



Full Syllabus



Course Title	
Topics in Innate Immunity and Viral Infections	
Lecturer	
Prof. Eran Bacharach	
Semester	
2 nd	
Course requirements	
Graduate students (open to limited number of undergraduates); given in English; former knowledge in virology, immunology and cell biology is desirable (but not mandatory). Compulsory class attendance.	
Final grade components	
Final Exam (a multiple-choice exam).	
Course schedule	
Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
Classes 1-3	Influenza A Virus NS1 Targets the Ubiquitin Ligase TRIM25 to Evade Recognition by the Host Viral RNA Sensor RIG-I. Requirement: Paper PMID: 19454348.
Classes 4-5	CARD8 is an inflammasome sensor for HIV-1 protease activity. Requirement: Paper PMID: 33542150.
Classes 6-8	SARS-CoV-2 Orf6 hijacks Nup98 to block STAT nuclear import and antagonize interferon signaling. Requirement: Paper PMID: 33097660.
Classes 9-11	Influenza Virus Z-RNAs Induce ZBP1-Mediated Necroptosis. Requirement: Paper PMID: 32200799.
Classes 12-13	Antibodies mediate intracellular immunity through tripartite motif-containing 21 (TRIM21). Requirement: Paper PMID: 21045130.
	Required course reading
	Papers PMIDs: 19454348; 33542150; 33097660; 32200799; 21045130 (as detailed above).
	Optional course reading
	Principles of Virology Molecular Biology, Pathogenesis, and Control. Flint SJ, Enquist LW, Krug RM, Racaniello, Skalka AM. ASM Press. Virology. Fields. Raven Press.
	Comments
	The above topics are tentative and may be changed. Changes may also be applied to the allocations of the topics to the different classes.