Anthropology 534: Biological Anthropology Perspectives on Health  
(Winter 2022)  
Department of Anthropology and Archaeology

Professor: Warren Wilson  
Class: Wednesday, 11:00 AM – 1:45 PM, ES 702
Tel.: 403-220-2665  
E-mail: wwilson@ucalgary.ca  
Office: ES 602D  
Office hours: by appointment.

Course Themes
If ever there was a time when the need for broad approaches to health was required, today is the day. Note, for example the data at right from November 2021. If we look at those >64 years of age, we see a decline in Covid-19 deaths after vaccine eligibility, but we still see differences as great as 5% between ethnic groups. If we look at those <65 years of age, for all but two cohorts, the percentage of deaths due to Covid-19 has risen since the advent of vaccines and we see differences as great as 13% between ethnic groups by age cohort. Why is this?

Such variation in health outcomes is, of course, not limited to US ethnic groups. Among the Makushi of Guyana, we find that the health of girls is significantly better than the health of boys. Among British Civil Servants, we find that those in higher-status positions have lower rates of chronic disease. In Tanzania, Maasai children exhibit substantially worse health outcomes in comparison to neighbouring ethnic groups and this

These are US data (Nov. 2021) as Canada does not collect race disaggregated health data (Is this a problem?).
disadvantage is concentrated in the majority of Maasai who record livestock herding, as opposed to growing crops, as their primary livelihood. Closer to home, Canadians with darker skin are roughly *five times more likely to have poor health outcomes* than those with lighter skin. Manitobans are *twice as likely* as Albertans to die of diabetes. In developed countries, children who grow up on farms have a *lower rate of autoimmune diseases* than do children who grow up in urban areas. How might we explain these health disparities? Where to begin?

Clearly, many disciplines generate helpful understandings of human health disparities. Anthropology, a discipline which emerged from a desire to understand human variation, is poised to provide holistic answers to questions about health disparities. Within this discipline, the sub-discipline of biological anthropology takes a biocultural perspective to understand human phenotypic variation. The biocultural perspective “…considers the social, ecological, and biological aspects of health issues and how these interact within and across populations” (Wiley and Allen 2013:8). Clearly, a biological perspective implies a basis in evolutionary theory. Hence, biological anthropologists interested in health consider it in light of the interaction between evolutionary processes and contemporary environmental variables, with an emphasis on culture. Given this approach, what can we make of the observation that after the introduction of vaccines, Hispanic Americans between the ages of 45-64 are twice as likely as Asian Americans to die of Covid-19? Why might Makushi girls be healthier than Makushi boys? Might environmental and evolutionary factors help us to understand and thereby address these differences?

In this course we will critically evaluate the work by biological anthropologists concerned with human health. We will begin with a general consideration of anthropology and anthropological perspectives on health and proceed through cross-cultural studies of health and healing, dietary impacts on health, growth and development, reproductive health, aging, infectious disease, innate and acquired immunity, and the impact of stress on physical and mental health.

**Prerequisites:** ANTH 201 and 3 units from ANTH 203 or ARKY 201 and a minimum of 12 units in courses labelled Anthropology.

**Learning Objectives**

Upon completion of this course, the student should be able to:

1. define biological anthropology & the use of the discipline to understand health disparities,
2. define & begin to practice critical thinking with an emphasis the six everyday illusions,
3. describe the questions and approaches of biological anthropologists interested in health,
4. apply the concept of adaptation to considerations of health,
5. define health, illness, disease, sickness, diagnosis, death, epidemiology, epidemic, endemic, pandemic, Red Queen hypothesis, anthropometry, culture bound syndrome,
6. describe how we might evaluate health in isolated field settings,
7. describe, broadly, the association between diet and health,
8. describe and provide examples of evolutionary medicine,
9. apply life-history theory to the study of health,
10. describe basic aspects of acquired and innate immunity,
11. create models to illustrate the association between dependent and independent variables,
12. write a logically structured, well-supported, clear, and concise paper.

Content warning: The content of this course includes topics that are difficult for some people to confront or discuss. These may include sexual and physical violence and assault, racism, genocide, images of war, the physical and psychological abuse of children, suicide, drug and alcohol abuse.

Course Conventions

1. Class: The course is organized as a seminar. Often, there will be no formal lecture. Participants will be expected to have done the appropriate readings, set the agenda, and contribute to the discussion. In order to meet the goals of the seminar you have to attend class each week and arrive on time. If you arrive 5 minutes after the class starting time, you will be noted as late on that day. You must be prepared to discuss the assigned topic. You are responsible for assigned material and any announcements concerning changes in schedule, etc. Because we meet only once a week and this seminar requires your active input, if you have more than two unexcused absences your overall participation grade is automatically a '0'.

2. Reading: With the exception of the Wiley and Allen (2016) book noted below, the readings for this course will be provided each week. You must plan accordingly to ensure that you obtain all of the readings with sufficient time to carefully and critically reading them prior to each class. Keep in mind that you are not finished with the reading assignment until you thoroughly understand it. This will often require you to read an assignment more than once.

Required Texts:


3. Evaluation: Evaluations will be based on four components:

   Class participation_____________________________30%
   Question sets________________________________30%
   Reflective journals____________________________12%
   Journal article review__________________________10%
   Term Paper____________________________________18%

Class Participation (Due date: weekly)
This class will generally revolve around class discussion. Discussions will be held in both small groups that I will moderate and as an entire class. Fundamental to any fruitful discussion is listening. Note that listening is “not about merely holding your peace while someone else holds forth. Quite the opposite. A lot of listening has to do with how you respond — the degree to which you facilitate the clear expression of another person’s thoughts and, in the process,
crystallize your own. ..."Good listeners ask good questions" (Murphy 2020). Demonstrate your respect for what others are saying by, first, summarizing what you think they are saying (e.g. “I think what you are telling me is…”) and, second, asking questions to generate deeper understanding of what they are saying. You will have an excellent opportunity to do this when your peers provide paper reviews each week.

If you are terrified of speaking in class or via Zoom, I can assure you that you are not alone. If this describes you, arrange to meet with me via Zoom before the third week of classes so that we can develop some strategies to help you to overcome this fear. If I do not hear from you by this deadline and you are not speaking your class, I’ll just assume you are not participating as you should be and will mark you accordingly.

While I may alter your score, you will determine your own participation score. The method for doing so can be found on the Participation Self Appraisal form available on D2L.

**Weekly Question Set & Reflective Journal**
*(Due dates: an electronic copy submitted in the appropriate D2L Dropbox no later than 30 minutes before class each week; that is, at 10:30 am before class each week.)*

Each week a selection of readings and questions will be assigned. Question Sets will be designed to ensure comprehension of the material and to facilitate discussion and must be completed without help from or collaboration with others. Your answers should reflect a critical evaluation of the material presented. A critical evaluation requires a clear understanding of the evidence presented and a careful consideration of alternative explanations for the outcomes. It is to your advantage to cite relevant literature when discussing particular papers and topics. On some weeks I’ll mark your answers and on some weeks you may instead have a quiz on the assigned material in the last 15 minutes of class. When I do mark your Question Sets, I will first determine if your work is complete. If you complete only 15 out of 19 assigned questions, I will deduct 21% (4/19) from your mark. I will next select two to five of the questions to mark. Assuming you complete all of the questions, your overall mark on the assignment will be based on my assessment of your work on these 2-5 questions.

**Weekly Reflective Journal**
*(Due dates: an electronic copy submitted in the appropriate D2L Dropbox no later than 10:00 pm on Thursdays of each week that we have class.)* Details concerning this assignment are provided in the Assignments section on the course D2L site.

**Journal Article Review**
*(Due date: please see the “Schedule” below)*

Details concerning this assignment are provided in the Assignments section on the course D2L site.

**Term Paper**
*(Due date: please see the “Deadlines to keep in mind” below.)*

Participants are to develop a research term paper around one or more of the themes in the course. This can be related to your own research interests and may even take the form of a research
proposal if it is useful to you. Details concerning this assignment are provided in the Assignments section on the course D2L site.

**Letter grade assignment:** At the end of the course, the numerical marks will be summed and a final letter grade will be assigned based on the following scheme:

**Department of Anthropology and Archaeology Grading Scheme:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>94.9 – 100</td>
</tr>
<tr>
<td>A</td>
<td>89.9 – 94.8 %</td>
</tr>
<tr>
<td>A-</td>
<td>84.9 – 89.8 %</td>
</tr>
<tr>
<td>B+</td>
<td>79.9 – 84.8 %</td>
</tr>
<tr>
<td>B</td>
<td>74.9 – 79.8 %</td>
</tr>
<tr>
<td>B-</td>
<td>70.9 – 74.8 %</td>
</tr>
<tr>
<td>C+</td>
<td>66.9 – 70.8 %</td>
</tr>
<tr>
<td>C</td>
<td>62.9 – 66.8 %</td>
</tr>
<tr>
<td>C-</td>
<td>58.9 – 62.8 %</td>
</tr>
<tr>
<td>D+</td>
<td>54.9 % – 58.8%</td>
</tr>
<tr>
<td>D</td>
<td>49.9 – 54.8 %</td>
</tr>
<tr>
<td>F</td>
<td>49.8 and below</td>
</tr>
</tbody>
</table>

Please note that no extra credit or ‘make up’ work is available in this class. It is not necessary to pass individual course components in order to pass the class.

Per the University of Calgary Calendar ([http://www.ucalgary.ca/pubs/calendar/current/f-2.html](http://www.ucalgary.ca/pubs/calendar/current/f-2.html)), an “A” is earned for “superior performance, showing comprehensive understanding of subject matter”. Superior performance is, by definition, extremely rare. Somewhat more common is the grade of “B” which is earned for “clearly above average performance with knowledge of subject matter generally complete”. Even more common is the grade of “C” which is earned for a “basic understanding of the subject matter”. If you require clarification on letter grade assignments, please arrange to meet with me via Zoom in the first two weeks of the semester. Keep in mind that, you have paid for the opportunity to learn, not a grade. As such, I do my utmost to ensure that you have the best learning opportunity possible in this course.

You must provide me with advanced notice if you are unable to complete an assignment on time. All requests for deferral of work due must be accompanied by some form of documentation to support your request. If you have missed a deadline for a legitimate reason, you will be able to complete the assignment as close to the original deadline as possible. The date and location will be at my convenience. Travel arrangements and misreading of the syllabus are not valid reasons for requesting a deferred deadline.

**3. Required technology:** For this course, you are required to have a computer with a word processor and internet access.
### Deadlines to keep in mind

Deadlines are part of the assignments. Assignments must be turned in in the appropriate Dropbox folder in D2L. Late work will not be accepted.

<table>
<thead>
<tr>
<th>Date</th>
<th>Item due</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 AM before each class</td>
<td>Question set</td>
</tr>
<tr>
<td>10:00 PM Thursday during each week in which we have class</td>
<td>Reflective journal</td>
</tr>
<tr>
<td>11:00 AM the day before your journal article review is scheduled to be presented</td>
<td>Journal article review</td>
</tr>
<tr>
<td>14 March</td>
<td>Term paper proposal</td>
</tr>
<tr>
<td>21 March</td>
<td>1\textsuperscript{st} Annotated bibliography (n \geq 12 sources).</td>
</tr>
<tr>
<td>28 March</td>
<td>2\textsuperscript{nd} Annotated bibliography (n \geq 12 additional sources).</td>
</tr>
<tr>
<td>8 April</td>
<td>Participation self-appraisal form (in class)</td>
</tr>
<tr>
<td>11 April</td>
<td>Term paper</td>
</tr>
</tbody>
</table>

### Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Paper review</th>
<th>Topic</th>
<th>Readings(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 26</td>
<td>Somaskandamoorthy, Shewfelt, Sabados</td>
<td>Healers and healing</td>
<td>W&amp;A Ch. 3 &amp; TBD</td>
</tr>
<tr>
<td>Feb. 2</td>
<td>Riaz, Revington, Pett</td>
<td>Diet, health, growth and development</td>
<td>W&amp;A-Ch. 4-5 &amp; TBD</td>
</tr>
<tr>
<td>Feb. 9</td>
<td>Owens, Niosi, Munro</td>
<td>Gender &amp; reproductive health</td>
<td>W&amp;A-Ch. 6 &amp; TBD</td>
</tr>
<tr>
<td>Feb. 16</td>
<td>Malik, Lee, Kolaric</td>
<td>Aging, life course &amp; life history approaches</td>
<td>W&amp;A-Ch. 7 &amp; TBD</td>
</tr>
<tr>
<td>Mar. 2</td>
<td>Kennedy, Hunter, Grisaru</td>
<td>Infectious disease- immune function, hygiene hypothesis</td>
<td>W&amp;A-Ch. 8 &amp; TBD</td>
</tr>
<tr>
<td>Mar. 9</td>
<td>Duchesneau, Dorbolo, de Souza</td>
<td>Infectious disease- epidemiological transitions</td>
<td>W&amp;A-Ch. 9 &amp; TBD</td>
</tr>
<tr>
<td>Mar. 16</td>
<td>Contreras, Chong</td>
<td>Epidemiology</td>
<td>Ghost Map &amp; TBD</td>
</tr>
<tr>
<td>Mar. 23</td>
<td>Chambers, Bacanu</td>
<td>Evolutionary medicine</td>
<td>Trevathan 2007 &amp; TBD</td>
</tr>
<tr>
<td>Mar. 30</td>
<td>n/a</td>
<td>Stress &amp; health</td>
<td>W&amp;A-Ch. 10, Dressler et al. 2005 &amp; TBD</td>
</tr>
<tr>
<td>Apr. 6</td>
<td>n/a</td>
<td>Mental health</td>
<td>W&amp;A-Ch. 11 &amp; TBD</td>
</tr>
</tbody>
</table>

\(^1\) The schedule of topics & topics themselves may change, but due dates for the assignments will not change.  
\(^2\) TBD = to be determined. W&A stands for Wiley & Allen’s \textit{Medical Anthropology}, the course textbook.
Course Mechanics

General expectations
Never give me a piece of writing that you haven’t spell-checked, proofread, and edited. Be supportive of other students in the class.

Office Hours
I enjoy discussing the course material with students outside of the classroom. I consequently encourage you to reach out to me to schedule times to meet whether you are having difficulty with some aspect of the course, or if you would like to discuss in greater detail something that was touched on in class.

E-mail
Students are encouraged to use the class time and arranged office hours to ask questions. For after-hours questions, the use of email is acceptable. Please write ‘ANTH 534’ in the ‘Subject’ portion of the email. I receive numerous e-mails. By clearly identifying the subject of your email, you will help me to reply more efficiently to your emails. While I will do my best to reply to your message as soon as possible, I will generally be unable to do so on weekends or holidays. Overall, I attempt to reply to all messages within four days. If I think that your question and related answer is of general interest, I may decide to post them on the course Desire to Learn class website (your name will not appear). If you ask me a question that is answered in the syllabus or on an assignment, I will not reply to your email. If you wish to have a grade reappraised please schedule a time to meet with me about that.

Reappraisal of grade:
• Reappraisal of Graded Term Work: http://www.ucalgary.ca/pubs/calendar/current/i-2.html
• Reappraisal of Final Grade: http://www.ucalgary.ca/pubs/calendar/current/i-3.html

Deferral of term work past the end of the semester
Requests to defer term work past the end of a term go through the Student Success Centre / Undergraduate Programs Office (http://www.ucalgary.ca/ssc/) and must be processed by the deadlines that are established in the University of Calgary Calendar. You can find the deferred term work form at http://www.ucalgary.ca/registrar/forms_students. You must submit these deferral forms to the Faculty of Arts Associate Dean (Students) through the Student Success Centre / Undergraduate Programs Office (http://www.ucalgary.ca/ssc/). To make an appointment with the Associate Dean, phone (403) 220-3580. Only the Associate Dean approves requests for deferrals which extend beyond the end of a term. Instructors are not involved in such decisions.

UNIVERSITY POLICIES

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.ca/student-services/access](https://live.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](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](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](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](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](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.

**SUPPORT AND RESOURCES:**

Please visit the Registrar’s website at: [https://www.ucalgary.ca/registrar/registration/course-outlines](https://www.ucalgary.ca/registrar/registration/course-outlines) for additional important information on the following:

- Emergency Evacuation/Assembly Points
- Wellness and Mental Health Resources
- Student Success Centre
- Student Ombuds Office
- Student Union (SU) Information
- Safewalk