

# Credit Risk Management

EM3E5M31

## Programme

PGE  
PGE5 Finance

## UE

Financial Institutions

## Semestre

A

## Discipline

Finance

## Volume horaire

22 H

## Nombre de places

45

## Ouvert aux visiteurs

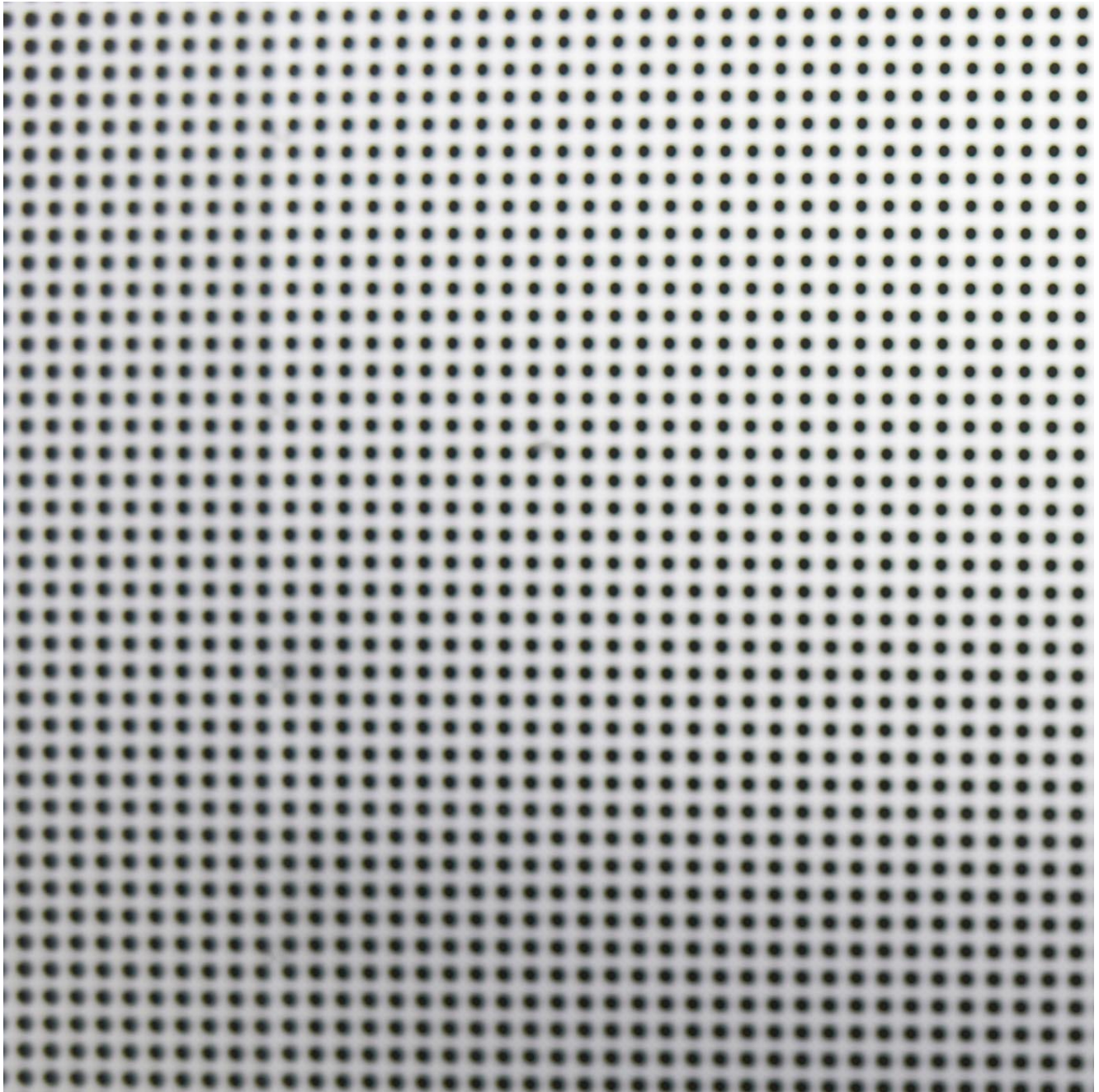
Oui

## Langue

EN

## Responsable

Régis BLAZY



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## Liste des intervenants

| Intervenant(s) | Email                                                              | Volume horaire CM |
|----------------|--------------------------------------------------------------------|-------------------|
| Régis BLAZY    | <a href="mailto:regis.blazy@unistra.fr">regis.blazy@unistra.fr</a> | 22 h              |

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**Contribution pédagogique du cours au programme**

## **Développer un management à impact grâce aux connaissances et aux outils les plus récents dans les domaines du management**

Developing a strategic and managerial vision in a complex, uncertain and changing environment

Evaluate sustainable managerial practices using managerial concepts and instruments as well as digital tools

Design solutions adapted to organizational problems by applying relevant methodologies

## **Développer des compétences managériales de niveau avancé se traduisant par un leadership responsable**

Recommend decision making by taking a critical approach to driving change in organizations

## **Pratiquer un management à impact dans un environnement multiculturel et international, porté par un "European mindset"**

Communicate in a professional context in (foreign) languages, in writing and/or orally

Formulate solutions to organizational challenges in a multicultural and international context, driven by a "European mindset"

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## **Descriptif**

This course aims at providing a panorama of the main techniques involved in credit risk management.

After having presented the context of those techniques, this module mainly focuses on the prediction tools, such as credit scoring methods (discriminant analysis).

The students are then given the opportunity to work on a real database made of bankrupt SMEs.

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## **Organisation pédagogique**

### Face-to-face

- Lectures
- Tutorials

### In group

- Exercises
- Other : XlStat application

### Interaction

- Discussions/debates
- Games (educational, role play, simulation)

### Others

Aucun élément de cette liste n'a été coché.

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## **Objectifs pédagogiques**

## **Cognitive domain**

A l'issue du cours, l'étudiant(e) devrait être capable de / d'...

- - (niv. 2) Describe the legal environment of bankruptcy.
  - - (niv. 3) Use XLSTAT(c) software.
  - - (niv. 4) Examine the quality of financial reports.
  - - (niv. 5) Arrange financial ratios.
  - - (niv. 5) interpret the context of credit risk management (crises, regulation, role of rating agencies).
  - - (niv. 6) Discriminate between good and bad firms.
  - - (niv. 6) Appraise the risk of default.
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## **Affective domain**

A l'issue du cours, l'étudiant(e) devrait être capable de / d'...

- - (niv. 4) prepare financial ratios
  - - (niv. 4) compare good and bad firms regarding their risk of default
  - - (niv. 5) act as a credit risk manager (individual ratings)
  - - (niv. 5) question the reliability of financial corporate reportings
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## **Objectifs de développement durable abordés**

ODD n°4 - Quality education

ODD n°9 - Industry, innovation and infrastructure

ODD n°16 - Peace, justice and strong institutions

ODD n°17 - Partnerships for the goals

## **Plan / Sommaire**

### 1) Understanding the context of credit risk management

- Definitions: (1) what is lending? (debt contract, collaterals), (2) what are (a) ratings, (b) credit scoring models, (c) credit risk management?
- Predicting "default" or "bankruptcy"? A short view of corporate bankruptcy systems (Europe)
- The importance of information in credit lending: main issues (adverse selection, rationing, collaterals)
- The role of rating agencies in acquiring systematic information (presentation of the main agencies)
- What does happen when ratings are wrong? (the role of the rating agencies in the 2008 financial crisis)
- The rating, as a central element of the Basel agreements (Basel 2 & 3, pillars 1 to 3).

### 2) Acquiring the technique of credit risk prediction (scoring)

- Introduction through a practical example: the National Banks' scoring functions.
- Presentation of linear discriminant analysis: theory & assignments.
- Credit scoring is the central element of credit risk management (elements on: risk factors, probabilities of default,

loss given default, exposure at default, correlation of defaults, etc.)

### 3) Managing credit scoring in "real life"

- Preparing a scoring (a question of point of view, accounts reprocessing, most common financial ratios used to build a scoring).
- Presentation of a software dedicated to discriminant analysis: XIStat©
- The students build their own credit scoring, using real corporate datasets.
- Extensions: beyond credit scoring issues (financial marketing, surveys...).

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## Prérequis nécessaires

### Connaissances en / Notions clés à maîtriser

- EXCEL
- Statistics (probability distribution, variance, covariance, statistical tests)
- Linear algebra (computation on matrixes, vectors)
- Financial analysis & Corporate reporting

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## Supports pédagogiques

### Mandatory tools for the course

- Computer
- Calculator
- Other :

### Documents in all formats

- Photocopies
- Newspaper articles
- Worksheets

### Moodle platform

- Upload of class documents
- Assessments
- Other : Access to tutorial videos

### Software

- Pack Office (Word, Excel, PowerPoint, Access)
- Other : XIStat (Excel)

### Additional electronic platforms

- Other : Unistra Cloud

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## Bibliographie recommandée

### Ouvrages principaux

In English:

- Credit Risk Scorecards: Developing and Implementing Intelligent Credit Scoring (2005). N. Siddiqi (John Wiley & Sons ed).

- Credit Scoring Methods: cf. your forwarded document #1. M. Vojtek and E. Kocenda.

In French:

Analyse discriminante (Dunod). M. Bardos (Dunod).

Mesure et gestion du risque de crédit dans les institutions financières. J. Petey and M. Dietsch (Revue Banque Ed.).

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### Littérature complémentaire

Several PDF documents uploaded on Moodle (Credit Risk Management class).

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### Travaux de recherche de l'EM : Veillez à mobiliser au moins une ressource

Peuvent être renseignés les manuels coordonnés, les traductions de manuel, les études de cas traduites etc...

"Building legal indexes to explain recovery rates: An analysis of the French and English bankruptcy codes", R. Blazy, B. Chopard, N. Nigam. Journal of Banking and Finance, 2013. Vol.37, n°6, pp 1936-1959.

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## Modalités d'évaluation

### Liste des modalités d'évaluation

**Evaluation finale** Autre (date, contrôle surprise...) : 11-oct-2024

Ecrite (120 min) / individuelle / Anglais / pondération : 100 %

Précisions : Written exam (closed-book) scheduled at a date relatively close to the end of the last class-session.

Cette évaluation sert à mesurer ILO1.3-PGE, ILO2.2-PGE, ILO4.1-PGE, ILO4.2-PGE