

San José State University
Department of Anthropology
Anth 153, Human Variation and Behavior
Spring 2014

Instructor: Dr. Caie Yan
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Office Hours: Monday: 12:00-13:00 or by appointment
Class Days/Time: TR: 13:30-14:45
Classroom: WSQ 004
GE/SJSU Studies Category: B2/Life Science

Course Description

This course explores biological variations among different human populations, how evolutionary forces, as well as ecological and cultural factors, lead to these variations, and whether or not race is an appropriate biological concept. In order to understand the answers to these questions, we will spend some time reviewing evolutionary theory, molecule genetics, and population genetics. Then, we will use these theoretical approaches to understand variation of different features.

Major topics will include:

- The history of race and the problems associated with racial classification
- Basic concepts of population genetics, and how to use theories of population genetics to explain variations across human populations.
- Case studies of genetic variation in simple traits: hemoglobin, blood type groups, lactase persistence, PKU, Tay-Sachs disease, G6PD, taste, cystic fibrosis, and HLA.
- Human variation at the DNA sequence level as suggested by the results of the Human Genome Project and other follow-up projects.
- Case studies of variation in complex traits: skin color, body shape, growth and development, adaptation to high altitude, and behavioral variation.
- Impacts of population history on genetic distance between current populations.

Course Goals and Student Learning Objectives

Course Learning Outcomes

Upon successful completion of this course, students will be able to:

- CLO 1 describe universal traits shared by human populations and explain them from an evolutionary perspective.
- CLO 2 understand how data drawn from non-human primates can be used to understand modern humans.
- CLO3 explain the nature versus nurture debate in relationship to human physical and behavioral traits.
- CLO4 explain how different views of human variation have been used and misused by social scientists and society as a whole.

Required Texts/Readings

Human Biological Variation. Second edition.

By Mielke, J. H., Konigsberg, L. W., and Relethford, J. H. 2011. Oxford University Press, New York. ISBN-10: 0195387406 | ISBN-13: 978-0195387407

Supplemental readings will be posted on line.

Course Assignments and Grading Policy

Exam I (in class)	30%
Exam II (in class)	30%
Final exam	30%
Reading summaries (1.5%*7)	10%
Total	100%

Grading is as followed:

A	B	C	D	F
97% - 100% = A+	87-89% = B+	77-79% = C+	67-69% = D+	Below 60% = F
93-96% = A	83-86% = B	73-76% = C	63-66% = D	
90-92% = A-	80-83% = B-	70-72% = C-	60-62% = D-	

Exams:

The course has two in class midterm exam and a final exam. Exams are composed of multiple choice questions and short answers. The final exam is not cumulative. Exams are based on both the textbook and the lectures. I will post study guides on Canvas before each exam. I will also post the outline of lecture slides on line, but I do not post lecture notes.

Reading summaries:

In this class we will discuss 7 case studies about human biological or behavioral variation. For each case study I will provide two to three readings. You are required to pick one reading, write a one-page summary, and come up two related questions. Your summaries are graded based on content, clarity, and organization. Due dates for each summary are listed on the syllabus. Please hand in a hard copy in class. I do not accept late assignments.

Cheating and Plagiarism

I have zero-tolerance for cheating and plagiarism; if you cheat or plagiarize you will fail the course. Incidences of cheating and plagiarism will be turned into the academic integrity office; you have two (2) office hour periods to discuss the issue with me prior to my turning in the report. I will only discuss individual cases concerning academic integrity in my office. Students are responsible for understanding and adhering to the academic integrity policy.

Classroom Protocol

There will be various in-class participation assignments intended to help students. I highly recommend students attend class as often as possible. I post the outline of lecture slides on line. But I do not post lecture notes.

Please turn off all electronic devices (which include iPods, Mp3 Players, Sidekicks, Cell phones, etc.) before class begins. You can use your laptop to take notes, while surfing the internet is not allowed.

Departmental Goals

Learn about the goals of the anthropology department and how it can benefit your education.

Goals <http://www.sjsu.edu/anthropology/departmentinfo/goals/index.html>

Credit Hours

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

University Policies

Here are some of the basic university policies that students must follow.

Dropping and Adding

Find the procedures and deadlines for adding and dropping classes.

Catalog Policies <http://info.sjsu.edu/static/catalog/policies.html>.

Add/drop deadlines http://www.sjsu.edu/provost/services/academic_calendars/

Late Drop Policy <http://www.sjsu.edu/aars/policies/latedrops/policy/>

Consent for Recording of Class and Public Sharing of Instructor Material

All students must obtain the instructor's permission if they wish to record lectures or distribute materials from the class.

University Policy S12-7 <http://www.sjsu.edu/senate/docs/S12-7.pdf>

Academic integrity

Learn about the importance of academic honesty and the consequences if it is violated.

[University Academic Integrity Policy S07-2](http://www.sjsu.edu/senate/docs/S07-2.pdf) <http://www.sjsu.edu/senate/docs/S07-2.pdf>

[Student Conduct and Ethical Development website](http://www.sjsu.edu/studentconduct/) <http://www.sjsu.edu/studentconduct/>

Campus Policy in Compliance with the American Disabilities Act

Here are guidelines to request any course adaptations or accommodations you might need.

[Presidential Directive 97-03](http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf) http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf

[Accessible Education Center](http://www.sjsu.edu/aec) <http://www.sjsu.edu/aec>

Resources

The university provides resources that can help you succeed academically. Just look here.

[Academic Success Center](http://www.sjsu.edu/at/asc/) <http://www.sjsu.edu/at/asc/>

[Peer Connections website](http://peerconnections.sjsu.edu) <http://peerconnections.sjsu.edu>

[Writing Center website](http://www.sjsu.edu/writingcenter) <http://www.sjsu.edu/writingcenter>

[Counseling Services website](http://www.sjsu.edu/counseling) <http://www.sjsu.edu/counseling>

Course Schedule

This tentative schedule---including assignment due dates, in class exam dates, date of the final exam--- is subject to change with fair notice and how the notice will be made available.

Week	Date	Topic	Readings & Due Date
1	1/23	Introduction	
2	1/28 1/30	Biological diversity and the Race concept Genetic Review (I)	Chapter1 Chapter 2
3	2/4 2/6	Genetic Review (II) Population Genetics (I)	Chapter 2 Chapter 3
4	2/11-13	Population Genetics (II)	Chapter 3
5	2/18-20	Simple genetic traits: Sickle cell anemia <i>Case study: CCR5 gene, the AIDS-resistance gene</i>	Chapter 7 Summary 1 due (2/20)
6	2/25 2/27	Simple genetic traits: Blood groups Review	Chapter 4,5,6
7	3/4 3/6	Exam I Simple genetic traits: Lactose Intolerance, PKU, CF, and Tay Sachs	Chapter 8
8	3/11-13	Simple genetic traits: Other protein polymorphism and HLA system	Chapter 8
9	3/18-20	DNA markers The Human Genome Project (I) <i>Case study: personalized medicine</i>	Chapter 9 Summary 2 due (3/18)

Week	Date	Topic	Readings & Due Date
10	3/24-28	<i>No Class (Spring Break)</i>	
11	4/1-3	The Human Genome Project (II) <i>Case study: Tracing the genetic ancestry</i> Epigenetic: Ghost in your gene (Video)	Chapter 9 Summary 3 due (4/1)
12	4/8 4/10	Review Exam II	
13	4/15-17	Complex traits: Body shape and adaptation to cold and hot climates Craniofacial traits <i>Case study: Racial inequality in health</i>	Chapter 10, 11 Summary 4 due (4/15)
14	4/22-24	Complex traits: Skin color, <i>Case study: eye color variation</i>	Chapter 12 Summary 5 due (4/22)
15	4/29- 5/1	Complex traits: growth, development, and nutrition <i>Case study: Variation in IQ</i>	Summary 6 due (4/29)
16	5/6-8	Behavioral variation <i>Case study: The history of eugenics</i>	Chapter 13,14 Summary 7 due (5/6)
17	5/12	Review	
Final Exam	5/19	WSQ 004, 12:15-14:30	