

TENTATIVE COURSE SCHEDULE

Horowitz (2018) is a reference for all dates and is not specifically listed in this table

Class	Date	Topic	References	Pres
1	Sept. 16	Introduction	Horowitz , Sec. 2.1	Horowitz Lecture 1.
2	Sept. 21	Consistency	Horowitz, Sec. 2.1, Mammen (1991), Sec. 1.2; Bickel and Freedman (1981).	Horowitz Lecture 2.
3	Sept. 23	Subsampling	Horowitz, Sec. 2.2; Politis <i>et al.</i> , Politis and Romano (1994), Bertail <i>et al.</i> (1999)., Delgado et. al. (2001)	Horowitz Lecture 3.
4	Sept. 28	Bias reduction	Horowitz (2001, Sec. 31.), Hall (1992a, Ch. 1)	Horowitz Lecture 4.
5	Sept. 30	Edgeworth expansions, smooth function model	Horowitz, Sec. 3.2; Hall (1992a), Ch. 2	Horowitz Lecture 5.
6	Oct. 5	Critical values, ERP, ECP	Horowitz, Sec. 3.3, 3.4; Hall (1992a), Ch. 3	Horowitz Lecture 6.

7	Oct. 7	Alternative resampling methods, wild bootstrap	(Mammen (1991, Sec. 8.3); Mammen (1993), Hall and Presnell (1999), Horowitz (2001, Sec. 5.2), Brown and Newey (2002), Davidson and Flachaire (2008), Horowitz (2019, Sec. 6.1).	Zhu Zhu Slides
8	Oct. 12	Recentring; Monte Carlos	Horowitz, Sec. 3.7; Bickel and Freedman (1981); Brown and Newey (2001)	Horowitz Lecture 8.
9	Oct. 14	Bootstrap iteration	Horowitz (2001, Sec. 4.4); Beran (1987, 1988); Hall (1992a, Ch. 3)	Chiu
10	Oct.19	Nonparametric density estimation	Horowitz (2001, Sec. 4.2.1-4.2.3); Hall (1992a, Ch. 4), Hall (1992b).	Horowitz
11	Oct. 21	Nonparametric regression	Horowitz (2001, Sec. 4.2.1-4.2.3); Hall (1992a, Ch. 4), Hall (1992b)..	Liu
12	Oct. 26	Bootstrap confidence bands in nonparametric regression	Hall and Horowitz (2013), Horowitz and Krishnamurthy (2018)	Horowitz
13	Oct. 28	Non-smooth models	Janas (1993), De Angelis <i>et al.</i> (1993), Horowitz (1998a), Chen et al. (2003)	Horowitz
14	Nov. 2	Partially identified models: Shape restrictions	Freyberger and Horowitz. (2015)	Premo
15	Nov. 4	Moment inequalities	Bugni (2011),	Velez Sala

16	Nov. 9	Time series; bootstrap; for parametric model, linear time series, and Markov processes	Horowitz, Sec. 4.1.1; Bose (1988, 1990), Bühlmann 1997; Choi and Hall (2000), Bühlmann (2002), Davidson (2014), Horowitz (2003)	Horowitz
17	Nov. 11	Block bootstrap	Hall <i>et al.</i> (1995), Hall and Horowitz (1996), Zvingelis (2001)	Horowitz
18	Nov. 16	Subsampling with time series data	Hall and Jing (1996)	Wilner
19	Nov. 11	The LASSO and other penalized estimators	Chatterjee and Lahiri (2011, 2013)	Obradovic Pareschi
20	Nov. 16	The multiplier bootstrap and non-asymptotic inference	Chernozhukov, Chetverikov, and Kato (2013); Spokoiny and Zhilova (2015).	Cho and S