INSTRUCTOR: Dr. J. A. NIENOW

OFFICE: 2089 Bailey Science Center; 249-4844

Office hours: M 3:30 to 5:00, TTh 2:00-3:00 or by appointment

EMAIL: <u>inienow@valdosta.edu</u>

REQUIRED TEXT:

Foster, J. W., Z. Aliabadi, J. L. Sonczewski. 2018. Microbiology, The Human Experience. Preliminary edition. W. W. Norton, New York.

Lab Manual for BIOL 3100 Microbiology, Valdosta State University. McGrawHill Higher Education, New York. ISBN 9781308191034

OTHER RESOURCES

BlazeView (Be sure to check Kaltura)

PREREQUISITES Chemistry 1152K

COURSE GOALS:

Students will acquire basic knowledge of bacteriology, immunology, and virology with an emphasis on applications and disease processes.

Students will grain experience with some basicst echniques used for studying

microorganism

Note: Pacing and testing dates may be changed if the need arises. Attend dass regularly.

8-18-2020	LECTURE Introduction to microbiology	pp. 1-58
0 10 2020	DISEASE OF THE DAYRabies	ρρ. 1-36
8-20-2020	LECTURE Introduction to microbiology (continued)	pp. 1-58
	LECTURE Basic concepts in medical microbiology	
	DISEASE OF THE DAY Smallpox	
0.05.0000	LEGILIDE M.	T
8-25-2020	LECTURE Microscopy LECTURE Bacterial ell structure	pp. 62-82
	DISEASE OF THE DAY Bubonic plague	pp. 124-144
8-27-2020	LECTURE Bacterial cell structure (continued)	77 404 444
0-21-2020	DISEASE OF THE DAYMalaria	pp. 124-144
	DICEACE OF THE DATIVIdIdHA	
9-01-2020	LECTURE Eukaryotic cell structure	pp. 144-152
	DISEASE OF THE DAY Boola hemorrhagic fever	FF
9-03-2020	5	
9-08-2020	LECTURE Viruses & viroids	pp. 350-382
	DISEASE OF THE DAYCholera	
9-10-202 <mark>0</mark>	LECTURE Viruses & viroids	pp. 350-382
	DISEASE OF THE DAY Shigellosis	
9-15-2020	LECTURE Dynamics of bacterial growth	pp. 156-186
0 10 2020	DISEASE OF THE DAY Escherichia coli infections	pp. 100 100
9-17-2020	LECTURE Environmental influences on bacterial growth	pp. 156-186
0 11 2020	DISEASE OF THE DAY Salmonellosis/Typhoid fever	pp. 100 100
9-22-2020	LECTURE Intro to bacterial metabolism	pp. 106-118
	DISEASE OF THE DAY Viral gastroenteritis	
9-24-2020		
0.00.000	LEONIDE Describerated in	400.040
9-29-2020	LECTURE Bacterial metabolism	pp. 192-218
40.04.0000	DISEASE OF THE DAYPolio	77 400 040
10-01-2020	LECTURE Bacterial metabolism	pp. 192-218
	DISEASE OF THE DAY Measles (Rubeola & Rubella)	

10-06-2020 LECTURE Bacterial genetics I
DISEASE OF THE DAY Mumps & Chickenpox

10-20-2020	LECTURE Bacterial genetics II	pp. 225-244
	DISEASE OF THE DAY Influenza	
10-22-2020	LECTURE Bacterial genetics III	pp. 225-244
	DISEASE OF THE DAY Coronavirus infections	
10-27-2020	LECTURE Host-microbe interactions and the disease process	pp. 524-560
	DISEASE OF THE DAY Bacterial pneumonia	
10-29-2020	LECTURE Defenses: Innate immunity	pp. 428-482
	DISEASE OF THE DAY Diphtheria & Whooping cough	
11-03-2020	LECTURE Defenses: Innate immunity	pp. 456-482
	DISEASE OF THE DAY Tuberculosis	
11-05-2020		
11-10-2020	LECTURE Defenses: Adaptive immunity	pp. 480-560
	DISEASE OF THE DAY Rickettsia infections	

11-12-2020 LECTURE Defenses: Adaptive immunity

Note: Pacing and testing dates may be changed if the need arises. Attend class regularly.			
8-17-2020	ON-LINE -		

10-12-2020	LAB - Complete Enumeration of virus particles LAB - Identification of unknown bacteria (Part I)	handout exercises 24 & 25
10-14-2020	ON-LINE - The Trouble with Antibiotics	handout
10-19-2020	LAB - Identification of unknown bacteria (Parts II & III)	handout exercises 26 & 27
10-21-2020	ON-LINE - The prevalence of antibiotic resistance in the environment (The PARE project)	handout
10-24-2020	(Group I)	
10-26-2020	LAB - Identification of unknown bacteria (Part IV)	handout
	LAB - Genetic analysis of bacteria using PCR (Part I)	handout
10-28-2020	ON-LINE - Antimicrobic Sensitivity Testing:Kirby-Bauer	exercise 22

11-02-2020 LAB - Identification of unknown bacteria (Part IV)

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8-17-2020	ON-LINE - Orientation; Lab safety	exercise 1
8-19-2020	ON-LINE - Brightfield microscopy	exercise 2

10-12-2020