**Time Table for SCBE390: Vertebrate Zoology (Inter)**

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| **Week** | **Lesson** | **Lesson Type** | **Date**  | **Time 65 hrs.** | **Location** | **Room** | **Instructor** |
| 1 | Introduction  | Lecture | Mon, 18 Jan | 13:30-14:30 | Online\* | - | AJ. Napat |
| Diversity of vertebrate | Lecture | Mon, 18 Jan | 14:30-16:30 | Online\* | - | AJ. Napat |
| Specimen: Preserved  | Laboratory | Fri, 22 Jan | 13:30-15:30 | Online\* | - | AJ. NP/CK/PP |
| 2 | Basic taxonomy | Lecture | Mon, 25 Jan | 13:30-16:30 | Online\* | - | AJ. Warut |
| Assignment | Visit | Fri, 29 Jan | 13:30-15:30 | Online\* | - | AJ. Warut |
| 3 | Fish I | Lecture | Mon, 01 Feb | 13:30-16:30 | Online | - | AJ. Jes |
| Specimen: Fish (Dissection) | Laboratory | Fri, 05 Feb | 13:30-15:30 | Online\* | - | AJ. Napat/Chalita |
| 4 | Fish II | Lecture | Mon, 08 Feb | 13:30-16:30 | Online | - | AJ. Jes |
| Special Holiday (Chinese New Year) |  | Fri, 12 Feb |  |  |  |  |
| 5 | Special talk: Parasitic Helminths in Fish Organs and Food Safety | Guest  | Mon, 15 Feb | 13:30-15:30 | Phayatai | N516 | AJ. Urusa |
| Amphibian I | Lecture | Fri, 19 Feb | 13:30-16:30 | Phayatai | N516 | AJ. Napat |
| 6 | Amphibian II | Lecture | Mon, 22 Feb | 13:30-16:30 | Salaya | SC1-159 | AJ. Pattarapon |
| National Holiday (Māgha Pūjā) |  | Fri, 26 Feb |  |  |  |  |
| 7 | Group Assignment (Mini project) and Brainstorming | Laboratory | Mon, 1 Mar | 13:30-14:30 | Phayatai | N503 | AJ. NP/PP |
| Specimen: Frog (Dissection) | Laboratory | Mon, 1 Mar | 14:30-16:30 | Phayatai | N503 | AJ. Napat/PP |
| **Midterm Lecture Exam** | **Exam** | **Fri, 5 Mar** | **13:30-16:30** | **Phayatai** | N516 | AJ. Napat |
| 8 | Reptile I | Lecture | Mon, 8 Mar | 13:30-16:30 | Salaya | SC1-159 | AJ. Napat |
| Visit: Snake farm | Visit | Fri, 12 Mar | 13:30-15:30 | SF, QSMI | - | AJ. Napat |
| 9 | Reptile II | Lecture | Mon, 15 Mar | 13:30-16:30 | Salaya | SC1-159 | AJ. Napat |
| Specimen: Snake (Dissection) | Laboratory | Fri, 19 Mar | 13:30-16:30 | Phayatai | N503 | AJ. Napat/Chalita |
| 10 | Aves I  | Lecture | Mon, 22 Mar | 13:00-15:00 | Salaya | SC1-159 | AJ. Philip |
| Birds Activity | Laboratory | Mon, 22 Mar  | 15:00-17:00 | Salaya | SC1-159 | AJ. Philip |
| Aves II | Lecture | Fri, 26 Mar | 13:30-16:30 | Salaya | SC1-159 | AJ. Philip |
| 11 | Day off (Already study on Monday) |  | Mon, 29 Mar |  |  |  |  |
| Specimen: Chick (Dissection) | Laboratory | Fri, 02 Apr | 13:30-15:30 | Phayatai | N503 | AJ. Napat/Chalita |
| 12 | Mammal I | Lecture | Mon, 05 Apr | 13:30-16:30 | Salaya | SC1-159 | AJ. Chalita |
| Specimen: Rat (Dissection) | Laboratory | Fri, 09 Apr | 13:30-15:30 | Phayatai | N503 | AJ. Kittipong |
| 13 | One-off bridge holiday (Songkarn) |  | Mon, 12 Apr |  |  |  |  |
| Assignment progress and discussion | Laboratory | Fri, 16 Apr | 13:30-15:30 | Phayatai | N503 | AJ. Napat |
| 14 | Mammal II | Lecture | Mon, 19 Apr | 13:30-15:30 | Salaya | SC1-159 | AJ. Chalita |
| Special talk: Ecological and Behavior of Gibbon in Thailand | Guest | Mon, 19 Apr | 15:30-16:30 | Salaya | SC1-159 | AJ. Warren |
| Special talk: Mammal-Borne (Zoonotic) Diseases | Guest | Fri, 23 Apr | 13:30-14:30 | Phayatai | N516 | AJ. Kittipong |
| 15 | Lecture and Lab Review | Lecture | Mon, 26 Apr | 13:30-16:30 | Phayatai | N503 | AJ. Napat/Chalita |
| Group Assignment: Presentation/Report | Laboratory | Fri, 30 Apr | 13:30-15:30 | Phayatai | N516 | AJ. Napat/Chalita |
| 16 | **Final Lecture Exam** | **Exam** | **Mon, 3 May** | **13:30-16:30** | **Salaya** |  | AJ. Napat |
| **Lab Exam*\*2*** | **Exam** | **Fri, 7 May** | **13:30-16:30** | **Phayatai** | **N503** | AJ. Napat |
| Course Coordinator: **Dr Napat Ratnarathorn** Department of Biology, Faculty of Science, Mahidol University Email: Napat.rat@mahidol.ac.thScore Evaluation: Lecture: **- Midterm exam 20%*\*1***: Diversity 3%, Taxonomy 3%, Fish 7%, and Amphibian 7% **- Final exam 20%*\*1***:Reptile 7%, Aves 6%, and Mammal 7%**-** **Class attendance and participation (+ After class quizzes) 10%**Laboratory: **-** **Group assignment 15%**: Presentation/Delivery 5%, Content 5%, Teamwork 2%, Other 3%**- Lab report/data sheet** **15%**: Specimen Lab - 6 times (2% each), Other 3%**- Final exam 15%*\*2***: Specimen Lab - 6 times (2% each), Visit & Talk 3%**- Class attendance and participation 5%**  | **GRADE** |
| **A** | ≥80 |
| **B+** | 75-79 |
| **B** | 70-74 |
| **C+** | 65-69 |
| **C** | 60-64 |
| **D+** | 55-59 |
| **D** | 50-54 |
| **F** | <50 |

*\* If the pandemic situation becomes better, we will be back to the on-site class. Everything will be updated!!*

*\*1 Session Instructor freely designs type and style of question in the exam*

*\*2 Buzzer exam (1.5 minutes per question)*

**Instructor and Guest Speaker**

**Mahidol University**

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| *Department member*  |
| **Instructor Name** | **Abbre.** | **Unit** | **Contact** |
| Assoc. Prof. Philip D. Round |  | Department of Biology, Faculty of Science, Mahidol University | Philip.rou@mahidol.ac.th |
| Assis. Prof. Dr. Chalita Kongrit | CK | Chalita.kon@mahidol.ac.th |
| Lect. Dr. Warut Siriwut |  | Warut.sir@mahidol.ac.th |
| Lect. Dr. Napat Ratnarathorn (Course-co) | NP | Napat.rat@mahidol.ac.th |
| Lect. Dr. Pattarapon Promnun | PP | Pattarapon.prm@gmail.com |
| *Other Departments/Faculties* |
| **Instructor Name** |  | **Unit** | **Contact** |
| Assoc. Prof. Dr. Urusa Thaenkham |  | Department of Helminthology, Faculty of Tropical Medicine, Mahidol University | Urusa.tha@mahidol.ac.th |
| Lect. Dr. Kittipong Chaisiri |  | Kittipong.cha@mahidol.ac.th |
| **Other Institutes** |
| **Instructor Name** |  | **Unit** | **Contact** |
| Prof. Dr. Warren Y. Brockelman |  | National Biobank of Thailand (NBT) National Science and Technology Development Agency (NSTDA) | Wybrock@cscoms.com |
| Assis. Prof. Dr. Jes Kettratad |  | Department of Marine Science, Chulalongkorn University | Jes.kettratad@gmail.com |

**Instructor Guidance for Exam Questioning (Lecture and Laboratory)**

* Time for students to do the exam **should not exceed** the number showed in the table below (see column: **Time**)
* Please give the raw score and the final % score (see column: **Score**) to course coordinator on time
* Lecture exam is paper-based
	+ No limit in the number of questions
	+ No limit for style and type of questionin the exams
	+ Please separate question and answer sheet
* Final exam for laboratory is a buzzer exam
	+ 1.5 minutes (90 seconds) per question
	+ At least 2 questions per one class (Total 15 questions minimum from 7 classes)
	+ Answer for the question should be short (generally one-few words or not more than one line)
	+ If there are more than 15 students, the numbers of question increase
	+ There must be two sub-questions in one question
	+ The questions must be in subsequent number (ex. Preserved specimen 1-2, Fish 3-4, Frog 5-6, …Visit 13-18)
	+ The sub-question number must be alphabetical (A and B)
	+ Please use the form provided below for questioning

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| --- | --- | --- |
| **Midterm exam (Lecture)** | **Final exam (Lecture)** | **Final exam (Laboratory)** |
| **Lesson** | **Score** | **Time (hour)** | **Lesson** | **Score** | **Time (hour)** | **Lesson** | **Score** | **Time (mins)****10-15 students** | **Time (mins)****16-21 students** |
| Diversity  | 3% | 0.5 | Reptile  | 7% | 1 | Preserved Sp.  | 2% | 3 (2Q) | 4.5 (3Q) |
| Taxonomy  | 3% | 0.5 | Aves | 6% | 1 | Fish | 2% | 3 (2Q) | 4.5 (3Q) |
| Fish  | 7% | 1 | Mammal | 7% | 1 | Frog | 2% | 3 (2Q) | 4.5 (3Q) |
| Amphibian | 7% | 1 | **Total** | **20%** | **3** | Snake | 2% | 3 (2Q) | 4.5 (3Q) |
| **Total** | **20%** | **3** |  | Chick | 2% | 3 (2Q) | 4.5 (3Q) |
|  | Rat | 2% | 3 (2Q) | 4.5 (3Q) |
| Visit & Guest | 3% | 4.5 (3Q) | 4.5 (3Q) |
| **Total** | **15%** | **22.5 (15Q)** | **31.5 (21Q)** |

Question 1

A.

B.

Question 2

A.

B.