Course Syllabus

1. Name of Curriculum Bachelor of Science (Biological Science). Faculty/Institute/College International College, Mahidol University

2. Course Code ICBI 402
Course Title Epidemiology

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

4. Prerequisite ICBI 211, ICBI 412

5. Type of Course Elective course

6. Trimester / Academic year

Second or third trimester of every academic year

7. Course Condition

Number of students is 20-30.

8. Course Description

Prevalence of endemic health problems caused by infectious diseases or non-infectious disorders; diseases of Southeast Asia in comparison with those occur in tropical Africa and America. Field studies are included.

9. Course Objective

By the end of the course, students should be able to

- -Understand the prevalence of endemic health problems caused by infectious diseases or non-infectious disorders.
- -Understand the differences between the diseases in Southeast Asia and those occur in tropical Africa and America

10. Course Outline

week	Topics/Seminar		Hours		
		Lecture	Lab	Self-study	Instructor
1	-Natural history of disease and	3	2	7	William Bloch
	levels of prevention.				
	-Introduction to infectious disease				
	Epi.				
2	Disease measurements: -Morbidity	3	2	7	William Bloch
	-Mortality rates and adjustment				
3	Causation in epidemiology and in	3	2	7	William Bloch
	other fields				
4	Diagnostic tests	3	2	7	William Bloch
5	Study design:	3	2	7	William Bloch
	-Randomized trials				
	-Cohort studies				
6	Study design and analysis: Case-	3	2	7	William Bloch
	control and cross-sectional studies				
7	Midterm Exam	3	2	7	William Bloch

8	Concept of risk	3	2	7	William Bloch		
	Measures of risk and applications						
9	Bias, confounding and interaction	3	2	7	William Bloch		
10	Chronic disease Epi and life course	3	2	7	William Bloch		
	models						
11	Epi and public policy	3	2	7	William Bloch		
Final Exam							
	Total	33	22	77			

11. Teaching Method (s)

- 1. Lecture
- 2. Suggested readings
- 3. Discussion in class
- 4. Case study

12. Teaching Media

- 1. Powerpoint Presentations
- 2. Texts and teaching materials
- 3. Case study

13. Measurement and Evaluation of Student Achievement

Student achievement is measured and evaluated by

- 13.1 The ability to understand the prevalence of endemic health problems caused by infectious diseases or non-infectious disorders.
- 13.2 The ability to describe the differences between the diseases in Southeast Asia and those occur in tropical Africa and America

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 40% Final Examination 40% Assignments and quizzes 20% Total 100% Range judges: $X \pm 2SD$ will be C^+ - C

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. References

Rothman, K.J. Epidemiology: An introduction. UK. Oxford University Press. 2002.

16. Instructors

Dr. William Bloch

17. Course Coordinator

Associate Professor Dr. Prayad Pokethitiyoke.