# Super Computer Consulting Inc.

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*Note. Where possible, we will use publicly available information to give examples of hedge funds using each investment style.*

<u>Equity-based hedge funds.</u>

1. Introduction.
   a. The first “hedge fund”: Alfred Jones’s long short equity strategy.
   b. What does it mean to “short” a stock?
   c. How shorting increases a manager’s opportunity set.
   d. The concept of an absolute return strategy.

2. Valuation techniques.
   a. Top-down and bottom-up analysis.
   b. Fundamental models for determining longs and shorts.
   c. Methods for forecasting earnings.
   d. “Black box” approaches to screening and valuation.
   e. Technical analysis and market timing.

3. Market neutral equity strategies.
   a. What is market “neutrality”?
   b. Dollar-, beta-, sector- and style neutrality.
   c. Managing a balanced portfolio of longs and shorts using automated risk controls.

4. Statistical arbitrage.
   a. An example of technical pairs trading.
   b. What is a “noise trader”?
   c. Exploiting short-term inefficiencies using technical trading models.
   d. The impact of market dispersion levels on statistical arbitrage.

<u>Arbitrage strategies.</u>

1. Introduction.
   a. What is “arbitrage”? Do pure arbitrage opportunities exist and how can they be exploited?
   b. Pure arbitrage trades, such as stock index futures arbitrage.
   c. Convergence and “statistical” arbitrage trading.
   d. The importance and potential dangers of leverage in arbitrage trades.
   e. Inefficient markets and liquidity risk.

2. Convertible bond arbitrage.

   a. A crowded market for arbitrageurs.
   b. What is a convertible bond?
   c. Cash and carry trades and delta hedging.
   d. Volatility (“gamma”) trading and options arbitrage.
   e. Credit analysis of convertible bonds.

3. Fixed income arbitrage.
   a. Trading government issued debt. Duration, international and liquidity spreads.
   b. Arbitrage in the mortgage markets. Mortgage-backed securities arbitrage, including non-conforming mortgage pools.
   c. Trading corporate yield spreads across the credit spectrum.
   d. Capital structure arbitrage.

<u>Event-driven strategies.</u>

1. What is “opportunistic” trading?
2. Anticipating and trading mergers, acquisitions and hostile takeovers.
3. Valuing and trading distressed debt and equity.
4. Trading around earnings surprises and corporate actions.

<u>Global asset allocation funds</u>

1. Global macro trading.
   a. Looking at the interaction between commodity, fixed income, currency and equity prices.
   b. Leads and lags across international markets.
   c. Trading according to economic policy and leading economic indicators.
   d. Time series models for describing market interactions.

2. Technical trading and CTA’s.
   a. Moving average oscillators and other technical indicators.
   b. Why trend-following strategies can diversify a portfolio of hedge funds.
   c. Stop-losses, diversification and risk controls.
   d. Short-term, “contrarian” technical trading.