

CLINICAL VIROLOGY

BSC 4933-03; R. H. REEVES
FALL, 2002

OBJECTIVES & PREREQUISITES

THIS IS A GRADUATE/SENIOR LEVEL COURSE IN CLINICAL VIROLOGY WHICH COVERS THE COMPARATIVE MOLECULAR BIOLOGY AND INFECTIOUS DISEASE OF THE VIRUSES AND SUBVIRAL PARTICLES. A FIRM BACKGROUND IN GENETICS, MICROBIOLOGY AND MOLECULAR BIOLOGY IS ESSENTIAL.

SYLLABUS

LECTURE

NO.	WEEK OF	TOPIC	READINGS
<u>INTRODUCTION</u>			
1.	AUG 26	THE NATURE OF VIRUSES PROKARYOTES VS. EUKARYOTES METHODS OF STUDY	CH 1
2.	SEP 02	VIRAL STRUCTURE VIRAL CLASSIFICATION	CH 1
<u>BACTERIOPHAGE & PLANT VIRUSES</u>			
3.	SEP 09	LEVIVIRIDAE--RNA BACTERIOPHAGE MICROVIRIDAE & INOVIRIDAE-- SMALL DNA PHAGE PODOVIRIDAE--MEDIUM-SIZED DNA ϕ MYOVIRIDAE--LARGE DNA PHAGE TEMPERATE PHAGE - LAMBDA	CH 2.7 CH 7.4, 7.5, 11.11.1 CH 8.7.1 CH 8.7.4 CH 8.7.2
4.	SEP 16	PLANT VIRUSES SATELLITES & VIROIDS	CH 2.6, 4.8-9 CH 7.6-7, 9.1-3
	SEP 23	REVIEW EXAMINATION #1--WEEKS 1-4	

FALL, 2002

LECTURE

NO.	DATE	TOPIC	READINGS
<u>DNA ANIMAL VIRUSES</u>			
5.	SEP 30	PARVOVIRIDAE PAPOVAVIRIDAE	CH 7.1 CH 7.2
6.	OCT 07	ADENOVIRIDAE	CH 8.1
7.	OCT 14	HERPESVIRIDAE POXVIRIDAE	CH 8.2 CH 8.3
8.	OCT 21	PRIONS	CH 9.6
	OCT 28	REVIEW EXAMINATION #2--WEEKS 6-9	
<u>RNA ANIMAL VIRUSES</u>			
9.	NOV 04	PICORNAVIRIDAE TOGAVIRIDAE & FLAVIVIRIDAE CORONAVIRIDAE (TOROVIRIDAE)	CH 2.2 CH 3.1, 3.2 3.3 (3.4)
10.	NOV 11	BUNYAVIRIDAE, ARENAVIRIDAE RHABDOVIRIDAE, PARAMYXOVIRIDAE FILOVIRIDAE	CH 4.1-4.7
11.	NOV 18	ORTHOMYXOVIRIDAE REOVIRIDAE	CH 4.3 CH 5.1
12.	NOV 25	RETROVIRIDAE HIV & AIDS	CH 6.1 10.3 CH 6.1, 14.1
	DEC 02	CLASS REVIEW EXAMINATION #3--WEEKS 9-13	

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GRADES WILL BE BASED ON THREE EXAMINATIONS WORTH 100 POINTS EACH AND ON ONE PAPER WORTH 100 POINTS. TOPICS FOR PAPERS WILL BE DISCUSSED AFTER THE FIRST EXAMINATION. PAPERS WILL BE DUE ON NOVEMBER 18. GRADE SCALE (%): A, 90-100; B, 80-89; C, 70-79; D, 60-69.

REQUIRED TEXT: VIROLOGY (1994) J. A. LEVY, H. FRAENKEL-CONRAT AND R. A. OWENS. PRENTICE-HALL, THIRD ED., 440 PP.

OTHER TEXTS: THE BACTERIOPHAGES, VOLS. 1 & 2 (1988) R. CALENDAR. PLENUM PRESS,

PLANT VIROLOGY (1991) R. E. F. MATTHEWS. ACADEMIC PRESS, INC. THIRD ED., 835 PP.

MEDICAL VIROLOGY (1994) D. O. WHITE AND F. J. FENNER, ACADEMIC PRESS, FOURTH ED., 603 PP.

FUNDAMENTAL VIROLOGY (1996) B. N. FIELDS ET AL., EDS., RAVEN PRESS, 1360 PP.

PRINCIPLES OF VIROLOGY (2000) S. J. FLINT ET AL., AMERICAN SOCIETY FOR MICROBIOLOGY PRESS, 803 PP.

ENCYCLOPEDIA OF VIROLOGY (1994) R. G. WEBSTER AND A. GRANOFF, EDS. ACADEMIC PRESS, 2128 PP. (ALSO ON CD-ROM)

VIRUS TAXONOMY (2000) M. H. V. VAN REGENMORTEL ET AL., EDS., ACADEMIC PRESS, 1162 PP.

VIRUSES, PLAGUES AND HISTORY (1998) M. B. A. OLDSTONE, OXFORD UNIVERSITY PRESS, 227 PP.

WEBSITE: <http://www.virology.net/garryfavweb.html> "All the Virology on the WWW" maintained by David Sander (Garry lab at Tulane)