

**Virology – Biology 3310/4310 Spring 2017**  
**Prof V. Racaniello**  
**Study questions for Lecture 8 – Viral DNA replication**

1. What are the different topologies of DNA viral genomes? How are the DNAs replicated?
2. Where in the cell do DNA viruses replicate?
3. Why is viral DNA replication always delayed after infection?
4. Do DNA viral genomes always encode their own DNA polymerase? If not, where does the polymerase come from?
5. What is the function of a viral origin of replication?
7. How is the 5'-end problem solved during viral DNA replication?
8. Viruses do not replicate well in non-dividing cells. Why not, and how do viruses get around this limitation?