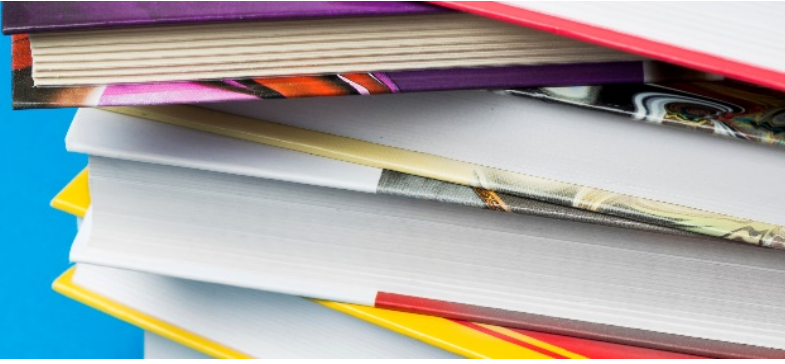
TEL AVIV UNIVERSITY אוניברסיטת תל אביב

Full Syllabus



Course Title

Genetic engineering

Lecturer

Kolot Misha

Semester

A

Course requirements

Midterm and final exam

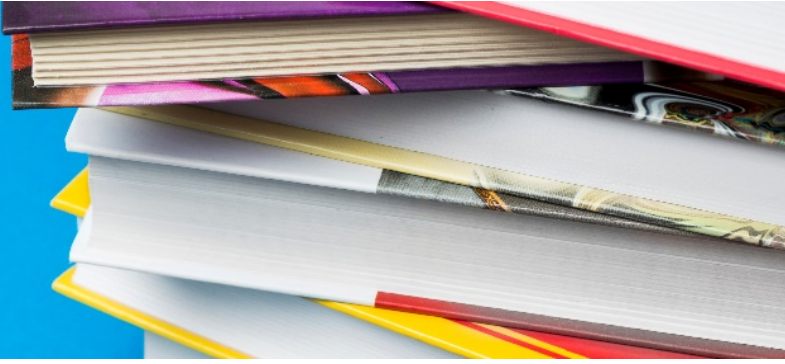
Final grade components

Two options

	a'	b'
midterm:	10	10
exam:	90	65
paper work	-	25
	100	100

Course schedule

Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
	Bacterial extra-chromosomal elements
	Plasmid DNA purification
	Enzymes in DNA engineering
	Bacterial cloning vectors
	Gene cloning and identification
	Polymerase Chain Reaction
	Gene expression and protein purification



	Creating mutations
	Eukaryotic cloning vectors
	Animal cell engineering
	Transgenic animals
	Transgenic plants

Genome editing and post-genome analysis

Gene therapy

Forensic genetic approach

Optional course reading

Textbooks for the course in Genetic Engineering

Bacterial Genetics

Any modern book in General Genetics, chapters on Microbial Genetics

Snustad, D.P. and Simmons M.J. Principles of Genetics, 6th or 7th eds. , Wiley publ.

Klug, W., Cummings, M., Spencer C. et all. Concepts of Genetics, 12th ed., Pearson publ.

Pierce, B. Genetics: A Conceptual Approach, 7th ed., Macmillanlearning publ.

Snyder, L. and Champness W., Molecular Genetics of Bacteria, 5th ed., Wiley publ.

Genetic Engineering and Biothechnology

Any modern book in genetic engineering or biotechnology

Primrose, S.B. and Twyman, R.M., Principles of Gene Manipulations and Genomics, 7th ed., Blackwell Publ.

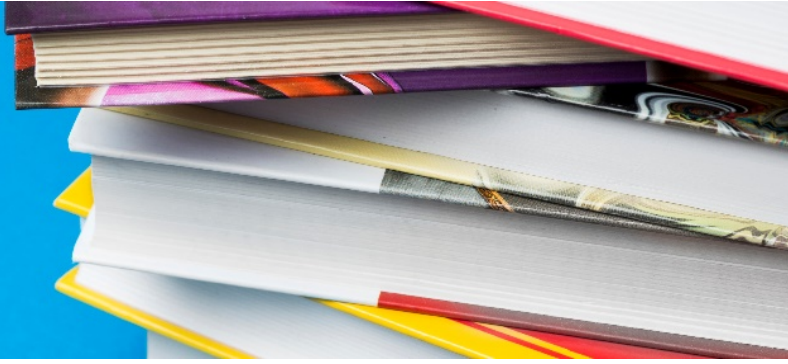
Brown, T.A. Gene Cloning & DNA Analysis, 7th or 8th ed., Wiley publ.

Wink, M., An Introduction to Molecular Biotechnology, 2nd ed., Wiley publ.

Nicholl, D. An Introduction to Genetic Engineering, 3rd ed., Cambridge Univ. press.

TEL AVIV UNIVERSITY אוניברסיטת תל אביב

Full Syllabus



Comments