Date	Day	Laptop required	Notes	Title	Lecturer	
Module 1	Building Blocks					
21 st January	Thursday	YES		The Random Behaviour of Assets	Paul Wilmott	
28 th January	Thursday			PDE's and Transition Density Functions	Riaz Ahmad	
02 nd February	Tuesday	YES		Applied Stochastic Calculus 1	Riaz Ahmad	
04 th February	Thursday	YES		Applied Stochastic Calculus 2	Riaz Ahmad	
09 th February	Tuesday			Products & Strategies	Neil Graham	
11 th February	Thursday	YES		Binomial Model	Randeep Gug	
16 th February	Tuesday			Discrete Martingales	Riaz Ahmad	
18 th February	Thursday			Continuous Martingales	Seb Lleo	
22 nd February	Monday			Module 1 Workshop	Riaz Ahmad	
Module 2	Quantitative Risk and Regulation					
24 th February	Wednesday			Portfolio Management	Seb Lleo	
25 th February	Thursday			Fundamentals of Optimization & Application to Portfolio Selection	Seb Lleo	
01 st March	Tuesday	YES		Risk Regulation & Basel III	Azmi Ozunlu	
03 rd March	Thursday			Market Risk Measurement Methods	Alonso Pena	

07 th March	Monday		This lecture will be held in New York	Impact of Risk Regulation on Investment & Trading	Edward Talisse
09 th March	Wednesday			Asset Returns: Key, Empirical Stylised Facts	Stephen Taylor
10 th March	Thursday			Volatility Models: The ARCH Framework	Stephen Taylor
Module 3	Equities and Curre	encies			
14 th March	Monday			Black-Scholes Model	Riaz Ahmad
16 th March	Wednesday			Martingale Theory - Applications to Option Pricing	Seb Lleo
17 th March	Thursday			Martingales & PDEs: Which, When & Why	Seb Lleo
21 st March	Monday	YES		Understanding Volatility	Richard Diamond
24 th March	Thursday	YES		Intro to Numerical Methods	Paul Wilmott
29 th March	Tuesday			Exotic Options	Riaz Ahmad
31 st March	Thursday			Further Numerical Methods	Riaz Ahmad
12 th April	Tuesday			Advanced Greeks	Espen Haug
13 th April	Wednesday			Derivatives Market Practice in the Time Before Quant Theory	Espen Haug
14 th April	Thursday	YES		Market-Based Valuation of Equity Index Options using Python	Yves Hilpisch
19 th April	Tuesday			'Advanced' Volatility Modeling in Complete Markets	Paul Wilmott
20 th April	Wednesday			Module 3 Workshop	Riaz Ahmad
Module 4	Fixed Income & Co	ommodities			
21 st April	Thursday	YES		Fixed Income Products & Analysis	Stuart Jackaman
28 th April	Thursday			Stochastic Interest Rate Modeling	Riaz Ahmad

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03 rd May	Tuesday			Calibration & Data Analysis	Paul Wilmott
04 th May	Wednesday			Probabilistic Methods for Interest Rates	Seb Lleo
10 th May	Tuesday	YES	This lecture will be held in New York	Heath Jarrow & Morton Model	Richard Diamond
17 th May	Tuesday		This lecture will be held in New York	Fixed Income Market Practices	Pat Hagan
18 th May	Wednesday		This lecture will be held in New York	Volatility Smiles & the SABR Model	Pat Hagan
19 th May	Thursday			The Libor Market Model	Peter Jaeckel
24 th May	Tuesday	YES		Mathematica for Quantitative Finance	TBC
26 th May	Thursday			Further Monte Carlo	Peter Jaeckel
28 th May	Saturday			Final Project Workshop Part I	Richard Diamond
01 st June	Wednesday		This lecture will be held in New York	Energy Derivatives (Hedging)	Iris Mack
02 nd June	Thursday		This lecture will be held in New York	Energy Derivatives (Trading)	Iris Mack
04 th June	Saturday			Final Project Workshop Part II	Richard Diamond
Module 5	Credit Products and Risk				
06 th June	Monday	YES		Introduction to Credit Derivatives & Structural Models	Alonso Pena
07 th June	Tuesday	YES		Credit Default Swaps	Alonso Pena
09 th June	Thursday			Intensity Models	SiYi Zhou
14 th June	Tuesday	YES		X - Valuation Adjustment (CVA,DVA,FVA) - Theory	Jon Gregory
16 th June	Thursday	YES		X - Valuation Adjustment (CVA,DVA,FVA) – Implementation	Alonso Pena
20 th June	Monday	YES		Collateralized Debt Obligations	SiYi Zhou

23 rd June	Thursday	YES		Statistical Methods in Estimating Default Probability	Richard Diamond
30 th June	Thursday	YES		Correlation Sensitivity & State Dependence	Siyi Zhou
05 th July	Tuesday			Co-integration Modeling Long Term Relationships	Richard Diamond
Module 6	Advanced Electives (online) – details on the electives will be provided separately				