

Course Name	Date	Class	Topic
PH20-20	13/02/2013	COURSE PH1+2	Intro, setting the pace, homeworks and projects, concepts in molecular biology revisited
PH20-20	20/02/2013	Formation of groups COURSE PH3+4	Genetic epidemiology; what is it and what is it not? Assignment 1 (due 20/3)
<i>BIOINF15-15</i>	<i>05/03/2013</i>	<i>COURSE 1+2</i> <i>Assignments: split up the work and generate one report per group</i>	<i>Intro, setting pace, epidemiology in R –concepts in epidemiology (finding resources), highlight the variation in available tools such as the FBAT software, R SNPassoc and GenABEL, PLINK Assignment1: e.g., what are the key properties of these software packages</i>
PH20-20	06/03/2013	COURSE PH5+6	Basic concepts in population genetics, primer on genetic association studies
UA	18/03/2013	CLASS 1	Intro in genetic epidemiology
<i>BIOINF15-15</i>	<i>19/03/2013</i>	<i>COURSE 3+4</i>	<i>Quality control: genome-wide association studies, confounders, environmental effect modifiers (i.e., quality control of environmental constructs) Assignment 2: Compare quality control measures in PLINK with those available via GenABEL (or R in general), look up the theory behind, report, discuss + when using the same QC-ed data, perform an association study in GenABEL and PLINK (compare the results, are they different or the same and why?)</i>
PH20-20	20/03/2013	COURSE PH7+8	Group presentations of HW1 Genomewide association studies: theory and practice
UA	21/03/2013	CLASS 2	Population genetics
UA	22/03/2013	CLASS 3	Population-based genetic association studies
UA	25/03/2013	CLASS 4	Family-based genetic

			association studies
UA	26/03/2013	CLASS 5	Traveling a world of interactions
PH20-20	27/03/2013	COURSE PH9+10	The genetic epidemiology of interactions, focus on gene-gene interactions Assignment 2 (due 24/4)
UA	28/03/2013	CLASS 6	How to do it in practice: showcase of practical analysis tools
UA	29/03/2013	CLASS 7	From linkage to omics integrated analyses
<i>BIOINF15-15</i>	<i>15/04/2013</i>	<i>COURSE 5+6</i>	<i>Pedigrees or not? (linkage versus association, family-based association tests, families and next generation sequencing) Showcase in class of how FBAT works Assignment 3: Perform a GenABEL analysis and compare with results obtained from FBAT, report and discuss</i>
PH20-20	24/04/2013	COURSE PH11+12	Presentations of homework 2 Closure with notes on biological interpretations and personalized medicine
<i>BIOINF15-15</i>	<i>29/04/2013</i>	<i>COURSE 7+8</i>	<i>Genome-wide association interaction analysis: theory with MB-MDR Assignment 4: Perform a gene-gene interaction analysis using GenABEL and interpret your findings (annotate)</i>