

Course Syllabus

1. **Course code and course title** ICBI 221 Animal Biology
2. **Number of credits** 4 (3-2-7)
3. **Program** Undergraduate Degree (International Program)
4. **Type of Subject** Required
5. **Course Coordinator** 1. Asst. Prof Tuempong Wongtawan, DVM, PhD
2. Dr Prarom Sriphavatsarakom DVM, PhD

6. Course Lecturers

Name	Email
Asst.Prof. Tuempong Wongtawan, DVM, PhD (TW)	tuempong.wan@mahidol.edu
Asst.Prof. Nlin Arya, DVM, PhD (NA)	nlin.arya@mahidol.edu
Dr. Sakdichod Kimsakulvech, DVM, PhD (SK)	sakdichod.kim@mahidol.edu
Dr Prarom Sriphavatsarakom, DVM, PhD (PS)	prarom.sri@mahidol.edu
Mr.Laird B. Allan. BSc, MS. (LA).	laird.all@mahidol.edu

7. **Trimester 1, Course Capacity:** approximately 30 students

6. **Pre-requisite** ICBI101 Biology

8. Venue of Study

- Mahidol University International College (MUIC)
 - Lecture room
- Faculty of Veterinary Science (VSMU)
 - Lab Anatomy room (1st floor)
 - Lab Histology room (6th floor)

9. Teaching materials

E-learnings, assignments and tests

- Please register at <https://gap.mahidol.edu/register.php> to have account and email @student.mahidol.edu
- Please use your @mahidol.edu to register google animal biology group at <https://groups.google.com/a/mahidol.edu/d/forum/animalbiology>

Recommended textbooks

- Campbell Biology by Urry et al, . 11th edition. Pearson.
- Miller's Anatomy of the Dog, 4th edition by Evan & de Lahunta. 2013.. Elsevier Saunders.
- Histology (6th ed) by Ross & Pawlina. 2011 Wolter Kluwer/Lippincott & Wilkins.
- Veterinary Physiology and applied anatomy by Tartaglia & Waugh. 2005., Elsevier Saunders.
- Textbook of veterinary physiology by Cunningham and Klein, 2007. Elsevier Saunders.
- Castellini, M. A., & Mellish, J. A. (Eds.). (2015). Marine mammal physiology: Requisites for ocean living. CRC Press.
- Helfman, G. S., Collette, B. B., Facey, D. E., Bowen, B. W., & Blackwell, W. (2009). The diversity of fishes.

Other documents/materials

- Digital slide and Software for digital slide
- Documents from lecturers and Slide handout

Website

- <http://www.histologyguide.com/index.html>
- <http://histology.medicine.umich.edu/full-slide-list>

Evaluation

- Summative assessment
 - Lecture examination (Midterm and Final) 40%
 - Lab examination (Post-class, Midterm and Final) 30%
- Formative assessment
 - (Assignment, Online test, Quiz, Class participation) 30%

Course Schedule

No	Date	Day	Time	Topics	Lecturer	Class	Venue
1	11 Sep 2019	Wed	12.30 - 13.00	Introduction	TW	Lecture	MUIC
1	11 Sep 2019	Wed	13.00-15.3 0	Animal diversity, evolution, and invertebrate adaptation (by LA)	LA	Lecture	MUIC
2	13 Sep 2019	Fri	12.00 - 16.00	Lab invertebrate	LA	Lab	MUIC

3	18 Sep 2019	Wed	12.30 - 15.30	Vertebrate adaptation	LA	Lecture	MUIC
4	20 Sep 2019	Fri	12.30 - 15.30	Digestive system	TW	Lecture	MUIC
5	25 Sep 2019	Wed	12.30 - 15.30	Animal movement and growth	TW	Lecture	MUIC
6	27 Sep 2019	Fri	12.30 - 16.00	Invertebrate anatomy	TW/SK/P S	Lab	VSMU
7	2 Oct 2019	Wed	12.30 - 15.30	Circulation system	TW	Lecture	MUIC
	4 Oct 2019	Fri	12.30 - 15.30				
8	9 Oct 2019	Wed	12.30 - 15.30	Animal Reproduction and development	SK	Lecture	MUIC
9	11 Oct 2019	Fri	12.30 - 15.30	Nervous and Endocrine system	PS	Lecture	MUIC
10	16 Oct 2019	Wed	12.30 - 15.30	Animal and the World (presentation)	TW	Lecture	MUIC
11	18 Oct 2019	Fri	12.00 - 16.00	Vertebrate anatomy 2	TW/SK/P S	Lab	VSMU
	23 Oct 2019	Wed		Holiday (Chulalongkorn day)			
	25 Oct 2019	Fri					
	30 Oct 2019	Wed	12.30 - 15.30	Midterm exam (topic 1-8) (7-27 Oct)			MUIC
12	1 Nov 2019	Fri	12.30 - 15.30	Renal system and excretion	NA	Lecture	MUIC
	6 Nov 2019	Wed					
13	8 Nov 2019	Fri	12.30 - 15.30	Aquatic animal adaptation	LA	Lecture	MUIC
14	13 Nov 2019	Wed	12.00 - 16.00	Lab aquatic animal	LA	Lab	MUIC
	15 Nov 2019	Fri	12.30 - 15.30				
15	20 Nov 2019	Wed	12.00 - 16.00	Lab Animal cell (histology)	NA	Lab	VSMU
16	22 Nov 2019	Fri	12.30 - 15.30	Animal behaviour and welfare	PS	Lecture	MUIC

17	27 Nov 2019	Wed	12.30 - 15.30	Animal communication	PS	Lecture	MUIC
18	29 Nov 2019	Fri	12.00 - 16.00	Lab animal behaviour	PS/SK	Lab	VSMU
	4 Dec 2019	Wed					
	6 Dec 2019	Fri					
	11 Dec 2019	Wed		Final (2-8 Dec)			MUIC