

2026 Spring
Fish diversity across time and space
古魚類多樣性的時空變遷

This course explores fish diversity through the lens of morphological taxonomy, and how it applies to topics like paleobiogeography, functional morphology, paleoecology, biostratigraphy, and evolutionary relationships. We'll start with the basics of fish taxonomy and biological classification, then dive into the fossil record to understand what it tells us about the role of fish in today's classification systems and their evolutionary history. Using research from Taiwan as a case study, we'll look at the relevance and potential of local findings. The course also includes hands-on fieldwork at local fossil sites to bring what we learn in class to life.

Wednesday 14:00-17:00		Room 101, 1 F, Green House Building, BRCAS
Instructor: Chien-Hsiang Lin		
Date	Theme	
week 1 2/25	Introduction to the marine paleontology in Taiwan →Schedule & rules (including final reports).	
week 2 3/4	→Introduction to the marine paleontology in Taiwan. →Presentation of displayed specimens.	
week 3 3/11	The origin of fish & the jawless wonders: agnathans →basal and early Chordata specimens.	
week 4 3/18	→recent lamprey and hagfish specimens.	
week 5 3/25	The origins of jaws: placoderms & the Acanthodians →placoderms specimens.	
week 6 4/1		
week 7 4/8	Mid-term: visit to the National Taiwan Museum and a written report	
week 8 4/15		
week 9 4/22	Elasmobranchs: the evolutionary history of sharks & rays →recent and fossil elasmobranch specimens.	
week 10 4/29	Ray-finned fishes: Actinopterygii →recent and fossil bony fish specimens.	
week 11 5/6		
week 12 5/13	Lobed-finned fishes and a step towards land →comparative anatomy on primary/secondary palates, inner ears, etc.	
week 13 5/20		
week 14 5/27	Final oral reports and discussion	
week 15 6/3		
week 16 6/13	Field trip to southern Taiwan fossil localities	