



Planning and Quality Assurance Affairs

Course Specifications

General Information	
Course name	Μ

Course name	Molec. Biology
Course number	BIOL4326
Faculty	
Department	
Course type	College Needs
Course level	4
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

- 1 , the objective of the course is to study the structure and functions of nucleic acids,
- 2 the flow of gene information, recombinant DNA techniques.
- 3 gene control, and genetic engineering.
- 4 some genetic diseases, and gene therapy.
- 5 to know the function of genes, how gene activity is controlled, some genetic disorders

Course Contents

- 1 Introduction to macromolecules, Nucleic acid structure
- 2 DNA Replication, DNA Transcription, RNA Translation
- 3 _ Mutagenesis: Mutations and Mutants, DNA repair
- 4 _ Regulation of gene activity in prokaryotes, Regulation of gene activity in Eukaryotes
- 5 Plasmids and transposons, Bacteriophage
- 6 Recombinant DNA and genetic engineering

Teaching and Learning Methods

1 - assignments.,research papers, power point lectures, discussions, ,

Teaching and Learning Methods for the Disabled Students

1 - N.A.

Students Assessment

Assessment Method	TIME	MARKS
Assessment		20
Midterm Exam	60minutes	30
Attendence		10
Final exam	120minutes	40

Books and References

Recommended books	essentials of Molecular biology, David Freifelder, jones and Bartlett Oublishers, Inc.
Other References (Periodical, web sites, etc.)	selected related research papers.