

PROGRAMME OF THE 2022, SAQA ACCREDITED NEMATOLOGY SHORT COURSE (End of August and beginning of September 2022): ?

Hybrid approach (online and face-to-face classes)

WEEK 1: Online		
<p>Facilitator: Dr Milad Rashidifard¹ (he will have access to the online platform to assist in getting the attendees in contact with the presenters and make sure everything runs smoothly although he will be in Iran). I will still discuss it with him since it will have a financial return for him too.</p>		
Monday		
08:00 – 08:40	Welcome	<p>Prof Driekie Fourie², Integrated Pest Management, Unit for Environmental Sciences and Management, NWU</p> <p style="padding-left: 20px;">- Basic orientation and rules, etc.</p> <p>Attendees will be able to register and pay online before the course starts</p> <p>Prof Johnnie van den Berg, Sub-Programme Leader, Integrated Pest Management, Unit for Environmental Sciences and Management, NWU</p>
08:40 – 09:20	Introduction to course Nematode sampling and extraction - lecture	Prof Driekie Fourie
		Self study: If attendees have access to nematology laboratories they will be asked to do the extractions and practice it OTHERWISE those who cannot do it this way will have the opportunity during the first day of the practical week at the NWU
09:20 – 10:00	Introduction to nematode biology, morphology and systematics - lecture	Prof Driekie Fourie
10:00 – 10:30	Refreshment break	
10:30 – 11:00	Introduction to nematode biology, morphology and systematics cont.- lecture	<p>Prof Driekie Fourie</p> <p>Selfstudy: Attendees will have to draw a picture of a male and female nematode and have to fill in the most important structures of which a list will be given (Small Formative Assessment – will contribute towards the final mark – 10%)</p>
11:30 – 12: 30	Terrestrial, non-parasitic/beneficial nematodes - lecture	Dr Chantelle Girgan, ARC-PHP ³
11:00 – 12:00	Nematode Ecology and survival - lecture	Dr Gerhard du Preez, NWU

12:00 – 13:00	Basic morphology of selected economically-important genera of the Order Tylenchida and use of identification keys - lecture	Drs Mariette Marais/Chantelle Girgan, ARC-PHP <i>Ditylenchus, Pratylenchus, Radopholus</i> , Hoplolaimidae (<i>Helicotylenchus, Hoplolaimus, Scutellonema, Rotylenchus, Rotylenchulus</i>), Criconematidae (<i>Hemicyliophora, Paratylenchus, Tylenchulus, Aphelenchoides</i>)
Tuesday		
08:00 – 9:00	Basic morphology of selected economically-important genera of the Order Tylenchida and use of identification keys cont. (symptoms too of e.g. <i>Pratylenchus, Radopholus</i> etc for different crops)	Drs Mariette Marais/Chantelle Girgan, ARC-PHP Self study (Small formative assessment will contribute towards final mark – 10%)
09:00 - 10:30	Basic morphology of selected economically-important Longidoridae and use of identification keys (symptoms too for different crops) - lecture	Drs Antoinette Swart <i>Longidorus, Paralongidorus, Xiphinema</i> Self study (Small formative assessment will contribute towards final mark – 10%)
10:30 – 11:00	Refreshment break	
11:00 – 12:00	Quarantine Nematodes - lecture	Drs Antoinette Swart
12:00 – 13:00	Basic morphology of selected economically-important Trichodoridae and use of identification keys (break included) - lecture	Dr Mariette Marais, ARC-PHP <i>Nanidorus, Paratrachodorus, Trichodoros</i>
Wednesday		
08:00 – 09:00	Importance, basic morphology and symptoms of root-knot nematodes (different crops) - lecture	Dr Mariette Marais: ARC- PHP <i>Meloidogyne</i>
09:00 – 10h00	Importance, basic morphology and symptoms of cyst nematodes (different crops) - lecture	Dr Antoinette Swart: ARC- PHP Heteroderinae
10:00 – 10:30	Refreshment break	
10:30 – 13:00	Importance, basic morphology and symptoms of ring nematodes (symptoms of various crops too) - lecture	Drs Chantelle Girgan: ARC¹; Rinus Knoetze, ARC-Infruitec⁴ (Chantelle morphology and Rinus symptoms) Self study? (Small formative assessment will contribute towards final mark – 10%)
Thursday		
8:00 – 10h00	Revision: Basic morphology of selected economically-important Tylenchida, Heteroderidae Longidoridae & Trichodoridae (break included) – lecture/interaction/feedback	Drs Mariette Marais, Antoinette Swart, Dr Chantelle Girgan: ARC- PHP ¹
10:00 – 10:30	Refreshment break	
10h30 – 13h00	Revision: Basic morphology of selected economically-important Tylenchida, Longidoridae & Trichodoridae (break included) lecture/interaction/feedback	Drs Mariette Marais, Antoinette Swart, Dr Chantelle Girgan: ARC- PHP ¹

Friday – no online classes		
PRACTICAL WEEK 2 (PHYSICAL ATTENDANCE AT POTCHEFSTROOM)		
Sunday		
Arrival of attendants: Afternoon Book in to accommodation		
Monday		
08:00 – 08:30	Arrival of attendants at EkoRehab – sorting out of laboratory space for each attendant	
08:30 – 09:30	Handling of microscopes: laboratory	Mnr Willie Landman, NWU
09:30 – 10:30	Nematode extraction: laboratory	Mnr Raymond Collett, NWU
10:00 – 10:30	Refreshment break	
10h30 – 13:00	Nematode extraction cont. & fishing of nematodes: laboratory	Mnr Raymond Collett & Prof Driekie Fourie, NWU
13:00 – 14:00	Lunch break	
14:00 – 16:00	Revision: Taxonomy & morphology: practical (break included)	Prof Driekie Fourie & Mr Raymond Collett, NWU
16:00 – 17:00	Nematode-plant interactions	Mr Raymond Collett, NWU
Tuesday		
08:00 – 10:00	Basic morphology of selected economically-important Tylenchidae and use of identification keys: practical	Drs Mariette Marais/Chantelle Girgan, ARC-PHP <i>Ditylenchus, Pratylenchus, Radopholus, Hoplolaimidae (Helicotylenchus, Hoplolaimus, Scutellonema, Rotylenchus, Rotylenchulus), Criconematidae, Hemicyliophora, Paratylenchus, Tylenchulus, Aphelenchoides, Meloidogyne, Heteroderinae, Nanidorus, Paratrichodorus, Trichodorus</i>
10:00 – 10:30	Refreshment break	
10:30 – 13:00	Basic morphology of selected economically-important Tylenchidae and use of identification keys: practical cont.	Drs Mariette Marais/Chantelle Girgan, ARC-PHP
13:00 – 14:00	Lunch break	
14:00 – 16:00	Entomopathogenic nematodes + practical+ refreshment break included	Dr Rinus Knoetze, ARC-Infruitec ⁴
16:00 – 17:30	Nematodes associated with subtropical, tropical, industrial and citrus crops (lecture)	Dr Mieke Daneel: ARC-TSC ⁵
Wednesday		
08:00 - 09:00	Nematodes associated with grain & legume crops (lecture)	Prof Driekie Fourie, NWU
09:00 – 10:00	Nematodes associated with weeds and tuber crops (lecture)	Dr Nancy Ntidi, ARC-GC ⁶
10:00 – 10:30	Refreshment break	

10:30 – 13:00	Revision: Basic morphology of selected economically-important and selected nematode genera: practical	Drs Mariette Marais/Chantelle Girgan (ARC-PHP) & Dr Rinus Knoetze (ARC-Infruitec) (if flight is only in the afternoon back to Stellenbosch)
13:00 – 14:00	Lunch break	
14:00 – 16:00	Revision: Basic morphology of selected economically-important and selected nematode genera: practical cont. (refreshment break included)	Drs Mariette Marais/Chantelle Girgan, ARC-PHP
16:00 – 17:00	Nematode control	Prof Mieke Daneel, ARC-TSC
Thursday		
08:00 - 10:00	Revision: Basic morphology of selected economically-important and selected nematode genera: practical cont.	Prof Driekie Fourie (NWU), Prof Mieke Daneel (ARC-TSC), Mr Raymond Collett (NWU)
10:00 – 10:30	Refreshment break	
10:30 - 13:00	Revision: Basic morphology of selected economically-important and selected nematode genera: practical cont.	Prof Driekie Fourie (NWU), Prof Mieke Daneel (ARC-TSC), Mr Raymond Collett (NWU)
13:00 – 14:00	Lunch break	
14:00 - 17:00	Revision: Basic morphology of selected economically-important and selected nematode genera: practical cont. (refreshment break included)	Prof Driekie Fourie (NWU), Prof Mieke Daneel (ARC-TSC), Mr Raymond Collett (NWU)
Friday		
08:00 - 10:00	Revision: Basic morphology of selected economically-important and selected nematode genera: practical cont.	Prof Driekie Fourie (NWU), Prof Mieke Daneel (ARC-TSC), Mr Raymond Collett (NWU)
10:00 – 11:00	Refreshment break	
11:00 – 13:30	Practical assessment (Summative will contribute 60% towards the final mark): identification using microscope + questions related to these nematode genera	Prof Driekie Fourie (NWU), Prof Mieke Daneel (ARC-TSC), Mr Raymond Collett (NWU)
13:30	Attendees depart	

*Programme is subject to change; ¹Ex NWU PhD student and Post Doc; ²NWU; ³Agricultural Research Council-Plant Health Protection, Pretoria; ⁴Agricultural Research Council-Infruitec; ⁵Agricultural Research Council-Tropical and Subtropical Crops; ⁶Agricultural Research Council-Grain Crops, Potchefstroom;

JOIN OUR 'NEMASTONISHING' WORLD!

