

## MODULE SPECIFICATION

Part 1: Information								
Module Title	Risk	Risk Management						
Module Code	UMECRK-15-M		Level	Level 7				
For implementation from	2020-	2020-21						
UWE Credit Rating	15		ECTS Credit Rating	7.5				
Faculty	Facul	ty of Business & Law	Field	Economics				
Department	FBL [	FBL Dept of Accounting Economics & Finance						
Module Type:	Stand	Standard						
Pre-requisites		None						
Excluded Combinations		None						
Co-requisites		None						
Module Entry Requirements		None						
PSRB Requirements		None						

### Part 2: Description

**Educational Aims:** The aim of the module is to provide students with an understanding of a variety of financial and operational risks, their measurement and management.

In addition to the learning outcomes the educational experience may explore, develop, and practise but not formally discretely assess the following:

Working as a team member Presentation of own work to a group Facility in the use of EXCEL

Outline Syllabus: The syllabus includes: Sources of risk (financial) Sources of risk (operational and business risks) Simple approaches to risk measurement (s.d. variance, APM, 'Greeks') Volatility and GARCH modelling (Using EXCEL Solver: S&P 500) Value at Risk measures (expected shortfall, time horizon, confidence level, types of VaR measures, back testing, stress testing) VaR and historical simulation (methodology, accuracy, historical and weighted historical simulation) Extreme value theory (define, parameter estimation, choosing the threshold, QQ plot; application: S&P 500) Hedging with derivatives (forwards and futures)

### Hedging with derivatives (options)

Credit risk (credit ratings, historical default probabilities, estimating default probabilities from bond prices) Interest rate risk and asset/liability management (measuring interest rates, duration, yield curve, interest rate deltas)

Managing operational risk (different ways of operational risk management, steps to measuring operational risk, capital attribution for operational risk)

**Teaching and Learning Methods:** A variety of teaching methods will be used, centred on conventional lectures and seminars. However, selected topics (e.g. 4, 5 and 6) will be explored through workshop sessions using EXCEL.

The core of the programme will be a series of lectures and seminars. A variety of teaching methods will be used. Students will be confronted with a series of practical exercises which will enable them to build up a range of valuation and other analytical techniques.

Students will be actively encouraged to make themselves familiar with the study skills web pages and in particular to read widely around the subject matter. Active use will be made of the Blackboard facilities.

3 hours per week (2 hours lecture and 1 hour tutorial) over a 12 week term.

#### Part 3: Assessment

There will be both formative and summative assessment on the module. The formative assessment will be through continuous feedback on tutorial and workshop exercises whilst the summative assessment will be through a 24-hour online open book exam. The major part of the examination will require students to write an analysis of selected risk management problems. The analysis will require students to show that they can apply concepts and principles that have been discussed in the course.

First Sit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A	$\checkmark$	100 %	24-hour online exam
Resit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A	~	100 %	24-hour online exam

Part 4: Teaching and Learning Methods						
Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:					
	Module Learning Outcomes	Reference				
	Distinguish different sources of financial and operational risks	MO1				
	Apply and critically assess simple approaches of risk measurement	MO2				
	Demonstrate an understanding of the fundamental concepts of hedging with derivatives	MO3				
	Apply complex risk measurement techniques and will be able to discuss their drawbacks and advantages	MO4				
	Distinguish different forms of market risk and their measurement and management	MO5				
	Understand yield curves and calculate duration and convexity measures	MO6				

## STUDENT AND ACADEMIC SERVICES

Contact Hours	Independent Study Hours:						
	Independent study/self-guided study	114					
	Total Independent Study Hours:	114					
	Scheduled Learning and Teaching Hours:						
	Face-to-face learning	36					
	Total Scheduled Learning and Teaching Hours:	36					
	Hours to be allocated	150					
	Allocated Hours	150					
Reading List	The reading list for this module can be accessed via the following link:						
	https://uwe.rl.talis.com/modules/umecrk-15-m.html						

# Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Finance [Sep][FT][Frenchay][1yr] MSc 2020-21

Finance [Sep][FT][BAV][1yr] MSc 2020-21

Finance [Sep][PT][Frenchay][3yrs] MSc 2019-20