Course Number: 5295  
Course Name: Fundamentals of Research  
Semesters Offered: Fall  

Prerequisites: None  

Course description: To acquaint the entering graduate student with the thought processes, materials, and methods of research in the Biological Sciences.  

Course Objectives: To make the entering graduate student aware of the importance of hypothesis testing in science; proper experimental animal care; safety issues in the workplace; hazardous chemical protocols and the Right to Know legislation; the utility of diversity in academics; how to select a research topic; thesis organization; and, data interpretation and presentation.  

Text: None  

Lecture Outline: attached.
BIOLOGY 5295 COURSE OUTLINE
FALL 2006

INSTRUCTOR: F. L. ROSE
TEXT: NONE
Office: 154 SUPPLE

TENTATIVE CLASS SCHEDULE

AUG. 28  (1) INTRODUCTION - HYPOTHESIS, THEORY, LAW - ETHICS

SEPT.  4  (2) STRONG INFERENCE - JOHN PLATT - BIOLOGY VS. SCIENCE
         11 (3) SAFETY ISSUES IN THE WORKPLACE
         18 (4) ANIMAL RIGHTS ISSUES
         25 (5) ANIMAL RIGHTS ISSUES

OCT.  2   (6) SEXUAL HARASSMENT/GENDER BIAS
         9  (7) CRITICAL THINKING: WHAT IS IT?
        16 (8) STRUCTURE OF UNIVERSITY/COMMON MISTAKES
        23 (9) SELECTING A RESEARCH TOPIC
        30 (10) FUNDS FOR RESEARCH - SOURCES

NOV.  6  (11) ORGANIZATION OF THESES
        13 (12) APPLICATIONS AND INTERVIEWS
        20  ARRANGED WORK - NO CLASS
        27 (13) THE END

GRADING: Grades are based on your attendance (each unexcused absence = one letter
grade reduction), your participation in class discussions, and performance on reading
assignments, and your final summary. Failure to read any given assignment may result in
a reduction of a letter grade from your overall grade.

Absences must be approved in advanced of the class time.