



## Anthropology 305: Human Variation and Adaptation (Fall 2018)

**Professor:** Dr. Warren Wilson

**Lecture:** Monday & Wednesday 2:00-3:15, CHC 105

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**Prerequisite(s)** One of Anthropology 201, Archaeology 203, or Biology 205 or 241

### Course Description

In *Natural History*, Roman scientific writer Pliny the Elder remarked that, although human countenance is made up of only “ten parts or a little more,” people were so fashioned that “among the many thousands no two exist who cannot be distinguished.” How are we to explain this rich multiplicity of human physical forms? Anthropology can assist us in our efforts to answer this question. Indeed, the discipline of anthropology investigates the nature and causes of human variation as well as those aspects of life that are common to all of humanity. The anthropological sub-discipline, biological anthropology is concerned with human biology and focuses specifically on human biological variation. Utilizing a biological anthropology perspective, the goal of this course is to introduce you to the scientific study of human variation. We will begin with a consideration of the origins and impacts of the concept of race and follow this with an overview of the scientific method and the anthropological approach to the study of human biological diversity. We will then cover the biological bases of human variation in discussions of genes in human populations, the heritability of traits, and population genetics. In the latter part of the course we will look at human variation as the outcome of adaptation to a variety of environmental factors. This course should help you to understand the biology underlying the variation of human physical and psychic forms and to sort fact from fiction in the contentious and clouded debates over human variation.

### Learning Objectives

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

1. describe the goals and methods of the social and natural sciences and the humanities,
2. describe the history and current scientific understanding of the concept of race,
3. explain how a misunderstanding of human variation played a role in eugenics & the Holocaust,

4. describe sources of human phenotypic variation, in general,
5. describe the history and current scientific understanding of intelligence testing,
6. describe our current understanding of gender,
7. describe the three levels of human adaptation to stress,
8. describe our current understanding of variation in skin colour,
9. describe how humans adapt to cold & heat stress, undernutrition, and hypoxia,
10. describe how humans adapt to infectious disease,
11. describe how human population growth rates have changed in the past 12,000 years,
12. *link the knowledge obtained in this course to their everyday life and events in the news.*

### Teaching Philosophy

In this course I do not seek to provide you with an intellectually safe space; rather I endeavor to challenge you with new ideas with which you will have to engage to reach your own conclusions. Students in my classrooms are encouraged to speak, write, listen, challenge and learn, without fear of censorship. That said, civility and mutual respect are vital to all of us, and freedom of expression does not mean the freedom to harass or threaten others. I consequently expect you to be engaged in evidence-based, rigorous debate, discussion, and even disagreement. At times, this may challenge you and even cause discomfort. Indeed, as we will consider some of the most horrific acts of inhumanity that have arisen due to human variation, such as murder, rape, and genocide, this course should be unsettling. Our consideration of such inhumanity is not gratuitous: a failure to understand the potential for such acts puts us at risk of repeating them.

### Course Conventions

**1. Lecture:** In order to meet the goals of the course you have to come regularly to class and ON TIME. Be prepared by reading what is assigned for the day. You are responsible for lecture material and any announcements concerning changes in schedule, etc. Please note that lectures are not a summary of the material presented in the text and that, on the balance, exam questions will be drawn from material emphasized in lecture. The use of computers, cell phones, or other personal electronic devices in the classroom is not permitted.

**2. Electronic Devices:** The use by students of computers, cell phones, or other personal electronic devices in the classroom is not permitted. *Why not?* This rule is based on research which finds that most students using a computer in the classroom attempt to multitask and students who are multitasking during class have less understanding and recall of what's being discussed. As well, students who are in direct view of a multitasking peer score lower on tests compared with those who were not. Even when multitasking is blocked, researchers find that students who take notes on a computer generally perform worse than students who take notes by hand: laptop users are generally creating a transcript of the lecture, while those taking notes by hand were synthesizing the information. This is often apparent in my meetings with students who have used their computers to

create an almost verbatim record of what I said in class but are unable to grasp what I sought to convey.

**3. Prerequisites:** One of Anthropology 201 or Archaeology 203 or Biology 241 or 205. You must have a basic understanding of molecular genetics, the inheritance of simple (Mendelian) traits, evolutionary theory, and human evolution prior to taking this course. If you are concerned about this, please see me during the first week of classes.

**4. Reading:** reading assignments will be found both in the text book, Kormondy & Brown, 1998. *Fundamentals of Human Ecology*, the Taylor Family Digital Library main information desk on the first floor, and online in the “Course Documents” section of the class Desire2Learn website. In addition to the required readings, there are several recommended readings which are provided to enhance your knowledge of the subject in question. Keep in mind that *you are not finished with the reading assignment until you thoroughly understand it*. This will sometimes require you to read an assignment more than once. An effective way of ensuring comprehension is to read the assignment then go back through it and summarize its main points in your notebook.

**5. Evaluation:** You will be evaluated based on your performance on **two mid-term exams, a comprehensive, registrar-scheduled exam** (each with multiple choice and short answer sections) and **three take-home, short-answer questions assignments**. Prior to each exam I will hand out a list of key terms and concepts that will be covered on the exams. In preparing for each exam, you should not define each key term in isolation; rather, define and understand it in relation to the other key terms within the context of the course. As well, I will frequently give 5-minute quizzes in class. These quizzes are designed to assess your understanding of the assigned readings and will not affect your grade.

*Missed exam:* You must provide advance notice to me if you are unable to attend an exam. All requests for deferral of an examination due to/for health reasons must be accompanied by written documentation as outlined in the University Calendar and should be obtained while you have the physical or emotional problem rather than after recovery. Deferred exams may be allowed in the following circumstances: illness, domestic affliction, or religious conviction. Travel arrangements and misreading of the syllabus are not valid reasons for missing an exam or incomplete or late assignments. If you have missed an exam for a legitimate reason, you will be able to write a “make up” exam as close to the original exam as possible. The make-up exam will not have the same questions as the original exam. The date and location will be at the convenience of the Department of Anthropology and Archaeology. Deferred exams will be granted only if it is determined that just cause is shown by the student.

*Grade Reappraisal:* Within two weeks of the date the exam/assignment is returned, students seeking reappraisal of examinations or assignments must submit a written response to me explaining the basis for reconsideration of their mark. I will reconsider the grade assigned and will then book a time with the student to discuss his or her work and rationale. It should be noted that a reconsidered mark may be raised, lowered, or remain the same.

*Deferred term work:* Please note that requests to defer term work past the end of a term go through the [Student Success Centre](#) and must be processed by the deadlines that are established in the University of Calgary Calendar. To defer term work, complete the required [form](#) and submit it to the Faculty of Arts Associate Dean (Students) through the [Student Success Centre](#). 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. Neither your TA nor I are involved in such decisions.

Your final grade will be calculated as follows:

Mid-Term Exam #1: Oct 3	_____	17%
Mid-Term Exam #2: Nov 7	_____	22%
Registrar-Scheduled, Comprehensive Final Exam: Dec 10-20	_____	28%
Take-home, short-answer questions & writing assignments:	_____	33%

A passing grade is not required on any particular component for the student to pass the course as a whole; that is, a student may fail, for example, Exam #2 or any other component and, assuming their overall average percentage earned for the course is above 49, they will pass the course.

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 basis:

<u>Percentage range</u>	<u>Letter grade</u>	<u>Percentage range</u>	<u>Letter grade</u>
95 or higher	A+	68-72	C+
90-94	A	64-67	C
85-89	A-	59-63	C-
81-84	B+	54-58	D+
77-80	B	50-53	D
73-76	B-	49 or lower	F

Per the [University of Calgary Calendar](#), an “A” is earned for “superior performance, showing comprehensive understanding of subject matter”. Superior performance is, by definition, rare; that is, superior is defined as “highest in quality”. Only a few can be “highest”. More common is the grade of “B” which is earned for “clearly above average performance with knowledge of subject matter generally complete”. More common still 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 see me within the first two weeks of the semester. Keep in mind that, you have paid for the opportunity to learn, not a grade. As such, my TA and I do our utmost to ensure that you have the best learning opportunity possible in this course.

**6. Retrieving Assignments:** The Freedom of Information and Protection of Privacy (FOIP) legislation disallows the practice of having students retrieve assignments from a public place, e.g., outside an instructor’s office or the Department main office. Term assignments must be returned to students individually, during class, or during the instructor’s office hours; if a student is unable to pick up her/his assignment s/he may provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

**7. Office Hours:** I enjoy having visitors during my office hours and am happy to schedule additional times as necessary. These hours are yours and I encourage you to take advantage of them, 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 or the readings.

**8. E-mail:** Students are encouraged to use the lectures and office hours to ask questions. For after-hours questions, the use of email is acceptable. When writing, please write ‘ARKY 305’ in the ‘Subject’ portion of the email and use proper grammar (Do not use text-message grammar.). By identifying the subject of your email and writing a clear message, you will help me to reply more efficiently to your emails. I attempt to reply to all messages within four days and will generally not be able to do so on weekends or holidays.

### Schedule<sup>1</sup>

Class	Date	Topic	Readings <sup>2</sup>
1	Sep. 10	course goals; why bother?	course syllabus, Understanding Science; Kristof; Implicit Association Test- <b>Race</b>
2	Sep. 12	Ways of knowing- humanities, social sciences, natural sciences, humanities, science, anthropology; Morton	<i>either Akpan or Wiesel; Marks; Culotta. Optional: Lipstadt; Gladstone; Critchley; CBC hate crimes; Weintraub.</i>
3	Sep. 17	The race concept: origins	Appiah. <i>Optional: Bauer &amp; Blumenthal; Milgram; SSRC; Amodio</i>
4	Sep. 19	The race concept: origins	Race the Power of Illusion; U. Utah. Scheiber & Abrams (2018) <i>Optional: Barbujani et al; Disotell; Whitman</i>
5	Sep. 24	The race concept: Why do scientist reject it?; Implications of race concept <b>Question Set #1 Due at 2:00 pm</b>	Rutherford. <i>Optional: Rosenberg</i>
6	Sep. 26	Genetic variation: human genetic diversity & sources of genetic variation	Groopman (Decoding Destiny); Lewis (2015, Multifactorial Traits)
7	Oct. 1	Patterns of Inheritance: simple & complex traits	Lewis (2015, Beyond Mendel's Laws). Radiolab (2012) <i>Optional: Mendelian Inheritance and Its Exceptions Informed consent for genetics testing; Epigenetics 101; Epigenetics &amp; 9/11, NPR - New Genetic Test &amp; Ethics Genetic Tests.</i>
8	Oct. 3	<b>Mid-Term Exam #1</b>	
n/a	Oct. 8	<i>Thanksgiving – no class</i>	
9	Oct. 10	Complex traits: IQ, intelligence & heritability	Jones (Calliban's Revenge), Singer (2018)

*continued on next page*

### Schedule<sup>1</sup> (cont.)

Class	Date	Topic	Readings <sup>2</sup>
10	Oct. 15	Complex traits: IQ, intelligence & heritability	Lewontin (Mental Traits) <i>Optional: Hidden Brain (2018)</i>
11	Oct. 17	Complex traits: sex & gender	Implicit Association Test- <b>Gender</b> ; Fausto-Sterling

			(1993); NOVA-How is sex determined? Henig. <i>Optional: Graves; Fausto-Sterling (2000), NPR – “What if your child...”; Padawar; Minto.</i>
12	Oct. 22	Complex traits: gender	Dreger; Sapolsky. <i>Optional: Green</i>
13	Oct. 24	Human population biology: origins, theory, levels of adaptation	K & B <sup>3</sup> Ch. 6
<b>Class</b>	<b>Date</b>	<b>Topic</b>	<b>Readings<sup>2</sup></b>
14	Oct. 29	Climatic stress & human variation: solar stress, thermal stress <b>Question Set #2 Due at 2:00 pm</b>	Loomis; Jablonski
15	Oct. 31	Climatic stress & human variation: thermal stress (cont.)	K & B Pp. 131–149
16	Nov. 5	Climatic stress & human variation: thermal stress (cont.)	K & B Pp. 149–161
17	Nov. 7	<b>Mid-Term Exam #2</b>	
<i>n/a</i>	Nov. 12 & 14	<i>Reading Week- no classes</i>	
18	Nov. 19	Adaptation to malnutrition: dietary requirements	K & B Pp. 186–202; Stunting; Wasting; UNICEF-WHO Child malnutrition.
19	Nov. 21	Adaptation to malnutrition: variation in susceptibility to starvation	K & B Pp. 202-204; Brown & Konner; Got lactase?
20	Nov. 26	Adaptation to Hypoxia	K & B Pp. 162-173 & Hypoxia Handout (Beall’s work), Zimmer (2018). <i>Optional: Baranova et al. (2017)</i>
21	Nov. 28	Adaptation to Infectious Disease <b>Question Set #3 Due at 2:00 pm</b>	K & B pp. 204-224 & Orent (How plagues...)
22	Dec. 3	Adaptation to Infectious Disease	Stress: Portrait of a Killer
23	Dec. 5	Population Ecology: terms & concepts in demography	K & B Ch. 4, Gapminder (2013), This American Life (“Words”)
<i>n/a</i>	TBD	<b>Registrar-Scheduled Final Exam</b>	

<sup>1</sup> The schedule of topics may change, but the exam dates will not change.

<sup>2</sup> For a detailed bibliography of the readings, please see the pages below. The reading assignments are subject to change should I find, during the present semester, more recent publications which better cover the topic considered. If this occurs, I will inform you at least one week prior to the relevant class.

<sup>3</sup> K & B = Kormondy & Brown’s *Fundamentals of Human Ecology*.

## Readings

Some readings are available as pdfs on the Desire2Learn (D2L) website, some only in the McKimmie Library Reserve Reading, and others online. Note, this bibliography does NOT include readings from the Kormondy and Brown text.

Akpan, Uwem (2008) *Say You're One of Them*. Hachette Book Group. New York. (While the entire book is appropriate for this course, the reading assignment only covers the book's last chapter: "My Parent's Bedroom"). (pdf posted on D2L)

Amodio (2014) The neuroscience of prejudice and stereotyping. *Nature Reviews Neuroscience* 15:670–682 doi:10.1038/nrn3800 (*optional reading*)

Appiah, Kwame Anthony (2016) *Colour. Mistaken Identities: Creed, Country, Color, Culture*. The Reith Lectures. BBC. <http://www.bbc.co.uk/programmes/b080t63w> (43 minutes) Listen to both Dr. Appiah's talk and the question and answer session. If you'd prefer to read the lecture, a transcript of his talk can be found on D2L.

Baranova et al. (2017) Genetic determination of the vascular reactions in humans in response to the diving reflex. *Am J Physiol Heart Circ Physiol* 312: H622–H631. doi:10.1152/ajpheart.00080.2016. (*optional reading*)

Barbujani et al. (1997) An apportionment of human DNA diversity. *Proceedings of the National Academy of Sciences* 94:4516-4519. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC20754/> (*optional reading*)

Bauer (2006) *On the Holocaust and Other Genocides*. United States Holocaust Memorial Museum. <http://www.ushmm.org/m/pdfs/20070215-bauer.pdf> (*optional reading*)

Blumenthal (2009) *How Might Another Holocaust be Prevented*. United States Holocaust Memorial Museum. <http://www.js.emory.edu/BLUMENTHAL/Hol%20Prevention.htm> (*optional reading*)

Brown, P.J. and M. Konner. 1987. An anthropological perspective on obesity. *Annals of the New York Academy of Sciences*. Vol. 499. Pp. 29-46. <http://onlinelibrary.wiley.com.ezproxy.lib.ucalgary.ca/doi/10.1111/j.1749-6632.1987.tb36195.x/pdf>

CBC. 2004. *Indepth: Hate Crimes – What is a hate crime?* <http://www.cbc.ca/news/canada/story/2011/06/15/f-hate-crimes.html> (*optional reading*)

Critchley, S (2014) *The Dangers of Certainty: A Lesson From Auschwitz*. The New York Times ([http://opinionator.blogs.nytimes.com/2014/02/02/the-dangers-of-certainty/?\\_php=true&\\_type=blogs&src=me&ref=general&r=0](http://opinionator.blogs.nytimes.com/2014/02/02/the-dangers-of-certainty/?_php=true&_type=blogs&src=me&ref=general&r=0)) Note, the video described can be seen here <https://www.youtube.com/watch?v=wXwj4jMnWZg>. I have also placed the transcript for this video in the "Readings" section of D2L). (*optional reading*)

Culotta, E. 2012. *Roots of Racism*. *Science*. 336:825-827. ((The easiest way to locate this article is to paste the article title into the library search box at <http://library.ucalgary.ca/>. Alternatively, the direct link is <http://science.sciencemag.org.ezproxy.lib.ucalgary.ca/content/336/6083/825>.)

Disotell (2000) Human genomic variation. *Genome Biology* 1(5):comment2004.1–2004.2.  
<http://genomebiology.biomedcentral.com/articles/10.1186/gb-2000-1-5-comment2004> (optional reading)

Dreger, Alice 2011. Is Anatomy Destiny? *Ted.com*  
[http://www.ted.com/talks/lang/en/alice\\_dreger\\_is\\_anatomy\\_destiny.html](http://www.ted.com/talks/lang/en/alice_dreger_is_anatomy_destiny.html)

Epigenetics 101: a beginner's guide (2014).  
<https://www.theguardian.com/science/occams-corner/2014/apr/25/epigenetics-beginners-guide-to-everything> (optional reading)

Epigenetics & 9/11- Rachel Yehudah (2014) How Trauma and Resilience Cross Generations.  
<http://www.onbeing.org/program/rachel-yehuda-how-trauma-and-resilience-cross-generations/7786>  
(optional podcast)

Erhlich and Holm 1964. A biological view of race. In *The Concept of Race* Ashley Montagu, editor. Collier Books, London: pp. 154-179. (pdf posted on D2L)

Fan et al. (2016) Going global by adapting local: a review of recent human adaptation. *Science* 354:54-59 (optional reading)

Fausto-Sterling. 1993. The five sexes. *The Sciences*. March/April 1993.  
[http://www.fd.unl.pt/docentes\\_docs/ma/TPB\\_MA\\_5937.pdf](http://www.fd.unl.pt/docentes_docs/ma/TPB_MA_5937.pdf) or  
<http://ezproxy.lib.ucalgary.ca:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9305215658&site=ehost-live> (select PDF Full Text on the left side of the page)

Fausto-Sterling. 2000. The five sexes, revisited. *The Sciences*. July/August 2000.  
<http://www.aissg.org/PDFs/Five-Sexes-Revisited-2000.pdf> (optional reading)

Gapminder (2013) Don't Panic. BBC. Video: 59 Minutes.  
<https://www.gapminder.org/videos/dont-panic-the-facts-about-population/>

Gladstone, R (2014) 26 Percent of World's Adults Are Anti-Semitic, Survey Finds. *The New York Times* <http://www.nytimes.com/2014/05/14/world/26-percent-of-worlds-adults-are-anti-semitic-survey-finds.html> (optional reading)

Got lactase? (2007) Understanding Evolution. University of California Museum of Paleontology.  
[http://evolution.berkeley.edu/evolibrary/news/070401\\_lactose](http://evolution.berkeley.edu/evolibrary/news/070401_lactose)

Graves, J (2014) Sex, genes, the Y chromosome and the future of men. *The Conversation*.  
<http://theconversation.com/sex-genes-the-y-chromosome-and-the-future-of-men-32893> (optional reading)

Green, L (2014) 51 Pretty Shocking Facts That Make Things Harder For Every Woman You Have Ever Met. <http://www.upworthy.com/51-pretty-shocking-facts-that-make-things-harder-for-every-woman-you-have-ever-met?c=recon1> (optional video)

Groopman, Jerome 1998. Decoding Destiny. *New Yorker*. February 9, 1998. Pp. 42-47.  
<http://jeromegroopman.com/ny-articles/DecodingDestiny-BRCA-020998.pdf>



Henig, Robin M. 2017. How Science Is Helping Us Understand Gender. National Geographic Magazine. <https://www.nationalgeographic.com/magazine/2017/01/how-science-helps-us-understand-gender-identity/>

Hidden Brain (2018) Emma, Carrie, Vivian: How A Family Became A Test Case For Forced Sterilizations. <https://www.npr.org/2018/04/23/604926914/emma-carrie-vivian-how-a-family-became-a-test-case-for-forced-sterilizations> (optional podcast)

Huntington's Disease (2004) Venezuelan kindreds reveal that genetic and environmental factors modulate Huntington's disease age of onset. *Proceedings of the National Academy of Sciences* 101(10):3498-3503. (The easiest way to locate this article is to paste the title into the library search box at <http://library.ucalgary.ca/>.)

Implicit Association Test- **Race**. <https://implicit.harvard.edu/implicit/canada/takeatest.html> Read the text on this page, then click "I wish to proceed." On the next page, click the blue box which says "Race". Read the instructions and proceed. ONLY YOU WILL SEE YOUR RESULTS. I may ask you some general questions about what you thought of the test but will never seek to determine what the test told you about your views on race.

Implicit Association Test- **Gender**. <https://implicit.harvard.edu/implicit/canada/takeatest.html> Read the text on this page, then click "I wish to proceed." On the next page, click the blue box which says "Gender". Read the instructions and proceed. ONLY YOU WILL SEE YOUR RESULTS. I may ask you some general questions about what you thought of the test but will never seek to determine what the test told you about your views on gender.

Informed consent for genetic testing- Presymptomatic Huntington disease testing <http://geneticslab.emory.edu/documents/informed-consent/huntington-disease-consent-form.pdf> (optional reading)

Jablonski, NG (2010) The Naked Truth. *Scientific American*. p. 42-29. [http://adamoliverbrown.com/wp-content/uploads/2015/02/2010\\_EvolutionOfHairlessness.pdf](http://adamoliverbrown.com/wp-content/uploads/2015/02/2010_EvolutionOfHairlessness.pdf)

Jones, Steve. 1993. Caliban's Revenge. In *The Language of Genes*. Anchor Books, NY. Pp. 182-196. (pdf posted on D2L)

Kristof, Nicholas D 2009. Learning How to Think, *New York Times*, 26 March. [http://www.nytimes.com/2009/03/26/opinion/26Kristof.html?\\_r=0](http://www.nytimes.com/2009/03/26/opinion/26Kristof.html?_r=0)

Kormondy & Brown, 1998. Fundamentals of Human Ecology. Prentice-Hall. New Jersey. (pdfs posted on D2L)

Lewis, Ricki. 2015. Beyond Mendel's Laws & Multifactorial Traits. In *Human Genetics*. McGraw-Hill. (pdfs posted on D2L)

Lewontin, Richard. 1982. Mental Traits. In. *Human Diversity*. WH Freeman, New York. Chapter 7. (pdf posted on D2L)

Lipstadt, D (2014) Why Jews are Worried. *The New York Times* <http://www.nytimes.com/2014/08/21/opinion/deborah-e-lipstadt-on-the-rising-anti-semitism-in->

[europe.html?action=click&contentCollection=Opinion&module=RelatedCoverage&region=Margin&pgtype=article](http://europe.html?action=click&contentCollection=Opinion&module=RelatedCoverage&region=Margin&pgtype=article) (optional reading)

Loomis, WF. 1970. Rickets. *Scientific American* Vol. 223. June. Pp. 77-91. (pdf posted on D2L)

Marks, Jonathan 1994. Black, White, Other. *Natural History*. Pp. 32-35.

<http://ezproxy.lib.ucalgary.ca:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9412070267&site=ehost-live>

Mendelian Inheritance and Its Exceptions (2008)

[https://www.glowm.com/section\\_view/heading/Mendelian%20Inheritance%20and%20Its%20Exceptions/item/342](https://www.glowm.com/section_view/heading/Mendelian%20Inheritance%20and%20Its%20Exceptions/item/342) As I expect you to already understand types of Mendelian inheritance, focus here on the section “exceptions to Mendelian inheritance”.

Milgram, S (1973) The Perils of Obedience. *Harper’s Magazine* 247:62-78 (The easiest way to locate this article is to paste the title into the library search box at <http://library.ucalgary.ca/>.

Alternatively, the direct link is

<http://ezproxy.lib.ucalgary.ca/login?url=http://search.proquest.com/docview/1301539341?accountid=9838> (optional reading)

Minto et al. 2003. The effect of clitoral surgery on sexual outcome. *The Lancet*. 361:1252-1257. DOI: 10.1016/S0140-6736(03)12980-7 (78 (The easiest way to locate this article is to paste the title into the library search box at <http://library.ucalgary.ca/>) (optional reading)

NOVA. How is sex determined? <http://www.pbs.org/wgbh/nova/body/how-sex-determined.html>

NPR 2011. New Genetic Test Screens Would-Be Parents

<http://www.npr.org/2011/01/13/132908098/new-gene-test-screens-nearly-500-childhood-diseases>

NPR 2011. The Ethics Of Genetic Tests For Would-Be Parents.

<http://www.npr.org/2011/01/13/132908943/The-Ethics-Of-Genetic-Screening-For-Parents?ps=rs>

NPR 2011. What If Your Child Says, 'I'm In The Wrong Body'?

<http://www.npr.org/2011/12/26/144156917/transgender-kids>

Orent, W (2014) How plagues really work. *Aeon* <http://aeon.co/magazine/health/the-next-pandemic-will-not-erupt-from-the-rainforest/>

Padawer, R (2012) What's So Bad About a Boy Who Wants to Wear a Dress? *The New York Times*

<http://www.nytimes.com/2012/08/12/magazine/whats-so-bad-about-a-boy-who-wants-to-wear-a-dress.html?pagewanted=all&r=0> (optional reading)

Race: The Power of Illusion. Episode 1: The Difference Between Us. (57 minutes)

To access the video:

1. Open the U. Calgary [library webpage](#)
2. Scroll down to the green bar and select [Databases](#)
3. In Databases select [F](#),
4. Select [Films on Demand](#)
5. In the search box type [Race: The Power of an Illusion](#),
6. Watch *The Difference Between Us* (57 minutes)

A transcript of this video can be found here: [http://www.pbs.org/race/000\\_About/002\\_04-about-01-01.htm](http://www.pbs.org/race/000_About/002_04-about-01-01.htm)

Radiolab (2012) Inheritance (65 minutes). <http://www.radiolab.org/story/251876-inheritance/>

Rosenberg et al. (2002) Genetic structure of human populations. *Science* 298:2381-2385. DOI: 10.1126/science.1078311 <http://www-leland.stanford.edu/~huatang/gene244/readings/Science%202002%20Rosenberg.pdf> (optional reading)

Rutherford, Adam. 2016. *A Brief History of Everyone Who Ever Lived*. Weidenfeld & Nicholson, London, UK. Chapter 4: The End of Race, Pp. 209-267.

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Scheiber & Abrams (2018) Can Training Eliminate Biases? Starbucks Will Test the Thesis. *The New York Times*. <https://www.nytimes.com/2018/04/18/business/starbucks-racial-bias-training.html>

Singer (2018) Employees Jump at Genetic Testing. Is That a Good Thing? *The New York Times*. <https://www.nytimes.com/2018/04/15/technology/genetic-testing-employee-benefit.html>

Special Pathogens Branch. 2010. Ebola hemorrhagic fever information packet. Centers for Disease Control and Prevention. Atlanta, GA. [http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/Fact\\_Sheets/Ebola\\_Fact\\_Booklet.pdf](http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/Fact_Sheets/Ebola_Fact_Booklet.pdf)  
<http://www.cdc.gov/vhf/ebola/outbreaks/guinea/index.html>

SSRC (2005) Is race real? <http://raceandgenomics.ssrc.org/> (optional reading)

Stunting (2016). WHO. Read the text *and watch* the 5 minute video "Chapter 1. Stunted growth: what is it?" [http://www.who.int/nutrition/healthygrowthproj\\_stunted\\_videos/en/](http://www.who.int/nutrition/healthygrowthproj_stunted_videos/en/)

Talenti and Goldstein. 2006. Genomics meets HIV-1. *Nature Reviews Microbiology*. 4:865-873. (The easiest way to locate this article is to paste *Nature Reviews Microbiology* into the library search box at <http://library.ucalgary.ca/>.) (optional reading)

This American Life (Podcast) 2002. "Words" <http://www.thisamericanlife.org/radio-archives/episode/204/81-Words> . If you'd prefer to read the transcript, it is here <http://www.thisamericanlife.org/radio-archives/episode/204/transcript>

Understanding Science (2016) University of California Museum of Paleontology. *Begin with this page:* [http://undsci.berkeley.edu/article/0\\_0\\_0/%3C?%20echo%20\\$baseURL;%20%3E/intro\\_01](http://undsci.berkeley.edu/article/0_0_0/%3C?%20echo%20$baseURL;%20%3E/intro_01) *and proceed through all of the following pages:* Understanding Science: Discovery: The spark for science; A science checklist; Science aims to explain and understand; Science works with testable ideas; Science relies on evidence; Science is embedded in the scientific community; Scientific ideas lead to ongoing research; Participants in science behave scientifically; Beyond physics, chemistry, and biology; Science in disguise; Science has limits: A few things that science does not do; Science in sum.)

UNICEF-WHO Child Malnutrition <http://apps.who.int/gho/data/node.wrapper.nutrition-2016&showonly=nutrition> Joint child malnutrition estimates 2016 (UNICEF-WHO-WB)  
Here, familiarize yourself with rates and patterns of stunting and wasting. Before looking at this site, complete the “Stunting” and “Wasting” assigned readings & video.

U. Utah (2013). Learn Genetics. Making SNPs Make Sense (view all sections in both What is a SNP? and What is a Haplotype?). <http://learn.genetics.utah.edu/content/precision/snips/Wasting>. [https://www.unicef.org/progressforchildren/2007n6/index\\_41505.htm](https://www.unicef.org/progressforchildren/2007n6/index_41505.htm) Here, you need only concern yourself with the definition of wasting. It’s found in the second paragraph and is only 3 sentences.

Weintraub (2016) Is everybody a racist? Aeon. <https://aeon.co/essays/unconscious-racism-is-pervasive-starts-early-and-can-be-deadly>

Whitman (2016) Why the Nazis studied American race laws for inspiration. Aeon. <https://aeon.co/ideas/why-the-nazis-studied-american-race-laws-for-inspiration>

Wiesel, Elie. 1958. *Night*. Bantam Books. New York. (pages 1 - 43)  
(The pdf is posted on D2L. The entire book can be found online here: [http://static1.1.sqspcdn.com/static/f/523476/26270953/1432918801417/eliewiesel-nightfulltext\\_3\\_26\\_2014\\_3\\_23\\_04\\_pm.pdf?token=YuTRiv7WyhCkEc4Kpyhog4JMm3c%3D](http://static1.1.sqspcdn.com/static/f/523476/26270953/1432918801417/eliewiesel-nightfulltext_3_26_2014_3_23_04_pm.pdf?token=YuTRiv7WyhCkEc4Kpyhog4JMm3c%3D). As well, our library has several print copies of this book.)

Zimmer (2018) Bodies remodeled for life at sea. The New York Times. <https://www.nytimes.com/2018/04/19/science/bajau-evolution-ocean-diving.html?hp&action=click&pgtype=Homepage&clickSource=story-heading&module=second-column-region&region=top-news&WT.nav=top-news>

## **Academic Misconduct**

Academic dishonesty is an unacceptable activity at the University of Calgary and students are **strongly advised** to read the Student Misconduct section of the University Calendar. Quite often, students are unaware of what constitutes academic dishonesty or plagiarism. The most common are:

- 1) Presenting another student's work as your own
- 2) Presenting an author's work or ideas as you own without proper referencing
- 3) Using work completed for another course

This activity will not be tolerated and students conducting themselves in this manner will be dealt with according to the procedures outlined in the University Calendar.

For detailed information on what constitutes academic misconduct, please refer to the following link:

<http://www.ucalgary.ca/pubs/calendar/current/k-2-1.html>

## **PLAGIARISM AND CHEATING**

Plagiarism: "to steal and pass off the ideas or words of another as one's own" (Webster's).

Plagiarism will not be tolerated and will automatically result in a failing grade for the submission.

Any student caught plagiarizing will also be subject to additional University sanctions. Students are expected to be familiar with the Department of Anthropology and Archaeology's policy on intellectual honesty

## **DEFERRED EXAMS:**

A student who is absent from a test for legitimate reasons must discuss an alternative course of action with the instructor. The instructor at their discretion may transfer the percentage weight for the test to the final examination, if there is a final examination in the course, set another test, etc. An instructor will normally make this decision on the basis of verbal information provided by the student. In the event that an instructor feels that they cannot judge the veracity of the information provided, Students must be aware that they are responsible for payment of any charge associated with the medical assessment and documentation as this service falls outside the realm of services provided by the Provincial Health Care Plan. Deferral of the final exam requires Registrar approval.

## **ACADEMIC ACCOMMODATIONS**

<http://www.ucalgary.ca/access/accommodations/policy>

Students needing an Accommodation because of a Disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities

Students needing an Accommodation based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the instructor of this course.

## **ACADEMIC INTEGRITY**

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Calgary is a strong signal of each student's individual academic achievements. As a result, the University treats cases of cheating and plagiarism very seriously. Non-academic integrity also constitutes an important component of this program.

For detailed information on what constitutes academic and non-academic misconduct, please refer to the following link: <http://www.ucalgary.ca/pubs/calendar/current/k-2-1.html>

All suspected cases of academic and non-academic misconduct will be investigated following procedures outlined in the University Calendar. If you have questions or concerns about what

constitutes appropriate academic behavior or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources.

Where there is a criminal act involved in plagiarism, cheating or other academic misconduct, e.g., theft (taking another student's paper from their possession, or from the possession of a faculty member without permission), breaking and entering (forcibly entering an office to gain access to papers, grades or records), forgery, personation and conspiracy (impersonating another student by agreement and writing their paper) and other such offences under the Criminal Code of Canada, the University may take legal advice on the appropriate response and, where appropriate, refer the matter to the police, in addition to or in substitution for any action taken under these regulations by the University

### **TEACHING EVALUATIONS / USRI (Universal Student Ratings of Instruction)**

At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. **Your responses make a difference, please participate!** Website: <http://www.ucalgary.ca/usri/>

### **Writing Across the Curriculum**

Writing skills are not exclusive to English courses and, in fact, should cross all disciplines. The University supports the belief that throughout their University careers, students should be taught how to write well so that when they graduate their writing abilities will be far above the minimal standards required at entrance. Consistent with this belief, students are expected to do a substantial amount of writing in their University courses and, where appropriate, members of faculty can and should use writing and the grading thereof as a factor in the evaluation of student work. The services provided by the Writing Support, part of the Student Success Centre, can be utilized by all undergraduate and graduate students who feel they require further assistance

**Emergency Evacuation Assembly Points:** In the event of an emergency that requires evacuation, please refer to the following link to become familiar with the assembly points for the class: <http://www.ucalgary.ca/emergencyplan/assemblypoints>

### **Freedom of Information and Protection of Privacy Act: Freedom of Information and Protection of Privacy Act**

The University of Calgary is committed to protecting the privacy of individuals who work and study at the University or who otherwise interact with the University in accordance with the standards set out in the Freedom of Information and Protection of Privacy Act. Please refer to the following link for detailed information: <http://www.ucalgary.ca/legalservices/foip>

The Department of Anthropology and Archaeology's FOIP (Freedom of Information and Privacy) policy requires all reports/examinations to be returned to students during class time or the instructor's office hours. Any term work not picked up will be placed in the Anthropology and Archaeology Office (ES620) for distribution. Any student not wishing to have their work placed in the office must make alternative arrangements with the course instructor early in the term.

**Safewalk Information:** Campus Security, in partnership with the Students' Union, provides the Safewalk service, 24 hours a day to any location on Campus including the LRT, parking lots, bus zones and University residences. Contact Campus Security at (403) 220-5333 or use a help phone, and Safewalkers or a Campus Security Officer will accompany you to your campus destination.

**Faculty of Arts Program Advising and Student Information Resources:** Have a question, but not sure where to start? Arts Students' Centre

The Faculty of Arts Students' Centre is the overall headquarters for undergraduate programs in the Faculty of Arts. The key objective of this office is to connect students with whatever academic assistance that they require.

In addition to housing the Associate Dean, Undergraduate Programs and Student Affairs and the Associate Dean for Teaching and Learning, the Arts Students' Centre is the specific home to:

- program advising
- the Faculty's Co-operative Education Program
- the Arts and Science Honours Academy
- the Faculty's Interdisciplinary Programs
- a Student Help Desk

Location: Social Sciences Room 102

Phone: 403.220.3580

Email: [ascarts@ucalgary.ca](mailto:ascarts@ucalgary.ca)

Website: [arts.ucalgary.ca/undergraduate/](http://arts.ucalgary.ca/undergraduate/)

For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at (403) 210-ROCK [7625] or visit them at the MacKimmie Library Block.

Contacts for Students Union Representatives for the Faculty of Arts:

arts1@su.ucalgary.ca

arts2@su.ucalgary.ca

arts3@su.ucalgary.ca

[arts4@su.ucalgary.ca](mailto:arts4@su.ucalgary.ca)

**Ombudsman`s office:** <http://www.ucalgary.ca/ombuds/>