Dakota College at Bottineau Course Syllabus

Course Prefix/Number/Title: BIOL 202 Microbiology (4CR)
Prerequisites: BIOL 120 or instructor approval

Course Description: A study of the characteristics and importance of microorganisms with emphasis on their identification and control, and their relationships to health and disease.

General chemistry review, prokaryotes and eukaryotes structure and function, microbial metabolism and genetics, physical and chemical control of microbes, host defenses and immunity, bacteria of medical importance, fungal and parasitic diseases, viruses and viral diseases, genetic engineering, environmental and applied microbiology

Course Objectives:

1. To gain an understanding of basic chemical and biological concepts
2. To gain an appreciation for the diversity of the microscopic world
3. To identify the relationships between microbes and diseases in humans
4. To realize the beneficial roles of microorganisms
5. To demonstrate methods of transferring and cultural ing microorganisms
6. To utilize staining procedures and diagnostic tests as a means of identifying bacteria

Instructor: Lura

Office: NSC 114

Office Hours: MWF 1:00-2:00

Phone: (701) 228-5472

Email: chuck.lura@dakota college.edu

Lecture/Lab Schedule: Spring semester

Textbook(s): Talaro, K.P. 2008. Microbiology. McGraw-Hill. 6th Edition

Course Requirements:		
	4 Hour Exams @ 100 pts. ea.	400 pts.
	Labs/quizzes/assignments	200 pts.
	TOTAL POINTS	**600 pts.**

A = 100-90%
B = 89-80%
C = 79-70%
D = 69-60%
F = below 60%

Tentative Course Outline:

Microbiology BIOL 202
TENTATIVE SYLLABUS SPRING 2011

DATE	TOPIC	TEXT	
Jan 11-14	Introduction, overview, Main Themes		Chapter 1
Jan 17-21	**January 17, Martin Luther King Day** Chemical Connections, Methods for Studying Microbes		2,3
Jan 24-28	Prokaryotes, Eukaryotes	4,5	
Jan 31-Feb 4	Eukaryotes cont'd., Viruses **FIRST HOUR EXAM FEBRUARY 4**		5,6
Feb 7-11	Microbial Nutrition, Ecology, Growth, and Metabolism		7,8
Feb 14-18	Microbial Genetics, Genetic Engineering	9,10	
Feb 21-25	**Monday February 21, President's Day** Genetic Engineering cont'd. **SECOND HOUR EXAM FEBRUARY 25**		10
Feb 28-Mar 4	Control of Microbes, Drugs and Chemotherapy	11,12	
Mar 7-11	Infections and Disease, Host Defenses	13,14	
Mar 14-18	**SPRING BREAK**		
Mar 21-25	Immunity and Immunizations	15,16	
Mar 28-Apr 1	Immunization/Assays, Immunity Disorders **THIRD HOUR EXAM, FRIDAY APRIL 1**		16,17
Apr 4-8	Medical Importance: Cocci and Bacilli	18,19	
Apr 11-15	Medical Importance: Bacilli cont'd.		19,20
Apr 18-22	Misc. Bacteria, Fungi **Friday April 22 – Easter Break**	21,22	
Apr 25-29	**Monday April 25 –Easter Break** Medically Important Parasites and Viruses	23,24	
May 2-6	Viruses cont'd, Environmental Microbiology		25,26
	FINAL EXAM, FRIDAY MAY 6		

General Education Goals/Objectives:

Goal 1: Explains the interrelationships between humans and their environment and the role of science in their lives

Goal 2: Demonstrates knowledge and application of technology

Relationship to Campus Theme:

Technological development of therapies covered and discussed

Microbial genetic engineering covered/discussed

Technological developments in microbiology and affects on science and society discussed in relation to news items.

Classroom Policies: Regular attendance and participation in lab and lecture is expected.
All make-up exams will include a significant essay/short answer component and must be made up within one week of the students return to class unless prior arrangements have been made.

Academic Integrity: Cheating on a test, quiz, or other assessment results in zero points for the assessment.

Disabilities and Special Needs: Any accommodations due to a learning disability must come through the MSU-B Learning Center. If you have a diagnosed learning disability, you need to contact the Learning Center in Thatcher 1104 or phone (701) 228-5477.