

11220LS 311100

遺傳學(Genetics)

一、課程說明(Course Description)

Genetics is a 16-week course designed for biology majors and is part of the core that all biology majors must complete. The objective of the course is to introduce the principles of Mendelian, molecular, quantitative and population genetics. In addition to the body of facts associated with genetics, you will be introduced to the methods that various scientists have used to solve different problems in genetics and the methodology that was used to test competing theories. Teaching materials will be provided to students before lectures for their preparation. Discussion and asking questions are highly encouraged. It is a very good idea to read assigned chapters before the lecture instead of afterward. Ask questions if concepts are initially unclear. Students who study the material before class and come to class with prepared questions, in general, will do much better than those who do not. It is also a good habit to take notes during lecture. Group study is encouraged - having to explain something to someone really focuses your attention on what you do or don't understand! However, while you are encouraged to talk to each other about solving problems, you must be able to work on your own when writing out the answers. After final exam, one more class will be provided to clarify students' concepts and answer their questions.

二、指定用書(Text Books)

Genetics: Analysis and Principles (volume 1 and 2), 7th edition by Snustad and Simmons (Wiley)

三、參考書籍(References)

No.

四、教學方式(Teaching Method)

Lectures in class, and may have homework or in-class test depending on lecturers.

五、教學進度(Syllabus)

Week	Date	Weekday	Topic	Lecturer
1	19-Feb	Monday	Chapter 1, 2	李政昇
	21-Feb	Wednesday	Chapter 2, 3	李政昇
2	26-Feb	Monday	Chapter 3, 4	李政昇

	28-Feb	Wednesday	228 和平紀念日	李政昇
3	4-Mar	Monday	Chapter 4, 5	李政昇
	6-Mar	Wednesday	Chapter 5	李政昇
4	11-Mar	Monday	Chapter 6	李政昇
	13-Mar	Wednesday	Chapter 7	李政昇
5	18-Mar	Monday	Chapter 7, 8	李政昇
	20-Mar	Wednesday	Chapter 8	李政昇
6	25-Mar	Monday	Chapter 9	李政昇
	27-Mar	Wednesday	Chapter 19	張筱涵
7	1-Apr	Monday	Chapter 19, 20	張筱涵
	3-Apr	Wednesday	校際活動周	
8	8-Apr	Monday	Chapter 20, 24	張筱涵
	10-Apr	Wednesday	Chapter 24	張筱涵
9	15-Apr	Monday	Midterm	
	17-Apr	Wednesday	Chapter 10	廖品超
10	22-Apr	Monday	Chapter 11, 12	廖品超
	24-Apr	Wednesday	Chapter 12	廖品超
11	29-Apr	Monday	Chapter 17, 18	廖品超
	1-May	Wednesday	Chapter 18	廖品超
12	6-May	Monday	Chapter 18, 13	廖品超
	8-May	Wednesday	Chapter 14	廖品超
13	13-May	Monday	Chapter 14, 15	廖品超
	15-May	Wednesday	Chapter 15	廖品超
14	20-May	Monday	Chapter 16, 21	廖品超
	22-May	Wednesday	Chapter 21	廖品超
15	27-May	Monday	Chapter 22, 23	廖品超
	29-May	Wednesday	Chapter 23	廖品超
16	3-June	Monday	Final	
	5-June	Wednesday	Discussion	廖/李/張

六、成績考核(Evaluation)

前半部(50%) : midterm (35%)

in-class quiz x 3 (5% each)

homework x 3 and class participation (as bonus in certain situations)

後半部(50%) : Final (35%)

Homework (15%)

七、採用下列何項 AI 使用規則 (Indicate which of the following options you use to manage student use of the AI)

有條件開放，請註明如何使用生成式 AI 於課程產出 Conditionally open; please specify how generative AI will be used in course output

八、可連結之網頁位址

<https://eeclass.nthu.edu.tw/>