

**COURSE OUTLINE:**  
**EVOLUTION & ADAPTATION (EEB214)**  
*Ecological & Evolutionary Biology, University of Toronto*

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**Course Coordinator:** Jennifer Carpenter (Rm. 3047, Earth Sciences Centre)  
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**Teaching Assistants:** Joanna Bundus ([j.bundus@mail.utoronto.ca](mailto:j.bundus@mail.utoronto.ca))

**Class Schedule:**                    **Lectures:** 13:00-14:00 Tuesday  
   13:00-15:00 Thursday

**Location:** Tuesday, UC 179  
                  Thursday, UC 179

**Office hours:** Tuesday 14:00-15:00

**Course Website:**                    Blackboard ([portal.utoronto.ca](http://portal.utoronto.ca)). It is the student's responsibility to keep up to date with course material and announcements on Blackboard.

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**Objectives:**

It been called the most important idea in human history, the idea that that human life, indeed all life, can be explained through evolution by natural selection. In this one-term lecture course you will be introduced to the main characters behind the theory of evolution by natural selection, and to those who later tested it. And you will be given the opportunity to understand the scientific basis and principles behind the theory of evolution and reflect on how it affects you and your society.

We will cover:

- i) The historical development of evolutionary theory by Darwin & his predecessors;
- ii) The evidence presented to support the theory of natural selection;
- iii) Adaptive strategies that have evolved in animals to deal with their life goals;
- iv) How does your species evolve?

**Course Approach:**

The course is comprised of three general components: 1) Darwin's personal story and the four fields/approaches from which he primarily drew evidence to support his ideas: paleontology, developmental biology, biogeography, and selection experiments; 2) What we have learned from the field of genetics and evolutionary biology since Darwin wrote 'On the Origin of Species' that tell us more about evolution; and 3) How evolutionary theory can help us explain the world around us, and the way we interact with it. The material is presented in lecture format two days a week for one hour, and then the third hour is given over to films and discussions. While the films and discussions are not mandatory, it is strongly recommended that students attend as many as possible as they add considerably to the ideas presented in class. Many examples are shown here that will help students remember the material covered in the lectures.

<b>Course Evaluation:</b>		
<b>Component</b>	<b>Value</b>	<b>Due Date</b>
<b>Tests:</b> Midterm (multiple choice) Final Exam (short answer)	35% 65%	TBA (In Class) Final exam week

### **Expectations:**

#### *Attendance and Participation*

You and your fellow students will get much more from this course if you attend class regularly, as many of the concepts and examples are often referred to in the exams. While the readings I set will help reinforce the material covered in lectures, it is no substitute for the lecture material itself as this information is constructed uniquely to the course. Exams cover the lecture material and the readings, while the videos and discussions will help illustrate the concepts more clearly.

#### *Email and other Communication*

Each email message must include in the subject line the course identifier and a concise and clear statement of purpose, for example 'EEB214: I have a conflict with next test'. I will try to answer course-related emails within 2 days business days. If you do not receive a response within that period please resubmit your question(s). If a number of students ask the same question I will try to address the issue at the beginning of the next class.

If a question cannot be easily answered by email I suggest you arrange to see either me after class, or with the TA. In addition, you may want to ask your classmates for help by using the Discussion forum on the Blackboard site. Please note that some servers (such as hotmail) can be unreliable in both sending and receiving messages. I encourage you to send myself or the TA's email using your UTORmail email account (see [www.utorid.utoronto.ca](http://www.utorid.utoronto.ca)). You can easily forward mail received at your UTORmail account to the email account that you use regularly.

#### *Assignments, Tests and Marking*

Missed exams must be supported with a letter of illness, compassionate grounds, etc. These must be provided to me within a week of the missed exam. A mark of 0% will be given for any unexcused test/exam absences.

If you believe that your mark on a test or assignment should be reconsidered you must submit the item for re-marking within 7 days of its return. You are also required to submit a written statement explaining why you feel the mark should be adjusted. Your final mark after remarking may be higher or lower than the original mark. An item will only be accepted for re-marking once.

#### *Plagiarism*

Plagiarism is a serious academic offence and can be avoided through sufficient understanding about the nature of the offence, good planning to ensure ample time to meet course deadlines with correct referencing, and a strong ethical sense that avoids stealing others' ideas and work. The University of Toronto has clear guidelines concerning plagiarism (i.e. what it is; the penalties for falling into it; and how it can be avoided). The University of Toronto websites with information on plagiarism include <http://www.writing.utoronto.ca/advice/using-sources/how-notto->

plagiarize & <http://www.utoronto.ca/academicintegrity/resourcesforstudents.html>.

Academic integrity and the code of ethics for academic behaviour at the University of Toronto can be found at: <http://www.utoronto.ca/academicintegrity/academicoffenses.html>.

Please familiarize yourself with these expectations and understand that actions as laid out by the code must be taken with respect to any offense committed in the context of this course.

If you have questions about what constitutes cheating or plagiarism, clear them up with me before you engage.

### **Course Website:**

Like many other courses, EEB214S uses Blackboard for its course website. To access the EEB214S website, or any other Blackboard-based course website, go to the U of T portal login page at <http://portal.utoronto.ca> and log in using your UTORid and password. Once you have logged in to the portal using your UTORid and password, look for the My Courses module, where you'll find the link to the EEB214S course website along with the link to all your other Blackboard-based courses. The Blackboard site will contain important information, documents, and announcements regarding the course. Please check it regularly.