F 1990-91 Registrar

GRANDE PRAIRIE REGIONAL COLLEGE
SCIENCE DEPARTMENT

COURSE: BIOLOGY 297 - Heredity

INSTRUCTOR: T. R. Shewchuk
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DESCRIPTION: This course will explore the cellular and molecular basis of the transmission of hereditary characteristics. Major emphasis will be placed on Mendelian inheritance and its cytological basis, the inheritance of quantitative characters, and population genetics. Sex determination, linkage and crossing over, DNA as genetic material, gene action and the genetic code will be discussed. This course is intended to be a preliminary introduction to the more advanced material covered in Genetics 375. The course consists of 3 hours of lecture and 3 hours of laboratory per week.

REQUIREMENTS:

A. Since presence at lectures and labs, participation in classroom discussion and projects, and the completion of assignments are important components of this course, students will serve their interests best by regular attendance. Those who choose not to attend must assume whatever risks are involved. In this connection the attention of the students is directed to the Academic Guidelines of the College.

B. One mid-term examination

C. One final lecture examination

D. One final laboratory examination

E. Weekly problem sets

EVALUATION:

A.	Weekly problem sets	30%
B.	Mid-term examination	20%
C.	Final laboratory examination	10%
D.	Final lecture examination	40%

RESOURCES: Biology 297. Laboratory Manual. University of Alberta.

Stansfield, W. D. Schaum's Outline Series of Theory and Problems of Genetics. McGraw Hill.

Suzuki, D.T., A.J.F. Griffiths, J.H.Miller, and R.C. Lewontin. 1986. An Introduction to Genetic Analysis. W.H. Freeman. (Note: This is the required text for Genetics 375).