

108-1 General Cell Biology 基礎細胞生物學

Class Time: 3:10 ~ 6:00 PM, Tuesdays

Credits: 3 hours (開課序號 Serial Number:026、課程系統碼 Course System Number:T161500)

Classroom: Rm 208 at NCKU Medical College

Coordinator: Prof Li-Wha Wu (Ext. 3618)

Course Goals: Familiarize students with the fundamentals of cell biology and with the application of this knowledge in addressing both basic and clinical research questions. By the end of the course, students would know the basics of fundamental cell biology and how to apply what they learn in addressing cell biology-related questions arising in the research field of their interest, including immunology, neuroscience, microbial pathology, tissue regeneration and cancer biology.

Course Format: Two parts: 1st on the fundamentals of cell biology and contemporary cell biology technology, and 2nd on the applied knowledge in stem cells and tissue renewal, immunity, pathogen and host interaction, neurons and cancer. Each lecture will be presented by the instructors with their expertise in the field. Problem-based assignment(s) will be given before the lecture via Moodle.

Course Materials: Molecular Biology of the Cell by Alberts B et al (5th or 6th editions) and the relevant published materials given by each lecturer

Grading Criteria: Student participation and punctuality (20%), assignment and panel discussion (20%), mid-term (30%) and PBL-based final (30%)

方法	百分比(%)	閱讀、理解與運用專業知識	彙整新知與良好的溝通能力	解決研究問題的能力
準時出席與參與課程 Q/A 討論	20	V	V	V
Problem-based assignments and panel discussion	20	V	V	V
期中考 Mid-term	30	V	V	V
期末考 PBL-based final	30	V	V	V

課程進度 Course Progress Outline

日期	週次 Week	進度說明 Progress Description	Lecturer
2019/9/10	1	Introduction	Wu, Li-Wha/吳梨華
9/17	2	Plasma membrane	Chiang, Chi-Wu/蔣輯武
9/24	3	Cytoskeleton and cell movement	Li, Chun-chun/李純純
10/1	4	Endomembrane systems and organelles	Chiang, Chi-Wu/蔣輯武
10/8	5	Cell cycle and its control system	Chen, Yun-Wen/陳韻雯
10/15	6	Cell death	Chang, Chih-Peng/張志鵬
10/22	7	Cell adhesion and extracellular matrix	Yeh, Yi-Chun/葉儀君
10/29	8	Mid-term	Wu, Li-Wha/吳梨華
11/5	9	Cell-cell communication	Chiu, Wen-Tai/邱文泰
11/12	10	Stem cell self-renewal and pluripotency	Wang, Yang-Kao/王仰高
11/19	11	Immunity	Wang, Shainn-Wei/王憲威
11/26	12	Nerve system	Chu, Chun-Hsien/朱俊憲
12/3	13	Pathogen and host interaction	Teng, Ching-Hao/鄧景浩
12/10	14	Cancer	Wu, Li-Wha/吳梨華
12/17	15	PBL-based final	Wu, Li-Wha/吳梨華
12/24	16	Panel discussion	Wu, Li-Wha/吳梨華