

Module Title: Social Forecasting

Module Code: POP77014

Module Name: Social Forecasting

ECTS Weighting: 5

Semester/Term Taught: HT

Contact Hours: 10 hours of lectures + 10 hours of tutorials = 20 hours total

Module Personnel: Thomas Chadefaux

Module Learning Aims:

This module aims to explore the application of forecasting methods and theory to socially significant domains. It emphasizes both theoretical underpinnings and practical implementation, drawing on case studies from real-world applications. The goal is to equip students with both the conceptual knowledge and technical skills necessary for designing and evaluating forecasting systems.

Module Learning Outcomes:

On successful completion of this module, students will be able to:

- 1. Understand and explain fundamental concepts and methodologies in forecasting.
- 2. Apply forecasting methods to real-world social phenomena.
- 3. Critically assess the effectiveness of different forecasting approaches.
- 4. Design and implement basic forecasting systems.

Module Content:

- Introduction to Social Forecasting: Overview of the field, significance, and foundational concepts
- Performance Evaluation and Validation
- Smoothing and ARIMA
- Neural Networks for time series forecasting (I)
- Neural Networks for time series forecasting (II); Communication

Recommended Reading List:

Shmueli, Galit, and Kenneth C. Lichtendahl Jr. Practical Time Series Forecasting with R: A Hands-on Guide (2nd ed.). Axelrod Schnall Publishers, 2018.

Module Pre-Requisite:

Basic knowledge of statistics

Module Co-Requisite:

NA

Assessment Details:

• Coursework assignments (50%)



• Final project (50%)

Module Website: Blackboard