

# 11110DMS 370500 醫學遺傳學

## Medical Genetics

任課教師: 廖品超、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. 10th/9th ed. M. Cummings 2014/2011

### 三、參考書籍

Emery and Rimoin's Principles and Practice of Medical Genetics (2013)

其他參考文章，PDF 檔將置放於 eclass 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	Instructor
1	9/13	Introduction and Cells	Ch 1 and 2	廖品超
2	9/20	Transmission genetics & Pedigree analysis	Ch 3, 4	廖品超
3	9/27	Complex traits	Ch 5	廖品超
4	10/4	Cytogenetics	Ch 6	廖品超
5	10/11	Development and sex determination	Ch 7	廖品超
6	10/18	Genetics of Behavior	Ch 18	廖品超
7	10/25	Population Genetics and human evolution	Ch 19	廖品超

8	11/1	Population Genetics and human evolution	Ch 19	廖品超
9	11/8	期中考試	Ch 1-7, 18 &19	廖品超
10	11/15	Nucleic acid and chromatin & Gene expression	Ch 8, 9	周裕珽
11	11/22	Gene expression & Proteins to phenotypes	Ch 9, 10	周裕珽
12	11/29	Mutation	Ch11	周裕珽
13	12/6	Genes and cancer	Ch12	周裕珽
14	12/13	Genetic technology & Social genetics	Ch 13, 14	周裕珽
15	12/20	Genomes and Genomics	Ch 15	周裕珽
16	12/27	Genetic testing and gene therapy	Ch 16	周裕珽
17	1/3	Immunogenetics	Ch 17	周裕珽
18	1/10	期末考試	Ch 8-17	周裕珽

#### 四、計分方式

期中考（45%）

期末考（45%）

上課表現（10%）