

PSY362H5S - Animal Cognition

Thursday 9:00am – 12:00pm

Room Location: CCT 2150 (Communication, Culture and Technology Building)

Contact Information

Dr. Loren Martin lj.martin@utoronto.ca Teaching Assistant: Erinn Acland erinn.acland@mail.utoronto.ca

Office Hours: Tuesday's 10:00 - 11:00 am, or by appointment (CCT building, room 4061)

Office Hours: TBA

Course Description

A comparative survey of cognitive processes in animals from an ecological and evolutionary perspective. The course will examine topics including perception, working and reference memory, simple associative and complex relational learning, and concept formation.

Exclusion: PSY362H1

Reading Material

TBA: All readings will be posted directly on the course website on a weekly basis

Course Evaluation

(Oct. 6) Mid-Term Test - 30% (Oct. 20) Mini-research proposal - 25% (Examination period) Final Exam - 45%

The mid-term test and final exam will be based on the material from the lectures and assigned journal articles. The mid-term test and the final exam will consist of multiple-choice questions, and shorter / longer questions. The shorter and longer questions will require students to recite information but also integrate knowledge analytically. The **final** exam WILL BE CUMULATIVE, i.e., the questions will ask you to consider material learned from the very beginning of the class albeit more weight will be given towards the second half of the course.

For the **mini-research proposal**, you will be required to come up with an original and empirically testable research project/set of experiments. You can use any animal species and propose any concept in the domain of animal cognition. The topic of choice may or may not be something that we discussed in class but should be approved either by the TA or instructor prior to fully committing. The 3-4 page proposal will include a brief literature review, hypotheses pertinent to your research idea, methods that you will use to test your research idea, predicted outcomes, potential pitfalls/limitations and a timeline of projected research milestones. See below (pg. 5) for detailed instructions regarding the mini-research proposal. The goal of this assignment is to allow you the opportunity to identify the approaches that researchers take to study animal cognition and how they draw meaning from their experimental findings.

The mini-research proposal will be submitted at the start of class on March 24th.

Normally, students will be required to submit their research assignments to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

Course Webpage

The website associated with this course is accessible via BlackBoard <u>http://portal.utoronto.ca</u>

You don't need to create a new login for Blackboard; it already knows who you are. You just need your UTORid and password. This is the same login that gets you onto the wireless network with your laptop, and the same one that you use to check your email. If you're confused about your UTORid or don't remember your password, go to: https://www.utorid.utoronto.ca/

In order to access course material, monitor course information, and view your grades you must log into Blackboard. If you have any general questions regarding Blackboard, please visit the following help site: http://www.portalinfo.utoronto.ca/students.htm

IMPORTANT COURSE POLICIES **PLEASE READ**

Missed Test Special Consideration Request Process

Students who miss a test due to circumstances beyond their control (e.g. illness or an accident) can request that the Department grant them special consideration. Students must present their case to the Department (NOT the Instructor) by submitting a request via the online Special Consideration Request form at: https://utmapp.utm.utoronto.ca/SpecialRequest.

Students are to submit original supporting documentation (e.g., medical certificates, accident reports, etc.) to the Psychology Academic Counselor or drop it in the drop box located outside the Psychology office, Deerfield Hall, 4th Floor. Students have up-to one week from the date of the missed test to submit request. Late submissions will NOT be considered without a letter of explanation specifying and documenting the reasons for the lateness.

Medical certificates or physician's notes must be completed by the Physician and MUST include the statement "This Student [name] was unable to write the test on [date(s)] for medical reasons". This documentation must show that the physician was consulted within one the day of the missed term test. A statement merely acknowledging a report of illness made by the student to the physician is NOT acceptable. For further information on this procedure please see: http://www.utm.utoronto.ca/psychology/undergraduate-studies/missed-testslate-submissions

If you missed your test/assignment deadline for a reason connected to your registered disability, please be advised that the department will accept documentation supplied by the UTM AccessAbility Resource Centre.

IMPORTANT: The Department of Psychology verifies the authenticity of medical certificates by contacting medical offices. Students are NOT to make any changes or alteration to completed medical certificates. Students who submit forged or altered documentation are subject to severe academic penalties.

If your request is approved by the department, the value of the test will I be redistributed to the final examination.

Extension of Time Special Consideration Request Process

Students who seek to be granted more time to complete their term work beyond the due date without penalty, owing to circumstances beyond their control (e.g., illness, or an accident), must do so by submitting a request directly to the Instructor for the period up to and including the last day of the term. The decision as to whether or not to apply a penalty for the specified period rests with the Instructor.

Students who seek to be granted more time to complete term work beyond the last day of the term must submit their request directly to the Department. This request covers the period following the last day of classes and ends the last day of the exam period. This is done by submitting a request via the online Special Consideration Request form at https://utmapp.utm.utoronto.ca/SpecialRequest.

You are advised to seek advising by the departmental Undergraduate Counsellor prior to the deadline.

Original supporting documentation (e.g., medical certificates, accident reports, etc.) must be submitted to the Psychology Academic Counselor or dropped off in the drop box located outside the Psychology office Deerfield Hall, 4th Floor. Students are expected to submit requests to the Department before the last day of the term, unless demonstrably serious reasons prevent them from doing so. In the event of an illness, medical certificates or doctor's notes must confirm that student was ill on the due date of the assignment (for a one-day extension). For a longer extension, documentation must specify the full duration during which academic work could not be carried out.

For extensions of time beyond the examination period you must submit a petition through the Office of the Registrar. <u>http://www.utm.utoronto.ca/registrar/current-students/petitions</u>

Penalties for Lateness

A penalty of 10% per calendar day (i.e., including week-ends and holidays, during which students are not able to submit term work) up to and including the last day of classes, will be applied by the Instructor. After the last day of classes, the penalty of 10% per calendar day will be applied by the Undergraduate Counsellor on behalf of the Department. No penalty will be assigned if request for special consideration, described above, was successful.

Academic Guidelines

It is your responsibility to ensure that you have met all prerequisites listed in the UTM Calendar for this course. If you lack any prerequisites you WILL BE REMOVED from the course up until the last day to add a course. Further information about academic regulations, course withdrawal dates and credits can be found in the University of Toronto Mississauga Calendar at: <u>http://www.erin.utoronto.ca/regcal/.</u>

You are encouraged to read this material. If you run into trouble and need advice about studying, preparing for exams, note taking or time management, free workshops and advice are available from the Robert Gillespie Academic Skills Centre at 905-828-5406.

AccessAbility Services

Students requiring academic accommodations for learning, physical, sensory, or mental health disabilities or medical conditions should contact the AccessAbility Office (2037B Davis Building), 905-828-3847. http://www.utm.utoronto.ca/accessability/

Academic Honesty and 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. The University of Toronto treats cases of cheating and plagiarism very seriously. Please take the time to review the Academic Integrity website: http://www.utm.utoronto.ca/academic-integrity/students.

- Common trends in academic offences:
- Plagiarizing/concocted references
- Collaboration/unauthorized assistance
- Purchasing work
- Recycling work "double-dipping"
- Resubmitting of altered work for re-grading

- Electronic devices (cell phones) or any unauthorized aids
- Altering medical certificates and UofT documents

From the Code of Behaviour on Academic Matters: "It shall be an offence for a student to knowingly: represent as one's own any idea or expression of an idea or work of another in any academic examination or term test or in connection with any other form of academic work, i.e. to commit plagiarism. Wherever in the Code an offence is described as depending on "knowing", the offence shall likewise be deemed to have been committed if the person ought reasonably to have known." All students must refer to this website to obtain information on what constitutes plagiarism. http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize.

If questions arise after reading the material on the website, consult your instructor. **Plagiarism will not be tolerated**.

Equity Statement

The University of Toronto is committed to equity and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect. As a course instructor, I will neither condone nor tolerate behaviour that undermines the dignity or self-esteem of any individual in this course and wish to be alerted to any attempt to create an intimidating or hostile environment. It is our collective responsibility to create a space that is inclusive and welcomes discussion. Discrimination, harassment and hate speech will not be tolerated. If you have any questions, comments, or concerns you may contact the UTM Equity and Diversity officer at edo.utm@utoronto.ca or the University of Toronto Mississauga Students' Union Vice President Equity at <u>vpequity@utmsu.ca</u>.

Academic Rights

You, as a student at UTM, have the right to:

- Receive a syllabus by the first day of class.
- Rely upon a syllabus once a course is started. An instructor may only change marks' assignments by following the University Assessment and Grading Practices Policy provision 1.3.
- Refuse to use turnitin.com (you must be offered an alternative form of submission).
- Have access to your instructor for consultation during a course or follow up with the department chair if the instructor is unavailable.
- Ask the person who marked your term work for a re-evaluation if you feel it was not fairly graded. You have up to one month from the date of return of the item to inquire about the mark. If you are not satisfied with a re-evaluation, you may appeal to the instructor in charge of the course if the instructor did not mark the work. If your work is remarked, you must accept the resulting mark. You may only appeal a mark beyond the instructor if the term work was worth at least 20% of the course mark.
- Receive at least one significant mark (15% for H courses, 25% for Y courses) before the last day you can drop a course for H courses, and the last day of classes in the first week of January for Y courses taught in the Fall/Winter terms.
- Submit handwritten essays so long as they are neatly written.
- Have no assignment worth 100% of your final grade.
- Not have a term test worth 25% or more in the last two weeks of class.
- Retain intellectual property rights to your research.
- Receive all your assignments once graded.
- View your final exams. To see a final exam, you must submit an online Exam Reproduction Request within 6 months of the exam. There is a small non-refundable fee.
- Privacy of your final grades.
- Arrange for representation from Downtown Legal Services (DLS), a representative from the UTM Students' Union (UTMSU), and/or other forms of support if you are charged with an academic offence.

Course Outline

Date	Торіс
January 7	Lecture 1: Introduction to animal behaviour and cognition
January 14	Lecture 2: Other ways of seeing the world
January 21	Lecture 3: Concept Formation
January 28	Lecture 4: Time and Number
February 4	Lecture 5: Cause and Effect
February 11	Lecture 6: Reasoning
February 18	Reading Week
February 25	Term Test
March 3	Lecture 7: Navigation
March 10	Lecture 8: Social cognition, social learning, imitation
March 17	Lecture 9: Conditioning, memory and remembering
March 24	Lecture 10: Animal communication in the wild Mini-research proposal due by 5 p.m.
March 31	Lecture 11: Language and conclusions

Final exam: It is the student's responsibility to be available for the entire exam period.

Psychology 362 – Mini-research proposal

The mini-research proposal is a grant-style assignment designed to promote independent thinking and allows you (the researcher) to investigate any research idea in the domain of animal cognition. Researchers are endlessly applying for grant funding to support their research programs; it is now your job to play to role of the independent investigator and come up with an original and testable hypothesis.

The proposed research study should be a project that could realistically be completed in one year, but you may wish to highlight future directions should the initial year of funding yield promising results. The proposed research must be an original idea; you will be graded on originality, understanding of the relevant literature and the ability to address your hypotheses using your chosen methods. In this assignment there are no right or wrong ideas, but you will be graded relative to everyone else in the class. This means that the more original and cogent your idea the better grade you will receive. If your idea is clear and the methods that you describe to test this idea are clear the better grade you will receive. You have a maximum of 4 single spaced pages to present your proposal; this includes graphs and tables. The references/works cited page does not count against your page total and please include references that originate from scholarly works (including journal articles and books); do not reference Wikipedia or random Internet blogs. A good source for searching scholarly journal articles is <u>www.pubmed.com</u> or <u>www.search.proquest.com</u>.

You will devise a research plan (set of experiments) to test your hypotheses. Describe the proposed research using the following headings:

Literature Pertinent to the Proposal: This should be a summary of the current state of knowledge relevant to your proposal.

Hypotheses/research questions: State the testable hypotheses clearly and concisely. You can also subdivide this section into specific aims and/or highlight objectives relevant to your proposal.

Methods: Give essential details of the methods that you would use to conduct your experimental plan. Describe the data to be collected and the method of collection.

Originality: State how the project will advance knowledge if it is completed as planned.

Limitations: Describe the limitations of your proposed studies and should your proposed methods not yield the expected results, what alternative approaches/methods could you use to address the same research question.

Budget: In planning a research study you will often have to justify how the money awarded from the funding agency is to be spent. In this section you will outline the necessary expenses for your research project and these could include student salaries, equipment, animal purchasing/housing costs etc. Your budget should not exceed \$50,000 and will be for one year.