

PROGRAMA DE VERÃO 2024 - 709 ESCOLA DE MATEMÁTICA APLICADA FGV EMAp DISCIPLINA: Modelagem Estocástica de Mortalidade PROFESSORA: Silvana Pesenti CARGA HORÁRIA: 06h PRÉ-REQUISITO: PERÍODO: 31/01/24 a 02/02/24 (quarta e sexta-feira) HORÁRIO: 14h às 17h

# PLANO DE ENSINO

## 1. Ementa

We start with looking at the importance of mortality modelling for life insurance by considering life tables and estimation of survival probabilities. We next discuss traditional mortality models and then move to more advanced stochastic mortality modelling. The course will have a strong focus on implementation in R using the StMoMo package. For example, we will conduct a case study where we use real mortality tables and fit different stochastic mortality models, assess model fit and quantify parameter uncertainty.

#### 2. Procedimentos de avaliação

Não será aplicado avaliação durante o curso.

## 3. Bibliografia Obrigatória

## 4. Mini Currículo

Silvana Pesenti joined the University of Toronto as an assistant professor of insurance risk management in 2019. She received her PhD at Cass Business School, London, and holds a MSc in Mathematics from ETH Zurich.

Silvana Pesenti is the 2022 Rising Star in Quant Finance by risk.net for her contribution to portfolio optimisation. Her paper "Reverse Sensitivity Testing: What does it take to break the Model?" received the 2020 Peter Clark Prize, a prize given to the best academic paper by the Institute and Faculty of Actuaries



(IFoA). In 2019, Silvana was awarded the Dorothy Shoichet Women Faculty Award of Excellence.