

Portfolio and Risk Management – Syllabus

- Week 1 : General Introduction and Key Concepts
 - Lesson 1: Introduction
 - **Lecture:** Why you should choose this course
 - **Lecture:** Some common mistakes you will no longer make after this course – Portfolio risk
 - **Lecture:** Some common mistakes you will no longer make after this course – Free lunch
 - Lesson 2: Useful things to know before this course
 - **Reading:** Glossary
 - **Lecture:** Distribution of returns – Graphical representation
 - **Lecture:** Distribution of returns – Numbers
 - **Forum discussion:** How would you build your portfolio?
 - **Lecture:** The risk-return trade-off – UBS guest speaker
 - **Graded quiz:** Graded quiz on the content of Week 1
- Week 2: Modern Portfolio Theory and Beyond
 - Lesson 1: Modern Portfolio Theory: The importance of diversification
 - **Lecture:** The impact of correlation – The benefits of diversification
 - **Lecture:** The impact of correlation – Maximizing diversification
 - **Lecture:** Reaching the efficient frontier – UBS guest speaker
 - **Lecture:** The efficient frontier with a risk-free asset
 - Lesson 2: Modern Portfolio Theory: A step beyond
 - **Lecture:** Expanding the asset universe – International diversification
 - **Lecture:** Expanding the asset universe – Country versus industry diversification
 - **Lecture:** Do investors diversify internationally? – UBS guest speaker
 - **Forum discussion:** How much would you be willing to invest abroad?
 - **Lecture:** The impact of constraints on optimal portfolios
 - **Lecture:** The pitfalls of Modern Portfolio Theory – Assumptions
 - **Lecture:** The pitfalls of Modern Portfolio Theory – Investors
 - Lesson 3: The Capital Asset Pricing Model
 - **Lecture:** Two-fund separation – Individual decision
 - **Lecture:** Two-fund separation – Market level
 - **Lecture:** Capital market equilibrium – The Capital Market Line
 - **Lecture:** Capital market equilibrium – The Capital Asset Pricing Model
 - **Graded quiz:** Graded quiz on the content of Week 2
- Week 3: Asset Allocation
 - Lesson 1: Investors' goals and needs
 - **Lecture:** How our age and wealth affect our investment profile – Main views
 - **Lecture:** How our age and wealth affect our investment profile – Robo-advisors
 - **Forum discussion:** Would you follow the advice of a Robo-advisor?

- **Lecture:** The path from an investor's profile to his/her optimal investment strategy – UBS guest speaker
 - Lesson 2: Strategic asset allocation
 - **Lecture:** Strategic asset allocation: MPT in practice – Definitions
 - **Lecture:** Strategic asset allocation: MPT in practice – Implementation
 - **Reading:** The importance of asset allocation
 - **Lecture:** Asset allocation versus stock picking: what matters more? – UBS guest speaker
 - **Lecture:** Rebalancing a portfolio to maintain the SAA – SAA versus TAA
 - **Lecture:** Rebalancing a portfolio to maintain the SAA – Weights and bounds
 - Lesson 3: Tactical asset allocation
 - **Lecture:** Key drivers of tactical asset allocation – Goals
 - **Lecture:** Key drivers of tactical asset allocation – Implementation
 - **Lecture:** Timing the market with tactical asset allocation – Shiller's CAPE
 - **Lecture:** Timing the market with tactical asset allocation – Macroeconomic tools
 - **Lecture:** How tactical asset allocation depends on macroeconomic fundamentals – UBS guest speaker
 - **Lecture:** How to combine strategic and tactical asset allocations – UBS guest speaker
 - **Graded quiz:** Graded quiz on the content of Week 3
- Week 4: Risk Management
 - Lesson 1: Defining risk
 - **Lecture:** Defining forwards and options - Forwards
 - **Lecture:** Defining forwards and options - Options
 - **Lecture:** Risk as volatility?
 - **Lecture:** What about illiquidity? – UBS guest speaker
 - **Forum discussion:** Would you pay for liquidity?
 - **Lecture:** Currency risk - Return
 - **Lecture:** Currency risk - Risk
 - Lesson 2: Managing risk
 - **Lecture:** Defining the Value-at-Risk
 - **Lecture:** Computing the Value-at-Risk
 - **Lecture:** Defining the Expected Shortfall
 - **Lecture:** Computing the Expected Shortfall
 - **Lecture:** Risk management applied to portfolio allocation
 - **Lecture:** Banking regulation & Basel recommendations: How did we get there?
 - Lesson 3: Hedging
 - **Lecture:** Hedging against market falls (using options)
 - **Lecture:** Hedging against currency risk (using forwards)
 - **Graded quiz:** Graded quiz on the content of Week 4