

| Biodiversity | |
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| Course Code: | DIC 8011 |
| Credits | Three (lectures: 3 hr per week) |
| Organizers | Si-Min Lin and Yu-Feng Hsu |
| Lecturers | Sen-Lin Tang, Daryi Wang, Shu-Miaw Chaw, John Wang, Benny Chan, Allen Chen, Ryuji Machida, Tung-Yuan Ho, Yoko Nozawa, Chih-Horng Kuo, Hwey-Lian Hsieh. Yin-Ru Chiang |
| Time | Tuesday 09:10-12:00 |
| Place | 1. NTNU S605 (first class, Gong-Guan Campus) 2. B208, Biodiversity Research Center, 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 | 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 ruminant future agenda and difficulties in biodiversity conservation. |
| Grade | 20% Class participation 10% Attendance 50% Assignments 20% Oral presentation |

| Week | Date | Topic |
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| Week 1 | 2/18 | [TBA] Dr. Si-Min Lin |
| Week 2 | 2/25 | [Biodiversity of species] Biodiversity of Zooplankton (Dr. Ryuji Machida) |
| Week 3 | 3/4 | Biodiversity of Plant (Dr. Shu-Miaw Chaw) |

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| Week 4 | 3/11 | Biodiversity of Ants (Dr. John Wang) |
| Week 5 | 3/18 | Biodiversity of Crustacean (Dr. Benny K.K. Chan) |
| Week 6 | 3/25 | Biodiversity of Cnidarian (Dr. Allen Chao-lun Chen) |
| Week 7 | 4/1 | [Biodiversity of genes or subcellular molecules] Diversification of Gene (Dr. Daryi Wang) |
| Week 8 | 4/8 | Midterm |
| Week 9 | 4/15 | [Biodiversity of species] Biodiversity of Prokaryotes (Dr. Chih-Horng Kuo) |
| Week 10 | 4/22 | Biodiversity of Viruses (Dr. Sen-Lin Tang) |
| Week 11 | 4/29 | Biodiversity of Environmental Metabolism (Dr. Yin-Ru Chiang) |
| Week 12 | 5/6 | [Biodiversity of ecosystems] Marine Phytoplankton Biodiversity and Its Environmental Control (Dr. Tung-Yuan Ho) |
| Week 13 | 5/13 | Comparative Biodiversity of Coral Reefs (Dr. Yoko Nozawa) |
| Week 14 | 5/20 | [Biodiversity of continentals and beyond] Biodiversity and Global Environmental Change (Dr. Allen Chao-lun Chen) |
| Week 15 | 5/27 | Connections from ecosystem services to human wellbeing- mangrove ecosystem in Danshuei River Estuary as an example (Dr. Hwey-Lian Hsieh) |
| Week 16 | 6/3 | Invited speech |
| Week 17 | 6/10 | Student presentation (Dr. Sen-Lin Tang) |
| Week 18 | 6/17 | Student presentation and Handing over essays (Dr. Sen-Lin Tang) |