

| | | | |
|--------------------|---|--------------------|---------|
| Course Name | : General Biology Laboratory II (SCBE 104) 1 (0-3-1) | | |
| Lecture | : Tuesday 08:30 - 11:30 | | |
| Semester | : Semester 2 | | |
| Room | : SC3-308 | Google class code: | nttt3s6 |

Course coordinator: **Dr. Pahol Kosiyachinda**

Course Description

T

This course is a continuation of SCBE102. It emphasizes on organisms, biodiversity of plants and animals, animal system and function, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. Laboratory exercises include microscope observations and dissections to reinforce topics discussed in lecture.

Course Learning Outcomes (CLO)

After completion of this course, the student will demonstrate basic knowledge in each of the following categories:

1. Characteristics of the phyla in the kingdoms Monera, Protista, Fungi, Plantae, and Animalia;
2. Comparative plant anatomy and physiology;
3. Comparative animal anatomy and physiology;
4. Distinguish organisms of different classes and kingdoms.

Teaching

Teaching will be in the classroom with interacting perspectives. A Campbell textbook is recommended but not required. Course content will follow the recommended textbook.

All practical laboratory works fit the lecture topics by Campbell text.

Laboratory assessment

The laboratory assessment is divided into 4 assessment throughout the semester. Each assessment consisted of 30 questions (15%). Students have only 30 seconds to answer each question. The questions in each assessment come from the lab activities prior to each assessment.

Evaluation

- | | |
|---------------------------------|-----|
| 1. Lab attendants | 20% |
| 2. Lab reports | 20% |
| 3. Lab assessment 1-4 (15% x 4) | 60% |

Students will be evaluated from their total score (out of 100%). Grading system is A, B+, B, C+, C, D+, D and F.

| | | | | | | | | |
|---------------------------------------|------|-------|-------|-------|-------|-------|-------|--------|
| Total percentage of evaluation | 0-49 | 50-54 | 55-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80-100 |
| Grade | F | D | D+ | C | C+ | B | B+ | A |

| Week | Date | Topic | Lecturer |
|-------------|-------------|--|-----------------|
| 1 | 19 Jan | Orientation | TP, PK |
| 2 | 26 Jan | Diversity of life | TP, PK |
| 3 | 2 Feb | Diversity of heterotrophic microorganism and invertebrates | TP, PK |
| 4 | 9 Feb | Diversity of vertebrates | NR, PK |
| 5 | 16 Feb | Diversity of autotrophic microorganism | NR, PK |
| 6 | 23 Feb | Diversity of plants | NR, PK |
| 7 | 9 Mar | Lab assessment 1 | PK |
| 8 | 16 Mar | Midterm examination | PK |
| 9 | 23 Mar | Animal development 1 | PJS, PK |
| 10 | 30 Mar | Animal development 2 | PJS, PK |
| 11 | 20 Apr | Nervous system | PP, PK |
| 12 | 27 Apr | Circulatory and respiratory system | PP, PK |
| 13 | 11 May | Final Examination | PK |

References:

Campbell, N.A., Reece, Jane B., Morgan, Judith G., Carter, M. E.B. 2007 Investigating Biology Lab Manual (6th Edition)

Course coordinator:

PK - Dr. Pahol Kosiyachinda

Lecturers:

PP - Assoc. Prof. Prayad Pokethitiyook

PJS - Asst.Prof. Patompong Johns Saengwilai

NR - Dr. Napat Ratnarathorn

PK - Dr. Pahol Kosiyachinda

TP - Dr. Toemthip Poolpak

Laboratory technician:

Ms. Krissana Parkpoomkamol