

## Course Syllabus

1. **Program of Study** Bachelor of Science (Biological Sciences)  
**Faculty/Institute/College** Mahidol University International College
2. **Course Code** ICBI 202  
**Course Title** Integrated Laboratory in Biological Sciences II
3. **Number of Credits** 2 (0-4-2) (Lecture/Lab/Self-study)
4. **Prerequisite (s)** none
5. **Type of Course** Required
6. **Trimester /Academic Year**  
Second trimester
7. **Course Condition**  
None
8. **Course Description**  
Integrated laboratory exercises on cell biology, genetics and molecular biology.
9. **Course Objective (s)**  
Same as course description

### 10. Course Outline

week	Topics/Seminar	Hours			Instructor
		Lecture	Lab	Self-study	
1	Introduction, Orientation, Lab Safety	0	4	2	Laird Allan
2	Environmental Biology	0	4	2	Laird Allan
3	Environmental Biology	0	4	2	Laird Allan
4	Circulatory System Physiology	0	4	2	Laird Allan
5	Advanced Microscopy	0	4	2	Laird Allan
6	Advanced Microscopy	0	4	2	Laird Allan
7	Advanced Microscopy	0	4	2	Laird Allan
8	Molecular Biology	0	4	2	Laird Allan
9	Molecular Biology	0	4	2	Laird Allan
10	Molecular Biology	0	4	2	Laird Allan
11	Molecular Biology	0	4	2	Laird Allan
<b>Final Examination</b>					
	Total	0	44	22	

### 11. Teaching Methods

- 11.1 Performing experiments in laboratory.
- 11.2 Self-study
- 11.3 Group discussion and presentation

**12. Teaching Media**

- Laboratory manual
- Laboratory equipment

**13. Measurement and evaluation of student achievement**

Student achievement is measured and evaluated by

13.1 the ability to understand the concepts of experiments on cell biology, genetics and molecular biology.

13.2 the ability to interpret the data obtained from the experiments

13.3 the ability to apply the technique and the interpretation skill to research.

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.

Students must attend at least 80% of the total class hours of this course.

Grade will be determined on the basis of

Class participation	10
LA	32
SS	26
PF	32
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)**

Notes and laboratory procedures prepared by each instructor.

**16. Instructor (s)**

Laird Allan

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**17. Course Coordinator**

Laird Allan