

Course
Introduction to Linux
 January 2-4, 2020
 Institut Pasteur de Tunis (IPT)

January 2 nd , 2020 (Computer Room, Research and Training Building)		
Session	Speakers	
9:00-10:15	Introduction to OS and Linux History	Kais Ghedira, IPT Fatma Guerfali, IPT
	<ul style="list-style-type: none"> • Overview on OS Systems • Linux OS System • Difference between Linux and Windows Systems 	
10:15-10:45 Coffee break		
10:45-12:00	Linux File System Tree and Paths	Fatma Guerfali, IPT Kais Ghedira, IPT
	<ul style="list-style-type: none"> • Directory and File System Tree under Linux • Relative vs Absolute Paths 	
12:00-13:30 Lunch		
13:30-14:45	Basic Commands and Access Control	Fatma Guerfali, IPT Kais Ghedira, IPT
	<ul style="list-style-type: none"> • Define Control Access • Control Owner, Group and Others Access • Manipulating Directories and Files 	
14:45-15:15 Coffee break		
15:15-16:30	Basic Commands with Applications	Kais Ghedira, IPT Fatma Guerfali, IPT
	<ul style="list-style-type: none"> • Create, copy, move, delete Directories and Files • Complex queries on Files 	

January 3 rd , 2020 (Computer Room, Research and Training Building)		
	Session	Speakers
9:00-10:15	Advanced Linux Commands: “sed” <ul style="list-style-type: none"> • Properties • Usage with reference to the Manual • Examples 	Fatma Guerfali, IPT Kais Ghedira, IPT
10:15-10:45 Coffee break		
10:45-12:00	Advanced Linux Commands: “sed” and Applications <ul style="list-style-type: none"> • Manipulate a File content using “sed” • Usage with reference to the Manual 	Fatma Guerfali, IPT Kais Ghedira, IPT
12:00-13:30 Lunch		
13:30-14:45	Advanced Linux Commands: “awk” <ul style="list-style-type: none"> • Properties • Usage with reference to the Manual • Examples 	Kais Ghedira, IPT Fatma Guerfali, IPT
14:45-15:15 Coffee break		
	Advanced Linux Commands: “awk” and Applications <ul style="list-style-type: none"> • Manipulate a File content using “awk” • Usage with reference to the Manual 	Kais Ghedira, IPT Fatma Guerfali, IPT

January 4 th , 2020 (Computer Room, Research and Training Building)		
Session	Speakers	
9:00-10:15	Introduction to Bash Shell Scripting	Kais Ghedira, IPT Fatma Guerfali, IPT
	<ul style="list-style-type: none"> • Bash Shell Script Basics • “Hello World” Bash Shell Scripting • Basic Bash Loops 	
10:15-10:45 Coffee break		
10:45-12:00	Practice Bash Shell Scripting	Kais Ghedira, IPT Fatma Guerfali, IPT
	<ul style="list-style-type: none"> • Script Creation • Script Execution 	
12:00-13:30 Lunch		
13:30-14:45	Reproducible research in computational biology 1	Houcemeddine Othman, SBIMB, University of the Witwatersrand
	<ul style="list-style-type: none"> • Best practices for handling files and data • Setting up a computational reproducible environment • Practical Markdown language (1) 	
14:45-15:15 Coffee break		
15:15-16:30	Reproducible research in computational biology 2	Houcemeddine Othman, SBIMB, University of the Witwatersrand
	<ul style="list-style-type: none"> • Practical Markdown language (2) • version control software • The Jupyter lab environment and Rmarkdown 	