

SUBJECT OUTLINE DETAILS

1. Subject: Animal Physiology Lab.

- **Code:** CS073C
- **Credits:** 1
- **Hours:** 30 practice hours, 30 self-study hours.

2. Management Unit:

- **Department:** Molecular Biotechnology
- **Institute:** Biotechnology Institute for Research and Development

3. Prerequisites:

4. Subject objectives:

4.1. Knowledge:

- 4.1.1. Strengthen and clarify knowledge gained from the theoretical subject on animal physiology
- 4.1.2. Deeply understand mechanisms of digestion, blood circulation, respiration, reproductive endocrine, development and reproduction.

4.2. Skill:

- 4.2.1. Being able to comment and analyse the growth and reproductive development of animals.
- 4.2.2. Applying physiological knowledge, together with other specialized skills in biotechnology to develop animal production.

4.3. Attitude:

- 4.3.1. Highly specialized knowledge with proper attitudes for the job.
- 4.3.2. Active participation in the development and management of animals

5. Brief description of subject content:

The module content includes practice training to understand blood characteristics, respiration system, digestive system and nerve system.

6. Subject content structure:

	Content	Hours	Objectives
Chapter 1.	Nutrient absorption in small intestine	5	4.1.1-4.3.2
Chapter 2.	Effects of parasympathetic nervous system on the heart	5	4.1.1-4.3.2

Chapter 3. Effect of O ₂ deficiency and CO ₂ excess in rabbit respiration	5	4.1.1-4.3.2
Chapter 4. Blood pressure measurement	1	4.1.1-4.3.2
Chapter 5. Red blood cell count	5	4.1.1-4.3.2
Chapter 6. Hemoglobin determination	4	4.1.1-4.3.2
Chapter 7. White blood cell count	4	4.1.1-4.3.2
Chapter 8. Body temperature measurement	1	4.1.1-4.3.2

7. Teaching method:

- Directly practice in the Lab.

8. Duties of student:

Students have to do the following duties:

- Attend all the practical lessons.
- Write report and attend final examination for the module.

9. Assessment of student learning outcomes:

9.1. Assessment

No.	Point components	Rules and Requirement	Weights	Objectives
1	Report writing	- Description and discussion of practical results	40%	4.1.1-4.3.2
2	Final examination	- Multiple choice test	60%	4.1.1-4.3.2

9.2. Grading

- Grading components and final test scores will be marked on a scale of 10 (0 to 10), rounded to one decimal place.
- Subject score is the sum of all the components of the evaluation multiplied by the corresponding weight. The subject score is marked on a scale of 10 and rounded to one decimal place, then is converted to A-B-C-D score and score on a scale of 4 under the academic provisions of the University.

10. Materials:

Materials information

Code number

- [1] Nguyen Thi Kim Dong, Nguyen Van Thu 2008. Textbook of animal physiology. Cantho University. 636.0892/ Đ455; NN012993
- [2] Lauralee Sherwood, Hillar Klandorf, Paul Yancey 2005. Animal physiology: from genes to organisms. Second edition, Cengage Publisher 571.1/ S554; NN.011803

11. Self-study Guide:

Week	Content	Theory (hours)	Practice (hours)	Students' duties
1	Chapter 1. Nutrient absorption in small intestine		5	Reading: Document [1], Chapter 3 Document [2], Section 4/14 Attend class and perform practical work
2	Chapter 2. Effects of parasympathetic nervous system on the heart		4	Reading: Document [1], Chapter 2 Document [2], Section 4, 8 Attend class and perform practical work
3	Chapter 3. Effect of O ₂ deficiency and CO ₂ excess in rabbit respiration		4	Reading: Document [1], Chapter 5 Document [2], Section 4/11 Attend class and perform practical work
4	Chapter 4. Blood pressure measurement		1	Reading: Document [1], Chapter 6 Document [2], Section 4/9 Attend class and perform practical work
5	Chapter 5. Red blood cell count		4	Reading: Document [1], Chapter 6 Document [2], Section 4/9 Attend class and perform practical work
6	Chapter 6. Hemoglobin determination		4	Reading: Document [1], Chapter 6 Document [2], Section 4/9 Attend class and perform practical work
7	Chapter 7. White blood cell count		4	Reading: Document [1], Chapter 6 Document [2], Section 4/9 Attend class and perform practical work
	Chapter 8. Body temperature measurement		1 3	Attend class and perform practical work Writing report

Can Tho,/...../20...

**ON BEHALF OF RECTOR
DEAN/ DIRECTOR**

HEAD OF DEPARTMENT