

Optional Course

LS 504—VIROLOGY [2 credits]
S Chakraborty

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

Suggested reading:

Selected References:-

1. Principles of Virology – S J Flints, L W Enquist, R M Krug, V R Racaniello, A M Skalka. ASM Press.
2. Field Virology –
3. Hand outs