



Full Syllabus



Course Title	
Selected Chapters in Cancer Biology	
Lecturers	
Dr. Dinorah Friedman-Morvinski, Dr. Vered Padler-Karavani, Dr. Lior Mayo, Prof. Gali Prag, Prof. Adit Ben-Baruch	
Semester	
2 nd semester (Bet)	
Course requirements	
Molecular Biology and Biotechnology (04552549), Immunology (04552688), Cell Biology (04551510), Genetics (04552526)	
Final grade components	
Final exam	
Course schedule	
Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
#1- 08/03	Introduction-Hallmarks of Cancer
#2- 15/03	Mouse models of Cancer <ul style="list-style-type: none"> ○ Mutagenic induced models ○ Allograft/Xenograft models ○ Transgenic/Knockout models ○ Viral induced models
#3- 22/03	Tumor heterogeneity and Cancer Stem Cells <ul style="list-style-type: none"> ○ Stem cells/Cancer Stem Cell ○ Tumor plasticity ○ Tumor heterogeneity (spatial, temporal, intra and inter-heterogeneity)
#4- 05/04	Cancer glyco-immunology <ul style="list-style-type: none"> ○ Carbohydrates in tumor initiation, progression and metastasis ○ Glycan receptors in tumor initiation, progression and metastasis
#5- 12/04	Cancer glyco-immunology <ul style="list-style-type: none"> ○ Involvement of glycans in the hallmarks of cancer ○ Novel approaches for glycol-therapy of cancer
#6- 19/04	Tumor microenvironment <ul style="list-style-type: none"> ○ Players of the TME - Stroma cells
#7- 26/04	Tumor microenvironment <ul style="list-style-type: none"> ○ Reprogramming of the TME
#8- 03/05	Tumor microenvironment



Full Syllabus



	<ul style="list-style-type: none">○ Metabolic Interactions in the Tumor Microenvironment○ Dissecting the Tumor Microenvironment
#9- 10/05	Tumor angiogenesis <ul style="list-style-type: none">○ Normal and neoplastic endothelial cells○ Angiogenic switch○ Anti-angiogenic therapies
#10- 24/05	Immunotherapy I <ul style="list-style-type: none">● Tumor infiltrating lymphocytes (TILs, TILs in cancer therapy)
#11- 31/05	Immunotherapy II <ul style="list-style-type: none">○ Immune checkpoints○ Engineered T cells
#12- 07/06	Cancer therapeutics <ul style="list-style-type: none">○ Undruggable oncoproteins/example: Transcription factors○ Viruses in cancer therapy
#13- 14/06	Cancer therapeutics <ul style="list-style-type: none">○ PROTAC – a novel modality for cancer therapy.

Required course reading

Each lecturer will post the reading material in the course website

Optional course reading

Comments