

LS 506A Virology Name of the Faculty: Prof. S. Chakraborty*			2 Credits
Sr.No.	Topic	Faculty Name/ Contact Hours	
1.	General perspectives: Origins of virology, viruses as a living system etc	SC/2	
2.	Organization of viruses	SC/1	
3.	Classification of viruses	SC/1	
4.	Virus attachment and entry in to host cells	SC/2	
5.	Genome replication and mRNA production by RNA viruses	SC/2	
6.	Reverse transcription and integration by Retroviruses	SC/2	
7.	Transcription strategies of viruses	SC/2	
8.	DNA virus replication strategies	SC/2	
9.	Translational control of viral gene expression	SC/2	
10.	Viral pathogenesis and cell transformation by viruses	SC/2	
11.	Hepatitis viruses	SC/1	
12.	HIV	SC/1	
13.	Baculovirus	SC/1	
14.	Emergence of new viruses and Current viral epidemics	SC/2	
15.	Viral vaccines	SC/1	
16.	Antiviral chemotherapy	SC/2	
17.	Virus evolution	SC/2	
18.	Persistence of viruses	SC/1	
19.	Viral vectors and gene therapy	SC/2	

Further Reading:

1. Principles of Virology – S J Flints, L W Enquist, R M Krug, V R Racaniello, A M Skalka. ASM Press.
2. Fields Virology –David M Knipe, Peter M Howley
3. Review papers and handouts related to topics