e	calculate and interpret the predicted value for the dependent variable, and a prediction interval for it, given an estimated linear regression model and a value for the independent variable
		f	describe different functional forms of simple linear regressions
11	Introduction to Big Data Techniques	a	describe aspects of "fintech" that are directly relevant for the gathering and analyzing of financial data.
		b	describe Big Data, artificial intelligence, and machine learning
		c	describe applications of Big Data and Data Science to investment management
<b>Economics - Pre-requisites</b>			
PR8	Topics in Demand and Supply Analysis	a	calculate and interpret price, income, and cross-price elasticities of demand and describe factors that affect each measure
		b	compare substitution and income effects
		c	contrast normal goods with inferior goods
		d	describe the phenomenon of diminishing marginal returns
		e	determine and interpret breakeven and shutdown points of production

Reading No.	Reading Name	LOS	Learning Outcome
PR9	Introduction to the Firm and Market Organization	a	describe characteristics of perfect competition, monopolistic competition, oligopoly, and pure monopoly*
		b	explain relationships between price, marginal revenue, marginal cost, economic profit, and the elasticity of demand under each market structure
		c	describe a firm's supply function under each market structure
		d	describe and determine the optimal price and output for firms under each market structure
		e	describe pricing strategy under each market structure
		f	explain factors affecting long-run equilibrium under each market structure
PR10	Aggregate Output, Prices, and Economic Growth	a	calculate and explain gross domestic product (GDP) using expenditure and income approaches
		b	compare the sum-of-value-added and value-of-final-output methods of calculating GDP
		c	compare nominal and real GDP and calculate and interpret the GDP deflator
		d	compare GDP, national income, personal income, and personal disposable income
		e	explain the fundamental relationship among saving, investment, the fiscal balance, and the trade balance
		f	explain how the aggregate demand curve is generated
		g	explain the aggregate supply curve in the short run and long run
		h	explain causes of movements along and shifts in aggregate demand and supply curves
		i	describe how fluctuations in aggregate demand and aggregate supply cause short-run changes in the economy and the business cycle
		j	distinguish among the following types of macroeconomic equilibria: long-run full employment, short-run recessionary gap, short-run inflationary gap, and short-run stagflation
		k	explain how a short-run macroeconomic equilibrium may occur at a level above or below full employment
		l	analyze the effect of combined changes in aggregate supply and demand on the economy
		m	describe sources, measurement, and sustainability of economic growth
		n	describe the production function approach to analyzing the sources of economic growth
o	define and contrast input growth and growth of total factor productivity as components of economic growth		
PR11	Introduction to Business Cycles	a	describe how resource use, consumer and business activity, housing sector activity, and external trade sector activity vary as an economy moves through the business cycle
		b	describe types of unemployment, and compare measures of unemployment
		c	explain inflation, hyperinflation, disinflation, and deflation
		d	explain the construction of indexes used to measure inflation
		e	compare inflation measures, including their uses and limitations
		f	contrast cost-push and demand-pull inflation
PR12	Monetary and Fiscal Policy	a	compare monetary and fiscal policy
		b	describe functions and definitions of money
		c	explain the money creation process
		d	describe theories of the demand for and supply of money
		e	describe the Fisher effect
		f	contrast the costs of expected and unexpected inflation
PR13	International Trade and Capital Flows	a	compare gross domestic product and gross national product
		b	describe benefits and costs of international trade
		c	contrast comparative advantage and absolute advantage
		d	compare the Ricardian and Heckscher–Ohlin models of trade and the source(s) of comparative advantage in each model
		e	describe the balance of payments accounts including their components
		f	explain how decisions by consumers, firms, and governments affect the balance of payments
PR14	Currency Exchange Rates	a	define an exchange rate and distinguish between nominal and real exchange rates and spot and forward exchange rates
		b	calculate and interpret the percentage change in a currency relative to another currency
		c	describe functions of and participants in the foreign exchange market
		d	explain the effects of exchange rates on countries' international trade and capital flows



Reading No.	Reading Name	LOS	Learning Outcome
<b>Economics</b>			
12	The Firm and Market Structures	a	determine and interpret breakeven and shutdown points of production, as well as how economies and diseconomies of scale affect costs under perfect and imperfect competition
		b	describe characteristics of perfect competition, monopolistic competition, oligopoly, and pure monopoly
		c	explain supply and demand relationships under monopolistic competition, including the optimal price and output for firms as well as pricing strategy
		d	explain supply and demand relationships under oligopoly, including the optimal price and output for firms as well as pricing strategy
		e	identify the type of market structure within which a firm operates and describe the use and limitations of
13	Understanding Business Cycles	a	describe the business cycle and its phases
		b	describe credit cycles
		c	describe how resource use, consumer and business activity, housing sector activity, and external trade sector activity vary over the business cycle and describe their measurement using economic indicators
14	Fiscal Policy	a	compare monetary and fiscal policy
		b	describe roles and objectives of fiscal policy as well as arguments as to whether the size of a national debt relative to GDP matters
		c	describe tools of fiscal policy, including their advantages and disadvantages
		d	explain the implementation of fiscal policy and difficulties of implementation as well as whether a fiscal policy is expansionary or contractionary
15	Monetary Policy	a	describe the roles and objectives of central banks
		b	describe tools used to implement monetary policy tools and the monetary transmission mechanism, and explain the relationships between monetary policy and economic growth, inflation, interest, and exchange rates
		c	describe qualities of effective central banks; contrast their use of inflation, interest rate, and
		d	explain the interaction of monetary and fiscal policy
16	Introduction to Geopolitics	a	describe geopolitics from a cooperation versus competition perspective
		b	describe geopolitics and its relationship with globalization
		c	describe functions and objectives of the international organizations that facilitate trade, including the World Bank, the International Monetary Fund, and the World Trade Organization
		d	describe geopolitical risk
		e	describe tools of geopolitics and their impact on regions and economies
		f	describe the impact of geopolitical risk on investments
17	International Trade	a	describe the benefits and costs of international trade
		b	compare types of trade restrictions, such as tariffs, quotas, and export subsidies, and their economic implications
		c	explain motivations for and advantages of trading blocs, common markets, and economic unions
18	Capital Flows and the FX Market	a	describe the foreign exchange market, including its functions and participants, distinguish between nominal and real exchange rates, and calculate and interpret the percentage change in a currency relative to another currency
		b	describe exchange rate regimes and explain the effects of exchange rates on countries' international trade and capital flows
		c	describe common objectives of capital restrictions imposed by governments
19	Exchange Rate Calculations	a	calculate and interpret currency cross-rates
		b	explain the arbitrage relationship between spot and forward exchange rates and interest rates, calculate a forward rate using points or in percentage terms, and interpret a forward discount or premium
<b>Portfolio Management (Part One)</b>			
20	Portfolio Risk and Return-Part I	a	describe characteristics of the major asset classes that investors consider in forming portfolios
		b	explain risk aversion and its implications for portfolio selection
		c	explain the selection of an optimal portfolio, given an investor's utility (or risk aversion) and the capital allocation line

Reading No.	Reading Name	LOS	Learning Outcome
20	Portfolio Risk and Return-Part I	d	calculate and interpret the mean, variance, and covariance (or correlation) of asset returns based on historical data
		e	calculate and interpret portfolio standard deviation
		f	describe the effect on a portfolio's risk of investing in assets that are less than perfectly correlated
		g	describe and interpret the minimum-variance and efficient frontiers of risky assets and the global minimum-variance portfolio
21	Portfolio Risk and Return-Part II	a	describe the implications of combining a risk-free asset with a portfolio of risky assets
		b	explain the capital allocation line (CAL) and the capital market line (CML)
		c	explain systematic and nonsystematic risk, including why an investor should not expect to receive additional return for bearing nonsystematic risk
		d	explain return generating models (including the market model) and their uses
		e	calculate and interpret beta
		f	explain the capital asset pricing model (CAPM), including its assumptions, and the security market line (SML)
		g	calculate and interpret the expected return of an asset using the CAPM
		h	describe and demonstrate applications of the CAPM and the SML
		i	calculate and interpret the Sharpe ratio, Treynor ratio, M2, and Jensen's alpha
<b>Financial Statement Analysis - Pre-requisites</b>			
PR15	Introduction to Financial Reporting	a	describe the objective of financial reporting and the importance of financial reporting standards in financial analysis
		b	describe the roles of financial reporting standard-setting bodies and regulatory authorities in establishing and enforcing reporting standards
		c	describe the International Accounting Standards Board's conceptual framework, including qualitative characteristics of financial reports, constraints on financial reports, and required reporting elements
		d	describe general requirements for financial statements under International Financial Reporting Standards (IFRS)
		e	describe the roles of the statement of financial position, statement of comprehensive income, statement of changes in equity, and statement of cash flows in evaluating a company's performance and financial position
PR16	Income Statements	a	describe the components of the income statement and alternative presentation formats of that statement
		b	describe general principles of revenue recognition and accounting standards for revenue recognition
		c	calculate revenue given information that might influence the choice of revenue recognition method
		d	describe general principles of expense recognition, specific expense recognition applications, and implications of expense recognition choices for financial analysis
		e	contrast operating and non-operating components of the income statement
		f	formulate income statements into common-size income statements
		g	evaluate a company's financial performance using common-size income statements and financial ratios based on the income statement
		h	describe, calculate, and interpret comprehensive income
		i	describe other comprehensive income and identify major types of items included in it
PR17	Balance Sheets	a	describe the elements of the balance sheet: assets, liabilities, and equity
		b	describe uses and limitations of the balance sheet in financial analysis
		c	describe alternative formats of balance sheet presentation
		d	contrast current and non-current assets and current and non-current liabilities
		e	describe different types of assets and liabilities and the measurement bases of each
		f	describe the components of shareholders' equity
PR18	Cash Flow Statements	a	compare cash flows from operating, investing, and financing activities and classify cash flow items as relating to one of those three categories given a description of the items
		b	describe how non-cash investing and financing activities are reported
		c	compare and contrast the direct and indirect methods of presenting cash from operating activities and describe arguments in favor of each method
		d	contrast cash flow statements prepared under International Financial Reporting Standards (IFRS) and US generally accepted accounting principles (US GAAP)

Reading No.	Reading Name	LOS	Learning Outcome
PR19	Inventories	a	contrast costs included in inventories and costs recognised as expenses in the period in which they are incurred
		b	describe different inventory valuation methods (cost formulas)
		c	calculate and compare cost of sales, gross profit, and ending inventory using different inventory valuation methods and using perpetual and periodic inventory systems
		d	calculate and explain how inflation and deflation of inventory costs affect the financial statements and ratios of companies that use different inventory valuation methods
		e	explain LIFO reserve and LIFO liquidation and their effects on financial statements and ratios
		f	demonstrate the conversion of a company's reported financial statements from LIFO to FIFO for purposes of comparison
		g	describe the measurement of inventory at the lower of cost and net realisable value
		h	describe implications of valuing inventory at net realisable value for financial statements and ratios
		i	describe the financial statement presentation of and disclosures relating to inventories
		j	explain issues that analysts should consider when examining a company's inventory disclosures and other sources of information
		k	calculate and compare ratios of companies, including companies that use different inventory methods
		l	analyze and compare the financial statements of companies, including companies that use different inventory methods
PR20	Long-Lived Assets	a	describe the different depreciation methods for property, plant, and equipment and calculate depreciation expense
		b	describe how the choice of depreciation method and assumptions concerning useful life and residual value affect depreciation expense, financial statements, and ratios
		c	explain and evaluate how impairment, revaluation, and derecognition of property, plant, and equipment and intangible assets affect financial statements and ratios
		d	describe the different amortisation methods for intangible assets with finite lives and calculate amortisation expense
		e	describe how the choice of amortisation method and assumptions concerning useful life and residual value affect amortisation expense, financial statements, and ratios
		f	describe the revaluation model
		g	compare the financial reporting of investment property with that of property, plant, and equipment
PR21	Income Taxes	a	calculate the tax base of a company's assets and liabilities
		b	calculate income tax expense, income taxes payable, deferred tax assets, and deferred tax liabilities, and calculate and interpret the adjustment to the financial statements related to a change in the income tax rate
		c	evaluate the effect of tax rate changes on a company's financial statements and ratios
		d	identify and contrast temporary versus permanent differences in pre-tax accounting income and taxable income
		e	explain recognition and measurement of current and deferred tax items
		f	describe the valuation allowance for deferred tax assets—when it is required and what effect it has on financial statements
PR22	Non-Current Long-Term Liabilities	a	determine the initial recognition, initial measurement and subsequent measurement of bonds
		b	describe the effective interest method and calculate interest expense, amortisation of bond discounts/premiums, and interest payments
		c	explain the derecognition of debt
PR23	Applications of Financial Statement Analysis	a	evaluate a company's past financial performance and explain how a company's strategy is reflected in past financial performance
		b	demonstrate how to forecast a company's future net income and cash flow
		c	describe the role of financial statement analysis in assessing the credit quality of a potential debt investment
		d	describe the use of financial statement analysis in screening for potential equity investments
		e	explain appropriate analyst adjustments to a company's financial statements to facilitate comparison with another company

Reading No.	Reading Name	LOS	Learning Outcome
<b>Corporate Issuers</b>			
22	Organizational Forms, Corporate Issuer Features, and Ownership	a	compare the organizational forms of businesses
		b	describe key features of corporate issuers
		c	compare publicly and privately owned corporate issuers
23	Investors and Other Stakeholders	a	compare the financial claims and motivations of lenders and shareholders
		b	describe a company's stakeholder groups and compare their interests
		c	describe environmental, social, and governance factors of corporate issuers considered by investors
24	Corporate Governance-Conflicts, Mechanisms, Risks, and Benefits	a	describe the principal-agent relationship and conflicts that may arise between stakeholder groups
		b	describe corporate governance and mechanisms to manage stakeholder relationships and mitigate associated risks
		c	describe potential risks of poor corporate governance and stakeholder management and benefits of effective corporate governance and stakeholder management
25	Working Capital and Liquidity	a	explain the cash conversion cycle and compare issuers' cash conversion cycles
		b	explain liquidity and compare issuers' liquidity levels
		c	describe issuers' objectives and compare methods for managing working capital and liquidity
26	Capital Investments and Capital Allocation	a	describe types of capital investments
		b	describe the capital allocation process, calculate net present value (NPV), internal rate of return (IRR), and return on invested capital (ROIC), and contrast their use in capital allocation
		c	describe principles of capital allocation and common capital allocation pitfalls
		d	describe types of real options relevant to capital investments
27	Capital Structure	a	calculate and interpret the weighted-average cost of capital for a company
		b	explain factors affecting capital structure and the weighted-average cost of capital
		c	explain the Modigliani–Miller propositions regarding capital structure
		d	describe optimal and target capital structures
28	Business Models	a	describe key features of business models
		b	describe various types of business models
<b>Financial Statement Analysis</b>			
29	Introduction to Financial Statement Analysis	a	describe the steps in the financial statement analysis framework
		b	describe the roles of financial statement analysis
		c	describe the importance of regulatory filings, financial statement notes and supplementary information, management's commentary, and audit reports
		d	describe implications for financial analysis of alternative financial reporting systems and the importance of monitoring developments in financial reporting standards
		e	describe information sources that analysts use in financial statement analysis besides annual and interim financial reports
30	Analyzing Income Statements	a	describe general principles of revenue recognition, specific revenue recognition applications, and implications of revenue recognition choices for financial analysis
		b	describe general principles of expense recognition, specific expense recognition applications, implications of expense recognition choices for financial analysis and contrast costs that are capitalized versus those that are expensed in the period in which they are incurred
		c	describe the financial reporting treatment and analysis of non-recurring items (including discontinued operations, unusual or infrequent items) and changes in accounting policies
		d	describe how earnings per share is calculated and calculate and interpret a company's basic and diluted earnings per share for companies with simple and complex capital structures including those with antidilutive securities
		e	evaluate a company's financial performance using common-size income statements and financial ratios based on the income statement
31	Analyzing Balance Sheets	a	explain the financial reporting and disclosures related to intangible assets
		b	explain the financial reporting and disclosures related to goodwill
		c	explain the financial reporting and disclosures related to financial instruments
		d	explain the financial reporting and disclosures related to non-current liabilities
		e	calculate and interpret common-size balance sheets and related financial ratios

Reading No.	Reading Name	LOS	Learning Outcome
32	Analyzing Statements of Cash Flows I	a	describe how the cash flow statement is linked to the income statement and the balance sheet
		b	describe the steps in the preparation of direct and indirect cash flow statements, including how cash flows can be computed using income statement and balance sheet data
		c	demonstrate the conversion of cash flows from the indirect to direct method
		d	contrast cash flow statements prepared under international financial reporting standards (IFRS) and US GAAP
33	Analyzing Statements of Cash Flows II	a	analyze and interpret both reported and common-size cash flow statements
		b	calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios
34	Analysis of Inventories	a	describe the measurement of inventory at the lower of cost and net realisable value and its implications for financial statements and ratios
		b	calculate and explain how inflation and deflation of inventory costs affect the financial statements and ratios of companies that use different inventory valuation methods
		c	describe the presentation and disclosures relating to inventories and explain issues that analysts should consider when examining a company's inventory disclosures and other sources of information
35	Analysis of Long-Term Assets	a	compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination
		b	explain and evaluate how impairment and derecognition of property, plant, and equipment and intangible assets affect the financial statements and ratios
		c	analyze and interpret financial statement disclosures regarding property, plant, and equipment and intangible assets
36	Topics in Long-Term Liabilities and Equity	a	explain the financial reporting of leases from the perspectives of lessors and lessees
		b	explain the financial reporting of defined contribution, defined benefit, and stock-based compensation plans
		c	describe the financial statement presentation of and disclosures relating to long-term liabilities and share-based compensation
37	Analysis of Income Taxes	a	contrast accounting profit, taxable income, taxes payable, and income tax expense and temporary versus permanent differences between accounting profit and taxable income
		b	explain how deferred tax liabilities and assets are created and the factors that determine how a company's deferred tax liabilities and assets should be treated for the purposes of financial analysis
		c	calculate, interpret, and contrast an issuer's effective tax rate, statutory tax rate, and cash tax rate
		d	analyze disclosures relating to deferred tax items and the effective tax rate reconciliation and explain how information included in these disclosures affects a company's financial statements and financial ratios
38	Financial Reporting Quality	a	compare financial reporting quality with the quality of reported results (including quality of earnings, cash flow, and balance sheet items)
		b	describe a spectrum for assessing financial reporting quality
		c	explain the difference between conservative and aggressive accounting
		d	describe motivations that might cause management to issue financial reports that are not high quality and conditions that are conducive to issuing low-quality, or even fraudulent, financial reports
		e	describe mechanisms that discipline financial reporting quality and the potential limitations of those mechanisms
		f	describe presentation choices, including non-GAAP measures, that could be used to influence an analyst's opinion
		g	describe accounting methods (choices and estimates) that could be used to manage earnings, cash flow, and balance sheet items
		h	describe accounting warning signs and methods for detecting manipulation of information in financial reports

Reading No.	Reading Name	LOS	Learning Outcome
39	Financial Analysis Techniques	a	describe tools and techniques used in financial analysis, including their uses and limitations
		b	calculate and interpret activity, liquidity, solvency, and profitability ratios
		c	describe relationships among ratios and evaluate a company using ratio analysis
		d	demonstrate the application of DuPont analysis of return on equity and calculate and interpret effects of changes in its components
		e	describe the uses of industry-specific ratios used in financial analysis
		f	describe how ratio analysis and other techniques can be used to model and forecast earnings
40	Introduction to Financial Statement Modeling	a	demonstrate the development of a sales-based pro forma company model
		b	explain how behavioral factors affect analyst forecasts and recommend remedial actions for analyst biases
		c	explain how the competitive position of a company based on a Porter's five forces analysis affects prices and costs
		d	explain how to forecast industry and company sales and costs when they are subject to price inflation or deflation
		e	explain considerations in the choice of an explicit forecast horizon and an analyst's choices in developing projections beyond the short-term forecast horizon
<b>Equity</b>			
41	Market Organization and Structure	a	explain the main functions of the financial system
		b	describe classifications of assets and markets
		c	describe the major types of securities, currencies, contracts, commodities, and real assets that trade in organized markets, including their distinguishing characteristics and major subtypes
		d	describe types of financial intermediaries and services that they provide
		e	compare positions an investor can take in an asset
		f	calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call
		g	compare execution, validity, and clearing instructions
		h	compare market orders with limit orders
		i	define primary and secondary markets and explain how secondary markets support primary markets
		j	describe how securities, contracts, and currencies are traded in quote-driven, order-driven, and brokered markets
		k	describe characteristics of a well-functioning financial system
l	describe objectives of market regulation		
42	Security Market Indexes	a	describe a security market index
		b	calculate and interpret the value, price return, and total return of an index
		c	describe the choices and issues in index construction and management
		d	compare the different weighting methods used in index construction
		e	calculate and analyze the value and return of an index given its weighting method
		f	describe rebalancing and reconstitution of an index
		g	describe uses of security market indexes
		h	describe types of equity indexes
		i	compare types of security market indexes
		j	describe types of fixed-income indexes
		k	describe indexes representing alternative investments
43	Market Efficiency	a	describe market efficiency and related concepts, including their importance to investment practitioners
		b	contrast market value and intrinsic value
		c	explain factors that affect a market's efficiency
		d	contrast weak-form, semi-strong-form, and strong-form market efficiency
		e	explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management
		f	describe market anomalies
		g	describe behavioral finance and its potential relevance to understanding market anomalies

Reading No.	Reading Name	LOS	Learning Outcome
44	Overview of Equity Securities	a	describe characteristics of types of equity securities
		b	describe differences in voting rights and other ownership characteristics among different equity classes
		c	compare and contrast public and private equity securities
		d	describe methods for investing in non-domestic equity securities
		e	compare the risk and return characteristics of different types of equity securities
		f	explain the role of equity securities in the financing of a company's assets
		g	contrast the market value and book value of equity securities
		h	compare a company's cost of equity, its (accounting) return on equity, and investors' required rates of return
45	Company Analysis-Past and Present	a	describe the elements that should be covered in a thorough company research report
		b	determine a company's business model
		c	evaluate a company's revenue and revenue drivers, including pricing power
		d	evaluate a company's operating profitability and working capital using key measures
		e	evaluate a company's capital investments and capital structure
46	Industry and Competitive Analysis	a	describe the purposes of, and steps involved in, industry and competitive analysis
		b	describe industry classification methods and compare methods by which companies can be grouped
		c	determine an industry's size, growth characteristics, profitability, and market share trends
		d	analyze an industry's structure and external influences using Porter's five forces and PESTLE
		e	evaluate the competitive strategy and position of a company
47	Company Analysis-Forecasting	a	explain principles and approaches to forecasting a company's financial results and position
		b	explain approaches to forecasting a company's revenues
		c	explain approaches to forecasting a company's operating expenses and working capital
		d	explain approaches to forecasting a company's capital investments and capital structure
		e	describe the use of scenario analysis in forecasting
48	Equity Valuation-Concepts and Basic Tools	a	evaluate whether a security, given its current market price and a value estimate, is overvalued, fairly valued, or undervalued
		b	describe major categories of equity valuation models
		c	describe regular cash dividends, extra dividends, stock dividends, stock splits, reverse stock splits, and share repurchases
		d	describe dividend payment chronology
		e	explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models
		f	explain advantages and disadvantages of each category of valuation model
		g	calculate the intrinsic value of a non-callable, non-convertible preferred stock
		h	calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate
		i	identify characteristics of companies for which the constant growth or a multistage dividend discount model is appropriate
		j	explain the rationale for using price multiples to value equity, how the price to earnings multiple relates to fundamentals, and the use of multiples based on comparables
		k	calculate and interpret the following multiples: price to earnings, price to an estimate of operating cash flow, price to sales, and price to book value
		l	describe enterprise value multiples and their use in estimating equity value
		m	describe asset-based valuation models and their use in estimating equity value
<b>Fixed Income</b>			
49	Fixed-Income Instrument Features	a	describe the features of a fixed-income security
		b	describe the contents of a bond indenture and contrast affirmative and negative covenants
50	Fixed-Income Cash Flows and Types	a	describe common cash flow structures of fixed-income instruments and contrast cash flow contingency provisions that benefit issuers and investors
		b	describe how legal, regulatory, and tax considerations affect the issuance and trading of fixed-income securities

Reading No.	Reading Name	LOS	Learning Outcome
51	Fixed-Income Issuance and Trading	a	describe fixed-income market segments and their issuer and investor participants
		b	describe types of fixed-income indexes
		c	compare primary and secondary fixed-income markets to equity markets
52	Fixed-Income Markets for Corporate Issuers	a	compare short-term funding alternatives available to corporations and financial institutions
		b	describe repurchase agreements (repos), their uses, and their benefits and risks
		c	contrast the long-term funding of investment-grade versus high-yield corporate issuers
53	Fixed-Income Markets for Government Issuers	a	describe funding choices by sovereign and non-sovereign governments, quasi-government entities, and supranational agencies
		b	contrast the issuance and trading of government and corporate fixed-income instruments
54	Fixed-Income Bond Valuation-Prices and Yields	a	calculate a bond's price given a yield-to-maturity on or between coupon dates
		b	identify the relationships among a bond's price, coupon rate, maturity, and yield-to-maturity
		c	describe matrix pricing
55	Yield and Yield Spread Measures for Fixed-Rate Bonds	a	calculate annual yield on a bond for varying compounding periods in a year
		b	compare, calculate, and interpret yield and yield spread measures for fixed-rate bonds
56	Yield and Yield Spread Measures for Floating-Rate Instruments	a	calculate and interpret yield spread measures for floating-rate instruments
		b	calculate and interpret yield measures for money market instruments
57	The Term Structure of Interest Rates-Spot, Par, and Forward Curves	a	define spot rates and the spot curve, and calculate the price of a bond using spot rates
		b	define par and forward rates, and calculate par rates, forward rates from spot rates, spot rates from forward rates, and the price of a bond using forward rates
		c	compare the spot curve, par curve, and forward curve
58	Interest Rate Risk and Return	a	calculate and interpret the sources of return from investing in a fixed-rate bond
		b	describe the relationships among a bond's holding period return, its Macaulay duration, and the investment horizon;
		c	define, calculate, and interpret Macaulay duration
59	Yield-Based Bond Duration Measures and Properties	a	define, calculate, and interpret modified duration, money duration, and the price value of a basis point (PVBP)
		b	explain how a bond's maturity, coupon, and yield level affect its interest rate risk
60	Yield-Based Bond Convexity and Portfolio Properties	a	calculate and interpret convexity and describe the convexity adjustment
		b	calculate the percentage price change of a bond for a specified change in yield, given the bond's duration and convexity
		c	calculate portfolio duration and convexity and explain the limitations of these measures
61	Curve-Based and Empirical Fixed-Income Risk Measures	a	explain why effective duration and effective convexity are the most appropriate measures of interest rate risk for fixed-income portfolios
		b	calculate the percentage price change of a bond for a specified change in benchmark yield, given the bond's effective duration and convexity
		c	define key rate duration and describe its use to measure price sensitivity of fixed-income instruments to benchmark yield curve changes
		d	describe the difference between empirical duration and analytical duration
62	Credit Risk	a	describe credit risk and its components, probability of default and loss given default
		b	describe the uses of ratings from credit rating agencies and their limitations
		c	describe macroeconomic, market, and issuer-specific factors that influence the level and volatility of credit spreads
63	Credit Analysis for Government Issuers	a	explain special considerations when evaluating the credit of sovereign and non-sovereign government debt issuers and issues
64	Credit Analysis for Corporate Issuers	a	describe the qualitative and quantitative factors used to evaluate a corporate borrower's creditworthiness
		b	calculate and interpret financial ratios used in credit analysis
		c	describe the seniority rankings of debt, secured versus unsecured debt and the priority of claims in bankruptcy, and their impact on credit ratings



Reading No.	Reading Name	LOS	Learning Outcome
65	Fixed-Income Securitization	a	explain benefits of securitization for issuers, investors, economies, and financial markets
		b	describe securitization, including the parties and the roles they play
66	Asset-Backed Security Instrument and Market Features	a	describe characteristics and risks of covered bonds and how they differ from other asset-backed securities
		b	describe typical credit enhancement structures used in securitizations
		c	describe types and characteristics of non-mortgage asset-backed securities, including the cash flows and risks of each type
		d	describe collateralized debt obligations, including their cash flows and risks
67	Mortgage-Backed Security Instrument and Market Features	a	define prepayment risk and describe time tranching structures in securitizations and their purpose
		b	describe fundamental features of residential mortgage loans that are securitized
		c	describe types and characteristics of residential mortgage-backed securities, including mortgage pass-through securities and collateralized mortgage obligations, and explain the cash flows and risks for each type
		d	describe characteristics and risks of commercial mortgage-backed securities
<b>Derivatives</b>			
68	Derivative Instrument and Derivative Market	a	define a derivative and describe basic features of a derivative instrument
		b	describe the basic features of derivative markets, and contrast over-the-counter and exchange-traded derivative markets
69	Forward Commitment and Contingent Claim Features and Instruments	a	define forward contracts, futures contracts, swaps, options (calls and puts), and credit derivatives and compare their basic characteristics
		b	determine the value at expiration and profit from a long or a short position in a call or put option
		c	contrast forward commitments with contingent claims
70	Derivative Benefits, Risks, and Issuer and Investor Uses	a	describe benefits and risks of derivative instruments
		b	compare the use of derivatives among issuers and investors
71	Arbitrage, Replication, and the Cost of Carry in Pricing Derivatives	a	explain how the concepts of arbitrage and replication are used in pricing derivatives
		b	explain the difference between the spot and expected future price of an underlying and the cost of carry associated with holding the underlying asset
72	Pricing and Valuation of Forward Contracts and for an Underlying with Varying Maturities	a	explain how the value and price of a forward contract are determined at initiation, during the life of the contract, and at expiration
		b	explain how forward rates are determined for interest rate forward contracts and describe the uses of these forward rates.
73	Pricing and Valuation of Futures Contracts	a	compare the value and price of forward and futures contracts
		b	explain why forward and futures prices differ
74	Pricing and Valuation of Interest Rates and Other Swaps	a	describe how swap contracts are similar to but different from a series of forward contracts
		b	contrast the value and price of swaps
75	Pricing and Valuation of Options	a	explain the exercise value, moneyness, and time value of an option
		b	contrast the use of arbitrage and replication concepts in pricing forward commitments and contingent claims
		c	identify the factors that determine the value of an option and describe how each factor affects the value of an option
76	Option Replication Using Put–Call Parity	a	explain put–call parity for European options
		b	explain put–call forward parity for European options

Reading No.	Reading Name	LOS	Learning Outcome
77	Valuing a Derivative Using a One-Period Binomial Model	a	explain how to value a derivative using a one-period binomial model
		b	describe the concept of risk neutrality in derivatives pricing
<b>Alternative Investments</b>			
78	Alternative Investment Features, Methods, and Structures	a	describe features and categories of alternative investments
		b	compare direct investment, co-investment, and fund investment methods for alternative investments
		c	describe investment ownership and compensation structures commonly used in alternative investments
79	Alternative Investment Performance and Returns	a	describe the performance appraisal of alternative investments
		b	calculate and interpret alternative investment returns both before and after fees
80	Investments in Private Capital-Equity and Debt	a	explain features of private equity and its investment characteristics
		b	explain features of private debt and its investment characteristics
		c	describe the diversification benefits that private capital can provide
81	Real Estate and Infrastructure	a	explain features and characteristics of real estate
		b	explain the investment characteristics of real estate investments
		c	explain features and characteristics of infrastructure
		d	explain the investment characteristics of infrastructure investments
82	Natural Resources	a	explain features of raw land, timberland, and farmland and their investment characteristics
		b	describe features of commodities and their investment characteristics
		c	analyze sources of risk, return, and diversification among natural resource investments
83	Hedge Funds	a	explain investment features of hedge funds and contrast them with other asset classes
		b	describe investment forms and vehicles used in hedge fund investments
		c	analyze sources of risk, return, and diversification among hedge fund investments
84	Introduction to Digital Assets	a	describe financial applications of distributed ledger technology
		b	explain investment features of digital assets and contrast them with other asset classes
		c	describe investment forms and vehicles used in digital asset investments
		d	analyze sources of risk, return, and diversification among digital asset investments
<b>Portfolio Management (Part Two)</b>			
85	Portfolio Management-An Overview	a	describe the portfolio approach to investing
		b	describe the steps in the portfolio management process
		c	describe types of investors and distinctive characteristics and needs of each
		d	describe defined contribution and defined benefit pension plans
		e	describe aspects of the asset management industry
		f	describe mutual funds and compare them with other pooled investment products
86	Basics of Portfolio Planning and Construction	a	describe the reasons for a written investment policy statement (IPS)
		b	describe the major components of an IPS
		c	describe risk and return objectives and how they may be developed for a client
		d	explain the difference between the willingness and the ability (capacity) to take risk in analyzing an investor's financial risk tolerance
		e	describe the investment constraints of liquidity, time horizon, tax concerns, legal and regulatory factors, and unique circumstances and their implications for the choice of portfolio assets
		f	explain the specification of asset classes in relation to asset allocation
		g	describe the principles of portfolio construction and the role of asset allocation in relation to the IPS
		h	describe how environmental, social, and governance (ESG) considerations may be integrated into portfolio planning and construction
87	The Behavioral Biases of Individuals	a	compare and contrast cognitive errors and emotional biases
		b	discuss commonly recognized behavioral biases and their implications for financial decision making
		c	describe how behavioral biases of investors can lead to market characteristics that may not be explained by traditional finance

Reading No.	Reading Name	LOS	Learning Outcome
88	Introduction to Risk Management	a	define risk management
		b	describe features of a risk management framework
		c	define risk governance and describe elements of effective risk governance
		d	explain how risk tolerance affects risk management
		e	describe risk budgeting and its role in risk governance
		f	identify financial and non-financial sources of risk and describe how they may interact
		g	describe methods for measuring and modifying risk exposures and factors to consider in choosing among the methods
<b>Ethics</b>			
89	Ethics and Trust in the Investment Profession	a	explain ethics
		b	describe the role of a code of ethics in defining a profession
		c	describe professions and how they establish trust
		d	describe the need for high ethical standards in investment management
		e	explain professionalism in investment management
		f	identify challenges to ethical behavior
		g	compare and contrast ethical standards with legal standards
		h	describe a framework for ethical decision making
90	Code of Ethics and Standards of Professional Conduct	a	describe the structure of the CFA Institute Professional Conduct Program and the process for the enforcement of the Code and Standards
		b	identify the six components of the Code of Ethics and the seven Standards of Professional Conduct
		c	explain the ethical responsibilities required by the Code and Standards, including the sub-sections of each Standard
91	Guidance for Standards I–VII	a	demonstrate the application of the Code of Ethics and Standards of Professional Conduct to situations involving issues of professional integrity
		b	recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct
		c	identify conduct that conforms to the Code and Standards and conduct that violates the Code and Standards
92	Introduction to the Global Investment Performance Standards	a	explain why the GIPS standards were created, who can claim compliance, and who benefits from compliance
		b	describe the key concepts of the GIPS Standards for Firms
		c	explain the purpose of composites in performance reporting
		d	describe the fundamentals of compliance, including the recommendations of the GIPS standards with respect to the definition of the firm and the firm's definition of discretion
		e	describe the concept of independent verification
93	Ethics Application	a	evaluate practices, policies, and conduct relative to the CFA Institute Code of Ethics and Standards of Professional Conduct
		b	explain how the practices, policies, and conduct do or do not violate the CFA Institute Code of Ethics and Standards of Professional Conduct