



# H3ABioNet

Pan African Bioinformatics Network for H3Africa

## Int\_BT 2020 prelim course schedule

\*subject to slight changes

Date	Topic	Trainer
<b>Welcome to the course!</b>		
Tuesday, <b>22 September</b>	Get to know where your classroom is and meet your teaching assistants and fellow participants	Int_BT core team
Thursday, <b>24 September</b>	Using Vula effectively and classroom bios	Int_BT core team
<b>Introduction to the command line and R</b>		
Tuesday, <b>29 September</b>	Introduction to the command line	Gerrit Botha, H3ABioNet, University of Cape Town
Thursday, <b>1 October</b>	Introduction to R	Katie Lennard, H3ABioNet, University of Cape Town
Friday, <b>2 October</b>	Assessment available for the 'introduction to command line and R' module via Vula 'Tests and Quizzes' tab	individual
Friday, <b>9 October</b>	<b>FINAL hand-in date</b> for 'introduction to command line and R' assessment	individual
<b>Introduction to the microbiome and study design - why 16S</b>		
Tuesday, <b>6 October</b>	Introduction to the microbiome and study design - why 16S	Shantel Claassen-Weitz
<b>Sample collection, extraction and library prep for NGS</b>		
Thursday, <b>8 October</b>	Sample collection, extraction and library prep for 16S NGS analyses	Shantel Claassen-Weitz
Friday, <b>9 October</b>	Joint Assessment available for the 'Introduction to the microbiome and study design' AND 'Sample collection, extraction and library prep for 16S NGS analyses' modules via Vula 'Tests and Quizzes' tab	individual
Friday, <b>16 October</b>	<b>FINAL hand-in date</b> for 'Introduction to the microbiome and study design' AND 'Sample collection, extraction and library prep for 16S NGS analyses' assessment	individual
<b>16S rRNA gene amplicon sequencing bioinformatics pipeline: the theory</b>		
Tuesday, <b>13 October</b>	Bioinformatics pipeline - The theory	Samson Kilaza
<b>16S analysis pipeline</b>		
Thursday, <b>15 October</b>	QC and ASV picking using the dada2 pipeline	Imane Allali

Tuesday, <b>20 October</b>	Taxonomic classification and alignment using the dada2 pipeline	Imane Allali	
<b>Thursday, 22 October</b>	<b>Revision day: No formal session</b>		
Friday, <b>23 October</b>	Assessment available for the ‘16S analysis pipeline’ module via Vula ‘Tests and Quizzes’ tab	individual	
Friday, <b>30 October</b>	<b>FINAL hand-in date</b> for ‘16S analysis pipeline’ assessment	individual	
Downstream analysis in R			
Tuesday, <b>27 October</b>	Loading packages for 16S, Basic terminology, Importing relevant ASV tables into R	Katie Lennard	
Thursday, <b>29 October</b>	Downstream analysis in R (alpha diversity, visual data exploration, etc.)	Katie Lennard	
Tuesday, <b>3 November</b>	Downstream analysis in R, continued	Katie Lennard	
<b>Thursday, 5 November</b>	<b>NO FORMAL SESSION: REVISION</b>		
Friday, <b>6 November</b>	Assessment available for the ‘Downstream analysis in R’ module via Vula ‘Test and Quizzes’ tab	individual	
Friday, <b>13 November</b>	<b>FINAL hand-in date</b> for ‘Downstream analysis in R’ assessment	individual	
Wrap up week			
Tuesday, 10 November	Wrap up and feedback + where to go from here	Verena	
Friday, 13 November	Course end		