

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**. Sixth Edition (International Version). Wiley.*

Grading:

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