

## Course Syllabus

- 1. Program of Study** Bachelor of Science (Biological Sciences)  
**Faculty/Institute/College** Mahidol University International College
- 2. Course Code** ICBI 231  
**Course Title** Plant Biology
- 3. Number of Credits** 4 (3-2-7) (Lecture/Lab/Self-study)
- 4. Prerequisite (s)** none
- 5. Type of Course** Required or Elective course
- 6. Trimester/ Academic Year**  
 2<sup>nd</sup> trimester / every academic year
- 7. Course Condition**  
 None

### 8. Course Description

A survey of the plant and their relatives, especially their functional anatomy and morphology, physiology, evolution, diversity and utilization; practical exercises included.

### 9. Course Objective (s)

After the completion of this course, students should be able to

9.1 to classify the living organisms according to the five majors phyla.

9.2 to describe the characteristics of each phylum.

9.3 to explain the basic anatomy and morphology of plant organs.

9.4 to explain the physiological processes in plants.

### 10. Course Outline

week	Topics/Seminar	Hours			Instructor
		Lecture	Lab	Self-study	
1	Classification of plants and other organisms.	3	2	7	Prof. Maleeya Kruatrachue
2	Kingdom Protista: Algae	3	2	7	Prof. Maleeya Kruatrachue
3	Kingdom Fungi	3	2	7	Prof. Maleeya Kruatrachue
4	Kingdom Plantae	3	2	7	Prof. Maleeya Kruatrachue
5	Early development of plant body Cells and tissues of plant body	3	2	7	Prof. Maleeya Kruatrachue
6	<b>Midterm Exam</b>	3	2		Prof. Maleeya Kruatrachue
7	Root: primary structure and development	3		7	Prof. Maleeya Kruatrachue
8	Stem: primary structure and development	3	2	7	Prof. Maleeya Kruatrachue

	Secondary growth				
9	Leaf, flower and fruit	3	2	7	Prof. Maleeya Kruatrachue
10	Plant nutrition and soil Transportation	3	2	7	Prof. Maleeya Kruatrachue
11	Plant growth regulators	3	2	7	Prof. Maleeya Kruatrachue
<b>Final Examination</b>					
	<b>Total</b>	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 classify the living organisms according to the five majors phyla.
- 13.2 The ability to describe the characteristics of each phylum.
- 13.3 The ability to explain the basic anatomy and morphology of plant organs.
- 13.4 The ability to explain the physiological processes in plants.

Ratio of mark

Laboratory reports and attendance	20%
Midterm examination	35%
Final examination	45%
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. Berg, L.R. Introduction botany. Plants, people, and the environment. USA. Saunders Colleges Publishing. 1997.
2. Raven P.H., Evert, R.F., and Eichhorn, S.E. Biology of plants, 6<sup>th</sup> Edition. USA. W.H. Freeman and Company. 1999.

**16. Instructor (s)**

Professor Dr. Maleeya Kruatrachue

**17. Course Coordinator**

Professor Dr. Maleeya Kruatrachue