

BioNb 221: Track 11 Section Syllabus, Fall 1998

Readings also available at the BioCentre in Stimson Hall

	Topic	Readings / Assignments
1 Sept	Levels of Analysis	Sherman, PW. 1988. <u>The levels of analysis</u> . Animal Behaviour 36:616-619 Alcock, J. 1998. Animal Behavior, Chapter 1, pp. 1- 6.
3 Sept	Natural Selection	<ul style="list-style-type: none">o Trivers, R. 1985. Chapter 2: Natural Selection. pp. 19-39 in <i>Social Evolution</i>.. Benjamin Cummings Co. Inc: California.o Alcock, J. 1998. Animal Behavior, Chapter 21, pp. 14-20.
8 Sept	Units of selection	<ul style="list-style-type: none">o Hull, DL. 1980. Individuality and selection. Annual Review of Ecology and Systematics. 11:311-332.
10 Sept	Genes and Behavior	<ul style="list-style-type: none">9 Plomin, R. 1990. The role of inheritance in behaviour. Science 248:183-188.o Levay, S. and Hamer, DH. 1994. Evidence for a biological influence in male homosexuality. Scientific American. 1994: 44 -49· Byne, W. 1994. <u>The biological evidence</u> <u>challen</u> Scientific American. 50 - 55.
		<p style="text-align: center;">Things to Do:</p> <ul style="list-style-type: none">be prepared for debatebring in journalspick up journal for peer response
Sept 15	Hypothesis testing	Sakaluk, S.K., Bangert, PJ, Eggert, AK, Gack, C and Swanson, LV 1995. The gin trap as a device facilitating coercive mating in sagebrush crickets.

Proceedings of the Royal Society of London,
Series B.

- Platt, JR. 1964. Strong inference. *Science*. 146:347-353.
 - **Things to Do:**
 - peer response to journals due
 - get assignment info for Hypothesis testing paper

Sept 17 Animal Cognition

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Griffin, D. **Animal Thinking. In: Exploring Animal Behavior** (eds. Sherman, PW and Alcock, J). Sinauer Associates, Inc: Massachusetts. p. 58.

- Adamo, SA and Hanlon, RT. 1996. Do cuttlefish (Cephalopoda) signal their intentions to conspecifics during agonistic encounters?. *Animal Behaviour*. 52:73-81.

Sept 22 Sexual selection

- Gwynne, DT and Simmons, LW. 1990. Experimental reversal of courtship roles in an insect. *Nature*. 346:172-174.

22 Sexual selection I
Sept

- Kempnaers, B et al. 1992. Extra-pair paternity results from female preference for high-quality males in the blue tit. *Nature*. **357**: 494-496.
- Alcock, J. 1998. *Animal Behavior*, p. 429 - 443.

Sept 24 Sexual selection II
Human mating selection

- Buss, DM. **The Strategies of Human mating. In: Exploring Animal Behavior** (eds. Sherman, PW and Alcock, J) Sinauer Associates, Inc., Massachusetts. p. 216

- **Things to do:**
 - bring in 1st draft Hypothesis paper (copies)

o pick up Hypoth. paper for peer review

Sept 29

Sexual selection III: sperm
competition and female choice

- Baker, RR and Bellis, MA. 1989. Number of sperm in human ejaculates varies in accordance with sperm competition theory. *Animal Behaviour*. 37:867-869.
- Gage, AR and Barnard, CJ. 1996. Male crickets increase sperm- number in relation to competition and female size. *Behavioral Ecology and Sociobiology*. 38:349-353.
- Eberhard, WG. **Animal genitalia and female choice**. In: **Exploring Animal Behavior**. (eds. Sherman, P and Alcock, J) Sinauer Associates, Inc.,: Massachusetts. p. 192
 - **Things to do:**
 - pick up data scoring package for Human Mate Choice paper

Oct 1 Alternative mating strategies

- Koprowski, JL. 1991. Alternative reproductive tactics in male eastern gray squirrels: "making the best of a bad job". *Behavioral Ecology*. 165-171.
- * Dominey, WJ. 1980. Female mimicry in male bluegill sunfish--a genetic polymorphism? *Nature*. 284:546-548.
- Things to do:
- Bring in journals for Maydianne
- peer review of Hypothesis paper due

3 Oct

NO CLASS (SATURDAY)

- Things to do:
- give Maydianne scored data for Human Mate Choice paper by 5 pm (e-mail or to her office)

6 Oct

Communicating scientific results

- o Gopen, GD and Swan, JA. **The science of scientific writing**. In: **Exploring Animal Behavior** (eds. Sherman PW and Alcock, J) Sinauer Associates, Inc.,: Massachusetts.
- **Things to do:**
- get assignment info for Human Mate Choice paper
- pick up synthesized data for Human Mate Choice paper from Maydianne
- pick up readings and debate assignment for next class

8 Oct

Debate/discussion

o Readings to be announced

Topic: issues raised in journal
entries

o Things to do:

o hand in final draft of Hypothesis paper

13 Oct Fall **break**
15 Oct Sensory exploitation

- Hill, GE. 1992. Geographic variation in male ornamentation and temple mate preference in the house finch: a comparative test of models of sexual selection. Behavioral Ecology. 5:64-73.
- Ryan, MJ and Rand, S. 1993. Sexual selection and signal evolution: the ghost of biases past. 1993. Philosophical Transactions of the Royal Society of London, B. 340:187-195.
- Alcock, J. 1998. Animal Behavior. p. 468 - 473.
 - **Things to do:**
 - bring in journal for Maydianne
 - pick up journal for peer response

Check Due dates

Track H homepage

BioNB 221 homepage

Email Maydianne