

Course Syllabus

- 1. Program of Study** Bachelor of Science (Biological Sciences)
Faculty/Institute/College Mahidol University International College
- 2. Course Code** ICBI 309
Course Title Pathobiology
- 3. Number of Credits** 4 (3-2-7) (Lecture/Lab/Self-study)
- 4. Prerequisite (s)** ICBI 216, ICBI 303
- 5. Type of Course** Elective
- 6. Trimester/ Academic Year**
 3rd trimester/ every academic year
- 7. Course Condition**
 Number of students is 20-30.

8. Course Description

Pathophysiological mechanism of diseases; cell injury and cell death; inflammation and repair; bacterial, viral, fungal and parasitic infections; disturbances of minerals and pigments; disorders of immune response; disturbance of body fluid and blood flow; fever and hypothermia; cellular differentiation and neoplasia; practical exercises included.

9. Course Objective (s)

- 9.1. To familiarize the students with the principles underlying the ways in which the living organisms, in particular mammalian organisms, and their contained organs, tissues and cells, respond and react to disturbances in the environment (exogenous and endogenous) that may be lead to disease.
- 9.2. To understand the patterns of responses and their consequences to the host; e.g. cell and tissue injury, repair, inflammation, immune responses, selected toxic agents, neoplasia and some examples of selected responses of specific organ systems to toxic agents, etc.

10. Course Outline

Week	Topics/Seminar	Hours			Instructor
		Lecture	Lab	Self-study	
1	Lecture: -Introduction & Basic terminology -Cell Injury Lab: Cell injury	3	2	7	Somphong
2	Lecture: -Cell Death & Adaptation -Aging Lab: Cell injury (cont.)	3	2	7	Somphong
3	Lecture: Hemodynamic Disorders Lab: Cell injury (cont.)	3	2	7	Somphong & Staff
4	Lecture: Inflammation	3	2	7	Suda

	Lab: Inflammation				
5	L 8: Healing & Repair Lab: Inflammation (cont.)	3	2	7	Suda & Staff
6	Midterm exam	3	2	7	Somphong & Staff
7	Lecture: -Infectious disease. Lab: Infectious disease	3			Somphong Vina
8	Lecture: Disorders of Immunity Lab: Infectious disease (cont.)	3	2	7	Vina Staff
9	Lecture: Disturbance of Mineral & Pigments -Neoplasia I Lab: Neoplasia	3	2	7	Somphong
10	Lecture: -Neoplasia II -Environmental Pathology Lab: Neoplasia (cont.)	3	2	7	Somphong Wanee
11	Lecture: -Nutritional Pathology Lab: Neoplasia (cont.)	3	2	7	Wanee Staff
Final examination					
	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 understand the principles underlying the ways in which the living organisms, in particular mammalian organisms, and their contained organs, tissues and cells, respond and react to disturbances in the environment (exogenous and endogenous) that may be lead to disease.
- 13.2 The ability to understand the patterns of responses and their consequences to the host; e.g. cell and tissue injury, repair, inflammation, immune responses, selected toxic agents, neoplasia and some examples of selected responses of specific organ systems to toxic agents, etc.

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. Assessment made from the set-forward criteria: student who gets 85% up will have grade A Students must attend at least 80% of the total class hours of this course.

Ration of mark	
Midterm exam	30%
Final exam	30%
Laboratory exam	40%
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. Kumar, V., Cotran, R.S. and Robbins, S.L. Basic pathology, 7th Edition. USA. W.B. Saunders Company. 2003.
2. Cotran, R.S., Kumar, V. and Collins, T. Robbins, S.L. Pathologic basis of disease 6th Edition. USA. W.B. Saunders Company. 1999.
3. Rubin, E. and Farber, J.L. Pathology 3rd Edition. USA. JB Lippincott Company. 2000.

16. Instructor (s)

Associate Professor Dr. Somphong Sahaphong

Associate Professor Dr. Suda Riengrojpitak

Associate Professor Dr. Vina Churdboonchart

Dr. Wannee Jiraungkoorskul

17. Course Coordinator

Associate Professor Dr. Somphong Sahaphong