

MICROBIOLOGY 315

INTRODUCTORY MICROBIOLOGY

Course Outline

INSTRUCTOR: Phil. Johnson (office 539 2827, lab. 539 2953)

ASSIGNED TEXT: Brock, T.D., Smith, D.W. and Madigan, M.T. (1984)

Biology of Microorganisms (4th ed.)

Prentice Hall Inc., Englewood Cliffs, New Jersey.

Microbiology 315. Introductory Microbiology, Lab. Manual

Grande Prairie Regional College

PURPOSE OF COURSE: Introduction of students to basic principles of microbiology, including aspects of microbial ecology and medical and applied microbiology.

(3 hours lecture, 3 hours laboratory per week)

COURSE REQUIREMENTS AND EVALUATION:

Quizzes	10%
Term paper	15%
Lab. reports	10%
Mid-term exam	20%
Lab. final exam	15%
Final exam	30%

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Course Contents

<u>week of:</u>	<u>topic</u>	<u>text chapter</u>
Sept. 1	Introduction	1
8	Prokaryotes	2
15	Eucaryotes	3
22	Bioenergetics	4
29	* Nutrition and biosynthesis of heterotrophic organisms.	5
Oct. 6	Nutrition and biosynthesis of autotrophic organisms.	6
13	Synthesis regulation of micromolecules	9
20	* Microbial ecology: Population growth and control	7
27	Microbial ecology: Environmental factors	8
Nov. 3	Microbial ecology: Microbes in ecosystems	13
10	Viruses	10
17	* Microbial ecology - symbiosis	14
and	Applied microbiology - parasitism	15
24	Medical microbiology - epidemiology	17
Dec. 1	Immunology	16
8	Review	

- * Short written quizzes will be given during the first class of these weeks. Questions will relate to the topics covered since the last quiz.