

Experimental Parasitology (MD647703)  
 Department of Parasitology, Faculty of Medicine, KKU  
 Second Semester Academic year 2023

Lecture- Tuesday 10.00-11.00 : MD3504

Lab. - Tuesday 13.00-17.00 : Lab 6 / Parasitology Research Lab

Date	Time	Topic	Lecturer
14-Nov-23	10.00 - 11.00	1. Course orientation Objective, teaching & learning processes, evaluation etc.	Thewarach Chatanun
21-Nov-23	10.00 - 11.00 13.00 - 17.00	2. Health GIS and mapping Demonstration and practice	Apiporn
12-Dec-23	10.00 - 11.00 13.00 - 17.00	3. Special staining of protozoa Demonstration and practice	Porntip Oranuch
26-Dec-23	10.00 - 11.00 13.00 - 17.00	4. Special staining of helminths Demonstration and practice	Chatanun Ai-rada
2-Jan-24	10.00 - 11.00 13.00 - 17.00	5. Cultivation of protozoa : <i>In vivo</i> and <i>in vitro</i> Demonstration and practice	Porntip Thidarut, Ai-rada
9-Jan-24	10.00 - 11.00 13.00 - 17.00	6. Maintenance & cultivation of nematodes : <i>In vivo</i> and <i>in vitro</i> Demonstration and practice ( <i>Trichinella</i> )	Oranuch Ai-rada
16-Jan-24	10.00 - 11.00 13.00 - 17.00	7. Maintenance & cultivation of platyhelminths: <i>In vivo</i> and <i>in vitro</i> Demonstration and practice	Apisit Apiporn
23-Jan-24	09.00 - 12.00	<b>Midterm Examination (Topic 2-7)</b>	Thewarach
30-Jan-24	10.00 - 11.00 13.00 - 17.00	8. Electron microscopy - Biological specimen preparation and operation of scanning and transmission electron microscope - Demonstration and practice	Kondo Yada
6-Feb-24	10.00 - 11.00 13.00 - 17.00	9. Molecular diagnosis for protozoa infection Demonstration and practice	Porntip
13-Feb-24	10.00 - 11.00 13.00 - 17.00	10. Serodiagnosis of tissue parasite infections Demonstration and practice (Western blot & ELISA)	Oranuch
20-Feb-24	10.00 - 11.00 13.00 - 17.00	11. Basic bioinformatic for gene and proteins sequence analysis; 11.1. Data retrieving-NCBI database, Blast, Parasite genome and transcriptome database 11.2. Sequence analysis – BioEdit (sequene editing, Translation, sequence alignment etc.) 11.3. Phylogenetic tree construction	Thewarach
27-Feb-24	13.00 - 14.00 14.00 - 18.00	12. Genetic markers in parasitology Demonstration and practice	Opal
5-Mar-24	10.00 - 11.00 13.00 - 17.00	13. Cloning and recombinant protein production for parasitology - Demonstration and practice	Thewarach Sujittra
12-Mar-24	09.00 - 12.00	<b>Final Examination (Topic 9-13)</b>	Thewarach

Date	Time	Topic	Lecturer
14-Nov-23 12-Mar-24		Laboratory studies on special projects and report writing	Thesis advisor
18-Mar-24	09.00 - 16.30	Report submission (3 copies)	
21-Mar-24	13.00 - 16.30	Project presentation	Lecturers
25-Mar-24	09.00 - 16.30	Final report submission (2 copies)	
		<b>Special project (0.5 credit)</b>	Advisor only 21 hrs / semester

**Lecturers :**

Prof. Thidarut Boonmars  
 Assoc. Prof. Thewarach Laha  
 Assoc. Prof. Porntip Laummaunwai  
 Assoc. Prof. Apiporn Thinkhamrop  
 Assoc. Prof. Oranuch Sanpool  
 Assist. Prof. Opal Pitaksakulrat  
 Dr. Chatanun Eamudomkarn  
 Dr. Apisit Chaidee  
 Dr. Ai-rada Pintong

**Guest Lecturer :** Prof. Dr. Hisatake Kondo, Ms. Yada Polsan- Department of Anatomy  
 Dr. Sujittra Chaiyadet - Tropical Medicine Graduate Program

**Course organizer :** Assoc. Prof. Thewarach Laha, e-mail : thewa\_la@kku.ac.th  
 Dr. Chatanun Eamudomkarn, e-mail : chatea@kku.ac.th

## Course evaluation

Experimental Parasitology (MD647703)

Second Semester Academic year 2023

### 1. Course evaluation

Paper examination 40%

Special project 50%

(Lab performance 30 advisor only, report 40, presentation 10, knowledge 20 : total 100 = 50 %)

Assignment or report of each lab 10%

### 2. Paper examination (contents from lecture and lab)

First examination : 16 Jan 2024 (topics 2-8) = 20 %

Second examination : 12 Mar 2024 (topics 9-14) = 20 %

### 3. Special project

Report submission : 18 Mar 2024

Project presentation : 21 Mar 2024

### 4. Scores will be deducted in cases of :

Absence from the class without letter of leave (0.5 % / time)

Late report submission (1 % / day)

### 5. Special project conduction

Special project should have been conducted since the beginning of the course.

Project report format has to follow MS of KKU, Journal of Graduate Studies.

### 6. Course organizer : Assoc. Prof. Thewarach Laha, e-mail : thewa\_la@kku.ac.th

Dr. Chatanun Eamudomkarn, e-mail : chatea@kku.ac.th