

Psychology 6140 - Class schedule

Topic & lecture notes	Tutorial	Assignment / Readings	Examples / other outputs: 
Overview: Multivariate analysis		Assign1	
Graphical methods	Intro to R	Assign2	
Vectors & matrices	SAS/IML Matrices in R	Assign3	imlmat1.sas 
Data screening	Data explore: SAS Data explore: R		outldemo.sas 
Missing data	SAS/Insight	Assign4	automiss.sas 
Linear equations	LinearEquations-IML LinearEquations-R		imlinv2.sas  imleqn.sas 
Eigen values/vectors	Eigenvalues-IML Eigenvalues-R	Assign5	imleig.sas 
Intro to regression	IntroReg IntroReg-R		regdemo.sas 
Model comparison Model selection	Regression	T&F, Ch 5	fuelr1.sas  stepsim2.sas 
Regression diagnostics	RegDiag	T&F, Ch 5	duncan-reg.R
Collinearity	Collin	T&F, Ch 5 FriendlyKwan(2009)	fitcolin.sas 
Logistic regression	Logistic	T&F Ch 10	
Multivariate regression	MMRA	J&W, Ch 7 Friendly (2006)	mregpvt.sas  mreq3.sas
Hotelling's T²	MeanDiff	J&W, Ch 5	hotel.sas  oral.sas 
MANOVA	OneWayMANOVA	J&W, Ch 6 T&F, Ch 7	m1way.sas  m1wayplt.sas
Repeated measures	RepeatedMeasures	T&F, Ch 8 Friendly(2010)	vocab.sas  probe1.sas 
Principal components	PCA	T&F, Ch 13 J&W, Ch 8	pca2.sas 
Exploratory factor analysis	EFA Amos-Exploratory	T&F, Ch 13 J&W, Ch 9	spear5.sas  psych9.sas 
Confirmatory factor analysis	CFA Amos-Multi-sample	T&F, Ch 14 J&W, Ch 9	
Robust methods & bootstrapping	Robust	FoxWeisberg(2010a) FoxWeisberg(2010b)	robduc.sas  bootduc.sas 
Mixed models	MixedModels	Singer (1998)	

T&F: Tabachnick & Fidell, *Using multivariate statistics*, 6th ed.
 J&W: Johnson & Wichern, *Applied multivariate statistical methods*, 6th ed.