Dakota College at Bottineau Course Syllabus

Course Prefix/Number/Title: BIOL 202 – Microbiology

Number of credits: 4

Course Description:

This course is a survey of microbial cell biology, microbial genetics, and virology with an emphasis on human infectious disease.

Pre-/Co-requisites: None

Course Objectives: **Instructor**: Kenneth C Cabarle

Office: NSC 113

Office hours: M,W,F 11:00-11:50, M,W, 2:00-2:50

Office phone: 701-228-5493

E-mail: kenneth.cabarle@dakotacollege.edu

Lecture/Lab Schedule: Lecture: M,W,F, 9:00-9:50, Lab: Wed, 4:00-5:50

Textbook(s): Burton's Microbiology for the Health Sciences (Microbiology for the Health Sciences (Burton)) Paperback – February 17, 2010 by Paul G. Engelkirk Janet Duben-Engelkirk EdD ISBN-13: 978-1605476735 ISBN-10: 1605476730 Edition: Ninth, North American Edition

Learning Objectives: To develop a fundamental understanding of the basic principles of microbiology. Students will develop a working understanding of the structure, growth, nutrition, metabolism, genetics and diversity of prokaryotes, microscopic eukaryotes and virus. Students will become familiar with medical, agricultural, and other applied aspects of the field of microbiology.

Grading:	4 Hour Exams @ 100 pts. ea. Labs Quizzes/assignments TOTAL POINTS	400 pts. 200 pts <u>100 pts.</u> 700 pts.
	A = 100-90% B = 89-80% C = 79-70% D = 69-60% F = below 60%	

I will also offer one 5 point extra credit paper. Extra credit papers need to be two pages in length, double spaced 12pt font on a topic approved by the instructor. Please do not write a paper without getting permission on the topic, if you hand in a paper and have not gotten the topic approved you will not get the credit and you will have to re-write another paper with an approved topic for credit.

Student E-mail Policy:

Dakota College is increasingly dependent upon e-mail as an official form of communication. A student's campus assigned e-mail address will be the only one recognized by the campus for official mailings. The liability for missing or not acting upon important information conveyed via campus e-mail rests with the student.

Academic Honesty (per undergraduate catalog): Honesty and integrity are central to academic life at DCB. They create a trust necessary in a community of scholars. When that trust is violated by cheating in any form, the atmosphere of academic freedom is threatened.

Cheating may affect the student in accordance with the faculty member's grading policy, and/or it may result in student disciplinary action in accordance with the Student Conduct Policy (available in the office of Student Affairs)

Lecture: Attendance at all lectures is simply expected. While there are many strategies for performing well in coursework, there seems to be no substitute for proper preparation: reading the material before and after each lecture, taking notes, re-writing these notes in a more coherent fashion after each lecture, and actively participating in each lecture. If this sounds like at least two-three hours of preparation for each lecture, then that's about right.

Study: To succeed in this class I expect that you will have to spend at least 2 hours on the course material outside of class for every lecture. You will be responsible for the material in the text, as well as, that from lecture.

Because microbiology is a large field, which we cannot hope to cover solely in lecture, I expect you to read the assigned chapters **BEFORE** coming to class. I also strongly encourage you rewrite your notes in a timely fashion.

Laboratory:

You are responsible for learning the lab material and such material may appear on the regular lecture exams.

Due to limited resources labs may not be made-up. You will be allowed to drop one lab report grade. If you miss a lab the missed lab becomes your dropped lab report grade.

Exams: Exams are a mixture of multiple choice, true false, fill in the blank and short answer essays. Multiple choice, true/false, and fill in the blank will be directly from the

test bank from the text. Short answer essay questions will be taken directly from lecture topics.

NOTE: All make-up exams will be given **after** the regularly scheduled exam and must be made up **within one week** of the students return to class.

Students with disabilities:

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact your instructor and Jan Nahinurk in the Learning Center (228-5479) as early as possible during the beginning of the semester.

DATE	Microbiology BIOL 202 TENTATIVE SYLLABUS SPRING 2015 TOPIC	TEXT
Jan 12-16	Introduction, overview, Main Themes	Chapter 1
Jan 19-23	Chemical Connections, Methods for Studying Microbes	2,3
No Class M Jan 26-30	Ionday January 19, Martin Luther King Day Prokaryotes, Eukaryotes	4,5
Feb 2-6th	Eukaryotes cont'd., Viruses	5,6
FIRST HO	UR EXAM FEBRUARY 6th	
Feb 9-13	Microbial Nutrition, Ecology, Growth, and Metabolism	7,8
No Class M	Ionday February 16, Presidents Day	
Feb 17-20	Microbial Genetics, Genetic Engineering	9,10
Feb 23-27	Genetic Engineering cont'd.	10
SECOND I	HOUR EXAM FEBRUARY 27th	
Mar 2-6	Control of Microbes, Drugs and Chemotherapy	11,12
Mar 9-13	Infections and Disease, Host Defenses	13,14
Mar 16-20	SPRING BREAK	
Mar 23-27	Immunity and Immunizations	15,16
Mar 30-Apr	2Immunization/Assays, Immunity Disorders	16,17

April 3 and April 6 No class Easter Break

THIRD HOUR EXAM, APRIL 2nd

Apr 6-10	Medical Importance: Cocci and Bacilli	18,19
Apr 13-17	Medical Importance: Bacilli cont'd.	19,20
Apr 20-24	Misc. Bacteria, Fungi	21,22
Apr 27- Ma	y 1 Medically Important Parasites and Viruses	23,24
May 4-8th	Viruses cont'd, Environmental Microbiology	25,26
May 8 th	Reveiw	

FINAL EXAMS: MAY 11-13