

CRONOGRAMA – WEEKLY PLANNING

COURSE: Adv. Derivatives - Master in Finance

Week	Schedule for the classroom		Working at home
	Contents and activities	Activities and resources	
1	<ul style="list-style-type: none"> Topic 1: An application of standard option pricing: The valuation of warrants using observable variables 	<ul style="list-style-type: none"> Professor notes and references Computer for practical exercises 	<ul style="list-style-type: none"> Study notes and references Practice exercises with Excel/Matlab
2	<ul style="list-style-type: none"> Topic 2: Exotic options and Monte Carlo simulation. Valuation of path-dependent options with Monte Carlo simulation 	<ul style="list-style-type: none"> Professor notes and references Computer for practical exercises 	<ul style="list-style-type: none"> Study notes and references Practice exercises with Excel/Matlab
3	<ul style="list-style-type: none"> Topic 2: Exotic Options and Monte Carlo Simulation. Valuation of path-independent options 	<ul style="list-style-type: none"> Professor notes and references Computer for practical exercises 	<ul style="list-style-type: none"> Study notes and references Practice exercises with Excel/Matlab
4	<ul style="list-style-type: none"> Lesson 2: Exotic Options and Monte Carlo Simulation. Design of structured products 	<ul style="list-style-type: none"> Professor notes and references Computer for practical exercises 	<ul style="list-style-type: none"> Study notes and references Practice exercises with Excel/Matlab
5	<ul style="list-style-type: none"> Topic 3: Valuation of swaps. Review of FRAs and swaps. Valuation of Interest Rate Swaps using forward rates 	<ul style="list-style-type: none"> Professor notes and references Computer for practical exercises 	<ul style="list-style-type: none"> Study notes and references Practice exercises with Excel/Matlab
6	<ul style="list-style-type: none"> Topic 4: Introduction to Interest Rate OTC derivatives. Description of caps, floors, collars, and swaptions 	<ul style="list-style-type: none"> Professor notes and references Computer for practical exercises 	<ul style="list-style-type: none"> Study notes and references Practice exercises with Excel/Matlab

7	<ul style="list-style-type: none"> • Topic 4: Introduction to Interest Rate OTC derivatives. Valuation of caps and swaptions as bond options. Valuation using Black (1976) model 	<ul style="list-style-type: none"> • Professor notes and references • Computer for practical exercises 	<ul style="list-style-type: none"> • Study notes and references
8	Final Exam		