

| Biodiversity | |
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| Course Code: | DIC 8035 (NTNU) No.5459 (THU) |
| Credits | Three (lectures: 3 hr per week) |
| Organizers | Dr. Kuo-Fang Chung, Dr. Allen Chen |
| Time | Thursday 09:10-12:10 |
| Place | B208, Biodiversity Research Center, BRC, AS |
| Description | Impact of global environmental change on organisms is getting more and more significant. One of the worst situations is that the change has caused an unexpectedly high extinction rate of species in Earth history, i.e., one thousand times higher than fossil record. Biodiversity conservation now becomes one of the important and noticeable public agenda. Why is biodiversity so important? What is biodiversity? This is the main aim of this course to lead students to know “biodiversity” and the relevant researches, particularly the recent studies. Moreover, the course will also extend beyond biodiversity and introduce the policies for biodiversity conservation and management in different countries as well as existing or potential conflicts. Student questioning and discussing will be one of the two important parts in this course that will facilitate students to have better understanding of biodiversity. In the end, we hope this course not only providing the knowledge of biodiversity but also giving students a great chance to have critical thinking and discussing of the complex issues beyond biodiversity. |
| Purpose | <ol style="list-style-type: none"> 1. Lectures and presentations are designed to provide a fundamental knowledge of biodiversity and the current progress of biodiversity researches. 2. Students will have deeper understanding of the ecological relationship between human society and other organisms or ecosystems and ruminare future agenda and difficulties in biodiversity conservation. |
| Grade | 70% Homework 30% Attendance/ Class Participation |

| Week | Date | Lecturer /Topic |
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| Week 1 | 9/23 | Dr. Allen Chen (BRCAS) Introduction |
| Week 2 | 9/23 | Dr. Kuo-Fang Chung and Miss Tsui-Ya Liu (BRCAS) Museum/herbarium collections and biodiversity researches; HAST collection and curation |
| Week 3 | 10/7 | Dr. Shih-Pin Huang and Dr. Kuo-Fang Chung (BRCAS) BRCAS fish collections and curation and TaiBOL |

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| Week 4 | 10/14 | Miss Meng-Min Hsueh and Dr. Kuo-Fang Chung (BRCAS) BRCAS zoological collections and curation |
| Week 5 | 10/21 | Miss Melissa Liu (TaiBIF) and Dr. Kuo-Fang Chung (BRCAS) GBIF, TaiBIF and Biodiversity Informatics |
| Week 6 | 10/28 | Prof. Jyh-Ming Chiang (THU) Ecology and diversity of Crassulacean acid metabolism |
| Week 7 | 11/4 | Dr. Chien-Hsiang Lin (BRCAS) Fish fossils and its paleodiversity in Taiwan: the known, unknown, and why should we care |
| Week 8 | 11/11 | Dr. Chung-Te Chang (THU) Phylogenetic relationships and the origins of Taiwan butterflies |
| Week 9 | 11/18 | Dist. Prof. Shu-Miaw Chaw (BRCAS) The diversity and evolution of plastid genomes in seed plants |
| Week 10 | 11/25 | Dr. Li-Wei Wu (THU) Phylogenetic relationships and the origins of Taiwan butterflies |
| Week 11 | 12/2 | Prof. Si-Min LIN (NTNU) TBA |
| Week 12 | 12/9 | Prof. Allen Chen (BRCAS) Filed trip to Taoyuan algal reef |
| Week 13 | 12/16 | Prof. Allen Chen (BRCAS) TBA |
| Week 14 | 12/23 | Prof. Yiching Lin (THU) Community assembly of forest communities |
| Week 15 | 12/30 | Prof. Allen Chen (BRCAS) Global marine biodiversity under the changing environment |
| Week 16 | 1/7 | Prof. Allen Chen (BRCAS) Trip to National Museum of Marine Science and Technology |