

1990-91

Registrar

GRANDE PRAIRIE REGIONAL COLLEGE

SCIENCE DEPARTMENT

COURSE: Biology 200- Introductory Biology

INSTRUCTORS: Glen Chilton Office: J223 Phone:
Julie Dais Office: J208 Phone:
Rick Scott, Laboratory Technician Office: J121

NATURE OF COURSE:

Biology 200 provides an introduction to the biological sciences. Topics considered include macromolecules and the construction of cells, principles of inheritance, evolution by natural selection, the origin of life, energetics, classification, and the ecology of populations, communities, and ecosystems.

REQUIREMENTS:

A. Students are expected to attend lectures, all laboratory sessions, and to submit reports and assignments as specified.

B. There will be a mid-term lecture examination on Wednesday 24 October. It will include all material presented through Friday 19 October.

C. There will be a final lecture examination, scheduled by the Registrar. While comprehensive, this examination will emphasize material presented after 19 October.

D. There will be a final laboratory examination during the scheduled laboratory session the week of 3 December.

EVALUATION:

A. Reports and assignments.....	10%
B. Mid-term lecture examination.....	20%
C. Final laboratory examination.....	30%
D. Final lecture examination.....	40%

100%

Brief practise tests are tentatively scheduled for Wednesday 3 October and Wednesday 14 November. These tests are designed to help you evaluate your progress. Results of these tests do not count toward your final grade.

TEXTBOOKS:

Wessels, N. K., and J. L. Hopson. 1988. Biology. Random House, Inc., New York.

Biology 200 Laboratory Manual. 1990/91 Edition. University of Alberta publication.

LECTURE SCHEDULE:

Topics	Text Chapters
1. Atoms, molecules, and bonds	2
2. Water, acids, and bases	2
3. Carbohydrates, proteins, lipids, and nucleic acids	3
4. Plasma membrane, organelles, and cell types	5,6
5. Origin of life	19
6. Energetics and enzymes	4
7. Photosynthesis	8
8. Cell respiration	7
9. Cell cycle and mitosis	9
10. Meiosis and syngamy	9
11. Molecular genetics	13
12. Monohybrid crosses and segregation of alleles	10
13. Dihybrid crosses and independent assortment	10
14. Darwin	41
15. Natural selection and speciation	41-43
16. Classification	19
17. Viruses, bacteria, protists, and fungi	20-22
18. Plants and animals	23-26
19. Ecology - populations	46
20. - communities	45
21. - ecosystems	44
22. Current topics in biology	----