Last update: January 19, 2024

# 2024 Biostatistics II 4FH087

Week I – Linear regression (February 19- February 23)

Day	Morning 9:00-12:00	Afternoon 13:00-16:00
Monday Feb 19	9:00-12:00 Roll call	13-16 Collaborative groups
	10:00-12:00 Introducing the course and	(SS)
	linear regression models (NO)	
Tuesday Feb 20	9:00-10:00 Study time	13-16 Collaborative groups
	10:00-12:00 Univariable linear model	(CC)
	with categorical predictor (HS)	
	9:00-10:00 Study time	13-16 Collaborative groups
Wednesday Feb 21	10:00-12:00 Multivariable linear model	(JL)
	(HS)	
Thursday Feb 22	9:00-10:00 Study time	
	10:00-12:00 Multivariable linear model	<b>DICE</b> (RT, HS)
	(HS)	
Friday Feb 23	Independent study	Independent study

Week II – Logistic regression (February 26 - March 1)

Day	Morning 9:00-12:00	Afternoon 13:00-16:00
Monday February 26	9:00-10:00 Weekly review Group I	13-16 Collaborative groups
	10:00-12:00 Introduction to logistic	(SS)
	regression (RT)	
Tuesday February 27	9:00-10:00 Study time	13-16 Collaborative groups
	10:00-12:00 Univariable logistic model	(CC)
	(RT)	
Wednesday February 28	9:00-10:00 Study time	13-16 Collaborative groups
	10:00-12:00 Multivariable logistic model	(JL)
	(RT)	
Thursday February 29	9:00-10:00 Study time	
	10:00-12:00 Multivariable logistic model	DICE (RT, JL)
	(RT)	
Friday March 1	Independent study	Independent study

Week III – Survival analysis (March 4-March 8)

Day	Morning 9:00-12:00	Afternoon 13:00-16:00
Monday March 4	Weekly review Group III Roll call	13-16 Collaborative groups
	Introduction to survival analysis (NO)	(SS)
Tuesday March 5	9:00-10:00 Study time	13-16 Collaborative groups
	10:00-12:00 Non-parametric and	(CC)
	parametric survival model (NO)	
Wednesday March 6	9:00-10:00 Study time	13-16 Collaborative groups
	10:00-12:00 Semi-parametric survival	(JL)
	model (NO)	
Thursday March 7	9:00-10:00 Study time	
	10:00-12:00 Semi-parametric survival	DICE (RT, NO)
	model (NO)	
Friday March 8	Independent study	Independent study

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Week IV – Advanced modelling topics (March 11 - March 15)

Day	Morning 9:00-12:00	Afternoon 13:00-16:00
Monday March 11	9:00-10:00 Weekly review Group II	13-16 Collaborative groups
	Roll Call + Mid-Course Evaluation	(SS)
	10:00-12:00 Multivariable modelling (JL)	
Tuesday March 12	9:00-10:00 Study time	13-16 Collaborative groups
	10:00-12:00 Non-linear mechanism (JL)	(CC)
Wednesday March 13	9:00-10:00 Study time	13-16 Collaborative groups
	10:00-12:00 Interaction mechanism (JL)	(JL)
Thursday March 14	9:00-10:00 Study time	DICE (DT II.)
-	10:00-12:00 Missing mechanism (RT)	DICE (RT, JL)
Friday March 15	Independent study	Independent study

## Week V – Review and get ready for final exam (March 18-March 22)

Morning 9:00-12:00	Afternoon 13:00-16:00
9:00-10:00 Weekly review Group IV	13:00-16:00
10:00-12:00 Get ready for the final exam	Get ready for the final exam (NO)
(NO)	
Independent study	Independent study
Independent study	Independent study
Independent study	Independent study
Final exam	
	9:00-10:00 Weekly review Group IV 10:00-12:00 Get ready for the final exam (NO) Independent study Independent study Independent study

#### Location

Lectures will be in Karolina (http://ki.se/medarbetare/karolina).

### Instructors

NO – Nicola Orsini, GPH, KI

HS - Hugo Sjöqvist, GPH, KI

RT – Robert Thiesmeier, GPH, KI

CC - Charilaos Chourpiliadis, IMM, KI

JL - Javier Lauro, IMM, KI

SS - Shuyun Chen - IMM, KI

### **Course Director**

Orsini Nicola, Principle Researcher, Associate Professor of Medical Statistics, GPH, KI

## Acronyms

IMM – Institute of Environmental Medicine

GPH - Department of Global Public Health

KI – Karolinska Institutet

DICE – Design, Interpret, Compute, Experiment. Detailed description of this activity is provided on Canvas. It is a one-day group activity with an opportunity to accumulate points during the course. Participation is not mandatory but highly recommended.