



The CODATA RDA Research Data Science Summer School | (SMR 3615)

6 September 2021 - 19 November 2021
Virtual, Italy

Week 1: 6-10 September

Week 1: 6-10 Sept	Module	Duration	Notes	Instructor(s)
	Mandatory session		Monday 11:00 - 12:00	
1	Welcome address	30 min	Candidates need to make provision for 9 hours of dedicated time. We have to schedule time to videotape all instructors and make the videos available in this module	Rob Quick
2	Summer School – the logistics	30 min	Video - explain how all will work - what are the mandatory sessions and what may they do in their own time.	Rob Quick
3	Open Science	4 hours	Several sessions - no more than 30 minutes continuous lecturing at any one time.	Louise Bezuidenhout
4	Data organisation in spreadsheets	1 hour	Suggest 2 x 30 minute sessions	Bianca Peterson
5	Data cleaning with OpenRefine	3 hours	Several sessions - no more than 30 minutes continuous lecturing at any one time	Bianca Peterson
8-Sep	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 1	1 hour	Wednesday 14:00 - 15:00 (UTC)	Louise Bezuidenhout Bianca Peterson
10-Sep	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Friday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 2	1 hour	Friday 14:00 - 15:00 (UTC)	Louise Bezuidenhout Bianca Peterson

Tutors: Emanuele Ratti (OS), Leani Bothma, Bianca Peterson, Annajiat Alim Rasel.

Week 2: 13-17 September

Week 2: 13-17 Sept	Module	Duration	Notes	Instructor(s)
6	R (Social Sciences)	12 hours	Make provision for 8 hours hands on for each of the Sciences. Candidates may select any one module but may complete both.	Marcela Alfaro Córdoba
	R (Natural Sciences)	12 hours		Bianca Peterson
15-Sep	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 1	1 hour	Wednesday 14:00 - 15:00 (UTC)	Bianca Peterson Marcela Alfaro Córdoba Louise Bezuidenhout
17-Sep	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Friday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 2	1 hour	Friday 14:00 - 15:00 (UTC)	Louise Bezuidenhout Marcela Alfaro Córdoba Bianca Peterson

Tutors: Annajiat Alim Rasel, Jorge Antonio Gómez Díaz, José López, Leani Bothma, Bianca Peterson.

Week 3: 20-24 September

Week 3: 20-24 Sept	Module	Duration	Notes	Instructor(s)
7	R (Social Sciences)	12 hours	Make provision for 8 hours hands on for each of the Sciences. Candidates may select any one module but may complete both.	Marcela Alfaro Córdoba
	R (Natural Sciences)	12 hours		Bianca Peterson
21-Sep	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 1	1 hour	Wednesday 14:00 - 15:00 (UTC)	Bianca Peterson Marcela Alfaro Córdoba Louise Bezuidenhout
23-Sep	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Friday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 2	1 hour	Friday 14:00 - 15:00 (UTC)	Louise Bezuidenhout Bianca Peterson Marcela Alfaro Córdoba

Tutors: Annajiat Alim Rasel, Jorge Antonio Gómez Díaz, José López, Leani Bothma, Bianca Peterson.

Week 4: 27 September - 1 October

Week 4: 27 Sept - 01 Oct	Module	Duration	Notes	Instructor(s)
8	Data Visualisation	12 Hours	Make provision for 12 hours hands on	Sara El-Jadid
9	Being open in a low/middle-income country	2 Hours		Louse Bezuidenhout
29-Sep	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 1	1 hour	Wednesday 14:00 - 15:00 (UTC)	Sara El-Jadid
1-Oct	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Friday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Mandatory session - Reflection and review	1 hour	Friday 14:00 - 15:00 (UTC)	Louise Bezuidenhout

Tutors: Emanuele Ratti (OS), Jorge Antonio Gómez Díaz, Leani Bothma, Bianca Peterson, Annajiat Alim Rasel.

Week 5: 4 - 8 October

Week 5: 04-08 Oct	Module	Duration	Notes	Instructor(s)
10	Machine Learning	5 Hours		Ekpe Okorafor
6-Oct	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 1	1 hour	Wednesday 14:00 - 15:00 (UTC)	Ekpe Okorafor Raphael Còbe Roger Barlow
8-Oct	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Friday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 2	1 hour	Friday 14:00 - 15:00 (UTC)	Ekpe Okorafor Raphael Còbe Roger Barlow

Tutors: Jorge Antonio Gómez Díaz, Annajiat Alim Rasel, Raphael Còbe.

Week 6: 11 - 15 October

Week 6: 11-15 Oct	Module	Duration	Notes	Instructor(s)
11	Neural Networks	5 hours		Roger Barlow
13-Oct	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 1	1 hour	Wednesday 14:00 - 15:00 (UTC)	Ekpe Okorafor Raphael Còbe Roger Barlow
	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Friday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
15-Oct	Questions & Answers & Reflection & Review - Option 2	1 hour	Friday 14:00 - 15:00 (UTC)	Ekpe Okorafor Raphael Còbe Roger Barlow

Tutors: Jorge Antonio Gómez Díaz, Ana Cristina Soto Rojas, Raphael Còbe.

Week 7: 18 - 22 October

Week 7: 18-22 Oct	Module	Duration	Notes	Instructor(s)
12	Research Data Management	12 hours	Make provision for 12 Hours. Several sessions - no more than 30 minutes continuous lecturing at any one time	Shanmugasundaram Venkataraman Steve Diggs
20-Oct	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 1	1 hour	Wednesday 14:00 - 15:00 (UTC)	Shanmugasundaram Venkataraman Steve Diggs Louise Bezuidenhout
	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Friday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
22-Oct	Questions & Answers & Reflection & Review - Option 2	1 hour	Friday 14:00 - 15:00 (UTC)	Shanmugasundaram Venkataraman Steve Diggs Louise Bezuidenhout

Tutors: Annajiat Alim Rasel, Martie, Johann.

Week 8: 25 - 29 October

Week 8: 25-29 Oct	Module	Duration	Notes	Instructor(s)
15	Information Security	4 hours		Daniel Fischer
27-Oct	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 1	1 hour	Wednesday 14:00 - 15:00 (UTC)	Alessandro Costantini Raphael Cöbe Louise Bezuidenhout
29-Oct	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Friday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 2	1 hour	Friday 14:00 - 15:00 (UTC)	Rob Quick Hannah Short Renier van Heerden

Tutors: Annajiat Alim Rasel, Ana Cristina Soto Rojas.

Week 9: 1 - 5 November

Week 9: 1-5 Nov	Module	Duration	Notes	Instructor(s)
16	Unix shell	6 hours	Several sessions - no more than 30 minutes continuous lecturing at any one time	Raphael Cöbe
17(a)	Git-Hub	2 hours		
17	Git	6 hours	Several sessions - no more than 30 minutes continuous lecturing at any one time	Hugh Shanahan
3-Nov	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 1	1 hour	Wednesday 14:00 - 15:00 (UTC)	Raphael Cöbe Hugh Shanahan Louise Bezuidenhout
5-Nov	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Friday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 2	1 hour	Friday 14:00 - 15:00 (UTC)	Raphael Cöbe Hugh Shanahan Louise Bezuidenhout

Tutors: Annajiat Alim Rasel, José López.

Week 10: 8 - 12 November

Week 10: 08-12 Nov	Module	Duration	Notes	Instructor(s)
18	National Research Computational Infrastructure - hands on for using CHPC resources	8 Hours		Rob Quick, Raphael Còbe, Alessandro Costantini
19	International Research Computational Infrastructure	8 Hours		Raphael Còbe
10-Nov	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 1	1 hour	Wednesday 14:00 - 15:00 (UTC)	Alessandro Costantini
				Raphael Còbe Louise Bezuidenhout
12-Nov	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Friday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Reflection & Review - Option 2	1 hour	Friday 14:00 - 15:00 (UTC)	Rob Quick
				Raphael Còbe Louise Bezuidenhout

Tutors: Annajiat Alim Rasel.

Week 11: 15 - 19 November

Week 11: 15-19 Nov	Module	Duration	Notes	Instructor(s)
20	Responsible Authorship	6 hours		Bianca Peterson, Marcela Alfaro Córdoba
	Reproducible writing	4 hours		
	Building researcher reputation	2 hours		
17-Nov	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Workshop wrap-up and discussion of school - Option 1	1 hour	Wednesday 14:00 - 15:00 (UTC)	Bianca Peterson Louise Bezuidenhout
19-Nov	Addis Ababa University Meeting (only for participants from AAU)	1 hour	Wednesday 13:00 - 14:00 (UTC)	Solomon Gizaw Addisu Semie Yoseph Berhanu Mesfin Diro
	Questions & Answers & Workshop wrap-up and discussion of school - Option 2	1 hour	Wednesday 14:00 - 15:00 (UTC)	Bianca Peterson Louise Bezuidenhout

Tutors: José López, Bianca Peterson, Annajiat Alim Rasel.