

# Derivative Fundamentals Lesson Plan

Each module consists of 3-6 lessons and includes exercises.

A lesson typical lesson requires 20-30 minutes for participants to work through.

## **A Introduction**

A10 About this course  
A20 What are derivatives  
A30 Derivatives Map

## **B Forwards**

B10 What are forwards  
B20 Uses of forwards  
B30 Basic forward pricing (Video)  
B40 Cash vs. physical settlement  
B50 Exercises

## **C Futures**

C10 Forwards vs Futures  
C20 A worked Example  
C30 Uses of Futures  
C40 Exercises

## **D Financing a Trade**

D10 Financing a trade  
D20 Repo market  
D30 Short selling example  
D40 Exercises

## **E Forward price**

E10 Forward price and carry costs  
E20 Arbitrage-free pricing  
E30 Pricing equity index futures  
E40 Pricing currency forwards  
E50 Risk in forwards and futures  
E60 Exercises

## **F Total Return Swaps**

F10 Total return swaps  
F20 Hedging total return swaps  
F30 Delta one products  
F90 Exercises

## **G Option basics**

G10 Introduction to options  
G20 Option valuation – Calls  
G30 Option valuation – Puts  
G40 PV & Relative valuation  
G50 Homework

## **H Relative valuation (Put-call parity)**

H10 Put-call parity  
H20 PCP relationship  
H30 PCP Arbitrage trade  
H40 Homework

## **I Strategies and graphs**

I10 Breakeven graphs  
I20 Option strategies  
I30 Leverage  
I40 Homework

## **J Risk measures**

J10 Intro to risk measures  
J20 Risk measures – Delta  
J30 Risk measures – Vega  
J40 Risk measures – Theta  
J50 Risk measures – Gamma  
J60 Homework

## **K Derivative Fundamental Test**

K10 Test (Multiple choice)