"Sociobiology" is the study of social phenomena in the light of contemporary evolutionary knowledge and theories. It is not centrally concerned with *Homo sapiens*; students seeking a course that focuses on human sociobiology are advised to consider Psychology 3F3.

Evaluation will be based on:

1. 10 brief quizzes, held in class time, worth 3% each.
2. A short essay, due November 3rd, worth 20%. (See Essay Assignment, overleaf.)
3. A 3-hour, registrar-scheduled, final examination worth 50%.

Textbook: M Daly & M Wilson (1983) *Sex, evolution and behavior* (2nd edition). Lectures will not reprise the textbook, but will focus on new theory and research since the book was written. Assigned readings must be done before the class for which they are assigned.

<table>
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<tr>
<th>Class Dates</th>
<th>Quiz #</th>
<th>Chapters to be Read</th>
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<td>1. September 8</td>
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<td>2. September 15</td>
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<td>8. November 3</td>
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<td>12. December 1</td>
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The 10 quizzes will be multiple-choice tests. They will be based primarily on the readings assigned for that class, but will also include material from recent lectures.

The final exam will consist entirely of essay questions (with ample choice). Good performance will require thorough familiarity with and comprehension of the content of both the textbook and the lectures.

Grades will be computed out of 100 points and converted to a letter grade as follows:

- 0-49 = F
- 50-52 = D-
- 53-56 = D
- 57-59 = D+
- 60-62 = C-
- 63-66 = C
- 67-69 = C+
- 70-72 = B-
- 73-76 = B
- 77-79 = B+
- 80-84 = A-
- 85-89 = A
- 90-100 = A+

The instructor reserves the right to adjust final marks up or down, on an individual basis, in light of special circumstances and/or the student's total performance in the course.
An essay (suggested length: 1500 words) will count 20% of your grade. Your task is to pick an empirical report of sociobiological research with a publication date in 2003, and demonstrate critical thinking about it. "Empirical" means the paper you choose must report new research results from real animals, and not just theory or a review of data already in the literature. You can demonstrate critical thinking in several ways. You can suggest alternatives to the authors' explanations of their results, and discuss how further research or data analysis could sort out the alternatives. You can criticize the authors' claim that their study tests a particular theory or illuminates a particular issue. You can point out methodological errors. However, "critical" does not mean that you must find fault. You can instead propose a next step for the research program, or discuss its relevance to theories and phenomena not discussed by the authors, or suggest how further analysis of the data already collected could tell us something more.

Sample the literature first. Consult 2003 issues of Animal Behaviour, Behavioral Ecology, Behavioral Ecology & Sociobiology, Behaviour, Ethology, Proceedings of the Royal Society B, and the American Naturalist. Taxonomically specialized journals (especially the bird journals) also include a lot of sociobiological research, and so do the ecology journals (especially the Journal of Animal Ecology and Oikos, but also Ecology and Oecologia). All the above journals are in the Thode Library. If a title interests you, read the abstract (summary); if you're still interested, read the whole paper before making it your choice. Keep four criteria in mind:

1. The article you choose (the "target article") must be appropriate for this course. Not all articles on animal behaviour (even animal social behaviour) are appropriate; the conceptual basis for the research must fall within sociobiology's selectionist, adaptationist paradigm. If you have any doubt that a paper that you are considering is appropriate, check with me.

2. It must have a 2003 publication date. No exceptions.

3. You should find it both interesting and intelligible. (Complaining that a paper is dull or that you don't understand the data analysis doesn't make an impressive "critical essay"!)

4. You have to be able to think of something to say about it.

Attach a copy of the target article (the whole article, including references) to your essay, so we can assess the accuracy of your description of the research and the quality of your critical comments. However, we should not have to consult the target article to follow your essay: you must summarize enough of the rationale, methods and results to make your own critical comments clear (and it must be clear just what you consider to be your original contribution).

Use about half your essay to summarize the paper's rationale, methods, results and conclusions, before embarking on your critical discussion (the second half). Do not use footnotes. Literature other than the target article need not be cited, but it can be, if appropriate; references should be listed at the end and cited in the body of your essay in the style of a scientific journal such as Animal Behaviour. Indicate when you are quoting, giving source and page numbers; for example, you might write: According to Daly & Wilson (1983, p. 1), "Why sex even exists remains one of the great conundrums in evolutionary biology."

Due date: Nov. 3, 2003. Don't ask for an extension. (Competing demands cannot excuse late submissions. It would be unfair to students who meet the deadline if I were to accept late essays without penalty.) Late essays will be graded, but then devalued by 10% per day: you'll get 0.9 times the grade if I receive it on November 4, 0.8 times the grade if on November 5, etc.

Please feel free to discuss your essay with me or one of the TAs at any stage of preparation.