Lesson Name	Code	Semester	T+U	Credit	ECTS
Genetic II	0804605	2	3+0	3	5

Language of the Lesson	Turkish
Type of Course Unit	Compulsory
Name of Lecturer(s)	Assist. Prof. Dr. Arif PARMAKSIZ
Objectives of the Lesson	To teach basic genetic principles and methods to undergraduate students.
Learning Outcomes of the Course	Structural and functional properties of genetic material Replication, transcription and translation systems Genotype-phenotype relationships Genetic and biochemical basis of the molecular evolutionary process
Course contents	Chromosomal mutations, Gene mutations, Sex and heritage, Bacterial genetic system, Viruses and genetic system, Control systems and differentiation in living systems

Weeks	Topics
1	Mutations
2	Chromosomal mutations
3	Gene mutations
4	Aneploidi in humans
5	Polyploidy in plants and animals
6	DNA repair mechanism
7	Midterm
8	Sex and heredity
9	Mosaic formation
10	Blood groups
11	Quantitative inheritance
12	Non-nuclear inheritance
13	Population genetics
14	Final

Resources
1. N. V. Rothwell,1993, Genetics, Willey-Liss, New York. 2. L. H. Hartwell et al., 2000, Genetics : From genes to genomes, McGraw-Hill, USA. 3. W. S. Klug and M. R. Cummings 2000, Concept of Genetics Prentice Hall, (Çev. Ed. C. Öner, Genetik Kavramlar, 2. baskı) 4. N. Dilsiz, 2004, Moleküler Biyoloji, Palme Yayınevi, Ankara 5. C. Evrensayım, 2000, Genetik, Nobel Yayın Dağıtım, Ankara

Evaluation System
Midterm : % 40 **Final :** % 60