

## Study Guide for Exit Exam for Finance Majors

The exit exam is given in the Advanced Financial Management (FINA40153) class. The exit exam counts as 10% of the course grade.

Students graduating with a Bachelors degree in Finance should be knowledgeable of the following:

### Time Value of Money

- Understand the concept of 'time value of money.'
- Calculate the present value or future value of a lump (single) sum.
- Find number of periods or interest rate for lump sum cash flow if given PV and FV
- Calculate PV or FV of an annuity and of an annuity due
- Find PMT, interest rate, or number of payments in annuity or annuity due problem with annual or non-annual payments
- Find the PV, PMT, or interest rate for a perpetuity
- Find the PV or FV of an uneven stream of cash flows.
- Calculate the effective annual rate for an interest rate compounded more than one time per year
- Prepare a loan amortization table
- Understand the effect of time and interest rate on present and future values of a cash flow

### Capital Budgeting

- Calculate the cost of debt with and without flotation costs
- Calculate the cost of preferred stock with and without flotation costs
- Calculate the cost of common stock using the dividend growth model with and without flotation costs
- Calculate the cost of equity using the Capital Asset Pricing Model
- Understand what a stock's beta measures and how it is calculated
- Understand how a firm's level of debt affects the cost of common equity
- Calculate the firm's capital structure weights
- Calculate the firm's weighted average cost of capital
- Understand marginal cost of capital
- Be able to evaluate a project's cash flows using payback period, discounted payback period, net present value, internal rate of return, and modified internal rate of return
- Be able to select between projects of different life length and different size (initial outlay)
- Be able to develop a project's cash flows
- Understand why the WACC curve is u-shaped

### Asset Valuation

- Calculate the price of a bond
- Calculate the yield to maturity of a bond
- Understand the impact of time to maturity on changes in bond prices as yield changes
- Explain bond duration
- Calculate the price of preferred stock
- Calculate the expected return of preferred stock
- Calculate the value of common stock using the dividend growth model, market multiples, and firm's free cash flows.
- Calculate the expected return of common stock
- Calculate the current yield (dividend yield) of stock
- Explain relative riskiness of bonds, preferred stock, common stock relative to claims on assets and claims on income
- Calculate the value of a merger or a firm using free cash flows, cash flows to equity, and adjusted present value approach
- Calculate free cash flow

### Risk, Diversification, and Asset Pricing

- Understand the effect of changes in discount rate on price of asset
- Understand the components of an asset's required return
- Understand derivative terminology, pricing models, and investment strategies.
- Explain the Efficient Market Hypothesis
- Explain the three different types of market efficiency and its implications to abnormal returns.
- Calculate the beta and alpha of a common stock based on historical stock price data
- Understand the capital asset pricing model (CAPM)
- Be able to calculate the return and risk of a single asset or of a two asset portfolio
- Explain the benefits of diversification
- Understand the difference between systematic and unsystematic risk.
- Calculate the Sharpe ratio and explain its relation to risk-benefit tradeoff
- Understand the 'random walk' of stock prices
- Explain business risk and financial risk

### Debt and Equity Capital Decisions

- Explain the role of an investment banker regarding security issues, capital structure analysis, and merger and acquisitions
- Explain financial leverage and operating leverage and how they impact firm performance
- Understand primary and secondary security market transactions
- Understand how to determine if the firm is operating at its optimal capital structure
- Use the Hamada equation to unlever or relever beta.
- Understand the effects of debt on firm value, cost of debt, and cost of equity
- Explain and calculate interest tax shields
- Discuss the effect of debt on the cost of financial distress

### Financial Statement Analysis

- Understand the uses of financial statement analysis
- Understand the use of profitability ratios, liquidity ratios, asset utilization ratios, and debt utilization ratios
- Calculate the following ratios: profit margin, return on equity, return on assets, debt ratio, times interest earned, receivables turnover, average collection period, total asset turnover, current ratio
- Use the DuPont system of analysis
- Understand the limitations of ratio analysis

### Corporate Governance

- Understand agency theory, agency problem, and ways firms can minimize the agency problem
- Explain the goal of a firm and how corporate governance policies influence management's actions to achieve the goal

### Money and Banking

- Understand how market interest rates are determined
- Explain the term structure of interest rates
- Understand foreign-exchange markets and exchange rates
- Explain the purpose of financial systems
- Understand the use and purpose of money and barter in the financial system
- Explain the money supply process
- Explain the organization of central banks, monetary policy tools, and the conduct of monetary policy
- Understand aggregate demand and aggregate supply
- Explain the causes and consequences of inflation
- Discuss the implications of the moral hazard problem
- Explain the adverse selection problem
- Understand how the yield curve is developed and what it tells an investor.
- Understand the concept of purchasing power.
- Explain the governance of the Federal Reserve system
- Explain the open market operations of the Federal Reserve