Course Syllabus

Psychology 3S03 ANIMAL BEHAVIOUR LABORATORY
Section 03

Time: January 6th, 2004 – April 6th, 2004, Tuesdays 11:30 am – 2:30 pm
Location: Psychology 116
Web Page: http://www.science.mcmaster.ca/psychology/understu.html#level3
(*Visit often for info. and updates*)

Instructors:
Eric Bressler (bressle@mcmaster.ca) X 26042
Andrew Clark (clarkap@mcmaster.ca) X 24867
Kamini Persaud (persaukn@mcmaster.ca) X 26042

Office Hours: by appointment

Assumptions:
One of PSYCH 2RR3, STATS 2MA3, 2MB3 or permission of the instructor; and registration in Level III or IV of an Honours programme in Biology or Psychology; and one of PSYCH 2TT3, 3F03, or six units of Level I Biology

NOTE: Generally, students are expected to have a working knowledge of evolutionary theory and basic statistics.

Course Description & Objectives:
In this course students will be given the opportunity to work with a variety of species both in the field and the laboratory. Throughout this experience they will learn how to
• Apply evolutionary and sociobiological theory to formulate testable hypotheses
• Design scientific experiments
• Perform (using different techniques) and record (organize data collection) behavioural observations
• Consider animal care, ethics and safety
• Critically analyze research (including objectives, methods, data analysis and interpretation of results)
• Assess and apply appropriate statistical analysis (using “Excel”)
• Write scientific research papers (develop scientific writing skills)
• Give professional oral presentations (using “PowerPoint”)
• Access electronic resources (using “PsycInfo” and other such databases)
• Work without direct instruction and with others in groups
Mark Breakdown:

Methods Write-up                                          6%
   (3 X 2% each)
Lab reports                                             30%
   (3 X 10% each)
Statistics Assignment                                   7%
Independent Project                                    57%
   (Proposal Presentation    7%)
   (Final Presentation      15%)
   (Final Report            30%)
   (Participation            5%)

TOTAL                                               100%

* NOTE: There will be no final exam in this course

ASSIGNMENTS

NOTE: Written assignments are to be in 12pt. regular font (“Times New Roman”, “Arial”, etc.), double-spaced with 1-1.25” margins. Remember: we were students too – we recognize the tricks!

1. **Pre-Lab Methods Write-ups** (3 X 2% each)
   For instructed labs 1, 2 and 3, students will be required to hand in (at the beginning of class) a BRIEF 1 page methods proposal for that day’s lab. This methods write-up will stem from a brief lecture on the topic given by one of the instructors the week before. Methods proposals should be completed independently.

2. **Statistics Assignment** (7%)
   This assignment will be given to students during the statistics tutorial to be held up in the 4th floor computer clusters. Though the instructors will, at first, help guide students through the assignment, students will be responsible for completing it independently and on their own time if necessary for the next week.
   The 4th floor computer clusters are generally open Mon.-Fri., 9:00 am-5:00 pm to students.

3. **Lab Reports** (3 X 10% each)
   For each of the 3 instructed labs at the beginning of the term (Labs 1, 2 & 3), students will be required to hand in a 4-page write-up. LABS SHOULD NOT BE MORE THAN 4 PAGES OF TEXT (not including figures)!! A tutorial on how to write a scientific research paper will be given in the first class. Each report, for which students will get feedback, will also serve as a practice exercise for their write-up of the final independent project report. Lab reports are always due the week after the lab and although the lab, itself, may be performed in groups, reports must be written independently.
4. **Independent Group Projects** (Total 57%)

For the second half of the term students will be assigned to groups of 2-4 to work on a self-created, larger-scale group project. Though an instructor will be assigned to each group for reference and support, groups will be responsible for meeting and conducting research on their own time. Grading will be based on several things:

(a) **Project Proposal Oral Presentation** (7%): Using the PowerPoint presentation skills learned in the previous class, groups will give a brief 10 minute presentation on what they plan to do for their independent projects. They will receive useful feedback from their instructors and classmates and thus this mini-talk will serve as a practice exercise for the final project presentation. Presented in groups.

(b) **Final Oral Presentation** (15%): Using the oral presentation and PowerPoint skills practiced during the proposal talk, this presentation is to be a 30 minute talk on the group’s independent project. Any feedback obtained may help individuals with their final written report. Presented in groups.

(c) **Final Written Report** (30%): Using the skills developed through the writing of brief lab reports and the feedback obtained from final oral presentations, students are to write up a longer (8-10 pages, not including figures), more comprehensive paper on their independent projects. This paper will be due the week after their final presentation. Every individual within a group is expected to hand in their own final report.

NOTE: Though the projects have been done thus far in groups, **the final written report MUST BE DONE INDEPENDENTLY!** (Within a group, individuals will differ in their interpretations of the findings, criticisms of the study, suggestions for future work, selection of relevant literature and in their styles and points of view.)

(d) **Participation** (5%): This mark will be composed of two things.

1. General participation in class – performing experiments, involvement in discussions and asking questions during talks.

2. Involvement in Group Projects – as assessed by your assigned group instructor and your GROUP-MATES who will all hand in an independent, private grade for you (and you for them).
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Place</th>
<th>Due</th>
<th>Activity</th>
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</thead>
</table>
| 1    | 01/06/04  | PC 116| -   | 1. Course Intro.  
2. Ethics  
3. Behavioural Observation Video  
4. Intro To Lab 1  
5. How to write a lab report |
| 2    | 01/13/04  | PC 116| 1. Methods for Lab 1 | 1. Lab 1 |
| 3    | 01/20/04  | PC 116| 1. Lab 1 report | 1. Statistics tutorial  
(4th floor computer clusters PC 403,416)  
2. Intro to Lab 2 |
| 4    | 01/27/04  | PC 116| 1. Stats assignment  
2. Methods for Lab 2 | 1. Lab 2  
2. Intro to Lab 3 |
| 5    | 02/03/04  | PC 116| 1. Lab 2 report  
2. Methods for Lab 3 | 1. Lab 3  
(outside “in the field”)  
(weather permitting) |
| 6    | 02/10/04  | PC 116| 1. Lab 3 report | 1. How to do a presentation  
2. Intro to Independent Projects |
| 7    | 02/17/04  |       |     | Mid-Term Recess |
| 8    | 02/24/04  | PC 116| 1. Independent Project Proposal  
Group Presentation | 1. Independent Project Proposal Group Oral Presentations |
| 9    | 03/02/04  |       |     | No Scheduled class  
(Independent Group arrangements) |
| 10   | 03/09/04  |       |     | |
| 11   | 03/16/04  |       |     | |
| 12   | 03/23/04  |       |     | |
| 13   | 03/30/04  | PC 116| 1. Independent Project final oral Presentation | 1. Independent Project Final Group Oral Presentations |
| 14   | 04/06/04  | ---   | 1. Independent Project written report | No Class |
THE TECHNICAL STUFF...

Grading:

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<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>90-100%</td>
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<tr>
<td>A</td>
<td>85-89%</td>
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<tr>
<td>A-</td>
<td>80-84%</td>
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<tr>
<td>B+</td>
<td>77-79%</td>
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<tr>
<td>B</td>
<td>73-76%</td>
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<tr>
<td>B-</td>
<td>70-72%</td>
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<td>C+</td>
<td>67-69%</td>
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<td>C</td>
<td>63-66%</td>
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<td>C-</td>
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<td>D+</td>
<td>57-59%</td>
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<tr>
<td>D</td>
<td>53-56%</td>
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<tr>
<td>D-</td>
<td>50-52%</td>
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<tr>
<td>F</td>
<td>0-49%</td>
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NOTE: The instructor reserves the right to adjust final marks up or down, on an individual basis, in the light of special circumstances and/or the individual’s total performance in the course. Furthermore, the instructor reserves the right to change the weight of any portion of this marking scheme. This might be done, for example, if a student has spoken to an instructor and has legitimate reasons for not completing a section of this course (including a doctor’s note if for medical reasons).

Policy Reminder:

Attention is drawn to the Statement on Academic Ethics and the Senate Resolutions on Academic Dishonesty as found in the Senate Policy Statements distributed at registration and available in the Senate Office. Any student who infringes on one of these resolutions will be treated according to the published policy. Special attention will be given to possibilities of PLAGIARISM, which will not be tolerated!

McMaster University Regulations for Use of Nonhuman Animals

To ensure the considerate and ethical treatment of animals, a number of policy requirements have been developed. These include approval the McMaster University Ethics Committee of the care and procedures using non-human animals. (AUP # 98-12-64).

ANY STUDENT NOT ABIDING BY THE ETHICAL AND HUMANE USE OF ANIMALS SHALL RECEIVE AN AUTOMATIC COURSE GRADE OF F.

Message from the Chair of Psychology:

The instructor cannot be responsible for returning long distance calls from students. Any student wishing to reach an instructor is invited to e-mail the instructor.