

More than 30% of inmates in Canadian prisons are Indigenous. Aboriginal people make up just 5% of the country's population. <sup>1</sup>

# Anthropology 305: Human Variation and Adaptation

(Fall 2021)

**Professor:** Dr. Warren Wilson **Lecture:** Tue. & Thu., 12:30-13:45-

synchronous via Zoom

TA: Lais Pacheco

**E-mail:** wwilson@ucalgary.ca Office hours by appointment

**E-mail:** <u>lais.pacheco@ucalgary.ca</u>
Office hours by appointment







### How can you get in touch with the TA or me?

- 1. If you have a question, it may already be answered in this this syllabus, course assignment documents, course rubrics, or the discussion boards. Check there first. If not, consider posting your question on the Discussion Board for individual students. Both your TA and I will monitor the Discussion Board and attend to questions regularly.
- 2. If your question is specific to your personal situation, or if you need a response quickly, please feel free to send your TA or me an email.
- 3. When writing, please write 'ANTH 305' in the 'Subject' portion of the email. In the body of your message please provide your first and last name and use proper, not 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
- 4. If you want to make an appointment, please indicate the times when you are available.
- 5. We will do our best to reply within one business day.

<sup>&</sup>lt;sup>1</sup>One third of Canada's prisoners are Indigenous...Why?

<sup>&</sup>lt;sup>2</sup> From <u>COVID-19 Racial Disparities in Testing, Infection, Hospitalization, and Death</u>: non-whites in the US were more than twice as likely to die from COVID-19...Why?

**Course Calendar Statement:** Some of the major problems involved in interpreting modern and recent human diversity. Emphasis on the interaction between human cultural and biological systems and on cultural influences upon human biological diversity.

### How do humans vary? Does it matter?

In *Natural History*, Roman scientific writer Pliny the Elder (AD 23/24 – 79) 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." Pliny's words still resonate with us in 2021 as we seek to make sense the differences between people in the face of <u>COVID19</u> and <u>protestors crying out for social justice</u>. How are we to explain this rich multiplicity of human physical forms? <u>Anthropology</u> can assist us in our efforts to answer this question. Anthropologists investigate the nature and causes of human variation as well as those characteristics that are common to all of humanity. In this course we will consider human variation from the perspective of the anthropological sub-discipline <u>biological anthropology</u> which focuses specifically on human biological variation. Biological anthropologists recognize that contemporary human variation can be explained by the interaction between biology and culture. Hence, our work is informed by evolutionary theory, biology, human evolution, the study of nonhuman primates, and the cultural context in which we find the variation (Figure 1).

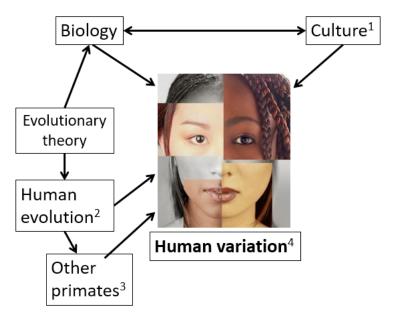


Figure 1: Variables which inform our understanding of contemporary human variation

(¹ Cultural anthropology, ² Paleoanthropology, ³ Primatology,

⁴ Human Population Biology...2-3 are subdisciplines of biological anthropology!)

Utilizing the perspective of biological anthropology, the goal of this course is to introduce you to the scientific study of human variation (Figure 2). 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 variation. 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 challenges. 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.

So, does this matter? Does this material have any bearing upon your life? I wouldn't teach this if I didn't strongly believe that it does. Do not, however, take my word for it. Ask these questions every time you engage with this course. I'll be curious to hear your answer when the course wraps up!

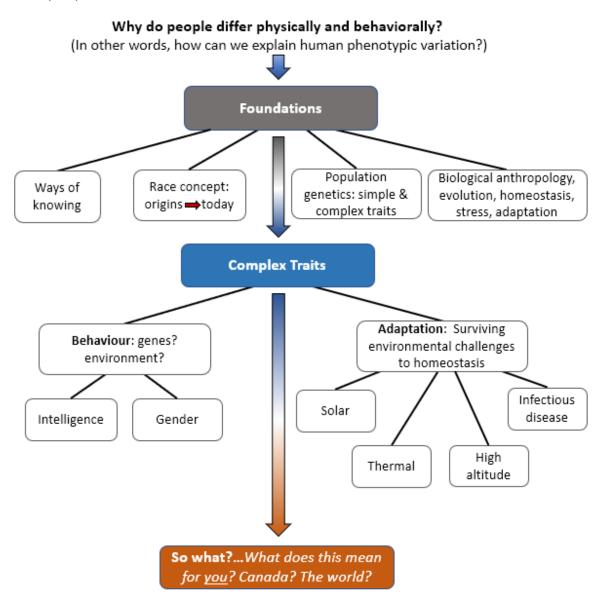


Figure 2: Course Map

## Learning Objectives

Upon completion of this course, you 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 anthropological perspectives on gender,
- 7. describe the three levels of human adaptation to stress,
- 8. describe how humans adapt to solar radiation, cold & heat stress, hypoxia, and infectious disease,
- 9. *link the knowledge obtained in this course to your everyday life and events in the news.*

# Teaching Philosophy<sup>1</sup>

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, informed conclusions. Students in my classes are encouraged to speak, write, listen, challenge, and learn, without fear of censorship. The free exchange of ideas is a fundamental part of democratic society. 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 with one another and me. 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 sexual and physical violence and assault, racism, sexism, discrimination based on sexual orientation, genocide, war, the physical and psychological abuse of children, suicide, and drug and alcohol abuse, this course should be unsettling. Our consideration of these domains is not gratuitous: a failure to understand the basis and potential for such acts puts us at risk of repeating them.

<sup>&</sup>lt;sup>1</sup> For more on my teaching philosophy, please see: Delbanco, A (2012) What is college for? *Continuing Higher Education Review* 76:11-19. https://files.eric.ed.gov/fulltext/EJ1000647.pdf

### Course Conventions

1. Modality: This course will take place online via Desire2Learn (D2L) and Zoom. To best succeed in the course, you 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 the time difference or unforeseen circumstances, inform the instructor in advance and propose and implement propose an alternative participation activity (e.g., watch the recordings, submit a brief reflection, and actively contribute to the follow-up online discussion). All but two classes (Oct. 28 & Nov. 4) will be held synchronously (see 'Schedule' below). The classes on Oct. 28 and Nov. 4 will be posted on D2L and held asynchronously.

#### Guide to Zoom:

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. 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. 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.

- **2. Prerequisites:** One of Anthropology 201, Archaeology 203, or Biology 205 or 241. 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 contact me during the first week of classes.
- **3. Breakout rooms:** In an effort to engage you in the learning process I will often use "think-pair-share" or "think-write-pair-share" to have you explore topics and answer questions with two to three of your classmates selected randomly by the computer. This generally will mean that I will ask you to think about a question, then put you in a breakout room with two to three people you may or may not know to discuss the question for 5-10 minutes. After bringing you "back" to the classroom, I will ask you to share what your group concluded. This behooves you to come to class prepared. For some it is uncomfortable to be placed in rooms with strangers. Showing up with no understanding of the material will further compromise your experience and what you take away from this class. Note that if you feel awkward in breakout rooms, you are not alone. I do this not to torment you but because this method has been found to improve student engagement, differentiate instruction and give you more of a voice in a large class where you otherwise might have none.
- **4. Learning Resources:** : reading assignments will be found both online in the "Course Documents" section of the class Desire2Learn website. In addition to the required readings, recommended readings are often provided to enhance your knowledge of the subject in question. Keep in mind that *you are not finished with the reading, podcast, or video assignment until you thoroughly understand it.* This will sometimes require you to read, listen to, or watch the assigned material more than once. An effective way of ensuring comprehension is to read, listen to, or watch the assignment then go back through it and summarize its main points and supporting evidence in your notebook.
- **5. Content Warning:** As I note above in my "Teaching Philosophy" section, some of the materials and topics in this class will include explicit content (violence; sexuality; profanity; blasphemous, objectionable or illegal conduct). If you feel any materials may cause you distress or severe discomfort, you are encouraged to speak with me or the teaching assistant and/or take measures to ensure that you feel braver in the classroom. You will not be exempt from any assigned work, but we will gladly work with you to accommodate your concerns.
- **6. Evaluation**: You will be evaluated based on your performance on two rounds of structured discussion boards which you will complete in groups, a midterm exam, a comprehensive final exam, and reflective journals. The assignments for the structured discussion boards and reflective journal can be found in D2L in Content > Discussion Board Assignment & Content > Reflective Journal Assignment. Deadlines for assignments can be found below in the course Schedule.

#### Guide to Exams:

- The one Mid-term Exam and one comprehensive Final Exam will be found in D2L in the Assessments > Quizzes on the day of the exam.
- At least six days 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.
- For the midterm you will have 75 minutes to complete 75 questions, plus 15 minutes extra in case of tech difficulties, for an overall total of 90 minutes to complete the exam. The registrar will set the time for the registrar-scheduled, final exam.
- The majority of questions will be multiple choice format with a small number of short-answer questions. Multiple choice questions will have either 4 or 5 possible answers.
- One question will appear at a time and you cannot scroll forward or backward through the questions, you must answer each question when it appears and move on to the next.
- The mid-term exam will be accessible to you from 12:01 am to 11:59 pm on the date of the
  exam. Once you start your test it will stay open until you answer all of the questions or for 90
  minutes, whichever comes first.
- Keep track of the time, as the mid-term exam will close after 90 minutes, whether you have answered all of the questions or not, just as it would if you were writing it in class in person.
- Do not logout until after you have answered all of the questions as you have one attempt only, you will not be able to get back in. You can take a break and walk away from your computer if you like but do not logout.
- You may consult your personal notes and readings while completing the tests, but not the internet. In other words, you are not permitted to google terms or questions. Also prohibited: communicating with other people in any way (remote or in person) during the test, sharing test information during or after you have taken the test, capturing (screen shot or photo) images of the questions, or sharing images of questions. As well, for 24-hour window for both your mid-term and final exam, you are not allowed to use any Discord sites set up for and by students in this class. A failure to abide by these guidelines would constitute a breach of academic integrity with detrimental repercussions.
- Why is the exam available to you for 24 hours? This 24-hour window is intended to allow you to find the best time (fewest distractions etc.) and place (good computer and Wi-Fi connection) for you to take the test. It is up to you to ensure that you have a good space to work in, with access to a decent device and a secure internet connection, to take the test. We cannot accommodate problems that derive from you not having prepared for this in advance. This is why you have a 24-hour time frame to take the test.
- We do not answer questions during exams in regular in person classes and likewise will not be
  answering questions during tests or the exam in this class. This means that everyone has
  access to the same information and we do not provide additional information or clarification to
  some students and not others. Questions or concerns will be handled via email in the days
  following the tests.
- Please do not send email inquiries about the test on the test day. Wait until at least the next day.
- The University is working hard to understand and accommodate the stress that students are facing during this pandemic and the necessary remote learning/testing environment. Please respect that this is being done to support you and choose to behave with integrity.

Your final grade will be calculated as follows:

ltem	Weight
Mid-Term Exam	26%
Final Exam	36%
Structured, Online Discussion Board	16%
Reflective Journal	22%

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 #1 or any other component and, assuming their overall average percentage earned for the course is above 49.8, they will pass the course.

#### **GRADING SCHEME:**

Each item of course work will be weighted as above and a final mark out of 100 calculated. This will then be converted to a letter grade as follows:

A+	94.9–100	А	89.9–94.8%	A-	84.9–89.8 %
B+	79.9–84.8 %	В	74.9–79.8 %	B-	70.9–74.8 %
C+	66.9-70.8 %	С	62.9-66.8 %	C-	58.9-62.8 %
D+	54.9 %- 58.8%	D	49.9–54.8 %	F	49.8 and below

Per the <u>University of Calgary Calendar</u>, 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". 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 contact 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 teaching assistant and I do our utmost to ensure that you have the best possible learning opportunity in this course.

Guidelines for the Reappraisal of Graded Term Work and the Reappraisal of Academic Assessments (Final Grades) can be found <a href="here">here</a> and <a href="here">here</a>.

What to do if you miss a required component of the course (e.g., miss an assignment deadline or aniss an exams): If you miss a required component of this course, you 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. You are not required to provide specific supporting documentation, such as a medical note. Students can make a Statutory Declaration as their

supporting documentation (available at <u>ucalgary.ca/registrar</u>). 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 <u>ucalgary.ca/registrar</u>. 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. Note that, deferral of the registrar scheduled final exam requires Registrar approval. For more detail, please see the Guidelines for the **Deferral of Term Work** here.

- **7. Office Hours:** I enjoy conversations with students. Whether you would like to discuss in greater detail something that was touched on in class or the assigned material or are having difficulty with some aspect of the course, both my TA and I are happy to meet as necessary.
- **8.** 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 <a href="https://www.ucalgary.ca/pubs/calendar/current/k-3.html">https://www.ucalgary.ca/pubs/calendar/current/k-3.html</a>

Further support on academic integrity is available at: <a href="https://ucalgary.ca/student-services/student-success/learning/academic-integrity">https://ucalgary.ca/student-services/student-success/learning/academic-integrity</a>

- **9.** Learning Technologies and Requirements: There is a <u>D2L site</u> for this course which contains required readings and other relevant class resources and materials. In this online course, students 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.

I appreciate that not all students can afford this without some financial assistance. A few options for financial assistance can be found here.

**10. 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.

- **11. Copyright Legislation:** All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (<a href="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</a>) and requirements of the copyright act (<a href="https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html">https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html</a>) 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.
- 12. 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 <a href="https://live-ucalgary.ucalgary.ca/student-services/access">https://live-ucalgary.ucalgary.ca/student-services/access</a>. 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 <a href="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-procedures/accommodation-students-disabilities-procedures/accommodation-students-disabilities-procedures.
- **13. Support and Resources:** Please visit the Registrar's website at:

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
- **14. Freedom of Information and Protection of Privacy:** 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.
- **15. Discord Channels:** The Department of Anthropology & Archaeology has made recommendations regarding Discord channels created by students for our courses. In this course I will implement them as follows:
  - 1) A Discord channel must have the TA as an administrator for the channel allowing the TA to monitor the channel.
  - 2) The channel must be limited to the main one and only one offshoot channel. Otherwise, it becomes too difficult to monitor.
  - 3) Do not go on Discord during the 24-hour test period and do not discuss the test in any way. The TA also has hours in the 24 hour time frame of the test to monitor discord.
  - 4) All members of the class must be invited to the Discord channel.

I also remind you that while Discord is not a U of C supported platform, U of C Academic Integrity standards still apply.

Treaty Acknowledgement: The University of Calgary, located in the heart of Southern Alberta, both acknowledges and pays tribute to the traditional territories of the peoples of Treaty 7, which includes the Blackfoot Confederacy (comprised of the Siksika, the Piikuni, and the Kainai) as well as the Tsuut'ina and the Stoney Nakoda (including Chiniki, Bearspaw, and Wesley First Nations). The University of Calgary is situated on land adjacent to where the Bow River meets the Elbow River. The University recognizes the traditional Blackfoot name of this place, Moh'kíns'tsis, now known as the City of Calgary. The University recognizes that the City of Calgary is also home to Region III of the Métis Nation of Alberta. By virtue of the 1877 signing of Treaty 7, the university recognizes that we are all treaty people. The City of Calgary is home to a culturally diverse community. Together, we share this land, strive to live together, learn together, walk together, and grow together "in a good way." ii' taa' poh' to' p

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

Class 1 7-Sep Wariation? V(P)=V(G)+V(E)  Class 2 9-Sep Who am I?, Anthropology, Race, IAT What is race?, Critical thinking sidebar: peer review, A cautionary tale, Race Concept-informal origins  Class 3 14-Sep concept-informal origins (cont.) & evolutionary theory, Critical thinking sidebar: peer review, A cautionary tale, Race Concept-informal origins (cont.) & evolutionary theory, Critical thinking sidebar: geodultionary theory, Critical thinking sidebar: research, natural experiments  Race concept-sinformal origins, Why rejection of race concept?  Class 4 16-Sep sidebar: research, natural experiments  Race concept-scientific origins, Why rejection of race concept?  Class 6 23-Sep Why rejection of race concept?  Class 7 28-Sep Why rejection of race concept? (cont.) Why rejection of race concept? (cont.) What is race?  Class 7 28-Sep Why rejection of race concept? (cont.) What is race?  Class 8 5-Oct Implications of race concept: Reading on eugenics/genocide TBD. Optional: Claeys, O'Connell & Ruse, Whitman  Lewis (Beyond Mendel's Laws); U. Utah – Genomic Imprinting, Optional: Welss & Tackney (review of basic genetics)  Assignment 11-Oct Discussion Board Topic 1: Group response A due  Class 10 12-Oct genes, patterns of inheritance (cont.) Radiolab  Lewis (Beyond Mendel's Laws); U. Utah – Genomic Imprinting, Optional: Welss & Tackney (review of basic genetics)  Jones (Calliban's Revenge), Singer (2018). Optional: Radiolab  Lexam 19-Oct Mid-Term Exam  Class 11 14-Oct Discussion Board Topic 1: Group response A due  Levontin (Mental Traits)  Class 14 27-Oct IQ, Intelligence, & Heritability Resnick, Optional: Hidden Brain Implicit Association Test-Gender; How is sex determined? Hengi. Optional: Imprication: Hidden Brain Implicit Association Test-Gender; How is sex determined? Hengi. Optional: Intersex Society of North America; Graves; Faust-Society of North America; Graves; Faust-Society of North America; Class 15 28-Oct Human variation in complex traits - Sex Graves; Faust-Society of North America; Class 15	Item	Date	Topic	Assigned Readings, Films, & Podcasts <sup>2</sup>
Class 2 9-Sep Who am I?, Anthropology, Race, IAT Gladstone  What is race?, Critical thinking sidebar: peer review, A cautionary tale, Race concept-informal origins weintraub.  Race concept-informal origins (cont.) & evolutionary theory, Critical thinking sidebar: peer review, A cautionary tale, Race concept-informal origins (cont.) & evolutionary theory, Critical thinking sidebar: peer review, A cautionary tale, Race concept-informal origins (cont.) & evolutionary theory, Critical thinking sidebar: research, natural experiments (cont.) & Appiah. Optional: Bauer & Blumenthal; Milgram; SSRC; Amodio (cont.) & Appiah. Optional: Bauer & Blumenthal; Milgram; SSRC; Amodio (cont.) & Appiah. Optional: Bauer & Blumenthal; Milgram; SSRC; Amodio (cont.) & Appiah. Optional: Barbujani et al. (cont.) & Appiah. Optional: Barbujani et a			How might we think about human	course syllabus, Understanding Science; Kristof; Implicit
Class 2 9-Sep Who am I?, Anthropology, Race, IAT What is race?, Critical thinking sidebar: peer review, A cautionary tale, Race concept-informal origins (cont.) & weintraub.  Race concept-informal origins (cont.) & weintraub.  Class 4 16-Sep Sidebar: research, natural experiments Appiah. Optional: Bauer & Blumenthal; Milgram; SSRC; Amodio  Class 5 21-Sep rejection of race concept? (cont.) Why rejection of race concept? (cont.) Why rejection of race concept? (cont.) Why rejection of the race concept?  Class 6 23-Sep Why rejection of race concept? (cont.) Why rejection of race concept? (cont.) Why rejection of the race?  Class 7 28-Sep (cont.), What is race?  Class 8 5-Oct Implications of race concept: genocide, social Darwinism  Class 9 7-Oct Sources of genetic variation (class)  Class 9 7-Oct Sources of genetic variation (cont.), genes, patterns of inheritance (cont.)  Class 10 12-Oct genes, patterns of inheritance (cont.)  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Uquantitative genetics  Class 13 26-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct Discussion Board Topic 1: Group response B due  Class 15 21-Oct Discussion Board Topic 1: Group response B due  Class 16 27-Oct Discussion Board Topic 1: Group response B due  Class 17 27-Oct Discussion Board Topic 1: Group response B due  Class 18 27-Oct Discussion Board Topic 1: Group response B due  Class 19 27-Oct Discussion Board Topic 1: Group response B due  Class 19 27-Oct Discussion Board Topic 1: Group response B due  Class 19 27-Oct Discussion Board Topic 1: Group response B due  Class 19 27-Oct Discussion Board Topic 1: Group response B due  Class 19 27-Oct Discussion Board Topic 1: Group response B due  Class 19 27-Oct Discussion Board Topic 1: Group response B due  Class 19 27-Oct Discussion Board Topic 1: Group response B due  Class 19 27-Oct Discussion Board Topic 1: Group response B due  Class 19 27-Oct Discussion Board Topic 1: Group response B due  Class 19 27-Oct Discussion Board Topic 1: Group response B due  Class 19 27-Oct D	Class 1	7-Sep	variation? V(P)=V(G)+V(E)	Association Test-Race
Class 3 14-Sep concept-informal origins (cont.) & evolutionary theory, Critical thinking sidebar: peer review, A cautionary tale, Race concept-informal origins (cont.) & evolutionary theory, Critical thinking sidebar: research, natural experiments Race concept-scientific origins, Why rejection of race concept? Marks  Class 5 21-Sep Why rejection of race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Why rejection of the race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Why rejection of the race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Why rejection of the race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Why rejection of the race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Why rejection of the race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Why rejection of the race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Why rejection of the race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Why rejection of race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Why rejection of race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  U. Utah – SNPs. Optional: Disotell; Whitman.  Pace the Power of Illusion. Optional: Barbujani et al.  U. Utah – SNPs. Optional: Barbujani et al.  U. Utah – SNPs. Optional: Pace the Future Reading on eugenics/genocide TBD. Optional: Claeys, O'Connell & Ruse, Whitman  Lewis (Beyond Mendel's Laws); U. Utah – Genomic Imprinting. Optional: Weiss & Tackney (review of basic genetics)  Pace the Power of Illusion. Optional: Weiss & Tackney (review of basic genetics)  U. Utah – SNPs. Optional: Weiss & Tackney (review of basic genetics)  Sources of genetic variation (cont.), Genes. Optional: Mendelian Inheritance; Informed consent; Epigenetics & 101; Epigenetics & 911  U. Utah – Spigenetics 101; Epigenetics & Groopman; Lewis (Mul				Culotta; Canadian Race Relations. Optional: Lipstadt;
Description of the race concept: genocide, and consumers and concept services of genetic variation (cass 9	Class 2	9-Sep		Gladstone
Class 3			•	
Race concept-informal origins (cont.) & evolutionary theory, Critical thinking sidebar: research, natural experiments Race concept-scientific origins, Why rejection of race concept? Class 5 21-Sep rejection of race concept? (cont.) Why rejection of race concept? (cont.) Why rejection of race concept? (cont.) Why rejection of race concept? Class 7 28-Sep (cont.), What is race? U. Utah – SNPs. Optional: Disotell; Whitman.  National Day for Truth and Reconciliation (no class) Implications of race concept: genocide, social Darwinism  Class 8 5-Oct social Darwinism  Class 9 7-Oct Sources of genetic variation Class 9 7-Oct Sources of genetic variation (cont.), genetics Class 10 12-Oct genes, patterns of inheritance Class 11 14-Oct Patterns of inheritance (cont.)  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics Class 13 26-Oct CRISPR  Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability Resnice Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;				Akpan or Wiesel. Optional: ; Critchley; Statistics Canada;
Class 4   16-Sep   sidebar: research, natural experiments   Amodio	Class 3	14-Sep		Weintraub.
Class 4   16-Sep   sidebar: research, natural experiments   Amodio			, , ,	
Class 5 21-Sep rejection of race concept? Marks  Class 6 23-Sep Why rejection of race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Why rejection of race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Why rejection of the race concept? (cont.) Why rejection of the race concept? (cont.), What is race? U. Utah – SNPs. Optional: Disotell; Whitman.  National Day for Truth and Reconciliation (no class) Optional: Honouring the Truth, Reconciling for the Future Implications of race concept: genocide, social Darwinism Orden Imprinting. Optional: Honouring the Truth, Reconciling for the Future Reading on eugenics/genocide TBD. Optional: Claeys, O'Connell & Ruse, Whitman  Lewis (Beyond Mendel's Laws); U. Utah – Genomic Imprinting. Optional: Weiss & Tackney (review of basic genetics)  Assignment 11-Oct Discussion Board Topic 1: Group response A due  U. Utah – Epigenetics & Inheritance; Ghost in Your Genes. Optional: Mendelian Inheritance; Informed consent; Epigenetics 101; Epigenetics & 9/11  Jones (Calliban's Revenge), Singer (2018). Optional: Radiolab  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics Groopman; Lewis (Multifactorial Traits)  IQ, Intelligence, & Heritability. Sidebar: CRISPR Lewontin (Mental Traits).  Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;				1 ''
Class 5   21-Sep   rejection of race concept?   Marks	Class 4	16-Sep		Amodio
Class 6 23-Sep Why rejection of race concept? (cont.) Race the Power of Illusion. Optional: Barbujani et al.  Class 7 28-Sep (cont.), What is race? U. Utah – SNPs. Optional: Disotell; Whitman.  National Day for Truth and Reconciliation (no class) Optional: Honouring the Truth, Reconciling for the Future Implications of race concept: genocide, Social Darwinism Order Imprinting. Optional: Honouring the Truth, Reconciling for the Future Reading on eugenics/genocide TBD. Optional: Claeys, O'Connell & Ruse, Whitman  Lewis (Beyond Mendel's Laws); U. Utah – Genomic Imprinting. Optional: Weiss & Tackney (review of basic genetics)  Assignment 11-Oct Discussion Board Topic 1: Group response A due  U. Utah – Epigenetics & Inheritance; Ghost in Your Genes. Optional: Mendelian Inheritance; Informed consent; Epigenetics 101; Epigenetics & 9/11  Jones (Calliban's Revenge), Singer (2018). Optional: Radiolab  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics Groopman; Lewis (Multifactorial Traits)  Class 13 26-Oct CRISPR Lewontin (Mental Traits).  Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability Resnot. Optional: Intersex Society of North America;  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;				
Class 7 28-Sep (cont.), What is race? U. Utah – SNPs. Optional: Disotell; Whitman.  National Day for Truth and Reconciliation (no class)  Optional: Honouring the Truth, Reconciling for the Future Implications of race concept: genocide, Social Darwinism  Class 8 5-Oct Sources of genetic variation  Assignment 11-Oct Discussion Board Topic 1: Group response A due  Class 10 12-Oct genes, patterns of inheritance (cont.)  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics  Class 13 26-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability  Class 14 27-Oct IQ, Intelligence, & Heritability  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;	Class 5	21-Sep	rejection of race concept?	Marks
Class 7   28-Sep   (cont.), What is race?   U. Utah – SNPs. Optional: Disotell; Whitman.	Class 6	23-Sep	Why rejection of race concept? (cont.)	Race the Power of Illusion. Optional: Barbujani et al.
National Day for Truth and Reconciliation (no class)  Optional: Honouring the Truth, Reconciling for the Future  Reading on eugenics/genocide TBD. Optional: Claeys, O'Connell & Ruse, Whitman  Lewis (Beyond Mendel's Laws); U. Utah – Genomic Imprinting. Optional: Weiss & Tackney (review of basic genetics)  Assignment  11-Oct Discussion Board Topic 1: Group response A due  Sources of genetic variation (cont.), genes, patterns of inheritance  Class 10 12-Oct genes, patterns of inheritance  Class 11 14-Oct Patterns of inheritance (cont.)  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics  Mid-Term Exam  Class 13 26-Oct CRISPR  Assignment  Class 14 27-Oct Discussion Board Topic 1: Group response B due  Class 14 Class 15 Class 16 Class 17 Class 17 Class 18 Class 18 Class 19 Class 20 Class 19 Class 19 Class 20 Class 19 Class 20 Cl			· · ·	
no class 30-Sep Reconciliation (no class) Optional: Honouring the Truth, Reconciling for the Future    Implications of race concept: genocide, Social Darwinism	Class 7	28-Sep	(cont.), What is race?	U. Utah – SNPs. Optional: Disotell; Whitman.
Implications of race concept: genocide, Social Darwinism			National Day for Truth and	
Class 8 5-Oct social Darwinism O'Connell & Ruse, Whitman  Lewis (Beyond Mendel's Laws); U. Utah – Genomic Imprinting. Optional: Weiss & Tackney (review of basic genetics)  Assignment 11-Oct Discussion Board Topic 1: Group response A due  U. Utah – Epigenetics & Inheritance; Ghost in Your Genes. Optional: Mendelian Inheritance; Informed consent; Epigenetics & 9/11  Jones (Calliban's Revenge), Singer (2018). Optional: Radiolab  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics Groopman; Lewis (Multifactorial Traits)  Class 13 26-Oct CRISPR Central Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;	no class	30-Sep	, ,	Optional: Honouring the Truth, Reconciling for the Future
Lewis (Beyond Mendel's Laws); U. Utah – Genomic Imprinting. Optional: Weiss & Tackney (review of basic genetics)  Assignment 11-Oct Discussion Board Topic 1: Group response A due  U. Utah – Epigenetics & Inheritance; Ghost in Your Genes. Optional: Mendelian Inheritance; Informed consent; Epigenetics 101; Epigenetics & 9/11  Class 11 14-Oct Patterns of inheritance (cont.)  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics Groopman; Lewis (Multifactorial Traits)  IQ, Intelligence, & Heritability. Sidebar: Lewontin (Mental Traits).  Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability  Resnick. Optional: Intersex Society of North America;			Implications of race concept: genocide,	Reading on eugenics/genocide TBD. Optional: Claeys,
Imprinting. Optional: Weiss & Tackney (review of basic genetics)   Assignment   11-Oct   Discussion Board Topic 1: Group response A due     U. Utah – Epigenetics & Inheritance; Ghost in Your Genes. Optional: Mendelian Inheritance; Informed consent; Epigenetics 101; Epigenetics & 9/11   Jones (Calliban's Revenge), Singer (2018). Optional: Radiolab   Radi	Class 8	5-Oct	social Darwinism	
Class 9 7-Oct Sources of genetic variation genetics)  Assignment 11-Oct Discussion Board Topic 1: Group response A due  U. Utah – Epigenetics & Inheritance; Ghost in Your Genes. Optional: Mendelian Inheritance; Informed consent; Epigenetics 101; Epigenetics & 9/11  Jones (Calliban's Revenge), Singer (2018). Optional: Radiolab  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics Groopman; Lewis (Multifactorial Traits)  IQ, Intelligence, & Heritability. Sidebar: CRISPR Lewontin (Mental Traits).  Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;				Lewis (Beyond Mendel's Laws); U. Utah – Genomic
Assignment 11-Oct Discussion Board Topic 1: Group response A due  U. Utah – Epigenetics & Inheritance; Ghost in Your Genes. Optional: Mendelian Inheritance; Informed consent; Epigenetics 101; Epigenetics & 9/11  Jones (Calliban's Revenge), Singer (2018). Optional: Radiolab  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics Groopman; Lewis (Multifactorial Traits)  IQ, Intelligence, & Heritability. Sidebar: Lewontin (Mental Traits).  Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;				Imprinting. Optional: Weiss & Tackney (review of basic
Class 10  12-Oct genes, patterns of inheritance  Class 11  14-Oct Patterns of inheritance (cont.)  Class 12  Class 13  26-Oct CRISPR  Assignment  Class 14  27-Oct Discussion Board Topic 1: Group response B due  Class 14  Class 14  Class 15  Class 16  Class 17  Class 17  Class 18  Class 19  Class	Class 9	7-Oct	Sources of genetic variation	genetics)
Class 10  12-Oct genes, patterns of inheritance  Class 11  14-Oct Patterns of inheritance (cont.)  Class 12  Class 13  26-Oct CRISPR  Assignment  Class 14  27-Oct Discussion Board Topic 1: Group response B due  Class 14  Class 14  Class 15  Class 16  Class 17  Class 17  Class 18  Class 19  Class	Assignment	11-Oct	Discussion Board Topic 1: Group response A due	
Class 10 12-Oct genes, patterns of inheritance consent; Epigenetics 101; Epigenetics & 9/11  Jones (Calliban's Revenge), Singer (2018). Optional: Radiolab  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics Groopman; Lewis (Multifactorial Traits)  IQ, Intelligence, & Heritability. Sidebar: Class 13 26-Oct CRISPR Lewontin (Mental Traits).  Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;				· =
Class 11  14-Oct Patterns of inheritance (cont.)  Mid-Term Exam Class 12  21-Oct Quantitative genetics  IQ, Intelligence, & Heritability. Sidebar: Class 13  26-Oct CRISPR  Lewontin (Mental Traits).  Assignment Class 14  27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;			=	
Class 11 14-Oct Patterns of inheritance (cont.) Radiolab  Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics Groopman; Lewis (Multifactorial Traits)  IQ, Intelligence, & Heritability. Sidebar: Class 13 26-Oct CRISPR Lewontin (Mental Traits).  Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;	Class 10	12-Oct	genes, patterns of inheritance	consent; Epigenetics 101; Epigenetics & 9/11
Exam 19-Oct Mid-Term Exam  Class 12 21-Oct Quantitative genetics Groopman; Lewis (Multifactorial Traits)  IQ, Intelligence, & Heritability. Sidebar: Class 13 26-Oct CRISPR Lewontin (Mental Traits).  Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;				
Class 12  21-Oct Quantitative genetics Groopman; Lewis (Multifactorial Traits)  IQ, Intelligence, & Heritability. Sidebar: Class 13  26-Oct CRISPR Lewontin (Mental Traits).  Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14  27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;	Class 11	14-Oct	Patterns of inheritance (cont.)	Radiolab
Class 13  26-Oct CRISPR  Lewontin (Mental Traits).  Assignment  25-Oct Discussion Board Topic 1: Group response B due  Class 14  27-Oct IQ, Intelligence, & Heritability  Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined?  Henig. Optional: Intersex Society of North America;	Exam	19-Oct	Mid-Term Exam	
Class 13 26-Oct CRISPR Lewontin (Mental Traits).  Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;	Class 12	21-Oct	Quantitative genetics	Groopman; Lewis (Multifactorial Traits)
Assignment 25-Oct Discussion Board Topic 1: Group response B due  Class 14 27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain  Implicit Association Test-Gender; How is sex determined?  Henig. Optional: Intersex Society of North America;			IQ, Intelligence, & Heritability. Sidebar:	
Class 14 27-Oct IQ, Intelligence, & Heritability Resnick. Optional: Hidden Brain Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;	Class 13	26-Oct	CRISPR	Lewontin (Mental Traits).
Implicit Association Test-Gender; How is sex determined? Henig. Optional: Intersex Society of North America;	Assignment	25-Oct	Discussion Board Topic 1: Group response B due	
Henig. Optional: Intersex Society of North America;	Class 14	27-Oct	IQ, Intelligence, & Heritability	Resnick. Optional: Hidden Brain
Henig. Optional: Intersex Society of North America;				Implicit Association Test-Gender; How is sex determined?
	Class 15	28-Oct	Human variation in complex traits - Sex	

Continued on the next page!

Item	Date	Topic	Assigned Readings, Films, & Podcasts <sup>2</sup>
		Human variation in complex traits –	
Class 16	2-Nov	Gender (anthropological view)	Sapolsky. Optional: Belluck, Bergner
		Human population biology:	
Class 17	4-Nov	homeostasis, adaptation, & stress	Stinson et al.
Break!	9 & 11-No	ov. Reading Week- no cla	asses
Class 18	16-Nov	Adaptation to climatic stress: UVR	Jablonski
Assignment	17-Nov	Discussion Board Topic 2: Group response A due	
		Adaptation to climatic stress: hot &	
Class 19	18-Nov	cold	Steegman
		Adaptation to hypoxic stress: high	
Class 20	23-Nov	altitude & under the sea	Beall. Optional: Baranova et al.
Class 21	25-Nov	Adaptation to disease stress	Sattenspiel & Slonim (pp. 387-418). Optional: Orent,
			Sattenspiel & Slonim (pp. 418-440). Optional: Jacobs &
Class 22	30-Nov	Adaptation to disease stress (cont.)	Richtel
Class 23	2-Dec	Adaptation to disease stress (cont.)	Sattenspiel & Slonim (pp. 440-450).
C1833 23	2-Dec	Adaptation to disease stress (cont.)	Sattenspier & Sionini (pp. 440-430).
Class 24	7-Dec	Stress & human variation	Stress: Portait of a Killer
Class 25	9-Dec	Couse wrap up	This American Life ("Words")
Assignment	10-Dec	Discussion Board Topic 2: Group response B due	
Final Exam	TBD		
FIIIdi EXdifi	IBD	Comprehensive, registrar scheduled, final exam	

<sup>&</sup>lt;sup>1</sup> The schedule of topics may change, but the exam dates and assignment due dates will not change.

## Readings

Some readings are available as pdfs on the Desire2Learn (D2L) website and others online.

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. <a href="http://www.bbc.co.uk/programmes/b080t63w">http://www.bbc.co.uk/programmes/b080t63w</a> (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)

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

TBD = to be determined

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

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

Beall, CM (2012) High-Altitude Hypoxia. IN Stinson, Bogin, & O'Rourke, editors. Human Biology: An Evolutionary and Biocultural Perspective. John Wiley & Sons, Inc. NY. pp. 221-234. https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=693178&ppg=1

Belluck, P (2019) Many Genes Influence Same-Sex Sexuality, Not a Single 'Gay Gene'. The New York Times. 29 August. https://nyti.ms/2ZmHedC

Bergner, Daniel (2019) The Struggles of Rejecting the Gender Binary. The New York Times. The Struggles of Rejecting the Gender Binary. https://www.nytimes.com/2019/06/04/magazine/gender-nonbinary.html

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

Canadian Race Relations Foundation. 2019. Hate Crimes in Canada. <a href="https://www.crrf-fcrr.ca/en/news-a-events/articles/item/26823-hate-crime-in-canada">https://www.crrf-fcrr.ca/en/news-a-events/articles/item/26823-hate-crime-in-canada</a>

Claeys, G (2000). The "Survival of the Fittest" and the Origins of Social Darwinism. Journal of the History of Ideas 61 (2):223–240. https://muse-jhu-edu.ezproxy.lib.ucalgary.ca/article/15068/pdf

Critchley, S (2014) The Dangers of Certainty: A Lesson from Auschwitz. The New York Times (<a href="http://opinionator.blogs.nytimes.com/2014/02/02/the-dangers-of-certainty/?\_php=true&\_type=blogs&src=me&ref=general&\_r=0">https://www.youtube.com/watch?v=wXwj4jMnWZg</a>. 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 <a href="http://library.ucalgary.ca/">http://library.ucalgary.ca/</a>. Alternatively, the direct link is <a href="http://science.sciencemag.org.ezproxy.lib.ucalgary.ca/content/336/6083/825">http://science.sciencemag.org.ezproxy.lib.ucalgary.ca/content/336/6083/825</a>.)

Demby, Gene (2014) The Ugly, Fascinating History of The Word 'Racism'. *Code Switch*, National Public Radio. http://www.npr.org/sections/codeswitch/2014/01/05/260006815/the-ugly-fascinating-history-of-the-word-racism. Accessed: 15 July 2016.

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

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)

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

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. (59-minute video). https://www.gapminder.org/videos/dont-panic-the-facts-about-population/

Ghost in Your Genes (2007) NOVA. (50-minute video) https://vimeo.com/248146854

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

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

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

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

Resnick, Brian (2018) How scientists are learning to predict your future with your genes. Vox. <a href="https://www.vox.com/science-and-health/2018/8/23/17527708/genetics-genome-sequencing-gwas-polygenic-risk-score">https://www.vox.com/science-and-health/2018/8/23/17527708/genetics-genome-sequencing-gwas-polygenic-risk-score</a>

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

Hidden Brain (2018) Emma, Carrie, Vivian: How A Family Became A Test Case for Forced Sterilizations. <a href="https://www.npr.org/2018/04/23/604926914/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</a> (optional, 41-minute podcast)

How is sex determined? (2001) NOVA. <a href="http://www.pbs.org/wgbh/nova/body/how-sex-determined.html">http://www.pbs.org/wgbh/nova/body/how-sex-determined.html</a>

Honouring the Truth, Reconciling the Future. <a href="https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Executive Summary English Web.pdf">https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Executive Summary English Web.pdf</a>

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. <a href="https://implicit.harvard.edu/implicit/canada/takeatest.html">https://implicit.harvard.edu/implicit/canada/takeatest.html</a> 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**. <a href="https://implicit.harvard.edu/implicit/canada/takeatest.html">https://implicit.harvard.edu/implicit/canada/takeatest.html</a> 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 <a href="http://geneticslab.emory.edu/documents/informed-consent/huntington-disease-consent-form.pdf">http://geneticslab.emory.edu/documents/informed-consent/huntington-disease-consent-form.pdf</a> (optional reading)

Intersex Society of North America. <a href="https://isna.org/faq/">https://isna.org/faq/</a>

Jablonski, NG (2012) Sunlight, UVR, and the Human Body (2012) IN Stinson, Bogin, & O'Rourke, editors. Human Biology: An Evolutionary and Biocultural Perspective. John Wiley & Sons, Inc. NY. pp. 205-221(https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=693178&ppg=1)

Jacobs, A & M Richtel (2019) In a Poor Kenyan Community, Cheap Antibiotics Fuel Deadly Drug-Resistant Infections. The New York Times.

https://www.nytimes.com/2019/04/07/health/antibiotic-resistance-kenya-drugs.html

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

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 alia&pgtype=article (optional reading)

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 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 <a href="http://library.ucalgary.ca/">http://library.ucalgary.ca/</a>. 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 <a href="http://library.ucalgary.ca/">http://library.ucalgary.ca/</a>) (optional reading)

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

O'Connell, J., & Ruse, M. (2021). Social Darwinism (Elements in the Philosophy of Biology). Cambridge: Cambridge University Press. doi:10.1017/9781108879026. <a href="https://www-cambridge-org.ezproxy.lib.ucalgary.ca/core/elements/social-darwinism/D928741B6AE3344271B09F730F7815D8">https://www-cambridge-org.ezproxy.lib.ucalgary.ca/core/elements/social-darwinism/D928741B6AE3344271B09F730F7815D8</a>

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

Padawer, R (2012) What's So Bad About a Boy Who Wants to Wear a Dress? *The New York Times* <a href="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">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</a> (optional reading)

Race: The Power of Illusion. Episode 1: The Difference Between Us. (57-minute video)

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. Scroll down to and watch The Difference Between Us

A transcript of this video can be found here: <a href="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</a>

Radiolab (2012) Inheritance (65-minute podcast). <a href="http://www.radiolab.org/story/251876-inheritance/">http://www.radiolab.org/story/251876-inheritance/</a>

Resnick, B. (2018) How scientists are learning to predict your future with your genes. Vox <a href="https://www.vox.com/science-and-health/2018/8/23/17527708/genetics-genome-sequencing-gwas-polygenic-risk-score">https://www.vox.com/science-and-health/2018/8/23/17527708/genetics-genome-sequencing-gwas-polygenic-risk-score</a>

Rosenberg et al. (2002) Genetic structure of human populations. Science 298:2381-2385. DOI: 10.1126/science.1078311 http://www-

<u>leland.stanford.edu/~huatang/gene244/readings/Science%202002%20Rosenberg.pdf</u> (*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. A pdf of this chapter is available on D2L. (optional reading)

Sapolsky, Robert M. 1997. The Trouble with Testosterone. In: *The Trouble with Testosterone and Other Essays on the Biology of the Human Predicament.* Simon & Schuster, NY. Pp. 147-159. (pdf posted on D2L)

Sattenspiel, L, K Slonim (2012) The epidemiology of human disease. IN Stinson, Bogin, & O'Rourke, editors. Human Biology: An Evolutionary and Biocultural Perspective. John Wiley & Sons, Inc. NY. pp. 387-450. <a href="https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=693178&ppg=1">https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=693178&ppg=1</a>

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/vhf/ebola/outbreaks/guinea/index.html

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

Statistics Canada. 2019. Police-reported hate crime, by type of motivation, Canada (selected police services). <a href="https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3510006601">https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3510006601</a>

Steegman, AT (2012) IN Stinson, Bogin, & O'Rourke, editors. Human Biology: An Evolutionary and Biocultural Perspective. John Wiley & Sons, Inc. NY. pp. 177-205. <a href="https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=693178&ppg=1">https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=693178&ppg=1</a>

Stinson, S., B. Bogin, D. O'Rourke, R. Huss-Ashmore (2012) Human Biology: An evolutionary and biocultural perspective. IN Stinson, Bogin, & O'Rourke, editors. Human Biology: An Evolutionary and Biocultural Perspective. John Wiley & Sons, Inc. NY. pp. 3-20. <a href="https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=693178&ppg=1">https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=693178&ppg=1</a>

Stress: Portrait of a Killer. 2008. (56-minute video) <a href="https://topdocumentaryfilms.com/stress-portrait-of-a-killer/">https://topdocumentaryfilms.com/stress-portrait-of-a-killer/</a>

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/

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" (58-minute podcast) <a href="https://www.thisamericanlife.org/204/81-words">https://www.thisamericanlife.org/204/81-words</a> . If you'd prefer to read the transcript, it is available at the URL for the podcast.

Understanding Science (2016) University of California Museum of Paleontology. *Begin with this page:* <a href="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</a> 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.)

U. Utah – SNPs (2019). Learn Genetics. Making SNPs Make Sense (view all sections in <u>both</u> What is a SNP? and What is a Haplotype?). <a href="http://learn.genetics.utah.edu/content/precision/snips/">http://learn.genetics.utah.edu/content/precision/snips/</a>

U. Utah – Epigenetics & Inheritance (2019) Epigenetics & Inheritance (you will be responsible for the entire page). <a href="https://learn.genetics.utah.edu/content/epigenetics/inheritance/">https://learn.genetics.utah.edu/content/epigenetics/inheritance/</a>

U. Utah – Genomic Imprinting (2019). Learn Genetics. Genomic Imprinting (you will be responsible for the entire page). <a href="https://learn.genetics.utah.edu/content/epigenetics/imprinting/">https://learn.genetics.utah.edu/content/epigenetics/imprinting/</a>

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

Weiss, ML. and J. Tackney (2012) An Introduction to Genetics. IN Stinson, Bogin, & O'Rourke, editors. Human Biology: An Evolutionary and Biocultural Perspective. John Wiley & Sons, Inc. NY.

pp. 53-88. <a href="https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=693178&ppg=1">https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=693178&ppg=1</a> (optional reading)

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

Wiesel, Elie. 1958. *Night*. Bantam Books. New York. (pages 1 - 43)

The publisher will not allow us to place any print copies on reserve. So, if you wish to read this, you can purchase personal copies from Kobo or Amazon for \$10.99

(https://www.kobo.com/ca/en/ebook/night-2, https://www.amazon.ca/Night-Trilogy-Elie-Wiesel-ebook/dp/B0071VUXXA).