

## **Full Syllabus**



Course Title	
Selected Chapters i	in Cancer Biology
Lecturers	
Prof. Dinorah Fried Ben-Baruch	man-Morvinski, Prof. Vered Padler-Karavani, Dr. Lior Mayo, Prof. Gali Prag, Prof. Adit
Semester	
2 <sup>nd</sup> semester (Bet)	
Course requirem	ents
Molecular Biology Genetics (0455252	and Biotechnology (04552549), Immunology (04552688), Cell Biology (04551510), 6)
Final grade comp	onents
Final exam	
Course schedule	
Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
#1-	Introduction-Hallmarks of Cancer
#2-	Mouse models of Cancer       O         Mutagenic induced models       O         Allograft/Xenograft models       O         Transgenic/Knockout models       O         Viral induced models       O
#3-	<ul> <li>Tumor heterogeneity and Cancer Stem Cells</li> <li>Stem cells/Cancer Stem Cell</li> <li>Tumor plasticity</li> <li>Tumor heterogeneity (spatial, temporal, intra and interheterogeneity)</li> </ul>
#4-	<ul> <li>Tumor angiogenesis</li> <li>Normal and neoplastic endothelial cells</li> <li>Angiogenic switch</li> <li>Anti-angiogenic therapies</li> </ul>
#5-	Cancer glyco-immunology <ul> <li>Carbohydrates in tumor initiation, progression and metastasis</li> <li>Glycan receptors in tumor initiation, progression and metastasis</li> </ul>
#6-	Cancer glyco-immunology <ul> <li>Involvement of glycans in the hallmarks of cancer</li> <li>Novel approaches for glycol-therapy of cancer</li> </ul>
#7-	Tumor microenvironment



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#9- Tumo #10- Immu #11- Immu cc #12- Cance #13- Cance Required course reading	or microenvironment Reprogramming of the TME or microenvironment o Metabolic Interactions in the Tumor Microenvironment o Dissecting the Tumor Microenvironment
#10- #11- #12- Kanna Immu Conce #12- Cance Required course reading	<ul> <li>Metabolic Interactions in the Tumor Microenvironment</li> <li>Dissecting the Tumor Microenvironment</li> </ul>
#11- #12- #13- Required course reading	Inotherapy I
#12- Cance #13- Cance Required course reading	Tumor infiltrating lymphocytes (TILs, TILs in cancer therapy)
#13- Cance C	
Required course reading	<ul> <li>er therapeutics</li> <li>Undruggable oncoproteins/example: Transcription factors</li> <li>Viruses in cancer therapy</li> </ul>
	er therapeutics PROTAC – a novel modality for cancer therapy.
Each lecturer will post the	5
	reading material in the course website
Optional course reading	
Comments	