

PLAN FOR INDIVIDUAL READING

Last update: May 11, 2023

Week	Date	Chapters	Topics
1	Feb 14	2.1, 2.2, 3.1.1, 3.1.2 (intro), 3.1.2.1	Time series, Time series decomposition, Prediction, Prediction accuracy, Prediction combinations, Linear trend
2	Feb 21	rest of 3.1.2, 3.2.1 up to page 64	Various non-linear trends, Linear filters
3	Feb 28	rest of 3.2.1, 3.2.2 (with 3.2.2.3 only informatively), 3.3.1 and 3.3.2 skip Rem. 3.5, 3.6, 3.7, 3.8, 3.9	Linear filters (cont.), simple exponential smoothing, double exponential smoothing
4	Mar 9	3.3.3, 4.1. (skip 4.1.4), 4.2	Holt's method, Seasonality, Periodicity
5	Mar 16	4.3.1, 5.1, ACF tools (6.3.3.4)	Transformation, Tests of randomness
6	Mar 23	up to page 134	Linear process, MA, AR
7	Mar 30	6.2.4, 6.3.1, 6.3.2	ARMA, Model identification, Model estimation
8	Apr 6		class canceled
9	Apr 13	6.3.3, 6.4	Model verification, Nonstationarity, ARIMA, Unit root tests
10	Apr 20	6.5, 6.6, 8.1, 8.2, intro to 8.3.4	SARIMA, Predictions, Intro to volatility modelling
11	Apr 27	8.3.4, 8.3.5	ARCH and GARCH model
12	May 4	8.3.1, 8.3.2, 8.3.6	Individual reading only, no class: EWMA, GARCH modifications
13	May 11	12.1, 12.2	Multivariate time series, VAR model
14	May 18		no class

EXAM:

- credit from the tutorial class required for the exam,
- exact date: after an email agreement, possibly in June and September,
- the exam will be oral (no test) and it will be held in my office (4th floor):
 - you should understand the theory underlying a chosen model: basic properties, estimation method etc.,
 - you should be able to propose an acceptable model for a particular practical problem,
 - after you get the questions, you will have enough time to prepare your answers. Then we will discuss the topic.