Course Objectives:

Welcome! In this course you will gain an overview of animal welfare and the science associated with describing the well-being of nonhuman animals. Students will drive much of the course content—selecting articles to discuss, leading group discussions, and importantly, choosing a species to represent throughout the semester. Through this experience, you will learn how to critically evaluate scientific papers, juggle multidimensional and often conflicting lines of evidence, and communicate your passion for animals in an effective way. For projects, students will have the option to develop a project proposal, pursue an existing project, or conduct a thorough literature review. Engaged participation, with a focus on listening, reflection, and providing constructive responses to fellow students is essential.

Required texts:

A selection of chapters and articles will be listed on NYU Classes.

Grading and Schedule Overview:

10% – Participation
20% – Data Collection (due throughout semester; 2 components totalling 1h each)
15% – Journal Club Leader
<table>
<thead>
<tr>
<th>Session</th>
<th>Date</th>
<th>Topic</th>
<th>Due (Beyond Readings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9/7</td>
<td>Intro to Course &amp; Species Diversity</td>
<td>(just readings)</td>
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<tr>
<td>2</td>
<td>9/14</td>
<td>History of AWS and Communicating Science</td>
<td>(just readings)</td>
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<tr>
<td>3</td>
<td>9/21</td>
<td>Representing Animals/Multispecies Listening</td>
<td>Species Selection, JC Topic Selection, &amp; Data Collection</td>
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<tr>
<td>4</td>
<td>9/28</td>
<td>Motivation &amp; Preferences + Journal Club</td>
<td>2 or more JC options</td>
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<tr>
<td>5</td>
<td>10/5</td>
<td>Environmental Enrichment + Journal Club</td>
<td>Lead Journal Club (or just readings)</td>
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<tr>
<td>6</td>
<td>10/12</td>
<td>Monday Schedule, no class</td>
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<tr>
<td>7</td>
<td>10/19</td>
<td>Study Ideas</td>
<td>Mini-Pres: Study Ideas (&amp; DC)</td>
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<tr>
<td>8</td>
<td>10/26</td>
<td>Naturalness + Journal Club</td>
<td>Lead Journal Club (or just readings)</td>
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<tr>
<td>9</td>
<td>11/2</td>
<td>Assessment of Welfare + Journal Club</td>
<td>Lead Journal Club (or just readings)</td>
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<tr>
<td>10</td>
<td>11/9</td>
<td>Jennifer Jacquet (marine life)</td>
<td>(just readings)</td>
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<tr>
<td>11</td>
<td>11/16</td>
<td>Joanna Makowska (laboratory animals)</td>
<td>(just readings)</td>
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<tr>
<td>12</td>
<td>11/23</td>
<td>Case Studies</td>
<td>Mini-Pres: Case Studies (&amp; DC)</td>
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<tr>
<td>13</td>
<td>11/30</td>
<td>Agency &amp; Challenge + Journal Club</td>
<td>Lead Journal Club (or just readings)</td>
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<tr>
<td>14</td>
<td>12/7</td>
<td>Social Conditions + Journal Club</td>
<td>Lead Journal Club (or just readings)</td>
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<tr>
<td>15</td>
<td>12/14</td>
<td>Final Projects</td>
<td>Mini-Pres: Final Project (&amp; DC)</td>
</tr>
<tr>
<td>16</td>
<td>12/21</td>
<td>Finals period, no class</td>
<td>Final Paper</td>
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Assignments:

**Participation (10% due throughout semester)**

Students are expected to have closely read all the assigned readings before class so that they come prepared for engaged participation. **At least once per semester**, you should volunteer to start the class off by summarizing the general reading and/or pose issues, questions, or complications for further discussion. Readings are TBD, will be posted on Brightspace sometime during the week before the class in which they are due, and are subject to modification throughout the semester.

**Data Collection (20% due throughout semester)**

In this course we will engage with two types of preliminary data collection.

- **Observational data (10% 1h total)** will be collected throughout the semester by observing your species, noting their behaviors and summarizing your notes. Ideally you will observe free-living individuals under optimal conditions, ie, low levels of human control, stress, or disturbance. These parameters will not always (never) be possible to achieve, so please be sure to note and consider deviations. Source material for your observations can include live observations, video recordings of live observations, postings to social media, or any other footage you are able to locate. If you do engage with sources from other individuals, please credit their work and turn off/ignore any sound/notes they may have added to the recording.

- **Perspective-taking data (10% 1h total)** will be collected throughout the semester by spending time immersing yourself in imaging a day-in-the-life of your species. As you learn more about your species and the issues at stake, your imaginings will and should change, so to avoid becoming fixated on one perspective, please engage in this activity for brief periods of time only (10 min max) throughout the semester. Be receptive to revising, updating, and unlearning your initial ideas as you slowly gather more information.

**Journal Club Leader (15% due once during the semester)**

To complement the background readings for each general Animal Welfare Science topic (sessions 4, 5, 7, 8, 12, 13), we will also read a recent empirical paper related to the topic. Once per semester you will be responsible for selecting that paper and leading the discussion. The
article you select should be one of the best or most important studies related to that week’s topic (not necessarily a paper on your species). It should be recently published (last 3 years).

While your selection itself will not be graded per se, it is one of the most important things you will do in the course and it is time-consuming to find good papers. The papers you select will be read and discussed by the entire class—it will determine our reading list! We will cover what makes for a good paper selection in the communicating science seminar (Session 2).

Pay special attention to the methods section and critically evaluate how the authors have operationalized what they sought to study. Are they measuring what they say they are measuring? What could they have done better to get at their research question? Do you think they found what they claim to have found? What could they have done to strengthen their conclusions? What are alternative implications for their findings? How does what they found relate to previous work in the field? While all students will have read the paper, you will be the expert and in charge of guiding them through the implications of the article.

To guide the discussion you will prepare a 2-page hand-out. The first page should cover the study itself. The second page should discuss your ideas for a new empirical study to improve and/or extend the original. Both aspects will be shared and discussed with the class.

**Mini-Presentations (30% due throughout semester)**

Throughout the course you will prepare three mini-presentations (approximately 10 min each).

**Study Idea (10% due 10/19).** Based on the work you have completed thus far, you will present a preliminary study idea for empirical data collection on your species. The study should fill in a gap in our knowledge or understanding of the data and adhere to ethical principles of engaging with nonhuman research participants. Your study idea should be grounded in approximately 1h of data collection (30 min of observational data and 30 min of perspective-taking) and 3 scientific articles you found on your species (consider: most cited, most relevant, most recent, empirical, review).

**Case Studies (10% due 11/23).** Briefly evaluate three animal advocacy groups or campaigns relevant to your species and add a new contribution by proposing a study to address an area of research need or an area of neglect, synthesizing existing material in a new way, or building a new collection of evidence/argumentation to support the group’s protection efforts. This novel contribution should be grounded in additional data collection (cumulatively now ~45 min for each observational and perspective-taking) and more 3 sources in addition to the ones you have already collected (more scientific articles on your species, articles from class, and/or one non-scientific source; at least 6 in total).

**Final Project Presentation (10% due 12/14).** A brief overview of your final project (see below).
Final Project Paper (25% due 12/23).
Submit a 7,000-word double-spaced paper providing a novel scholastic contribution on your species. The contribution can take the form of an empirical study, an empirical study proposal, a systematic review proposal, or a review-type article. The topic can address any welfare or protection issues facing your species. You should include:

- An abstract (approximately 300 words)
- References to at least 7 scientific articles, with at least 3 being on your species (most cited, most recent, most relevant) and the rest being from class or related searches
- Reference to at least 1 non-scientific source (literature, video, film, social media, anecdote)
- 1h of observational data (as an appendix and referenced at least once in the main text)
- 1h of perspective-taking data (included in an appendix and referenced at least once in the main text)
- An ethics statement and reference(s)

Basic Expectations:

Attendance and respect—including listening, punctuality, attention, and engagement—are vital!

Absences & Late Assignments: If something comes up and you are unable to attend class and/or need to turn in assignments late—that is, you hand in an assignment after the class in which it was due—first, let me know as soon as possible! I strongly encourage you to do whatever you can to make sure that you keep on-top of your work and are present during class. If there are extenuating circumstances, please bring in documentation otherwise your grade will be docked for lateness/missed classes. At my discretion, in exceptional cases, you may be allowed to complete a bonus assignment to make-up lost points.

Plagiarism: often results in failure in the class and referral to an academic dean. Plagiarism includes: copying sentences or fragments from any source without quotes or references; not citing every source used in your papers; citing internet information without proper citation; presenting someone else’s work as your own; or copying verbatim from any source. You are subject to CAS’s guidelines on plagiarism:

https://cas.nyu.edu/content/nyu-as/cas/academic-integrity.html

Disability disclosure statement: academic accommodations are available to any student with a chronic, psychological, visual, mobility, learning disability, or who is deaf or hard of hearing. Students should please register with the Moses Center for Students with Disabilities at 212-998-4980.
NYU's Henry and Lucy Moses Center for Students with Disabilities
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Voice/TTY Fax: 212-995-4114
Web site: http://www.nyu.edu/csd