



Module Specification

Credit Risk Analysis and Management

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Part 1: Information

Module title: Credit Risk Analysis and Management

Module code: UMAD5W-15-3

Level: Level 6

For implementation from: 2023-24

UWE credit rating: 15

ECTS credit rating: 7.5

Faculty: Faculty of Business & Law

Department: FBL Dept of Accounting Economics & Finance

Partner institutions: None

Delivery locations: Not in use for Modules

Field: Accounting and Finance

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Overall, the purpose of this module is to introduce students to the concept of credit risk and acquaint them with the theoretical as well as practical applications with a view to efficiently analysing, reporting and managing credit risk.

Features: Not applicable

Educational aims: The module aims to enable students to develop an appreciation for the subject area of credit risk, its potential and practical significance and inspire students to actively pursue research in this area and remain up-to-date with the rapid developments in the various constituent areas of credit risk.

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

Communication of information, ideas, arguments, concepts, theories and development of an argument in a clearly and effectively organised essay or report.

Use of IT and computer skills in the identification of source material, capture and manipulation of data and support of research.

Planning and undertaking tasks, developing criteria to evaluate performance and seeking and making use of feedback.

Outline syllabus: Financial Risk Management:

Basic risk types and key measurement tools

Creating value with financial risk

Credit Risk Management:

Introduction to Credit Risk Management

Credit Risk Assessment Framework

Approaches to Credit Risk Management:

Empirical modelling (incl. market-based models)

Structural modelling

Reduced-form modelling

The main credit risk equation $EL = PD \times LGD \times EAD$:

Expected and Unexpected Losses (EL and UL)

Modelling of Probability of Default (PD)

Modelling of Loss Given Default (LGD)

Modelling of Exposure at Default (EAD)

Credit ratings / credit scoring:

A taxonomy of credit ratings (external, internal, market-based, sovereign)

Accounting, financial, market-based and cash flow ratio analysis; analytic relationship models

Credit risk scorecards

Credit risk portfolio management:

Modern Portfolio Theory (MPT) revisited

Portfolio Effects in Credit Risk: Risk Contributions and

Unexpected Losses

Value-At-Risk (VaR) and Credit VaR:

Introduction to VaR

VaR modelling approaches (correlation, historical simulation and Monte Carlo simulation)

Credit VaR models, backtesting and stress testing

Financial Derivatives:

Introduction to financial derivatives

The binomial tree approach

The Black-Scholes-Merton model

Introduction to the “Greeks”

Credit derivatives:

A taxonomy of credit derivatives (CDOs, CDSs, CLNs, etc)

The Structuring Process and Securitisation

The Regulatory View of Credit Risk:

Capital and regulation

From Basel I to Basel III

Regulatory aspects of securitisation

Part 3: Teaching and learning methods

Teaching and learning methods: Module delivery will be based on 3 hours of scheduled learning and teaching activities per teaching week.

Formal contact between lecturers and students will be through lectures and workshops each week.

The main purpose of the lectures will be to convey core material and engage students in critical thinking over the theories and practices relating to credit risk and its management.

The workshops, tutorials and other organised learning activities will aim to enable students to apply the knowledge gained in the lectures and also emulate industry models and practices in a facilitated environment. Specific emphasis will be placed on the use of modern technologies for the purposes of credit risk analysis and management.

Online discussion boards, reference to professional associations (e.g. GARP), use of professional websites (e.g. www.defaultrisk.com) will allow students to keep up to-date with the developments in the area of credit risk and also reflect upon and elaborate on issues that will be covered in the module. The module team will rely extensively on current financial and credit related news to form the backdrop against which the discussion will take place and theories will be sought to be put into practice.

Furthermore, students will be actively directed towards the University Library online Study Skills resources, namely mySkills for the development of academic as well as generic skills appropriate to the level and style of the module.

Students will be directed on how the resources on this site should be used to develop the skills that will underpin their studies in the module handbook and/or via Blackboard.

Lectures: 1 hour per week, total 12 hours

Workshops: 2 hours per week, total 24 hours

Independent Study: 114 hours

Total hours: 150 hours

This breakdown of delivery is only indicative. The module team reserves the right to amend the balance of lectures and workshops as it sees fit for the achievement of the learning outcomes of the module.

Independent Study includes, but is not necessarily restricted to, engaging in essential reading, workshop preparation, contribution to online discussion, development of academic and generic skills, assignment preparation and completion, research required for the purposes of the module, keeping up-to-date with credit risk developments and examination preparation.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Recognise and explain the importance of financial risk management and the role of credit management in a risk management and regulatory framework

MO2 Critically discuss the different approaches to credit risk modelling and the associated theoretical and operational issues with each

MO3 Demonstrate a good understanding of the main concepts in credit risk that are probability of default, loss given default and exposure at default and be able to apply a variety of models for their accurate measurement

MO4 Carry out a comprehensive financial ratio and cash flow analysis of any company to try and quantify credit risk

MO5 Research, explain and apply various credit risk assessment techniques in a number of different industries (corporate, consumer, sovereign)

MO6 Demonstrate an understanding of the application of portfolio theory in a credit risk context and appreciate the practices developed to overcome the associated problems

MO7 Identify, understand, discuss, critically assess and employ credit derivatives to mitigate credit risk

MO8 Familiarise themselves with the regulatory framework governing credit risk from a financial institution's perspective and demonstrate a solid grasp and ability to apply different approaches used by regulators

MO9 Critically appraise the role of volatility and correlation in credit risk and exhibit the ability to empirically apply methods, such as Value At Risk (VaR) to successfully report and manage credit risk

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 114 hours

Face-to-face learning = 33 hours

Total = 147

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link

<https://uwe.rl.talis.com/modules/umad5w-15-3.html>

Part 4: Assessment

Assessment strategy: The module will be assessed by means of a portfolio (40%) and a written individual coursework assessment (60%).

Non-assessed formative feedback will be provided in class group work and individual practical problems that students will be expected to attempt most weeks.

Assessment components:

Report (First Sit)

Description: Individual Business Report (2,000 words)

Weighting: 60 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO7, MO8, MO9

Portfolio (First Sit)

Description: Selection of online tasks to be completed during the teaching period

Weighting: 40 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO7, MO8, MO9

Portfolio (Resit)

Description: portfolio of assessment tasks

Weighting: 40 %

Final assessment: No

Group work: No

Learning outcomes tested:

Report (Resit)

Description: Individual Business Report (2,000 words)

Weighting: 60 %

Final assessment: Yes

Group work: No

Learning outcomes tested:

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Business Management with Accounting and Finance {Top-Up}[Sep][FT][Frenchay][2yrs] BA (Hons) 2022-23

Accounting [Sep][FT][Frenchay][3yrs] BSc (Hons) 2021-22

Accounting and Finance [Sep][FT][Frenchay][3yrs] BA (Hons) 2021-22

Business Management with Accounting and Finance [Sep][FT][Frenchay][3yrs] BA (Hons) 2021-22

Banking and Finance {Dual} [Aug][FT][Taylors][3yrs] BA (Hons) 2021-22

Banking and Finance {Dual} [Mar][FT][Taylors][3yrs] BA (Hons) 2021-22

Accounting and Finance {Dual} [Aug][FT][Taylors][3yrs] BA (Hons) 2021-22

Accounting and Finance {Dual} [Mar][FT][Taylors][3yrs] BA (Hons) 2021-22

Accounting and Management [Sep][FT][Frenchay][3yrs] - Withdrawn BA (Hons) 2021-22

Business Management with Accounting and Finance {Top-Up} [Sep][SW][Frenchay][3yrs] BA (Hons) 2021-22

Banking and Finance [Sep][FT][Frenchay][3yrs] BSc (Hons) 2021-22

Accounting and Business Management [Sep][FT][Frenchay][3yrs] BA (Hons) 2021-22

Business Management with Accounting and Finance [Sep][SW][Frenchay][4yrs] BA (Hons) 2020-21

Business Management with Accounting and Finance {Foundation} [Sep][FT][Frenchay][4yrs] BA (Hons) 2020-21

Banking and Finance {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2020-21

Accounting and Management [Sep][SW][Frenchay][4yrs] BA (Hons) 2020-21

Accounting and Finance [Sep][SW][Frenchay][4yrs] BA (Hons) 2020-21

Accounting and Management {Foundation} [Sep][FT][Frenchay][4yrs] BA (Hons) 2020-21

Banking and Finance [Sep][SW][Frenchay][4yrs] - Withdrawn BA (Hons) 2020-21

Banking and Finance {Foundation} [Sep][FT][Frenchay][4yrs] - Withdrawn BA (Hons) 2020-21

Accounting and Finance {Foundation} [Sep][FT][Frenchay][4yrs] BA (Hons) 2019-20

Banking and Finance [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Accounting [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Business Management with Accounting and Finance {Foundation} [Sep][SW][Frenchay][5yrs] BA (Hons) 2019-20

Banking and Finance {Foundation} [Sep][SW][Frenchay][5yrs] BA (Hons) 2019-20

Accounting and Management {Foundation} [Sep][SW][Frenchay][5yrs] BA (Hons)
2019-20

Accounting and Finance {Foundation} [Sep][SW][Frenchay][5yrs] BA (Hons) 2019-20

Accounting and Finance {Foundation} [Sep][SW][Frenchay][5yrs] - Withdrawn BA
(Hons) 2019-20