

Human Variation

LOCATION: HSSB 1174

TIME: MTWR 2pm to 3:15pm

Class Website: GauchoSpace

Instructor: Lisa McAllister

Email: lisamcallister@umail.ucsb.edu

Office: HSSB 2030

Office Hours: T and W 3:30pm to 5pm (or by appointment)
Please come and see me if you have any questions.

SYNOPSIS

An examination of traditional race concepts contrasted with an approach to human variation through the analysis of biologically adaptive traits.

This course will discuss human variation from a genetic and developmental perspective. We will start with a basic (re)introduction to genetics and the theory of natural selection, before discussing how genes, and gene-environment interactions, cause within population variation. We will then look at phenotypic and genotypic variation across populations, and touch on cultural variation and behavior. Students will also learn that the nature of human variation is more phenotypic than genetic.

TEXTS

Readings on class website.

GRADING

<u>Date Due</u>	<u>Assignment</u>	<u>Percent</u>
10pm Saturday of that week (online)	Weekly Quizzes	40%
September 13 th 2012 (in class)	Group Project	40%
September 15 th 2012 (online)	Final Essay	20%

COURSE FORMAT

This course is taught using a flipped class room format. In summary, I lecture to you once a week, the other three class days are used as shown below. This is how many medical school courses and classes at MIT and Caltech are being taught. Each Monday, in class, I will give you a question. You will be able to answer this question by Thursday's class. I will provide you with a variety of materials (called activities) through GauchoSpace and in class that will help you answer the question. But, you are encouraged to look for additional material as necessary and share this with the class through GauchoSpace forums. You are expected to use these different resources to teach yourself and make inferences from what you learn about broader topics. It is more work for me but in theory, for you, a better way to learn.

In Class

<u>Day</u>	<u>Activity</u>
Monday (M)	Introductory Lecture, and the question of the week is given
Tuesday (T)	In class group project work, guest lecture or video
Wednesday (W)	In class group project work, guest lecture or video
Thursday (R)	In class section, your answer to the question of the week

In Your Own Time

<u>Time</u>	<u>Activity</u>
Before 2pm on Thursday	Do all GauchoSpace activities
Thursday 10pm to Saturday 10pm	Do weekly quiz
Each week	Work with your group on your Group Project

WEEKLY ACTIVITIES**On GauchoSpace**

Monday's Lecture:	A recording of Monday's lecture, which will summarize the topic of the week and introduce the question for that week.
Mini-lectures:	3 to 4 mini-lectures. 10 to 20 minutes in length. These address key concepts.
Readings:	Each week there will be a maximum of 3 assigned readings. These will address topics not covered by the mini-lectures. Where possible for articles, if there is a news piece associated with it, the news piece will also be attached, but in this instance it is optional reading. All optional reading will be clearly marked. Note, NOT all news pieces are optional. Some news pieces are assigned reading.
Links:	Links to websites that will help you to explore key concepts in more detail.

In Class

Monday:	A standard lecture (length 75 minutes). This lecture will introduce you to the broad topic(s) to be covered that week and the "Question of the Week". Suggestions about how to address the question of the week will be given. An activity that involves class participation will be included/incorporated.
Tuesday & Wednesday:	<p>ALWAYS</p> <p>Group Project Work: Each week you will make progress in your group project. Each week one class will be set aside to allow for in class group work, for your group to ask for help and for me to assess your group's progress. This will allow for between group discussion of ideas and concerns. This will also allow me to give advice, guidance and critique to all equally.</p> <p>PLUS ONE OF THESE</p> <p>Guest Lecture: Human Variation is an extremely broad topic. Where possible, I have arranged for people more specialized (or more interested) in an area than me to come and talk to you about it. These will be 60 minute lectures. The remaining 15 minutes are for you to ask questions. I will always tell you in advance what the lecture is on so you have plenty of time to think of questions.</p> <p>Video: Sometimes a picture is worth a 1000 words. Human Variation is a very visual topic and there are several wonderful videos out there that neatly show this.</p>
Thursday:	<p>In class section (60 minutes), followed by 15 minute summary as needed. By 2pm Thursday, assuming you have completed all activities, you will be able to answer the question of the week. I will divide you into random groups (your group assignments will be on the board as you arrive for class). There will be 5 to 8 people per group, and a maximum of 9 groups per week.</p> <p>2pm to 2:30pm: For the first 30 minutes you will discuss with your group how to address the question of the week and the additional related questions I assign. Each group chooses a group leader. Everyone must be a group leader at least once - this is your chance to earn 5% extra credit! A group leader represents their group in the next segment.</p> <p>2:30pm to 3pm: The group leaders come to the stage. For the next 30 minutes we debate and discuss the question of the week and the additional related questions. The group leaders lead this and are encouraged to use the board to clarify their points and arguments. The audience may ask additional questions and raise additional concerns.</p> <p>3pm to 3:15pm: I will summarize the answers and the take home message of the week. This is a great opportunity for you to ask any additional questions you may have.</p>

TIME MANAGEMENT

The 6 week term means your work load—learning activities and assignments—which would be allotted 120 hours during a normal quarter (3 hours per unit, with 12 hours for a 4 unit course) must be compressed. In a 10 week quarter you are expected to spend 12 hours in class and out of class on a course. In a six week quarter you are expected to spend 20 hours in class and out of class on a course. Realistically, you should expect to spend 15 hours per week on this course minimum:

- 5 hours in class (remember one class is Group project work, and one class is a discussion section to help you prepare for the weekly quiz)
- 1 to 2 hours watching mini-lectures
- 1 to 3 hours on readings (some weeks there will be more readings and fewer mini-lectures, and vice versa)
- 2 hours on weekly quiz, including doing the quiz
- 3 hours per week on other assignments (e.g. group project or Final essay). It is your choice to leave this until the very end, in which case your final week will be very busy. I would recommend working on your Final essay and group project write up a little bit each week.

ASSIGNMENTS

Weekly Quizzes

- Percent of grade = 40%
- Due Date = every Saturday by 10pm

There are 6 weekly quizzes. The lowest scoring quiz is dropped, so that only 5 quizzes are counted towards this 40% of your grade (8% per counted quiz). However, **all quizzes must be attempted**. If a quiz is not attempted it is scored as zero and considered as one of your counted 5 quizzes. **Quizzes must be ONLY your own work (do NOT work in groups while taking the quiz or writing your answers to the short answer questions).**

Each week at Thursday 10pm a quiz will appear on Gauchospace. You will have until 10pm the following Saturday (48 hours) to start and complete a quiz. Once you start a quiz you will have 60 minutes (1 hour) to complete it. **You must stay within the time limit (60 minutes) and you will only have one attempt at a quiz.**

Each quiz is graded out of 50 total possible points. Each quiz consists of 5 short answer questions (30 points) and 10 to 20 multiple choice questions (20 points). Every week the 5 short answer questions are the same. The short answer questions are shown below. Note, the first short answer question you will have begun to address during Thursday's class. I strongly recommend you work on these before starting the quiz in Microsoft Word or another word processor. This way you can copy and paste your short answers into the quiz. This will also enable you to check your spelling, grammar and word count. **Short answer questions have strict word limits.**

The multiple choice part of each quiz will test your understanding and knowledge of that week's general topic(s) and the associated activities. **Do not attempt a quiz before you have finished all the activities for that week.**

If your computer dies mid quiz, or some other catastrophe occurs in which you start the quiz but cannot finish it, email me by Sunday 12pm (this is enough time for you to find a friend's computer to borrow or to use the computers on campus). In the email in 100 words or less explain what catastrophe befell you and attach, as a word document, your answers to the 5 short answer questions. I will grade these separately if needed or re-open the quiz to you (this is at my discretion). If I do not open the quiz for you, I will grade your short answer questions, but for this quiz you will only be able to get a

maximum of 30 points out of 50 points. If any of your answers to the multiple choice questions have been saved on GauchoSpace I will count those too. I will not count answers to multiple choice questions not saved on GauchoSpace. Please remember that your lowest quiz score is dropped. Emailing me your short answers confirms that you attempted the quiz. Only email me your answers to the short answer questions if you started the quiz but were unable to complete it due to some factor beyond your control. Please remember GauchoSpace tells me when you started the quiz. Manage your time accordingly. If you never even started the quiz see above. All quizzes must be attempted.

Short Answer Questions (Question 1 = 10pts and Questions 2 to 5 = 5pts each, for a total of 30pts)

- (1) In 200 words or less, what is the answer to this week's question(s)? (Question shown) Remember, to address all parts of the question, including why and how as appropriate.
- (2) In 100 words or less, what do you think were the main points of this week's learning activities?
- (3) In 100 words or less, what did you find most interesting about this week's topic and why?
- (4) In 100 words or less, what further research is needed or what more do you want to know about this week's topic?
- (5) In 100 words or less, what do you feel you still do not understand about this week and why?

Short Answer Grading Rubric

The grading rubric for essays is as follows. These are doubled for Question 1 to make up 10pts, otherwise each question is worth a maximum of 5 points.

Points

- 1** Wrote something but it shows no forethought, understanding or depth. Grammatically incorrect.
- 2** Wrote something but it shows no forethought, understanding or depth. However, you used coherent sentences. Grammatically correct.
- 3** Addresses the question asked but lacks depth (e.g. Did not answer all parts, went off on an unrelated tangent, or shows a lack of understanding of key concepts).
- 4** Addresses all parts of the question clearly, but only just. As appropriate: no linking of ideas from previous weeks, lack of curiosity to know more, minor lack of understanding of key concepts, confused in some area, minor going off on unrelated tangents.
- 5** Dang, I retire you can teach the course. Your answer shows depth, understanding and strong curiosity to know more.

Group Project

- Percent of grade = 40%
 - 15% decide by other group members. WK 5 you will fill out a form that scores each of your group members on a 5 point scale. The lowest score is dropped.
 - 5% allotted as 1% a week to keep track of progress (week 2 through week 6). This is the same for all group members.
 - 20% decided by me as overall grade of the project - all group members get same score for this.
- Due Date = September 13th in class.

Students are assigned by me to work in groups of 4 to 5 students. All groups work on the same general group project. This project investigates how we and the US census bureau commonly classify people.

WK 1: Students are introduced to the group project and get to know their group. Students are introduced to the US government definitions of race. Students separately sort 20 head shots of people into one of 5 racial categories from the US census bureau.

WK 2: Students consider why they, and other people, may have sorted the headshots as they did. Each group devises one hypothesis for why people may group others into each category. These hypotheses must be justified with theory and testable through a simple survey format, preferably a single question. Each group devises a single question or short series of questions that will help test their hypothesis. Hypothesis may look at how people classify others (e.g. by skin color) as well as why (e.g. socioeconomic background of interviewee). For example:

Hypothesis: People who have traveled more outside the US will be better at sorting people into racial categories.

Questions: (1) How many countries outside of the US have you traveled to? → 0, 1, <5, >5
(2) How many countries in Africa have you traveled to? → 0, 1, <5, >5
(3) How many countries in Europe have you traveled to? → 0, 1, <5, >5
(4) How many countries in Asia have you traveled to? → 0, 1, <5, >5

Note, the above hypothesis is extremely weak and has no justification. It is just to give you an idea.

The **introduction** of your group project is grounded in the theory behind your group's hypothesis and should clearly explain where your ideas came from. The introduction should be a maximum of 2 pages double spaced.

WK 3: Each student answers all the groups' questions devised in WK 2. And, each student gets two other people, not in this class, to sort the 20 head shots and answer the associated questions. Students must enter this data on the class website by Monday 27th August.

The **methodology** section of your group project should be short but must accurately describe the survey and what test subject, including yourself, were forced to do. The methodology should be a maximum of 1 page double spaced.

WK 4 and 5: Students analyze the data relevant to their question and hypothesis. In class we will discuss how to do this and what each group has found. We will also discuss what each groups' findings suggest about how and why people classify others.

The **results** section of your group project should be the second longest part (the Discussion will most likely be the longest). The results section should only describe what you found. It should not discuss what you think your findings mean. Use of frequencies, percentages and/or histograms is the minimum expected here. Use of statistics or more complicated analyses are highly encouraged. This section should be a maximum of 3 pages double spaced.

The **discussion** section should address what you and your group thinks your results show, especially considering the additional information you will be given after WK 3 about each of the 20 subjects in the head shots. In addition the following questions must also be addressed and tied in to your findings and discussion as a whole. Each part of these additional questions should be no more than 200 words maximum.

Additional Questions for Discussion Section: The racial classifications used are from the US census bureau. These government racial categories do not necessarily reflect how people view themselves or their ancestry.

- a. How accurate a predictor of race is skin color among the 20 subjects? Why is skin color not an accurate predictor of race? What are the limitations of focusing on skin color?
- b. Choose one subject who categorized themselves differently than expected. Why do you and your group think the subject categorized his/herself this way? Consider both the costs and benefits.
- c. Given that there is no objective way to classify people, discuss how you think the government should define racial categories. What definitions best help us remedy inequality?

Group Project Outline

The group project is due 13th September in class. It should be in 12pt Times New Roman font, 1 inch margins and double spaced on letter sized paper.

There are 6 parts to the write up of the group project

- (1) **Title Page** – Title of your group project. Each group member's name.
- (2) **Introduction** - The introduction of your group project is grounded in the theory behind your group's hypothesis and should clearly explain where your ideas came from. The introduction should be a maximum of 2 pages double spaced.
- (3) **Methodology** - The methodology section of your group project should be short but must accurately describe the survey and what test subject, including yourself, were forced to do. The methodology should be a maximum of 1 page double spaced.
- (4) **Results** - The results section of your group project should be the second longest part (the Discussion will most likely be the longest). The results section should only describe what you found. It should not discuss what you think your findings mean. Use of frequencies, percentages and/or histograms is the minimum expected here. Use of statistics or more complicated analyses are highly encouraged. This section should be a maximum of 3 pages double spaced.
- (5) **Discussion** - The discussion section should address what you and your group thinks your results show, especially considering the additional information you will be given after WK 3 about each of the 20 subjects in the head shots. The additional questions must also be addressed here and tied in to your findings and discussion as a whole. Each part of the additional questions should be no more than 200 words maximum. The whole discussion section should be a maximum of 5 pages double spaced.
- (6) **References** – literature cited in your main document (parts 2 through 5). See below for when to cite and how to cite.

Group Project Grading Rubric

- Title, Methodology and References = 0pts (however, if absent or incoherent project is not graded and group will score zero)
- Introduction – 3pts
 - 1pt for having some theory backing up the hypothesis
 - 1pt for having strong theoretical background and argument for hypothesis
 - 1pt for having a clearly worded hypothesis.
- Results – 5pts
 - 1pt for showing that group collect some results
 - 1pt for having results and attempting to analyze them
 - 1pt for having results and succeeding in analyzing them
 - 1pt for results being applicable to hypothesis

- 1pt for results being clearly presented and in a logical format
- Discussion – 12pts
 - 6pts for discussion of results and tying in to bigger picture
 - 2pts for attempting to discuss results
 - 2pts for discussing results well and showing understanding of deeper meanings
 - 2pts for tying in to bigger picture e.g. other topics in the course, politics, institutionalization, etc
 - 6pts for addressing additional questions (2pts each)
 - 1pt for addressing question
 - 1pt for well thought out and justified answers

Final Essay

- Percent of grade = 20%
- Due Date = September 15th through Gauchospace.

The final essay is linked to the Group Project you worked on. It focuses on race and racism. Choose one (ONLY ONE) of the essay questions shown below. Answer the essay in a maximum of 5 letter-sized pages double spaced, 12pt Times New Roman font, with 1 inch margins. You must cite correctly and you should have a minimum of 6 proper reference articles. What I mean by a proper reference is discussed below. Your list of references is a separate page and does not count towards your 5 page limit. If you have any figures or tables these should be noted in the main body of your document and attached as separate pages at the end after the reference page. Figures and tables should not be inserted into your main document and do not count towards your 5 page maximum.

Essay Questions (choose ONE)

1. Considering the history of race and racism in the United States, what does it mean to say race has been used to justify social inequalities? Give three examples, with explanations, for how race has been historically used in the United States as a “cover up” to deflect attention away from inequality (e.g. to justify slavery). How do these three examples continue to affect United States’ culture or institutions today (this can be Government policies, pop-culture, work force, media representation, etc – you choose)?
2. Race is an ideology. Race is not a biological reality. Discuss how race is socially constructed. List and explain three biological arguments against pigeon holing people into racial categories. How do these three biological arguments strengthen the argument that race is a social construct not a biological reality.
3. We often hear about the institutional and cultural forces that contribute to racism. However, there is evidence that there are psychological motives and processes behind racism. What are the costs and benefits to racial inequality of suggesting that racism may be psychologically motivated (e.g. an evolved trait). List and explain three distinct psychological motives that have been linked to racism. How are these psychological motives keeping racism alive?

Essay Grading Rubric

Each essay has three parts. The first part is worth 5pts, the second part 10pts (the list three things and explain – 3pts per item (1 for listing, 1 for explaining, 1 for explain well) and 1 pt for having three DISTINCT items), and the third part 5pts. Essays that do not have 6 or more proper references will not be graded and will receive scores of zero. If your essay is very impressive it is applicable for extra credit. You can get a maximum of 5% extra credit from this essay. You must alert me, by email, that

you are seeking extra-credit and why you think your essay is especially deserving of it (in 200 words or less) by September 14th (24hrs before the essay is due).

CITATIONS

In your final essays and group projects you are expected to **cite relevant statements accurately and use reliable sources.** Statements that require citation are those that are not exceptionally common knowledge. For example, “The sun is the Earth’s nearest star.” does not require a citation; however, “Data indicate that male baboons experience a pubertal growth spurt whereas females do not.” needs a citation. If you are uncertain, ask me; if it’s the night before the assignment is due, better to over-cite than under-cite.

The best sources of information are academic journals; the use of these is strongly encouraged. Textbooks are a good place to start but remember they are often outdated or over simplified. Do remember that anyone can put anything up on the internet, use it with caution. Similarly, Wikipedia is a fine place to start but it is a terrible place to finish; getting all your information from Wikipedia will result in a lower grade.

A primer on how to cite different sources is provided below.

CLASS ABSENCE

You may miss one class, total, without excuse. But, you must come to all other classes. If you must miss a class you must justify why with a doctor’s note or some equivalent document (note from a mechanic with contact details, copy of death or birth certificate). The supporting document must be given to me within 72hrs of your absence. For each day you are absent (not including the one allowed day) without justification **you will be docked 10% of your total grade.**

RE-GRADES

You may request a re-grade on any assignment, as long as the assignment was typed and I have a copy of the original. Your request must be made in writing **within 72 hours** of the assignment’s grade being posted on GauchoSpace. **Requests must be typed and include a detailed description of why a re-grade is warranted.**

SYLLABUS MODIFICATIONS

I reserve the right to modify anything in the syllabus during the course of the quarter, with prior warning via in-class and website announcements. Students are responsible for keeping apprised of any such modifications and for recording such modifications on their syllabi.

OFFICE HOURS

I am happy to answer questions that are logistical via email. Please do check the syllabus first to make sure it is not addressed there. If something in the syllabus needs further explanation please ask, I am more than happy to help. If you need help understanding any theory, concepts or course assignments please come and see me during my office hours or make an appointment.

ACADEMIC HONESTY

Cheating will not be tolerated. You are expected to work together for the group project. However, although you may study together, all quizzes and the final essay must be your own work. Please review the Honor Code and give close attention to the sections on cheating and plagiarism. For a brief primer on what counts as academic dishonesty at UCSB and the associated consequences see <http://judicialaffairs.sa.ucsb.edu/pdf/academicintegflyer.pdf>. The policies established in the *UCSB Policies and Campus Regulations Applying to Campus Activities, Organizations and Students* will serve as guidelines for dealing with dishonesty (www.sa.ucsb.edu/osl). Anytime work or an idea is not your own

you should cite the source in your text. If you directly copy and paste from a website, including Wikipedia, that is cheating.

CITING PRIMER (courtesy of K. Sobraske Hanson)

To use someone's words or ideas in your writing without letting your readers know where they came from is a form of theft called plagiarism. It is considered a serious academic offence. You can avoid plagiarizing if are careful to do the following:

Write a summary or paraphrase in your own words and sentence patterns. Follow it with a citation. Just changing some words does not make a paraphrase; the ideas must be taken in, understood, and completely rewritten with your own words. This method is bullet-proof if you do it correctly.

The tactic above is best, however, if you feel the original author phrased something so perfectly that you couldn't possibly do better, put the words of the author in quotation marks, record them accurately, and follow the quotation with a citation that indicates your source. For example you could write: According to Paul Smith, "Kangaroos simply cannot get enough blue jellybeans; they prefer blue to all other colors presented" (2004). Use quotation marks when you borrow a phrase or a single, special word from another person. Note that quotes should be used very sparingly, should be short and that excessive quoting will result in a lower grade.

To avoid plagiarism, cite the source of anything that you use from academic journals; CD's; newspapers; the Internet, including material from Web pages, e-mail, and newsgroups; etc. These materials are the words and ideas of people who deserve to be given credit.

Work that is cited must be compiled in a bibliography at the end of the paper. Please arrange sources alphabetically by last name of first author. For example, Aaronson et al.'s work should be first in my bibliography, even if it was the last citation I used.

Below are some examples of how to cite different sources and how to list them in the bibliography. This list is not exhaustive but should cover most things you'd come across. Pay special attention to the formatting such as the placement of periods and commas, what is capitalized, what is italicized. Please cite any published work (like a journal article) as published work, even if you got it online at Google scholar or the actual journal's website. The statement "Kangaroos prefer blue jellybeans" is meant to serve as a place-holder for any statement that requires a citation.

Academic Journal or Magazine Articles

One author, within paper	Kangaroos prefer blue jellybeans (Smith, Year). Smith has noted that kangaroos prefer blue jellybeans (Year).
One author, bibliography	Smith PA. Year. Title of article. <i>Journal Name</i> volume number: start page-end page.
Two authors, within paper	Kangaroos prefer blue jellybeans (Smith & Doe, Year). Smith and Doe have noted that kangaroos prefer blue jellybeans (Year).
Two authors, bibliography	Smith PA, and Doe R. Year. Title of article. <i>Journal Name</i> volume number: start page-end page.
Multi. authors, within paper	Kangaroos prefer blue jellybeans (Smith et al., Year). Smith et al. have noted that kangaroos prefer blue jellybeans (Year).
Multi. authors, bibliography	Smith PA, Doe R, and Harris ML. Year. Title of article. <i>Journal Name</i> volume number: start page-end page.

Example: Smith PA, Doe R, and Harris ML. 2004. Dietary preferences of *Macropus rufus*: novel confectionary findings. *Australian Zoology* 26: 34-48.

Newspaper Articles

Same as for journals; just replace newspaper name for the journal title and for the volume number write the full date (mm/dd/yyyy), followed by page number if possible.

Books, Not Edited

One author, within paper	Kangaroos prefer blue jellybeans (Smith, Year). Smith has noted that kangaroos prefer blue jellybeans (year).
One author, bibliography	Smith PA. Year. <i>Title of book</i> (Number edition). Location of publication: Publisher
Multi. authors within paper	Kangaroos prefer blue jellybeans (Smith et al., Year). Smith et al. have noted that kangaroos prefer blue jellybeans (Year).
Multi. author, bibliography	Smith PA, Doe R, and Harris ML. Year. <i>Title of book</i> (Number edition). Location of publication: Publisher

Example: Smith PA, Doe R, and Harris ML. 2004. *Kangaroo diets* (2nd edition). Cambridge: Cambridge University Press.

Chapter from an Edited Book

One author, within paper	Kangaroos prefer blue jellybeans (Smith, Year). Smith has noted that kangaroos prefer blue jellybeans (Year).
One author, bibliography	Smith PA. Year. Title of chapter. In Jones CR, Nelson AC, editors. <i>Title of book</i> . Location of Publisher: Publisher. p start page-end page.
Multi. author, within paper	Kangaroos prefer blue jellybeans (Smith et al., Year). Smith et al. have noted that kangaroos prefer blue jellybeans (Year).
One author, bibliography	Smith PA, Doe R, and Harris ML. Year. Title of chapter. In Jones CR, Nelson AC, editors. <i>Title of book</i> . Location of Publisher: Publisher. p start page-end page.

Example: Smith PA, Doe R, and Harris ML. 2004. Kangaroo diets. In Jones CR, Nelson AC, editors. *Marsupial diets*. Cambridge: Cambridge University Press. p 34-48.

Internet Sources

Author known, within paper	Kangaroos prefer blue jellybeans (Smith, Year information was posted). Smith has noted that kangaroos prefer blue jellybeans (Year information was posted).
Author known, bibliography	Smith PA. (Year information was posted). Main title of website [Online]. Available: http://full.url [Accessed: Date accessed].
Author unknown, in paper	Kangaroos prefer blue jellybeans (Main title of website, Year information was posted).
Author unknown, bib.	Main title of website (Year information was posted). Available: http://full.url [Accessed: Date accessed].

Note: If the website does not provide information as to when the most recent time information was posted, 'n.d.' for 'no date' should be used.

Example: Kangaroos prefer blue jellybeans (Kangaroo diets, 2004).

Kangaroo diets (2004). Available: <http://www.allthingskangaroo.org> [Accessed: 24 October 2008].

WEEKLY QUESTIONS

August 6th to 9th

1) **Why do I, Lisa McAllister (remember I am female), look more like my mother than my father, or my half-sister (we have different mothers)?**

(Photographic evidence provided)

Goals: Understand what a genotype is, how it is formed/inherited, and what influences the corresponding phenotype even in an environmental bubble (introduction to the idea of a phenotype in preparation for wk 2). How and why an individual is unique.

August 13th to 16th

2) **Why are identical twins not truly identical?**

Goals: understand how the environment and genotype interact to influence an individual's phenotype.

August 20th to 23rd

3) **Why are we not subspecies? (Why are we more genetically diverse within than between populations?)**

Goals: How species are formed. How we get genetic differences. Understand that due to constant movement of people between populations no human population has been isolated for long enough to become a subspecies/separate species.

August 27th to 30th - GL: Sabrina Curran

4) **How and why am I, Lisa McAllister, physically different from an Inuit, a Maasai, or an Andean highlander? Could I adapt to their local environments? If so, how?**

(Photo of Inuit, Maasai Warrior, Tibetan/Andean highlander, etc – How and why are they physically different)

Goals: understand physical adaptation to local environment. Suggest that cultural adaptation may precede biological adaptation.

September 3rd to 6th – GL Ben Trumble & Chris von Rueden

5) **Physical adaptation can be slow. How do humans move between different environments rapidly and yet survive? How did humans manage to move in to so many different environments and yet do not show extreme adaptations (e.g. Inuits do not have copious layers of blubber or fur)?**

Goals: understand explanations for cultural adaptations to local environment

September 10th to 13th - GL: Kate Sobraske

6) **Is my behavior a product of my genes or my environment? Explain your reasoning/Justify your answer.**

Goals: understand variation in human behavior and the nature-nurture debate for some key behaviors.