



## Course Syllabus (Academic Year 2020)

School of Interdisciplinary Studies, Kanchanaburi Campus, Mahidol University

1. **Course No. and Title** : KAGS 232 Paleontology Laboratory  
**Credit (study hours)** : 1 (0-3-4)
2. **Program Name** : Bachelor of Science in Geoscience program
3. **Course Module** :  Gen.Edu. course  B.Sc. core course  
 GS core course  Elective course  
**Pre/co-requisite** : KAGS 201 and KAGS321
4. **Class Semester** :  1<sup>st</sup> Semester  2<sup>nd</sup> Semester  3<sup>rd</sup> semester
5. **Class Schedule & Venue** : 13.00 – 16.00 hrs., Room L-102, Laboratory Building  
Mahidol University, Kanchanaburi Campus
6. **Class Coordinator** : Lect. Paiphan Paejaroen  
Contact No. : 081-2557694 Email : paiphan.pae@mahidol.edu

### 7. Course Description

Laboratory exercises related to lecture, i.e. an identification and classification of fossils, plants and animals.

### 8. Course Objectives / Course Learning Outcomes (CLOs)

No.	Objectives / CLOs	Expected Skills / Knowledge			PLOs
		Specific	Generic	Knowledge	
8.1	Explain the taphonomy of plants and animals				1
8.2	Explain the stratigraphy and correlation				1
8.3	Describe the surveying plan of fossils				1
8.4	Explain the fossil collecting techniques				1
8.5	Identify fossils by using pictorial key				1
8.6	Explain the paleobiology and paleoenvironment				1

PLO1: Able to produce geologic map and evaluate geological materials, features and process by using appropriate techniques (for social and economic)

## 9. Class Instructor List

9.1	Paiphan Paejaroen	081-255-7694	paiphan.pae@mahidol.edu
9.2	Katsuo Sachida	-	dt4mi5@bma.biglobe.ne.jp
9.3	Pramote Nontarak	088-496-9366	-
9.4	Sakchai Jaunngam	098-485-6581	-
9.5	Ekkachak Chandon	090-989-5117	<a href="mailto:ekkachak.cha@mahidol.ac.th">ekkachak.cha@mahidol.ac.th</a>
9.6	Adun Samathi	096-918-7916	asamathi@gmail.com

## 10. Course Outline

Week	Date	Contents	CLOs	Teaching & Learning	Instructor's Names
1	22 Jan 21	VDO: First life	1	Lab practice	Paiphan, Pramote, Ekkachak
2	29 Jan 21	Fossil and stratigraphy, Biostratigraphy	1, 2, 6	Lab practice	Sachida, Paiphan, Pramote, Ekkachak
3	5 Feb 21	Fossil replica	1, 2, 5, 6	Lab practice	Paiphan, Sachida, Pramote, Ekkachak
4	12 Feb 21	Plant evolution, trace fossils and Fossilization Animal symmetry	1, 2, 5, 6	Lab practice	Paiphan, Sachida, Pramote, Ekkachak
5	19 Feb 21	Microfossil: Protozoa and Ostracod	1, 5, 6	Lab practice	Sachida, Paiphan, Pramote, Ekkachak
6	26 Feb 21	<b>No class (Makhabucha day)</b>			
7	5 Mar 21	Poriferan and Cnidarian	1, 5, 6	Lab practice	Paiphan, Sachida, Pramote, Ekkachak
8	12 Mar 21	Mollusc	1, 5, 6	Lab practice	Paiphan, Sachida, Pramote, Ekkachak
9	Midterm Examination (15-19 Mar 2021)				

10	26 Mar 21	Brachiopod	1, 5, 6	Lab practice	Paiphan, Sachida, Pramote, Ekkachak
11	2 Apr 21	Arthropod and trilobites	1, 5, 6	Lab practice	Paiphan, Sachida, Pramote, Ekkachak
12	9 Apr 21	Echinoderm, Graptolites and Bryozoan	1, 5, 6	Lab practice	Paiphan, Sachida, Pramote, Ekkachak
13	23 Apr 21	Chordates in Thailand	1, 2, 4, 5, 6	Lab practice	Sakchai, Paiphan, Sachida, Pramote, Ekkachak
14	30 Apr 21	Chordates (Overall)	1, 2, 4, 5, 6	Lab practice	Adun, Paiphan, Sachida, Pramote, Ekkachak
15	Final Examination (3-14 May 2021)				
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## 11. Course Assessment

No.	Methods / Activities	Regulations	CLOs	Week	Weight Distribution (%)
11.1	Laboratory report	Hand in after classes	1-6	1-8, 10-17	50
11.2	Midterm laboratory exam	30 minutes	1-6	1-7	15
11.3	Final laboratory exam	30 minutes	1-6	10-16	15
11.4	Assignments	Will be announced in the class	1-6	1-7, 10-16	20
				<b>Total</b>	<b>100</b>

## 12. Grading System

Criterion-referenced evaluation

Grade	Score	Grade	Score	Grade	Score	Grade	Score
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A	≥ 80 %	B	70 – 74.99%	C	60 – 64.99%	D	50 – 54.99%
B+	75 – 79.99%	C+	65 – 69.99%	D+	55 – 59.99%	F	< 50 %

Norm-referenced evaluation

\*If use both criterion and norm-referenced evaluation, please tick two boxes.

### 13. References

13.1 สุรพงษ์ เลิศทัศนีย์ (2536). บรรพชีวินวิทยาทั่วไป (General Palaeontology).

13.2 Doyle, P. (1996). Understanding Fossil. An introduction to invertebrate palaeontology. John Wiley & Sons Ltd.

13.3 Foote, M., Miller, A. I. (2007). Principles of Paleontology (3<sup>rd</sup> ed.). W.H. Freeman and Company.