Course Syllabus

1. Program of Study Bachelor of Science (Biological Sciences)
Faculty/Institute/College Mahidol University International College

2. Course Code ICBI 412
Course Title Parasitology

3. Number of Credits 4 (3-2-7) (Lecture/Lab/self-study)

4. Prerequisite *(s)* ICBI 211

5. Type of Course Elective

6. Trimester/ Academic Year
Second trimester / every academic year

7. Course Condition
Number of students is 20-30.

8. Course Description
Biology, ecology and physiology of parasites of man and some domestic animals; molecular parasitology; basic research in control and diagnosis of parasite infection; demonstrations and laboratory exercises included.

9. Course Objective *(s)*
After completion of this course, the students should be able to
1. Describe morphology and life cycles of protozoa and helminthes of medical and veterinary importance.
2. Explain the mechanisms of pathogenesis of important parasites.
3. Describe the routine diagnostic methods for important parasitic infections.
4. Describe how to prevent themselves from parasitic infections.

10. Course Outline

week	Topics/Seminar	Hours			Instructor
		Lecture	Lab	Self-study	
1	Introduction to protozoa	3	2	7	Dr. Peerapan
2	Medically important protozoa	3	2	7	Dr. Peerapan
3	Host-protozoa interactions and protozoa evasion	3	2	7	Dr. Peerapan
4	Tutorial session Demonstration of medically important protozoa	3	2	7	Dr. Peerapan
5	MIDTERM EXAM	3	-	-	Dr. Peerapan
6	Introduction to helminthes	3	2	7	Dr. Araya
7	Medically important helminthes	3	2	7	Dr. Araya
8	Host-parasite interactions and helminthic immune evasion	3	2	7	Dr. Araya
9	Principles and research on drug and vaccine development against	3	2	7	Dr. Araya

	parasitic infection I				
10	Principles and research on drug and vaccine development against parasitic infection II	3	2	7	Dr. Araya
11	Tutorial session Demonstration of medically important helminthes	3	2	7	Dr. Araya
FINAL EXAM					
	Total	33	22	77	

11. Teaching Method *(s)*

1. Lecture
2. Suggested readings
3. Discussion in class

12. Teaching Media

1. Powerpoint Presentations
2. Texts and teaching materials

13. Measurement and Evaluation of Student Achievement

Student achievement is measured and evaluated by

13.1 The ability to describe morphology and life cycles of protozoa and helminthes of medical and veterinary importance.

13.2 The ability to explain the mechanisms of pathogenesis of important parasites.

13.3 The ability to describe the routine diagnostic methods for important parasitic infections.

13.4 The ability to describe how to prevent themselves from parasitic infections

Student's achievement will be graded according to the college and university standard using the symbols: A, B+, B, C+, C, D+, D and F. Minimal passing level is 60%. Student who earns 85% up will have Grade A, 80-84% Grade B+ , 75-79% Grade B, 70-74% Grade C+, 65-69% Grade C, 60-64% Grade D+, 55-59% D, less than 55 Grade F. Students must attend at least 80% of the total class hours of this course.

Ratio of mark

Midterm examination	45%
Final examination	40%
Participation, Attendance, and quiz	15%
Total	100%

14. Course evaluation

14.1 Students' achievement as indicated in number 13 above.

14.2 Students' satisfaction towards teaching and learning of the course using questionnaires.

15. Reference *(s)*

1. Symth, J.D. Introduction to animal parasitology. 3rd Edition, UK. Cambrige University Press 1994.

2. Roberts, L.S. and Janovy, J., jr. Foundations of parasitology. USA. Mcgraw-Hill Companies Inc. 1996.

16. Instructor *(s)*

Professor Peerapan Tan-ariya
Assistant Professor Araya Chusattayanond

17. Course Coordinator

Professor Peerapan Tan-ariya