

Course syllabus

TMID528 Non-mosquito Vector-borne Diseases and Zoonoses

Academic Year 2016-2018

1. **Institute** Mahidol University
Faculty/Department Faculty of Tropical Medicine, Department of Clinical Tropical Medicine
2. **Course Name:**
 - a. **Course Code:** TMID 528
 - b. **Course Title:** Non-mosquito Vector-borne Diseases and Zoonoses
3. **Number of credits:** 2 (2-0-4)
4. **Programme use:** Graduate Diploma Programme in Tropical Medicine and Hygiene
Master of Clinical Tropical Medicine
Master of Clinical Tropical Medicine (Tropical Paediatrics)
5. **Prerequisite:** None
6. **Type of Course:** Core subject
7. **Condition: class size:** None
8. **Session/Academics year:** The first semester of each academic year
9. **Course description:**
Non-mosquito vector-borne diseases and zoonoses, epidemiology, pathogens, vectors, life-cycle, pathogenesis, pathology, clinical manifestations, diagnosis, management, prevention and control
10. **Course expected learning outcomes:**
The students should be able to
 - 1) Explain and differentiate type of common arthropods vectors; including residence, epidemiology and life-cycle
 - 2) Explain the causative agents of tropical diseases caused by arthropods and zoonoses; including physical quality, reservoir, how to diagnose, epidemiology, pathogenesis, and management
 - 3) Approach and manage non-mosquito vector-borne diseases and zoonoses
 - 4) Explain the prevention and control of common important tropical diseases caused by arthropods and zoonoses

11. Course outline and constructive alignment

Topic	Title	Hours			Instructors	Course Learning Outcome	Programme ELOs	Teaching & Learning Strategies	Assessment
		Lecture	Lab	Self-study					
1	Epidemiology of Non-mosquito Vector-borne Diseases & Zoonoses	2	0	4	Prof Pratap	1,2,4	2.1	PowerPoint presentation, Q&A	MCQ Examination
2	Vector Morphology I: Tick & Mites, Lice, Fleas and Laboratory Demonstration	2	0	4	Dr Sungsit & Entomology Staff	1,4	2.1	PowerPoint presentation, Laboratory demonstration, Q&A	Post-test: OSCE MCQ Examination
3	Rickettsial Diseases: Causative Organisms, Clinical Aspects and Laboratory Diagnosis	2	0	4	Dr Wirongrong/Dr Prakaykaew/ Prof Sasithon/ Asst Prof Piengchan/ Dr Sungsit	1,2,3,4	2.1,3.1	PowerPoint presentation, Laboratory demonstration, Case Discussion, Q&A	Discussion, MCQ Examination
4	Vector Morphology II: Biting Flies, Flies, Biting Bugs and Laboratory Demonstration	1	0	2	Assoc Prof Narumon & Entomology Staff	1,4	2.1	PowerPoint presentation, Laboratory demonstration, Q&A	Post-test: OSCE MCQ Examination
5	Trypanosomiasis: Causative Organisms, Clinical Aspects and Laboratory Diagnosis	2	0	4	Dr Wirongrong/ Dr Chayasin/ Dr Aongart	1,2,3,4	2.1,3.1	PowerPoint presentation, Laboratory demonstration, Case Discussion, Q&A	Discussion, MCQ Examination
6	Leishmaniasis: Causative Organisms, Clinical Aspects and Laboratory Diagnosis	2	0	4	Prof Arjen Dondorp/ Dr Wirongrong/ Asst Prof Jittima/ Asst Prof Porntip	1,2,3,4	2.1,3.1	PowerPoint presentation, Laboratory demonstration, Case Discussion, Q&A	Discussion, MCQ Examination
7	Leptospirosis: Causative Organisms, Epidemiology, Clinical Aspects and Laboratory Diagnosis	2	0	4	Prof Polrat/ Dr Kittiyod/Asst Prof Viravarn/ Asst Prof Noppadon/ Asst Prof Thareerat & Microbiology Staff	1,2,3,4	2.1,3.1	PowerPoint presentation, Laboratory demonstration, Case Discussion, Q&A	Discussion, MCQ Examination
8	Bartonella, Turaemia, Rat Bite Fever and Cat-Scratch Diseases: Causative Organisms, Epidemiology, Clinical Aspects and Laboratory	3	0	6	Assoc Prof Daniel Paris/ Dr Wirongrong/ Asst Prof Viravarn/ Dr Muthita	1,2,3,4	2.1,3.1	PowerPoint presentation, Laboratory demonstration, Case Discussion, Q&A	Discussion, MCQ Examination

Topic	Title	Hours			Instructors	Course Learning Outcome	Programme ELOs	Teaching & Learning Strategies	Assessment
		Lecture	Lab	Self-study					
	Diagnosis								
9	Rabies	2	0	4	Prof Terapong/ Dr Watcharapong/ Dr Akanitt	1,2,3,4	2.1,3.1	PowerPoint presentation, Case Discussion, Q&A	Discussion, MCQ Examination
10	Brucellosis	2	0	4	Assoc Prof Yupaporn/ Dr Watcharapong/ Asst Prof Supat/ Dr Wirongrong/ Assoc Prof Thareerat	1,2,3,4	2.1,3.1	PowerPoint presentation, Case Discussion, Q&A	Discussion, MCQ Examination
11	Cutaneous Manifestation of Scabies, Pediculosis, Paederous Dermatitis and Other Insect Infestations	2	0	4	Asst Prof Jittima/ Dr Vorada/ Dr Sungsit	1,2,3,4	2.1,3.1	PowerPoint presentation, Laboratory demonstration, Case Discussion, Q&A	Discussion, MCQ Examination
12	Case Discussion: Non Mosquito Vector-borne Diseases	5	0	10	Dr Wirongrong/ Dr Prakaykaew/ Asst Prof Viravarn/ Dr Chayasin/ Dr Kittiyod/ CTM Staff	1,2,3,4	2.1,3.1	Group presentation, Case Discussion, Q&A	Group presentation, participation, discussion, MCQ Examination
13	Anthrax	1	0	2	Assoc Prof Vipa/ Dr Wirongrong/ Dr Nathamon	1,2,3,4	2.1,3.1	PowerPoint presentation, Case Discussion, Q&A	Attendance, MCQ Examination
14	Emerging Zoonoses	2	0	4	Dr Wirongrong/ Dr Sant/ Asst Prof Viravarn	1,2,3,4	2.1,3.1	PowerPoint presentation, Case Discussion, Q&A	Attendance, MCQ Examination
	Total	30	0	45					

12. Teaching and Learning Activities

Lecture
 Case discussion and seminar
 Laboratory demonstration

13. Teaching media

PowerPoint presentation
 Case Scenario
 Microscope

14. Course achievement and evaluation

Quiz	10%
Participation and discussion during academic activity	20%
Multiple-choice question examination (online examination)	70%

Students who get grade lower than B, will need re-examination using same MCQ (in shuffled order of items and choices) within 2 weeks after first examination. Student must get more than 60% correct answer then they will get Grade B at the maximum, regardless of any marks at re-examination.

15. Course evaluation

Discussion and comments session at the end of the course
 Questionnaire for contentment and suggestion for the course

16. References

- 16.1. Service M. *Medical Entomology for Students*. 5th ed. Cambridge, UK: Cambridge University Press, 2012
- 16.2. Bennett JE, Dolin R and Blaser MJ. *Mandell Douglas, and Bennett's Principles and Practice of Infectious Diseases*. 8th ed. Oxford, UK: Elsevier; 2014
- 16.3. Farrar J, Hotes P, Junghanss T, Kang G, Lalloo D, and White NJ. *Manson's Tropical Diseases*, 23rd ed. Oxford, UK: Elsevier; 2014
- 16.4. Eddleston M, Davidson R, Wilkinson R, and Pierini S. *Oxford Handbook of Tropical Medicine*, 2nd ed. Oxford, UK: Oxford University Press; 2014

17. Instructors:

Prof Polrat Wilairatana
 Prof Pratap Singhasivanon
 Prof Nicholas J White
 Prof Nicholas P Day
 Prof Arjen Dondorp
 Prof Sasithon Pukrittayakamee
 Prof Terapong Tantawichian
 Assoc Prof Yupaporn Wattanagoon
 Assoc Prof Daniel Paris

Assoc Prof Vipha Thanachartwet
Assoc Prof Narumon Komalamisra
Assist Prof Supat Chamnanchanunt
Asst Prof Viravarn Luvira
Asst Prof Jittima Dhitavat
Asst Prof Noppadon Tangpukdee
Asst Prof Piengchan Sonthayanon
Asst Prof Porntip Petmitr
Asst Prof Thareerat Kalambaheti
Dr Chayasin Mansanguan
Dr Kittiyod Poovorawan
Dr Watcharapong Piyaphanee
Dr Wirongrong Chierakul
Dr Sungsit Sungvornyothin
Dr Aongart Mahittikorn

18. Course responsibility:

Dr Wirongrong Chierakul
Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University