# San José State University Social Sciences/Anthropology Anth153, Human Variation, Biology, Section 1, Spring 2010

**Instructor:** Dr. Elizabeth Weiss

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Office Hours: Tuesdays 1330 – 1730, Thursdays 1330 – 1430 (Or available by

appointment via prior arrangement)

Class Days/Time: Tuesdays & Thursdays 1030 – 1145

Classroom: WSQ 004

# **Faculty Web Page and MYSJSU Messaging**

Copies of the course materials such as the syllabus, major assignment handouts, etc. may be found on my faculty web page. You are responsible for regularly checking with the messaging system through MySJSU (or other communication system as indicated by the instructor).

http://www.sjsu.edu/people/elizabeth.weiss/

# **Course Description**

Human variation and behavior is the study of the nature and extent of heritable biological and behavioral differences and similarities among human populations in an evolutionary perspective. Data drawn from non-human primates, medical fields, the fossil record and genetics will be reviewed. The role of genetics and environment in the formation of these differences is considered.

# **Course Goals and Student Learning Objectives**

By the completion of this course, students should be able to:

Think critically;

Recognize how evolution has shaped human variation;

Recognize biases in science and media;

Know the historical development of Western classification systems;

Distinguish and understand the primary factors influencing human biological and behavioral variation and similarities;

Understand the relationships between human adaptations and their environment;

Understand how biology and culture interact.

# Departmental Learning Objectives and Skills:

The department of anthropology also has key learning objectives and skills that we wish students to obtain. By the completion of this course, students should have an increased ability to:

- 1) Understanding culture as the distinguishing phenomenon of human life, and the relationships of human biology and cultural processes in human behavior and evolution.
- 2) Awareness of human diversity and the ways in which humans categorize diversity.
- 3) Knowledge of the significant findings of archaeology, cultural anthropology, and physical anthropology, and familiarity of the important issues in each subdiscipline.
- 4) Knowledge of the history of anthropological thought and its place in modern intellectual history.
- 5) Comprehension of migration, colonialism, and economic integration as significant phenomena shaping global society.
- 6) Ability to access various forms of anthropological data and literature.
- 7) Awareness of the importance and value of anthropological knowledge in contemporary society, and the ability to apply it to social issues.
- 8) Knowledge of the research methods of the sub-disciplines of anthropology, and ability to apply appropriate research methods in at least one sub-discipline.
- 9) Ability to present and communicate anthropological knowledge and the results of anthropological research to different audiences.
- 10) Knowledge of political and ethical implications of social research.

## Attaining the Course Objectives/Goals

At a general level, this course is primarily about human biological and behavioral variation and the evolutionary processes that play a key role in human traits. Information relating to genes, evolutionary processes, nonhuman primates, and earlier hominids are used to explain the large variety of differences (and some surprising similarities as well) we see in people today. In addressing these fundamental questions relating to human variation, you will be challenged to think critically, apply sound scientific methodologies, understand and assess quantitative data, and communicate your knowledge.

At SJSU students are encouraged to recognize that education is participatory experience. Thus, each student is expected to contribute to further refining the course objectives (so better to articulate your individual expectations and needs), to give feedback to the instructor regarding the adequacy of your learning and how well the course assessment measures that learning (and how these assessment tools can be improved). Finally, each student is challenged to be engaged in the exploration of the fascinating material covered this semester and to participate in class discussions and to relate in assignments and exercises how you can apply these concepts to your everyday life.

The most important contribution this course can make to your education is to provide you with greater ability to think critically. As a result, this skill will contribute permanently to your further education, that it, for the remainder of your lifetime.

# Required Texts/Readings

#### **Textbook**

Molnar S. Human Variation: Races, Types, and Ethnic Groups, 6th Ed. Prentice Hall, 2006.

Other Readings (The following articles will be posted on the course website; other articles may be added to this list).

- 1. Picard C et al. 2006. *Mendelian traits* that confer predisposition or resistance to specific infections in humans. *Current Opinion in Immunology* 18(4): 383-390.
- 2. Tishkoff SA et al. 2007. Convergent adaptation of human lactase persistence in Africa and Europe. *Nature Genetics* 39(1): 31-40.
- 3. Deaton A. 2007. Height, health, and development. *Proceedings of the National Academy of Sciences of the United States of America* 104(33): 13232-13237.
- 4. Ruff CB. 2002. Variation in human body size and shape. *Annual Review of Anthropology* 31(1): 211-232.
- 5. Taylor NAS. 2006. Ethnic differences in thermoregulation: Genotypic versus phenotypic heat adaptation. *Journal of Thermal Biology* 31(1/2): 90-104.
- 6. Irons W. 2005. How has evolution shaped human behavior? Richard Alexander's contribution to an important question. *Evolution & Human Behavior* 26(1): 1-9.
- 7. Apostolou M. 2007. Sexual selection under parental choice: the role of parents in the evolution of human mating. *Evolution & Human Behavior* 28(6): 403-409.
- 8. Gray PB et al. 2002. Marriage and fatherhood are associated with lower testosterone in males. *Evolution & Human Behavior* 23(3): 193-201.
- 9. Spinks R et al. 2007. School achievement strongly predicts midlife *IQ. Intelligence* 35(6): 563-567.
- 10. Zagorsky JL. 2007. Do you have to be smart to be rich? The impact of *IQ* on wealth, income and financial distress. *Intelligence* 35(5): 489-501.

#### Classroom Protocol

Make-up Work

If you know in advance that you should be unable to attend an exam due, it is your responsibility to contact me immediately by either e-mailing or telephoning me, leaving a message for me at the main department office, or coming by during my office hours.

Only students with a valid documented excuse will be able to take a make-up exam or hand in a late assignment. Late assignments will not be accepted otherwise.

#### **Class Behavior**

Newspaper reading is not allowed in class. If you read a newspaper in class, I will ask you to leave the classroom.

No electronics (which include Ipods, Mp3 Players, Sidekicks, Cell phones, Laptops, etc.) will be allowed out in class. Before class begins, you should turn off all electronics and put them out of sight. Any student with a cell phone or other electronic device out during class will be asked to leave the classroom.

#### **Late Assignments and Papers**

Papers are due at the beginning of class.

No late papers without a documented valid excuse will be accepted.

#### **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.

#### Miscellaneous

You must sign up with the Disability Resource Center to get any special consideration regarding any disability. Just telling me that you have a disability will not be enough.

Students are responsible for understanding policies about adding, dropping, academic renewal, and incompletes.

Students are responsible for being aware of assignment due dates, midterm date, and the final exam schedule.

Students who miss classes should keep up with course readings and obtain notes from a classmate.

If you have any concerns about your class performance or comprehension, come by my office during office hours or schedule an appointment. I am always willing to help students and I care about whether students are grasping the material and enjoying the class.

Library Liaison For Anthropology: Bernice Redfern; Librarian; (408) 808-2038; Bernice.Redfern@sjsu.edu

# **Dropping and Adding**

Students are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. <u>Information on add/drops are available at http://info.sjsu.edu/webdbgen/narr/soc-fall/rec-298.html</u>. <u>Information about late drop is available at http://www.sjsu.edu/sac/advising/latedrops/policy/</u>. Students should be aware of the current deadlines and penalties for adding and dropping classes.

Friday, February 5 - Last day to drop or withdraw without a "W" grade Friday, February 12 - Last day to add courses

# **Assignments and Grading Policy**

**EXAMS:** There will be a three (3) quizzes and a final exam. The final, which will be comprehensive, will be given on the scheduled final day.

**PAPER:** A research paper will due at the end of the term, May 4th. The paper can be a research paper with a focus on a specific trait or adaptation, a behavior and its evolutionary roots, a cultural adaptation to deal with environment stresses, etc. The papers should be 4 to 6 pages long (double-spaced), 1-inch margins, 12 pt font, and the references will either be APA or AJPA style. Each student is required to see me about their topic during my office hours (or at a scheduled time) before starting the paper.

**PARTICIPATION:** This will be based on in class assignments. I highly recommend students to attend class as often as possible. In-class assignments are meant to help you perform well on quizzes and the final, and give you an opportunity to discuss topics with other classmates.

#### **GRADING POLICY AND PROCEDURES**

Assignments are graded on a scale of 100.

Quizzes (Each worth 10%) 30%

Final		30%	
Paper		30%	
Participation		10%	
97% and Above	A+	77-79%	C+
91-96%	A	71-76%	C
90%	A-	70%	C-
87-89%	B+	67-69%	D+
81-86%	В	61-66%	D
80%	B-	60%	D-
		59% and Below	F

# **University Policies**

#### **Academic integrity**

Students should know that the University's <u>Academic Integrity Policy is availabe at http://www.sa.sisu.edu/download/judicial affairs/Academic Integrity Policy S07-2.pdf.</u>

Your own commitment to learning, as evidenced by your enrollment at San Jose State University and the University's integrity policy, require you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The website for <a href="Student Conduct and Ethical Development">Student Conduct and Ethical Development is available at <a href="http://www.sa.sjsu.edu/judicial\_affairs/index.html">http://www.sa.sjsu.edu/judicial\_affairs/index.html</a>.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include in your assignment any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy F06-1 requires approval of instructors.

## Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the DRC (Disability Resource Center) to establish a record of their disability.

# ANTH153 / Human Variation, Behavior, Spring 2010, Course Schedule

List the agenda for the semester including when and where the final exam will be held. Indicate the schedule is subject to change with fair notice and how the notice will be made available.

**Table 1 Course Schedule** 

Week	Date	Topics, Readings, Assignments, Deadlines
1	1/26 – 1/28	Classification of Human Variation; Molnar Chapter 1
2	2/02-2/04	Genetics Review; Genetics and Evolution; Molnar Chapter 2
3	2/09 – 2/11	Mendelian Traits: PKU, CF, Tay Sachs; Molnar pp. 119-122, 128-131; Picard C et al. 2006 Mendelian Traits: Lactose Intolerance; Molnar pp. 124-126; Tishkoff SA et al. 2007
4	2/16 – 2/18	Mendelian Traits: Sickle Cell & Malaria; Molnar pp. 137-148 QUIZ 1
5	2/23 – 2/25	Environment & Gene Interactions: Stature; Molnar pp. 205-207, 210-211; Deaton A. 2007

Week Date		Topics, Readings, Assignments, Deadlines	
		Complex Inheritance/Phenotypes: Skin Color;	
		Molnar pp. 175-193	
6	3/02 - 3/04	Complex Inheritance: Craniofacial Traits;	
		Molnar pp. 193-203	
		Complex Inheritance: Body Size & Shape;	
		Molnar pp. 205-214; Ruff CB. 2002	
7	3/09 – 3/11	3/09 – No Class; Furlough Day	
		Complex Inheritance: Hot & Cold Climates;	
		Molnar pp. 246-257; Taylor NAS. 2006	
8	3/16 – 3/18	Complex Inheritance: High Altitude Adaptation	
		Molnar pp. 257-268	
		3/18 – No Class; Furlough Day	
9	3/23 – 3/25	Growth & Nutrition;	
		Molnar pp. 215-246	
		QUIZ 2	
10	3/30 – 4/01	SPRING BREAK	
11	4/06 – 4/08	Behavior & Evolution: Adaptive & Maladaptive & Nature vs.	
		Nurture	
		Irons W. 2005; Molnar pp. 292-295; 297-301	
		Who Breeds with Whom: Universals & Cultural Specifics;	
		Molnar Chapter 8; Apostolou M. 2007	
12	4/13 – 4/15	Who Breeds with Whom: Mate Choice and Parental Investment; Molnar Chapter 8; Gray PB et al. 2002 4/15 – No Class	
13	4/20 - 4/22	Health & Disease: Modern Culture and Disease;	
		Molnar pp. 349-359	
		Health & Disease: AIDS;	
		Molnar pp. 360-364	
14	4/27 – 4/29	Intelligence: Predictive validity;	
		Molnar pp. 277-308;	
		Intelligence: Brain size & other factors, Predictive validity;	
		Spinks R et al. 2007; Zagorsky JL. 2007	
15	5/04 - 5/06	Population Changes: Fertility, Mortality & Culture;	
		Molnar Chapter 10; PAPER DUE	
		5/06 – No Class; Furlough Day	

Week	Date	Topics, Readings, Assignments, Deadlines
16	5/11 – 5/13	QUIZ 3 FINAL REVIEW
Final Exam	5/24 (Monday)	WSQ004; 0945-1200