

Course Title	Molecular Biology		
Semester	3-2	Course Type	Core
Course Number	27749-00	No. of Credit	3/3/0
Professor	Pil-Jae Maeng	E-mail	pjmaeng@cnu.ac.kr
Objective	To provide the knowledges on molecular mechanisms of genome complexity, transcriptional regulation, and protein expression.		
Syllabus	<ol style="list-style-type: none"> 1. A Brief History 2. The Molecular Nature of Genes 3. An Interduction to Gene function 4. Molecular Cloning Methods 5. Molecular Tools for Studying Genes and Gene Activity 6. The Transcription Apparatuses of Prokaryotes 7. Operons: Fine Control of Prokaryotic Transcription 8. Major Shifts in Prokaryotic Transcription 9. DNA-Protein Interaction in Prokaryotes 10. The Mechanism of Translation I: Initiation 11. The Mechanism of Translation II: Elongation and Termination 12. Ribosomes and Transfer RNA 13. DNA Replication I: Basic Mechanism and Enzymology 14. DNA Replication II: Detailed Mechanism 		