

## 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 culturing 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](mailto:chuck.lura@dakota college.edu)

Lecture/Lab Schedule: Spring semester

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

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

A = 100-90%

B = 89-80%

C = 79-70%

D = 69-60%

F = below 60%

**Tentative Course Outline:**

<b>Microbiology BIOL 202 TENTATIVE SYLLABUS SPRING 2012</b>		
<b>DATE</b>	<b>TOPIC</b>	<b>TEXT</b>
Jan 10-13	Introduction, overview, Main Themes	Chapter 1
Jan 16-20	<b>January 16, Martin Luther King Day</b> Chemical Connections, Methods for Studying Microbes	2,3
Jan 23-27	Prokaryotes, Eukaryotes	4,5
Jan 30-Feb 3	Eukaryotes cont'd., Viruses <b>FIRST HOUR EXAM FEBRUARY 3</b>	5,6
Feb 6-10	Microbial Nutrition, Ecology, Growth, and Metabolism	7,8
Feb 13-17	Microbial Genetics, Genetic Engineering	9,10
Feb 20-24	<b>Monday February 20, President's Day</b> Genetic Engineering cont'd. <b>SECOND HOUR EXAM FEBRUARY 24</b>	10
Feb 27-Mar 2	Control of Microbes, Drugs and Chemotherapy	11,12
Mar 5-9	Infections and Disease, Host Defenses	13,14
<b>Mar 12-16</b>	<b>SPRING BREAK</b>	
Mar 19-23	Immunity and Immunizations	15,16
Mar 26-30	Immunization/Assays, Immunity Disorders <b>THIRD HOUR EXAM, FRIDAY MARCH 30</b>	16,17
Apr 2-6	Medical Importance: Cocci and Bacilli <b>Friday, April 6-Easter Break</b>	18,19
Apr 9-13	<b>Monday, April 9-Easter Break</b> Medical Importance: Bacilli cont'd.	19,20
Apr 16-20	Misc. Bacteria, Fungi	21,22
Apr 23-27	Medically Important Parasites and Viruses	23,24
Apr 30-May 4	Viruses cont'd, Environmental Microbiology <b>FINAL EXAM, FRIDAY MAY 4</b>	25,26

**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.