

課程名稱：BMES424200分子遺傳學 (Molecular Genetics)

學分數：3

時間：T7T8T9

地點：醫環系 R501

授課老師：張建文 (C.W. Chang)

助教：TBD

課程簡述: 本課程內容涵蓋三大部分，(1) 染色體與遺傳；(2) 基因與遺傳；(3) 現代分子遺傳技術。

Schedule:

Lecture

Title

L1 Introduction: the Science of Genetics/Cellular Reproduction

L2 Mendelism

L3 The Chromosomal Basis of Mendelism/Variation in Chromosome Number and Structure

L4 DNA and the Molecular Structure of Chromosomes

L5 Replication of DNA and Chromosomes/Transcription

L6 Translation and the Genetic Code/DNA repair

Mid-term exam

L7 The Techniques of Molecular Genetics

L8 Nucleic Acid Hybridization

L9 Analyzing the Structure and Expression of Genes and Genomes

L10 Model Organism

L11 Organization of Human Genome

L12 Genetic Manipulation of Animal; Genetic Approaches to Treating Diseases

L13 Tentative Special Topics I: Genetic Manipulation of Animals

L14 Tentative Special Topics II: Genetic Approaches to Treating Diseases

Final Exam

Textbook:

*D. Peter Snustad and Michael J. Simmons. **Genetics**. (International Version). Wiley. 歐亞書局*

Grading:

15% class participation; 15% report/presentation; 35% midterm exam; 35% final exam.