# Course Details

## Instructor
Dr. Ayesha Khan  
Office Hours: See Avenue to Learn for more information.  
Office Location: Psychology Building (PC), Rm 107  
E-mail: khan.mcmaster@gmail.com  
**Please include the course code (Life Sci 2D03) in the subject of all E-mails.**

When using the MSAF, report your absence to msaf.2d03@gmail.com

## Course Description
We will use fundamental concepts in evolutionary biology to understand behavioural genetics, learning and cognition, communication, foraging and antipredator behaviours, parental care, and social and mating habits in non-human animals.

Students explore a diversity of behaviours in a variety of taxa such as invertebrates, amphibians, reptiles, fish, birds, and mammals.

Each student will take on the role of citizen scientist to document local wildlife by capturing observations through their mobile phones. We will contribute to a crowdsourcing project called *iNaturalist Canada*; maintained through a collaboration between the Canadian Wildlife Federation, NatureServe Canada, and the Royal Ontario Museum. *iNaturalist* is an online tool that allows for the exploration and documentation of diverse species so that scientists may use this information for their research.

**Course aims.** Students will: [1] gain practice in applying the scientific perspective in thinking critically about research in animal behaviour and, [2] become part of a citizen science network to document and learn about the ecology and history of a chosen animal species.

Three lectures; one term

Prerequisite(s): BIOLOGY 1A03, 1M03, PSYCH 1X03, 1XX3; or ISCI 1A24  
Antirequisite(s): PSYCH 2TT3

## Required Reading Materials

### Animal Behavior  
**Concepts, Methods, and Applications**

Please purchase the *2nd edition*.

Authors: Shawn Nordell and Thomas Valone  
Copyright © 2014 by Oxford University Press  
ISBN: 9780190276744  

The text is available in hardcopy and in electronic format.  
The eBook can be purchased via RedShelf  
[https://www.redshelf.com/](https://www.redshelf.com/)

## Evaluation
The final course grade is based on:
1. Midterm 1 (15%)
2. Midterm 2 (20%)
3. Online quizzes (Best 9 out of 10, 10%)
4. *iNaturalist*: Citizen Scientist Assignment (15%)
5. Cumulative Final Exam (40%) scheduled by the Office of the Registrar
Quizzes (see schedule on pg. 7) will be administered online via Avenue to Learn.

A link to each quiz will become available by 5PM on a given Friday. This link will remain available until 5PM the following Friday. For example, if a quiz link is posted on Friday at 5PM on September 15th then this link will remain available until 5PM on September 22nd.

A student may click on the link and launch the quiz at any time during the relevant week. However once a quiz is launched then ALL quiz questions must be answered in one sitting.

Each quiz will expire one hour after it has been launched. If you exit the quiz halfway then the questions that have yet to be answered will have zero marks associated with them.

Please make sure that you have access to a reliable internet connection. Unfortunately we do not have the person power to deal with individual concerns around challenges related to technical issues (e.g., computer breakdown or internet access).

Please do not submit a MSAF for missing a quiz. If you miss a quiz then you will receive a zero for that quiz. We will count best 9 out of 10 quiz marks in order to calculate the final course grade.

Each quiz will mostly contain questions from readings and lecture materials from that week alone. Disclaimer: It is possible for a question to get included in a quiz from previous readings. Students are responsible for keeping up-to-date with course readings and therefore, if a question is included from a previous week, then we expect that students should be able to answer this question.

Quiz questions could be in the format of True/False items or multiple-choice questions.

The two mid-term tests and the final exam may contain a combination of multiple-choice, true/false statements, and written-response questions.

The True/False section will contain about 15 statements out of which students will select the only 5 true options. This section of the test will contain questions from lecture notes, videos or guest speakers, or the textbook.

The Multiple Choice section of the test will contain questions from either lecture/lecture notes, or guest speakers, or the textbook.

The Short Answer section of the test will contain questions from lecture and associated notes ONLY. During lectures, we will review experiments in great detail. That is, for individual experiments, we will learn about specific research questions, hypotheses, predictions, methodologies, and associated results. Students are ONLY expected to reproduce these from experiments completed in lecture notes only.

For the experiments provided in the textbook but not covered in lecture, think about any particular experiment using the following framework: [1] what did the experimenter do? [2] how did they do it (i.e., methodology)? [3] what did they find (i.e., results)? And [4] what did they conclude (i.e., conclusion)? Students are not expected to reproduce specific research questions and associated predictions from experiments not covered in lecture.

In order to prepare for tests students are encouraged to attend lecture and keep up with textbook readings.

Information presented via guest speakers, video or audio format will be testable on the term tests and final exam. Due to copyright issues, it may not be possible to post videos/audio recordings presented in class on Avenue to Learn. If you miss a class, please ask a fellow classmate for lecture notes.

The final exam will be 2.5 hours in duration and cumulative, covering questions from all chapters, lecture notes, guest speakers, and audio/video presentations from throughout the semester.
In this course, we use *Avenue to Learn (Avenue)*. Students should be aware, when they access the electronic components of this course, private information such as first and last names, usernames for the McMaster e-mail accounts, and program affiliation *may* become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure, please discuss this with the course instructor.

### Course Policies

| Missed Tests & Quizzes | Please read this section carefully. This course does not have make-up tests or quizzes. If you miss a quiz you will receive a mark of zero for that quiz. We simply don’t have the person-power to create permutations associated with final grade calculations. To keep it simple, you have the option to miss one quiz without penalty (regardless of MSAF submission).

The percentage associated with each missed **midterm** will get added to your final exam (given that you have submitted a MSAF or have permission from your Associate Dean’s Office).

| McMaster Student Absence Form | If you are absent from the university for a minor medical reason, lasting fewer than 3 days, you may report your absence, **once per term**, without documentation, using the McMaster Student Absence Form (http://www.mcmaster.ca/msaf/). Absences for a longer duration or for other reasons must be reported to your Faculty/Program office, with documentation, and relief from term work may not necessarily be granted.

**Please read the new MSAF policy by clicking [here](http://www.mcmaster.ca/academicintegrity).**

**When using the MSAF, report your absence to msaf.2d03@gmail.com**

| Other Academic Matters | If you require a specific grade in this course, please make sure that you create a schedule for yourself that will allow for you to: (1) complete all readings and course requirements, (2) attend all class meetings, (3) create a realistic study schedule, and (4) visit the Instructor and/or TAs during office hours for additional help. If you are struggling with course material, ask for help early!

Your final course grade is calculated based on the course components listed on the first page. It is not possible to add bonus marks.

| Bonus Marks | Written work will be marked on grammar, clarity of writing, and organization, as well as content. More details about the assignment are posted on *Avenue*.

Your assignment must be properly referenced. You may choose any style for referencing depending on your familiarity. It is preferred that you select a citation style typically used in the sciences, social sciences, or medical sciences. Once you have selected a citation style, please continue to use that specific style throughout the assignment.

In this course, we will be using a web-based service (Turnitin.com) to reveal plagiarism. Students will be expected to submit their work electronically to Turnitin.com so that it can be checked for academic dishonesty. Students who do not wish to submit their work to Turnitin.com must still submit a copy to the instructor. No penalty will be assigned to a student who does not submit work to Turnitin.com. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, etc.). To see the Turnitin.com Policy, please go to: [http://www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity)

Students are encouraged to visit the Centre for Student Development to improve their writing skills (MUSC B107 at x:24711). For information about the Writing Clinic and the Centre’s other services, visit the Centre’s website: [http://studentsuccess.mcmaster.ca/academic-skills/writing-support-services.html](http://studentsuccess.mcmaster.ca/academic-skills/writing-support-services.html)
Penalties for Lateness

All written work must be submitted via the assignment dropbox on Avenue and in Microsoft® WORD, on the due date before midnight (12 AM). More details about assignment submission are posted on Avenue.

Do not submit assignments by email and do not slide them under the instructor’s door.

Late assignments will be penalized 5% a day (weekends will count as one day).

If you submit a MSAF for the assignment then you must complete the assignment within one week of the original due date.

Late penalties will not be waived unless your Faculty/Program Office advises the instructor that you have submitted to that office the appropriate documentation to support your inability to submit the work by the due date.

Plagiarism

Honesty and fairness are considered fundamental to the university's mission, and, as a result, all those who violate those principles are dealt with as if they were damaging the integrity of the university itself.

When students are suspected of cheating or a similar academic offence, they are typically surprised at how formally and seriously the matter is dealt with and how severe the consequences can be if it is determined that cheating did occur.

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at http://www.mcmaster.ca/academicintegrity

The following illustrates only three forms of academic dishonesty:
1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in-group work.
3. Copying or using unauthorized aids in tests and examinations.
Any claims of documents submitted to locations/persons apart from those indicated in this course syllabus will NOT be accepted.

You are also responsible for checking Avenue on a regular basis (on the morning of each class meeting at minimum) to ensure that you are up-to-date on important announcements related to this course.

McMaster University Student Centre (MUSC) Basement, Room B107, or telephone 905-525-9140 at x:28652
http://sas.mcmaster.ca/

At certain points in the course, it may make good sense to modify the schedule outlined. The instructor reserves the right to modify elements of the course and will notify students accordingly, both in class and on Avenue. Posted changes take precedence over this course outline. The University may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites daily during the term and to note any changes.

Assignments worth more than 10% of the final course grade that are assigned at the beginning of term and noted on the course outline can be due during the Assessment Ban period. Please refer to: http://www.mcmaster.ca/policy/Students-AcademicStudies/UGCourseMgmt.pdf
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<tr>
<th>Course Schedule</th>
<th>Topics &amp; Important Deadlines</th>
<th>Readings</th>
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| **Week of September 4\(^{th}\)** | Introduction to the Course  
The Science of Animal Behaviour | Chapter 1 |
| **Week of September 11\(^{th}\)** | The Science of Animal Behaviour  
Evolution & the Study of Animal Behaviour | Chapter 1  
Chapter 3 |
| **Week of September 18\(^{th}\)** | Methods for Studying Animal Behaviour | Chapter 2 |
| **Week of September 25\(^{th}\)** | Behavioural Genetics | Chapter 4 |
| **On October 2\(^{nd}\)** | Midterm Review (Conditional)  
Based on student questions posted on Avenue |  |
| **On October 3\(^{rd}\)** | **Test 1 (1:30 – 2:20PM)** |  |
| **On October 5\(^{th}\)** | **Animal Behaviour Speaker Series**  
*Why We Should All Love Bats* | In Class Lecture  
No readings required |
| **Week of October 9\(^{th}\)** | Fall Break |  |
| **On October 16\(^{th}\)** | **Assignment Workshop:** You’ve Got Questions, We’ve Got Answers (Conditional)  
Based on student questions posted on Avenue |  |
| **On October 17\(^{th}\) & 19\(^{th}\)** | Learning, Neuroethology, and Cognition | Chapter 7 |
| **Week of October 23\(^{rd}\)** | Mating Behaviour  
**Citizen Scientist Assignment due before midnight on October 29\(^{th}\)** | Chapter 12 |
| **Week of October 30\(^{th}\)** | Communication | Chapter 6 |
| **Week of November 6\(^{th}\)** | Foraging Behaviour | Chapter 8 |
| **Week of November 13\(^{th}\)** | Antipredator Behaviour | Chapter 9 |
| **On November 20\(^{th}\)** | Midterm Review (Conditional)  
Based on student questions posted on Avenue |  |
| **On November 21\(^{st}\)** | **Test 2 (1:30 – 2:20PM)** |  |
| **On November 23\(^{rd}\)** | **Animal Behaviour Speaker Series**  
*Why Zebra Don’t Get Ulcers: Stress and Health* | Online– No Class Today  
No readings required |
| **Week of November 27\(^{th}\)** | Mating Systems | Chapter 13 |
| **Week of December 4\(^{th}\)** | Parental Care | Chapter 14 |
### Online Quizzes
You must complete each quiz in ONE sitting and within one hour. That is, once a quiz is launched, you must answer all questions at one time and within one hour. You cannot exit the quiz then return to it at a later time.

<table>
<thead>
<tr>
<th>Quiz</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Quiz 1, 2, 3</td>
<td>Released on September 15th, September 22nd, September 29th</td>
</tr>
<tr>
<td>Quiz 4, 5</td>
<td>Released on October 20th, October 27th</td>
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<tr>
<td>Quiz 6, 7, 8</td>
<td>Released on November 3rd, November 10th, November 17th</td>
</tr>
<tr>
<td>Quiz 9, 10</td>
<td>December 1st, December 8th</td>
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### Dates
If you submit a MSAF, we do not have the capacity to create make-up quizzes. Best 9 quizzes will count out of 10 for your final course grade. Each quiz is released at 5PM on a Friday until 5PM the following Friday.