

<b>Biogeography</b> 生物地理學	
<b>Course Code:</b>	DIC 8046
<b>Credits</b>	Three (lectures: 3 hr per week)
<b>Organizers</b>	Sheng-Feng Shen, Kuo-Fang Chung and Maoning Tuanmu
<b>Time</b>	Thursday 09:10-12:10
<b>Place</b>	B204, Biodiversity Research Center, AS
<b>Student Limit</b>	30
<b>Description</b>	Study the patterns and processes of Biogeography. Students will be introduced to both evolutionary and ecological processes that shapes the current and historical patterns of species distribution. Topics include phylogeny, island biogeography, Conservation biogeography, species range size and range limits.
<b>Purpose</b>	The goal of this course is to introduce biogeography from both ecological and evolutionary perspectives. The ability of active learning, including paper reading and writing reports, will be developed through the course.
<b>Grade</b>	40 % Class Participation 50 % Report/Presentations 10 % Attendance
<b>Textbooks and References</b>	Lomolino, M.V., Riddle, B.R. & Brown, J.H. 2010. Biogeography, 4rd Ed. Sinauer Associate, Inc., Sunderland.

<b>Week</b>	<b>Date</b>	<b>Topic (tentative)</b>
Week 1	9/15	<b>Moon Festival</b>
Week 2	9/22	Course introduction
Week 3	9/29	Ch 2. The History of Biogeography
Week 4	10/6	Phylogenetic inferences
Week 5	10/13	Molecular Phylogenetics
Week 6	10/20	Inferring and Reconstructing Histories within and among closely-related Species— Phylogeography
Week 7	10/27	Ch 5. The Geography of Communities; Ch 6. Dispersal and Migration
Week 8	11/3	Ch 7. Speciation and Extinction
Week 9	11/10	Ch 8. The Changing Earth; Ch 9. Glaciation and Biogeographic Dynamics of the Pleistocene
Week 10	11/17	Ch 10. The Geography of Diversification
Week 11	11/24	Ch 12. Reconstructing the History of Biotas
Week 12	12/1	Ch 13. Island Biogeography: Patterns in Species Richness; Ch 14. Island Biogeography: Assembly and Evolution of Insular Communities

Week 13	12/8	Ch 15. Areography, Ecogeographic Rules, and Diversity Gradients; Ch 16. Biodiversity and the Geography of Extinctions
Week 14	12/15	Ch 17. Conservation Biogeography and the Biogeography of Humanity
Week 15	12/22	Ch 18. The Frontiers of Biogeography
Week 16	12/29	Special topic: Gene flow and range limits
Week 17	1/5	Special topic: range size and richness
Week 18	1/12	Project Reports