

ECONOMETRICS III - TIME SERIES				
Week	Class	Day of the Week	Time	Content description
1	1	Tuesday, April 17, 2018	10h30-12h	AR/MA/ARMA models: stationarity, ACF, Ljung-Box test, white noise, AR models
	2	Thursday, April 19, 2018	10h30-12h	AR(1) and AR(2) processes, PACF, AIC/BIC, forecasting, MA models,
3	3	Thursday, May 3, 2018	10h30-12h	Random walk, mean reversion, predictability, random walk with drift, trend-stationarity, ARIMA(p,1,q), unit root tests
4	4	Tuesday, May 8, 2018	10h30-12h	Long memory models, seasonal time series, seasonal adjustment and differencing, multiplicative seasonality
	5	Thursday, May 10, 2018	10h30-12h	Seasonal time series, seasonal adjustment and differencing, multiplicative seasonality, Seasonal ARIMA models, R package forecast, airline data
	6	Friday, May 11, 2018	13h-14h30	Bayesian ingredients: sequential learning, normal-normal, prior, predictive, posterior and posterior predictive
	7	Friday, May 11, 2018	14h30-16h	Sequential Bayes, model probability, posterior odds, Bayes factor and marginal likelihood, multiple linear regression
5	8	Tuesday, May 15, 2018	10h30-12h	Monte Carlo integration, rejection method MC via IS
	9	Thursday, May 17, 2018	10h30-12h	MH algorithms
	10	Thursday, May 17, 2018	13h-14h30	Gibbs sampler
	11	Thursday, May 17, 2018	14h30-16h	Bayesian inference for the Gaussian AR(2) model
6	12	Tuesday, May 22, 2018	10h30-12h	ARCH, GARCH, EGARCH, GARCH-M and TGARCH models, Bayesian GARCH model
	13	Thursday, May 24, 2018	10h30-12h	Local level model
	14	Friday, May 25, 2018	13h-14h30	Dynamic models
	15	Friday, May 25, 2018	14h30-16h	Dynamic models
7	16	Tuesday, May 29, 2018	10h30-12h	Stochastic volatility models
8	17	Tuesday, June 5, 2018	10h30-12h	Stochastic volatility models
	18	Thursday, June 7, 2018	10h30-12h	Take home exam
9	19	Tuesday, June 12, 2018	10h30-12h	VAR models
	20	Thursday, June 14, 2018	10h30-12h	VAR-GARCH, VAR-SV, TVP-VAR-SV models
10	21	Tuesday, June 19, 2018	10h30-12h	Large BVAR, TVP-BVAR, FAVAR and BFAVAR models
	22	Thursday, June 21, 2018	10h30-12h	Dynamic factor models and factor SV models
12	23	Tuesday, July 3, 2018	10h30-12h	Particle filters for state learning
	24	Thursday, July 5, 2018	10h30-12h	Particle filters for state and parameter learning
13	25	Tuesday, July 10, 2018	10h30-12h	Final presentations
	26	Thursday, July 12, 2018	10h30-12h	Final presentations