

SCBM 346: Tropical Infectious Diseases and controls

Academic Year 2018

**Department of Pathobiology
Faculty of Science
Mahidol University**

Course Syllabus

(Lecture-Lab-Self-study)

SCBM 346 Tropical Infectious Diseases and controls 2(2-0-4)

Clinical tropical medicine, vector population biology and control, epidemiology, clinical management and control of current tropical pathogens including malaria, dengue, HIV, TB and fluke worm, environmental changes, socio-economic status and human behaviors to public health, modern techniques for high risk area mapping and tropical disease controls and travel medicine.

Prerequisite	SCBM 341 General Pathology
Type of Course	Required course
Session	2 nd Semester, Third year student
Course Condition	class size: None

Course Objective

1. Summarize the clinical manifestation and vector biology that related to tropical infectious diseases.
2. Explain and demonstrate the main group of tropical infectious diseases (malaria, dengue, HIV/AIDS, tuberculosis and fluke worm infection) on biology of microorganism, infection cycle, epidemiology, clinical management and control.
3. Discuss the relationship between public health and environmental changes, socio-economic status and human behaviors in tropical region and global transport.

Course-level Learning Outcomes (CLOs)

By the end of the course, students are able to

1. Discuss the key biological features and epidemiological features of the main group of tropical infectious diseases (malaria, dengue, HIV/AIDS, tuberculosis and fluke worm infection) that are currently of public health importance.
2. Discuss the relationship between disease transmission and tropical infectious diseases in tropical regions.
3. Apply knowledge to develop control strategies to address these main group of tropical infectious diseases (malaria, dengue, HIV/AIDS, tuberculosis and fluke worm infection) by;
 - 3.1 reading the peer-reviewed literature to understand current control strategies;
 - 3.2 considering the social, economic, biological and environmental drivers of disease; and
 - 3.3 discussing their own creative ideas for disease control with the class.

Course Outline

Weeks	Topic	Hour			Instructor
		Lecture/ Discussion	Lab.	Self-study	
1	LM1 - Clinical tropical medicine	3	-	6	SN
	LM2 - Vector population biology and control	3	-	6	NK
2	LM3 - Malaria: Epidemiology, clinical management and control	3	-	6	NK
	LM4 - Dengue: Epidemiology, clinical management and control	3	-	6	PC
3	LM5 - TB: Epidemiology, clinical management and control	3	-	6	SB
	LM6 - HIV: Epidemiology, clinical management and control	3	-	6	PC
Exam	Writing examination (L1-L5)				Staff
4	LM7 - Fluke worm: Epidemiology, clinical management and control	3	-	6	NK
	LM8 - Environmental changes, socio-economic status and human behaviors to public health	3	-	6	WJ
5	LM9 - Modern techniques for high risk area mapping and tropical disease controls	3	-	6	WP
	LM10 - Travel medicine	3	-	6	WP
Exam	Writing examination (L6 – L10)				Staff

Teaching Method

1. Interactive lectures, effective questioning and brain storming in class 30 hours.

Teaching Media

1. Class handouts, assignment, Power point presentation

Measurement and Evaluation of Students Achievement

1. Class attendance 10%
2. Class activity: Assignment, Presentation, Discussion, Participation and Interactive performance 30 %
3. Written examination 60 %
4. Student Examination Grade = A, B+, B, C+, C, D+, D, F

Course Evaluation

1. Students gain knowledge according to the course objectives.
2. Students' performance in class activity.
3. Students give written course evaluation at the end of the course.
4. Evaluate students' satisfaction towards teaching and learning of the course using a questionnaire.
5. The lecturer will be notified with the result of the course evaluation from students to further improve the lecturing process.

References

1. World Health Organization website: <http://www.who.int/en/> access on Dec 2016
2. Centers for Disease Control and Prevention website: <https://www.cdc.gov/> access on Dec 2016

Instructors

1. NK = Niwat Kangwanrangsang, Ph.D.
2. PC = Pornthip Chaichompoo, Ph.D.
3. SB = Sebastian Punyaratabandhu Bhakdi, M.D.
4. SN = Somphong Narkpinit, M.D.
5. WJ = Wannee Jiraungkoorskul, Ph.D.
6. WP = Witchuda Payuhakrit, Ph.D.

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