

[첨부 2] 강의개요

KUOCW 참여강의 개요

※ 실제로 진행된 강의에 대한 개요입니다.

1. 교과목 개요

교과목명(국문)	유전학
[선택] 교과목명 (영문)	Introduction to Genetics
교수자명	이진협
교과목 학습목표	After taking this KFBT212 Introduction to Genetics class, you should know the key concepts of the central dogma of molecular biology , including the composition of genomes and the basic mechanisms of replication, transcription, RNA processing, translation and RNA turnover, and how the complexes that perform these activities identify their targets, carry out their function and can be regulated to meet cellular needs.
교과목 소개	KFBT212 Introduction to Genetics course will examine the central dogma of molecular biology which is the logical explanation of the flow of genetic information within a biological system, and thus discuss DNA, RNA, and protein, and how their synthesis, such as DNA replication, transcription, RNA processing, and translation, is regulated as the fundamental architecture of the course.
교과목 키워드	DNA, RNA, Replication, Transcription, Translation, Cloning, Recombination

2. 주차별 강의 내용 및 연관 파일명

주차	주제	내용 요약	해당 주차의 강의자료 파일명
1	Heredity, Genes, and DNA		
2	Expression of Genetic Information		
3	The complexity of eukaryotic genomes		
4	The sequences of complete genomes		
5	Chromosomes and chromatin		
6	DNA Replication		
7	DNA Repair		
8	DNA Rearrangements		
9	Transcription in Prokaryotes		

10	Eukaryotic RNA Polymerases and General Transcription Factor		
11	Regulation of Transcription in Eukaryotes		
12	RNA Processing and Turnover		
13	Translation of mRNA		
14	Protein Folding and Processing		
15	Recombinant DNA		
16	Detection of Nucleic Acids and Proteins		