

10410DMS 370500 醫學遺傳學

Medical Genetics

任課教師: 周裕珽

Time: T3T4 (星期二 10:10-12:00)

Room: LSII R217 生命科學二館 217 教室

一、課程說明(Course Description)

In addition to the basic introduction of human genetics, the most updated scientific and technical advance in human genetics will be included. The class will cover the basic genetic rules with emphasis on medical applications. The lectures will include genetic testing, screening, approaches to therapy, personalized medicine, disease models, comparative genomics, model organisms, and epigenetics.

二、指定用書 Human Heredity Principles and Issues. 9th ed. M. Cummings 2011

三、參考書籍

A large collection of related genetics textbooks will be deposited in the Lifescience 文念慈 library. 其他參考文章，PDF 檔將置放於 iLMS 數位學習平台。

四、教學方式

按教課書講授課為主

五、教學進度(Syllabus)

Week	Date	Topic	Chapter	Corresponding page	Instructor
1	9/15	Introduction and Cells		Ch 1 and 2	周裕珽
2	9/22	Transmission genetics		Ch 3	周裕珽
3	9/29	Pedigree analysis & Complex traits		Ch 4,5	周裕珽
4	10/6	Cytogenetics		Ch 6	周裕珽
5	10/13	Development and sex determination		Ch 7	周裕珽
6	10/20	Nucleic acid and chromatin & gene expression		Ch 8, 9	周裕珽
7	10/27	Gene expression & proteins to phenotypes		Ch 9, 10	周裕珽
8	11/3	Mutation		Ch11	周裕珽

9	11/10	期中考試		Ch 1-10	周裕珽
10	11/17	Genes and cancer		Ch12	周裕珽
11	11/24	Genetic technology & social genetics		Ch 13, 14	周裕珽
12	12/1	Genomes and Genomics		Ch 15	周裕珽
13	12/8	Genetic testing and gene therapy		Ch 16	周裕珽
14	12/15	Immunogenetics		Ch 17	周裕珽
15	12/22	Genetics of Behavior		Ch 18	周裕珽
16	12/29	Population Genetics and human evolution		Ch 19	周裕珽
17	1/5	Population Genetics and human evolution		Ch 19	周裕珽
18	1/12	期末考試		Ch 11-19	周裕珽