ANTH 505: Ecophysiology
Department of Anthropology and Archaeology

Course Outline, Fall 2021

PREREQUISITE: ANTH 311

CLASSROOM LOCATION: room TI STUDIO C and Web based (Zoom)

CLASS DAYS & TIMES: in-person, Wednesdays 2pm – 4:45pm
synchronous online lecture, on November 17th

INSTRUCTOR: Kathleen Reinhardt
Office: ES 602 E
E-mail: kathleen.reinhardt@ucalgary.ca       Tel: (403) 220-6688
Office Hours: Wed 11:00 – 13:00, or via Zoom appointment

INSTRUCTOR EMAIL POLICY:
Please note that all course communications must occur through your @ucalgary email, and I will respond to emails sent via student’s @ucalgary emails within 48 hours. Please include the course title (ANTH451) in the subject heading, and your full name in the email.

COURSE DESCRIPTION:
Primates occupy a range of habitat on Earth, and not all of their environments are hospitable or even tolerable without significant physiological adaptations and behavioural adjustments. In this course, we will learn about a variety of adaptations that have allowed primates to occupy physiologically challenging environments. By comparing and contrasting the different ways primate species and populations overcome stressors in their biotic and abiotic environment, we will both broaden and deepen our understanding of primate ecophysiology. Independently and through teamwork, you will apply your knowledge of animal physiology and primate populations learned in this course and prior courses to interpret and critique current literature, synthesize information from multiple sources, collaborate with global experts, and construct new hypotheses. You will develop critical skills in oral and written communication to effectively deliver information to other scientists and the public at large.

For online lectures:
There will be 1 synchronous Zoom sessions throughout the term (November 03), as indicated in the course schedule), and will be recorded. Online lecture will be via Desire2Learn (D2L) and Zoom to accommodate guest lectures from experts in the field.

To best succeed in the course, students are encouraged to participate in the asynchronous learning tasks using the D2L learning environment and synchronous Zoom sessions. When unable to participate live due to unforeseen circumstances, inform the instructor in advance and propose and implement an alternative participation activity (e.g., watch the recordings, submit a brief reflection, and actively contribute to the follow-up online discussion).

*COURSE LEARNING OUTCOMES
At the end of this course, students should be able to:
1. Identify and describe adaptations that have allowed primates to occupy some of the most physiologically challenging environments on the planet.
2. Apply knowledge of animal anatomy and physiology to critically interpret current literature, synthesize information from multiple sources, and construct new hypotheses.
3. Develop critical thinking in regards to research on topics related to ecophysiology.
4. Apply standard practices in scientific writing, including proper attribution of cited works.
5. Develop skills in oral and written communication to effectively deliver information to other scientists and the public at large.

*LEARNING RESOURCES*
- There is no required textbook for this course.
- Weekly readings, including links to peer-reviewed journal articles, are posted on D2L

Supplemental optional readings will also be offered. These provide further context for course materials covered in lecture and may be helpful in preparing final papers. (see d2L.ucalgary.ca)

*LEARNING TECHNOLOGIES AND REQUIREMENTS*
There is a D2L site for this course which contains required readings and other relevant class resources and materials.

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Broadband internet connection.

Most current laptops will have a built-in webcam, speaker and microphone.
## CLASS SCHEDULE

* indicate online lectures  
Grey font = no class

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<thead>
<tr>
<th>Important Dates</th>
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<tbody>
<tr>
<td>September 08 – First day of ANTH 505</td>
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<tr>
<td>October 06 – Term paper Outline due</td>
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<td>November 03—Term paper draft due</td>
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<td>November 07 to 13 – Term Break</td>
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<td>November 17 - Online</td>
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<td>November 24 -Peer-review due</td>
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<td>December 01 – Poster Presentations</td>
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<td>December 08—Last day of ANTH505</td>
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<td>December 15 – Final paper due /Response to reviewer</td>
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<td>(Topics subject to change)</td>
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<tr>
<td>Sep 08 Introduction to the Course</td>
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<td>What is Ecophysiology</td>
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<td>Sept 15 Oxygen, metabolism and water</td>
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<tr>
<td>Hypometabolism</td>
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<td>Sept 22 Temperature regulation</td>
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<td>Sep 29 Human Energetics</td>
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<td>Guest Lecture: Dr. Vivek Venkataraman</td>
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<td>Oct 06 Respiration and circulation</td>
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<td><strong>Term paper Outline due</strong></td>
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<td>Oct 13 Sleep and circadian rhythms</td>
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<td><em>Journal Club</em></td>
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<td>Oct 20 Multistressors</td>
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<tr>
<td><em>Journal Club</em></td>
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<td>Oct 27 High altitude adaptations</td>
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<tr>
<td><em>Journal Club</em></td>
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<td><strong>Nov 03</strong> Behavioural coping strategies</td>
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<td>How to present your work</td>
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<tr>
<td><strong>Term paper draft due</strong></td>
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<td>Nov 10 Term Break</td>
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<td><strong>Nov 17</strong> Hormones and chemical control</td>
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<tr>
<td>Guest Lecture: Dr. Alicia Rich</td>
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<td><em>Journal Club</em></td>
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Nov 24  Conservation Physiology
Responding to reviewer feedback
Peer-review due

Dec 01  fieldwork and data management
Poster Presentations

Dec 08  Term paper workshops
Journal Club

Dec 15  Final term paper and review responses due

*EXAMINATIONS*
There is no final examination.

*ASSESSMENT COMPONENTS*

**Journal Clubs (30%)**: Based on assigned readings, students will each lead one journal club session among your peers in class. Lead journal club assignments will make up 25% of this component, and responses and engagement to the journal club sessions lead by peers will account for the remaining 5%.

Aligned Course Learning Outcomes: 1, 3, 5

**Participation (5%)**: This is a weekly exercise based on each lecture that will add up for a cumulative 5% of the grade. By the end of each lecture week, students should submit a document with their full name and the date that includes: (1) One new thing they learned in the week’s lecture; (2) One question they have on the week’s topic or anything they would like clarified.

Date: weekly, by Friday 11:59pm (via D2L)

Aligned Course Learning Outcomes: 3, 5

**Research Poster (25%)**: Students will create a research poster of a scientific research article, designed for presenting at a conference meeting. Posters will be submitted virtually before 2:00pm on the day of presentations. Students will give a 2-minute ‘speed talk’, to present their research poster, similar to many poster sessions at international conference meetings.

Date: Dec 01

Aligned Course Learning Outcomes: 1, 2, 3, 5
**Term Paper (40%)**: A written review paper on a topic decided in consultation with the instructor, pertaining to the course. Grading components of the paper will include: Outline & annotated bibliography (10%), feedback given to peer (5%), response to feedback from a peer (5%) and the final paper (20%).

Students will submit a paper outline, a midterm draft, provide peer-review feedback on midterm drafts, and submit their final paper along with responses to feedback. This will provide students with the skillset to participate in peer-review for scientific writing, developing and articulating constructive criticism as well as how to respond to reviews for publication to scientific journals.

Outlines due: October 06
Draft due: Nov 03
Peer-review feedback due: November 24
Response to peer feedback and Final Paper due: December 15

Aligned Course Learning Outcomes: 2, 3, 4, 5

**MISSED OR LATE ASSIGNMENTS**
Classroom materials missed due to absenteeism are the sole responsibility of the student. If students miss a required component of the course, they must contact the instructor in writing within 24 hours to discuss options to submit and/or make-up for that component.

Assignments submitted after the deadline will have 5% of their mark deducted for each day late.
**Reappraisal of Graded Term Work**: [http://www.ucalgary.ca/pubs/calendar/current/i-2.html](http://www.ucalgary.ca/pubs/calendar/current/i-2.html)

**Reappraisal of Final Grade**: [http://www.ucalgary.ca/pubs/calendar/current/i-3.html](http://www.ucalgary.ca/pubs/calendar/current/i-3.html)

Students may be asked to provide supporting documentation for an exemption/special request. This may include, but is not limited to, a prolonged absence from a course where participation is required, a missed course assessment, a deferred examination, or an appeal. Students are encouraged to submit documentation that will support their situation. Supporting documentation may be dependent on the reason noted in their personal statement/explanation provided to explain their situation. This could be medical certificate/documentation, references, police reports, invitation letter, or a statutory declaration, etc. The decision to provide supporting documentation that best suits the situation is at the discretion of the student. Students cannot be required to provide specific supporting documentation, such as a medical note.

Students can make a Statutory Declaration as their supporting documentation (available at ucalgary.ca/registrar). This requires students to make a declaration in the presence of a Commissioner for Oaths. It demonstrates the importance of honest and accurate information provided and is a legally binding declaration. Several registered Commissioners for Oaths are available to students at no charge, on campus, please see ucalgary.ca/registrar.

Falsification of any supporting documentation will be taken very seriously and may result in disciplinary action through the Academic Discipline regulations or the Student Non-Academic Misconduct policy.
**GRADING**

A student’s final grade for the course is the sum of the separate assignments. It is not necessary to pass each assignment separately in order to pass the course.

Letter grades are assigned according to the following:

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>95 – 100%</td>
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<tr>
<td>A</td>
<td>90 – 94.9%</td>
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<tr>
<td>A-</td>
<td>85 – 89.9%</td>
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<tr>
<td>B+</td>
<td>80 – 84.9%</td>
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<tr>
<td>B</td>
<td>75 – 79.9%</td>
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<tr>
<td>B-</td>
<td>71 – 74.9%</td>
</tr>
<tr>
<td>C+</td>
<td>67 – 70.9%</td>
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<tr>
<td>C</td>
<td>63 – 66.9%</td>
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<tr>
<td>D+</td>
<td>55 – 58.9%</td>
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<tr>
<td>D</td>
<td>50 – 54.9%</td>
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<tr>
<td>F</td>
<td>&lt; 50%</td>
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University’s undergraduate/graduate grading system: 

**EXPECTATIONS FOR WRITING**

All written assignments (including, to a lesser extent, written exam responses) will be assessed at least partly on writing skills. Writing skills include not only surface correctness (grammar, punctuation, sentence structure, etc.) but also general clarity and organization. Sources used in research papers must be properly documented and cited. If you need help with your writing, you may use the writing support services in the Learning Commons. For further information, please refer to the official online University of Calgary Calendar, Academic Regulations, E. Course Information, E.2: Writing Across the Curriculum: http://www.ucalgary.ca/pubs/calendar/current/e-2.html

**ADDITIONAL COURSE INFORMATION**

**ATTENDANCE AND PARTICIPATION EXPECTATIONS**

Students are expected to attend both in-person and online class regularly and to be fully present and engaged in class activities and discussions.

**GUIDELINES FOR SUBMITTING ASSIGNMENTS**

Please submit all assignments electronically the dropbox in D2L. Assignments may be submitted in Word or PDF format. Assignments should have a file name as follows: “First Name Last Name Assignment Name” (e.g., Alex Smith - Hotspot Exercise). Assignments must be submitted by 11:59pm on their due date, unless stated otherwise in Assessment Components. It is the student’s responsibility to keep a copy of each submitted assignment and to ensure that the proper version is submitted.

**CONDUCT**

Students, employees, and academic staff are also expected to demonstrate behaviour in class that promotes and maintains a positive and productive learning environment. As members of the University community, students, employees, and academic staff are expected to demonstrate conduct that is consistent with the University of Calgary Calendar, the Code of Conduct and Non-Academic Misconduct policy and procedures, which can be found at: http://www.ucalgary.ca/pubs/calendar/current/k.html

**USE OF INTERNET AND ELECTRONIC COMMUNICATION DEVICES IN CLASS**

The use of laptop and mobile devices is acceptable when used in a manner appropriate to the course and classroom activities. Please refrain from accessing websites and resources that may be distracting to you or for other learners during class time. Students are responsible for being aware of the
GUIDELINES FOR ZOOM SESSIONS
Zoom is a video conferencing program that will allow us to meet at specific times for a “live” video conference, so that we can have the opportunity to meet each other virtually and discuss relevant course topics as a learning community.

To help ensure Zoom sessions are private, do not share the Zoom link or password with others, or on any social media platforms. Zoom links and passwords are only intended for students registered in the course. Zoom recordings and materials presented in Zoom, including any teaching materials, must not be shared, distributed or published without the instructor’s permission.

The use of video conferencing programs relies on participants to act ethically, honestly and with integrity; and in accordance with the principles of fairness, good faith, and respect (as per the Code of Conduct). When entering Zoom or other video conferencing sessions (such as MS Teams), you play a role in helping create an effective, safe and respectful learning environment. Please be mindful of how your behaviour in these sessions may affect others. Participants are required to use names officially associated with their UCID (legal or preferred names listed in the Student Centre) when engaging in these activities. Instructors/moderators can remove those whose names do not appear on class rosters. Non-compliance may be investigated under relevant University of Calgary conduct policies (e.g. Student Non-Academic Misconduct Policy). If participants have difficulties complying with this requirement, they should email the instructor of the class explaining why, so the instructor may consider whether to grant an exception, and on what terms. For more information on how to get the most out of your zoom sessions visit: https://elearn.ucalgary.ca/guidelines-for-zoom/.

If you are unable to attend a Zoom session, please contact your instructor to arrange an alternative activity for the missed session (e.g., to review a recorded session). Please be prepared, as best as you are able, to join class in a quiet space that will allow you to be fully present and engaged in Zoom sessions. Students will be advised by their instructor when they are expected to turn on their webcam (for group work, presentations, etc.).

The instructor may record online Zoom class sessions for the purposes of supporting student learning in this class – such as making the recording available for review of the session or for students who miss a session. Students will be advised before the instructor initiates a recording of a Zoom session. These recordings will be used to support student learning only and will not be shared or used for any other purpose.

COURSE EVALUATIONS AND STUDENT FEEDBACK
Student feedback will be sought at the end of the course through the standard University Student Ratings of Instruction (USRI) and Faculty course evaluation forms. A midterm evaluation may also be included to provide students an opportunity to provide feedback, for the instructor to adjust their approaches to teaching and learning, and to continuously improve the course. Students are welcome to discuss the process and content of the course at any time with the instructor.
COURSE POLICIES AND PROCEDURES

ACADEMIC ACCOMMODATIONS
Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit https://live.ucalgary.ucalgary.ca/student-services/access. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor or the Department Head. The full policy on Student Accommodations is available at https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure.

ACADEMIC MISCONDUCT
“Academic Misconduct” includes such things as cheating, falsification, plagiarism, unauthorized assistance, and failure to comply with exam regulations or an Instructor’s expectations regarding conduct required of Students completing academic assessments. Students who participate in, or encourage the commission of, Academic Misconduct will be subject to disciplinary action which could include Probation, Suspension, or Expulsion from the University. For information on academic misconduct and its consequences, please see the University of Calgary Calendar at https://www.ucalgary.ca/pubs/calendar/current/k-3.html

Further support on academic integrity is available at: https://ucalgary.ca/student-services/student-success/learning/academic-integrity

INSTRUCTOR INTELLECTUAL PROPERTY
Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These materials may NOT be reproduced, redistributed or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY ACT
Student information will be collected in accordance with typical (or usual) classroom practice. Students’ assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary.

COPYRIGHT LEGISLATION
All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (https://ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy) and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks, etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.
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*COPRIGHT LEGISLATION*
All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (https://www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright-policy.pdf) and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy https://www.ucalgary.ca/pubs/calendar/current/k.html.

*OTHER IMPORTANT INFORMATION*
Please visit the Registrar’s website at: https://www.ucalgary.ca/registrar/registration/course-outlines for additional important information on the following:
- Wellness and Mental Health Resources
- Student Success
- Student Ombuds Office
- Student Union (SU) Information
- Graduate Students’ Association (GSA) Information
- Emergency Evacuation/Assembly Points
- Safewalk