

## Certificate in Animal Behaviour

The certificate program is a collaborative effort of both the Biology and Psychology departments. It provides students an opportunity to take, within their B.A. or B.Sc. Honours or Major program, a set of classes and a research project that will accord them an animal behavior specialization. Completion of the Certificate will be noted at convocation and shown on a student's transcript.

### *Certificate requirements:*

1. A minimum grade of a B- is required in *four* mandatory classes:

NESC/PSYO 2160.03 Animal Behaviour

PSYO 2501.03 Statistical Methods 1 or Stat 2080.03 Statistical Methods for Data Analysis and Inference

BIOL 3062.03 Behavioral Ecology

BIOL 3630.03 Field Methods in Animal Behaviour or NESC/PSYO 3161.03 Measuring Behaviour

2. A grade of B- in *two* full credits of elective classes chosen from the following list. One of the two-full credits must be at the 3000/4000 level.

#### 2000 Level

NESC/PSYO 2140.03 Learning

NESC/PSYO 2170.03 Hormones and Behaviour

NESC/PSYO 2470.03 Systems Neuroscience

#### 3000 Level

BIOL 3327.03 Entomology

BIOL 3622.03 Ornithology

BIOL 3067.03 Ecology and Evolution of Fishes

BIOL 3626.03 Field Studies of Marine Mammals

NESC/PSYO 3000.06 Independent Research in Modern Psychology (Anim. Behav. topic)

NESC/PSYO 3001.03 Directed Research Project in Psychology (Anim. Behav. topic)

NESC/PSYO 3043.03 Neurobiology and Learning

NESC/PSYO 3044.03 Laboratory Methods of Learning and Conditioning

NESC/PSYO 3162.03 Advanced Animal Behaviour (subject to approval)

NESC/PSYO 3165.03 Neuroethology

NESC/PSYO 3180.03 Psychoneuroimmunology/Ecological Immunology

NESC/PSYO 3670.03 Genes, Brain and Behaviour

#### 4000 Level

NESC/PSYO 4160.03 Topics in Behavioural Biology

BIOL 4060.03 Marine Mammalogy

BIOL 4806.03, 4807.03 Special topics (Animal Behaviour topic)

3, A grade of B- in *one half credit or more* of independent research in Animal Behaviour.

The research topic must be pre-approved by the Certificate Coordinator prior to the start of their research class (i.e. NESC/PSYO 3000.06, NESC/PSYO 3001.03, NESC/PSYO 4500.06, BIOL 4806.03, BIOL 4807.03, or BIOL 4900.06). Honours students are encouraged to complete their Honours thesis on a topic in Animal Behaviour to fulfill this requirement.

Students are also encouraged to further develop their study design and analysis skills by taking additional classes such as BIOL 4061.03 (Design of Biological Experiments) or BIOL 4062.03 (Analysis of Biological data).

4. Enrollment in the 'Certificate in Animal Behaviour' program should be undertaken by students in their third or fourth year of studies when they are seeking approval of the research topic by the Certificate Coordinator.

The Certificate Coordinator will be named by the Animal Behaviour Working Group (S. Adamo, S. Gadbois, A. Horn, M. Leonard, C. Staicer).