

F.91

GRANDE PRAIRIE REGIONAL COLLEGE
SCIENCE DEPARTMENT

COURSE: Entomology 220 - INTRODUCTION TO INSECT BIOLOGY

INSTRUCTOR: Dr. Julie M. Dais
Office - J 208
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DESCRIPTION: Entomology 220 is an introduction to the structure, function, ecology and systematics of insects, with emphasis on the regulation of their metabolism, locomotion, reproduction/development, their evolution, behavior and their interactions with other organisms including man.

- 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 regard, the attention of the students is directed to the Academic Guidelines of the College.
 - B. Laboratory quizzes
 - C. Laboratory assignments and projects
 - D. Two in-class lecture quizzes
 - E. Final lab exam in last lab period
 - F. Final lecture exam scheduled by the Registrar

EVALUATION:

A. Laboratory quizzes (best 3 out of 4 quizzes)	15%
B. Laboratory project	15%
C. Two in-class lecture quizzes (first worth 10%, second worth 15%)	25%
D. Final lab exam	15%
E. Final lecture exam	30%

TEXTBOOK: Gillot, Cedric. 1980. Entomology. Plenum Press, New York. 729 p.

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ENTOMOLOGY 220: FALL 1991 SCHEDULE

LECTURE OUTLINE AND READING ASSIGNMENTS
(order of subjects covered)

	Gillott pages
1. Introduction	
2. Arthropod Evolution and Diversity.....	3-20
3. Insect Diversity.....	23-49
<u>Structure and Function</u>	
4. External Structure.....	53-86
5. Integument.....	321-334
6. Sensory Systems.....	335-359
7. First Lecture Quiz: October 2	
8. Nervous and Chemical Integration.....	361-385
9. Locomotion.....	387-419
10. Gas Exchange.....	421-438
11. Food Uptake and Utilization.....	439-462
12. Circulatory System.....	463-479
10. Homeostasis.....	481-501
14. Reproduction.....	505-535
15. Development.....	537-591
16. Second Lecture Quiz: November 4	
<u>Behavior</u>	
17. Offence and Defense.....	595-641
18. Social insects (bees, wasps, ants and termites)	-
19. Insects and other organisms.....	629-651
<u>Classification and Identification</u>	
20. Apterygota.....	109-120
21. Paleoptera.....	121-136
22. Orthopteroid Orders.....	137-182
23. Hemipteroid Orders.....	183-216
24. Panorpid Orders.....	217-268
25. Remaining Endopterygote Orders.....	269-318
Final Lecture Exam: Scheduled by the Registrar	

LABORATORY OUTLINE (order depends on the weather)

1. Use of the Microscope
Insects and Related Arthropods
Collection Techniques
 2. Field Trip
 3. External Anatomy
 4. Insect Adaptations and Sense Organs
 5. Survey of Insect Orders and Use of Taxonomic Keys
 6. Internal Anatomy
 7. Metamorphosis and Insect Collection Preparation
 8. Camouflage, Mimicry and Social Insects
 9. Medical Entomology
- Final Lab Exam: November 28 During Lab Period
Collection Project Due by: December 5 at 4:00 p.m.