



Physical & Environmental Sciences  
**UNIVERSITY OF TORONTO**  
SCARBOROUGH

**Applied Conservation Biology**  
**EES3000H**  
**Fall 2021**

**Instructor**

Nicholas E. Mandrak, Ph.D.

Office Hours: By appointment, email me.

E-mail: [nicholas.mandrak@utoronto.ca](mailto:nicholas.mandrak@utoronto.ca)

Note: I will only respond to course-related e-mails sent from an official University of Toronto e-mail address.

**Lectures:** Mondays 2-5, online

**Zoom Link for the Semester:**

<https://utoronto.zoom.us/j/87123502037>

Meeting ID: 871 2350 2037

Passcode: 218930

**Teaching Assistant**

Menilek Beyene [menilek.beyene@mail.utoronto.ca](mailto:menilek.beyene@mail.utoronto.ca)

**Prerequisite:** BIOC63H3 (Conservation Biology) or equivalent.

**Course Description**

Canada has a complex conservation landscape. Through lectures and interactive discussions with leading Canadian conservation practitioners, this course will examine how conservation theory is put into practice in Canada from our international obligations to federal and provincial legislation and policies.

**Course Objectives**

By the end of this course, you will have the information required:

- To understand the role of science in government.
- To understand how conservation theory is put into practice to protect terrestrial and aquatic biodiversity.
- To understand the science behind COSEWIC and SARA.

**Required Readings and Lecture Notes**

Chris Turner. 2013. Chapter 3. *The War on Science*. Greystone Books. Available on Quercus.

Electronic versions of required readings and lecture notes will be placed on the Quercus course website before, or immediately after, the lecture. In the case of primary literature, a link to the library electronic version will be provided. Asynchronous recordings of the

lectures will be provided after each lecture. Posting of the presentations of guest lectures will be at the discretion of the guest. **It is highly recommended that you take additional notes during lectures and tutorials. All assigned readings and material covered during lectures and tutorials will form the subject matter for the examinations.**

### **Evaluation**

4 Primer Assignments (60%) - **Due 1 week after assigned. Submitted via Quercus**  
Final Assignment (20%) - **Due 1 week after assigned. Submitted via Quercus**  
Independent Assignment (10%) - **Due December 6, 2021**  
Participation (10%)

### **Participation**

Student participation will be evaluated based on in-class participation (oral or via chat) and on weekly discussion board.

### **Attendance**

Students are REQUIRED to VIEW all activities outlined in the schedule below. To maximum the learning experience, students are STRONGLY encouraged to attend and participate in synchronous activities in real time.

### **Verification of Illness**

During the COVID-19 pandemic, the University is temporarily suspending the need for a doctor's note or a verification of illness for absences from academic participation. Students should use the Absence Declaration tool or ACORN to declare an absence if they require consideration for missed academic work. Students are responsible for contacting instructors to request the academic consideration they are seeking. Students should record each day of their absence as soon as it begins, up until the day before they return to classes or other academic activities.

### **Emergency Planning**

Students are advised to consult the university's preparedness site (<http://www.preparedness.utoronto.ca>) for information and regular updates regarding procedures relating to emergency planning.

### **Accessibility Needs**

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact The UTSC Accessibility Services as soon as possible: <http://www.utsc.utoronto.ca/~ability/>.

We also suggest you also refer to the following University of Toronto Scarborough Library link: <http://utsc.library.utoronto.ca/services-persons-disabilities>

### **Plagiarism**

University of Toronto code of Behaviour on Academic Matters states that "it shall be an offense for a student knowingly: to 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."

For accepted methods of standard documentation formats, including electronic citation of internet sources please see the UofT writing website at:

<http://www.writing.utoronto.ca/advice/using-sources/documentation>

The full Code of Behaviour regulations could be found from consulting

<http://www.sgs.utoronto.ca/facultyandstaff/Pages/Academic-Integrity.aspx>

### Writing and English Language

As well as the faculty writing support, please see English Language and writing support at University of Toronto: <http://www.sgs.utoronto.ca/currentstudents/Pages/English-Language-and-Writing-Support.aspx>

### Schedule

| Date    | 2:00-3:00  | 3:00-5:00      | Assignments          |
|---------|--|----------------|----------------------|
| Sept 13 | *Assignment TBC by 3:00                                  | **Introduction |                      |
| Sept 20 | **The Role of Science in Government - NEM                |                |                      |
| Sept 27 | **COSEWIC Designatable Unit Primer - NEM                 |                |                      |
| Oct 4   | **COSEWIC Spatial Criteria Primer - NEM                  |                | **+Primer Assignment |
| Oct 11  | Thanksgiving   |                |                      |
| Oct 18  | **Detection Probability Primer - Alan Dextrase           |                | **+Primer Assignment |
| Oct 25  | **Conservation Genetics Primer - Thais Bernos, UT        |                |                      |
| Nov 1   | **PVA Primer - Peter Molnar, UTSC                        |                | **+Primer Assignment |
| Nov 8   | **Allowable Harm Primer - Marten Koops, DFO              |                |                      |
| Nov 15  | **Critical Habitat Primer - Andrew Drake, DFO            |                | **+Primer Assignment |
| Nov 22  | **Invasion Biology Primer - Sarah Bailey, DFO            |                |                      |
| Nov 29  | **Climate Change and SAR - Ilona Naujokaitis-Lewis, ECCC |                |                      |
| Dec 6   | **Invasive Species Risk Assessment Primer - NEM          |                | **+Final Assignment  |

Note: 10 min breaks will be taken approximately every hour

\* Asynchronous

\*\* Synchronous

+ Primer assignment due one week later @2:00 pm