BIOLOGICAL ANTHROPOLOGY

Instructor: Dr. L. Epstein

Offices: Social Science Division: D200d; D110 (main office)

Phone: (425) 564-4189; (405) 564-2331 Office Hours: 10:30 daily, or by appointment

YOU ARE REQUIRED TO REVIEW THIS SYLLABUS AND THE ATTACHED SOCIAL SCIENCE DIVISION POLICY STATEMENT

LECTURE TOPICS

Darwin's place in intellectual history; the scientific method contrasted with absolutist or rationalist approaches; Darwin's predecessors and their contribution to Darwinian thought; the background to Darwin's formulation of evolutionary theory; the principles of Darwinian evolution.



Genetics and evolution: Some background to Mendelian genetics and cell biology; mitosis and meiosis; the structure and function of DNA; protein synthesis; the basic Mendelian mechanisms, terms, concepts and principles; Mendelian traits, polygeny and other deviations from Mendelian genetics in humans.

 $P_{\text{OPULATION GENETICS:}}$ The synthetic or modern theory of evolution; the Hardy-Weinberg Equilibrium; the evolutionary interpretation of $H\beta^s$ and other polymorphisms in human evolution.

HUMAN VARIATION: The meaning of race in biology; racial classification schemes; clinal analysis; selective factors in *in situ* populations; selection, biology and culture.

 $B_{\mbox{\scriptsize IOLOGICAL TAXONOMY:}}$ Classification systems; Linnæan taxonomy; the vertebrate classes; the lutionary trends of the primate order; a survey of cladistic analysis.



the principles of mammals; evoliving primates;



Primate behavior: The mother-infant bond; dominance; the sex bond in relation to resource quality and distribution; separation of roles by age and sex; intelligence, learning and communication in nonhuman primates.

Comparative anatomy: The skeletal anatomy of living hominids and pongids.

Early primate evolution: The meaning of species; a survey of primate evolution in the Paleocene, Eocene and Oligocene; Miocene hominoid evolutionary trends; the dental morphology of Miocene hominoids; reproductive barriers; macroevolutionary models: cladogenesis, anagenesis, and punctuated equilibrium.



The East African Rift Valley System: Late Miocene paleogeology; fossilization; relative and chronometric dating; paleoclimates; hypotheses concerning homi-nization.

PLIO-PLEISTOCENE HOMINID PALEOANTHROPOLOGY: The discovery, anatomy and interpretation of early hominid material; the primitive and derived australopithecines, and early forms of *Homo*; comparative anatomy of the australopithecines and *Homo*; phylogenetic interpretations.

PLEISTOCENE HOMINID PALEOANTHROPOLOGY: The discovery, comparative anatomy and analysis of *Homo ergaster*, *Homo erectus*, *Homo heidelbergensis*, *Homo nean-dertalensis* and *Homo sapiens*; hominid phylogenies and the origin of modern humans.



"Ignore him. He just walks that way to bug his parents."

READING AND TESTING SCHEDULE

The assigned textbook is Robert Jurmain, Lynn Kilgore, et al., Essentials of Physical Anthropology (sixth edition). Please have the readings completed by the assigned dates. (The schedule below may be subject to change.) The lectures are designed principally to highlight and interpret the more important aspects of the readings, as well as to update information in the book. Students will be held responsible for participating in class discussions of the reading and lecture materials.

Week	Monday	Tuesday	Wednesday	Thursday	Friday
I	Mar 31	Apr 1	2	3	4
		Ch. 1		Ch. 2	
II	Apr 7	8	9	10	11
	Ch. 3		TEST #1	Ch. 4	
III	Apr 14	15	16	17	18
	Ch. 12				TEST #2
IV	Apr 21	22	23	24	25
	Ch. 5			Ch. 6	
V	Apr 28	29	30	May 1	2
		Ch. 7			
VI	May 5	6	7 P. 99;	8	9
	TEST # 3	NO CLASS	Ch. 8: 172-183	ANATOMY	ANATOMY
VII	May 12	13	14	15	16
	ANATOMY				TEST #4
VIII	May 19	20	21	22	23
,	Ch. 8: 184-215				
IX	May 26	27	28	29	30
	HOLIDAY			TEST #5	Ch. 9
X	Jun 2	3	4	5	6
	Ch. 10		Ch. 11		
XI	June 9	10 MAKE-UPS	11 TEST #6		

YOU ARE REQUIRED TO BRING A SCANTRON ANSWER SHEET AND A #2 PENCIL TO ALL TESTS

All tests will be multiple-choice. Lecture, reading, visual and class discussion materials will be covered on the tests. Each test will count equally and may be expected to cover primarily the current section of the readings and lectures, although some questions referring to earlier materials may be included. The sixth test will follow the same procedure and will not be a comprehensive final. Students must take all six tests, although students receiving grades of 90% or better on the first five exams may be excused from taking the sixth. No test may be dropped. The following are the minimum grade parameters:

$$95\% = A$$
 $77\% = C+$ $90\% = A 70\% = C$ $87\% = B+$ $65\% = C 83\% = B$ $60\% = D+$ $55\% = D$ $54-=F$

You are expected to read the page assignments in a timely fashion and be prepared to answer questions on them. Your basic final grade will be determined by averaging your test grades. Additionally, your in-class participation and preparedness will also be taken into consideration in establishing your final grade.

DO NOT MISS AN EXAM. ALL MISSED TESTS MAY BE MADE UP ONCE AND ONLY ONCE DURING THE QUARTER DURING THE LAST CLASS HOUR ON JUNE 10.

ONCE TAKEN, A TEST MAY NOT BE MADE UP.

OTHER INFORMATION

Tests must be returned after each test. You may check your answers by consulting the keys and grade distributions which will be posted in A-100 (north wall). The results of your last test and your class grade may be obtained from me by providing me with a self-addressed stamped envelope on the day of the last test.

No extra credit assignments will be given or permitted.

Talking aloud, private conversations and other interruptions of this class will not be tolerated. If you are issued a warning for violating this policy, your class grade will be lowered by one full letter grade. A second warning will result in a failing class grade.

If you have any questions in regards to working toward your Associate in Arts & Sciences degree, or any additional advising matter, feel free to contact Deanne Eschbach,

advisor for the Social Science Division. You may stop by her office in D110, call to schedule an appointment at (425) 564-2212, or e-mail deschbac@bcc.ctc.edu.

If you have medical information to share with me in the event of an emergency, please contact me via email or come to see me during office hours. Emergency preparedness is important! If you need course modifications / adaptations or accommodations because of a disability, I can refer you to our Disability Resource Center (DRC). If you prefer, you may contact them directly by going to B132 or by calling 425.564.2498 or TTY 425.564.4110. Information is also available on their website at http://bellevuecollege.edu/drc/

LEARNING OBJECTIVES

- To demonstrate an understanding of the historical contexts and consequences of natural science and social science concepts developed for and directed at a holistic and comparative approach to human behavior.
- To recognize, identify and use the scientific method, in particular the principles of biological evolution, and to distinguish coherent arguments based on such principles from other claims.
- To show knowledge of the general elementary principles of molecular, Mendelian and population genetics and their synthesis with evolutionary explanation.
- To apply contemporary concepts in re human variation, such as clinal analysis and selective factors in population biodynamics, and distinguish such approaches from older paradigmatic formulations.
- To apply taxonomic and cladistic concepts and principles toward an analysis of zoological sets, focusing on evolutionary trends through a survey of the living primates.
- To observe and recognize phyolgenetic behaviors found throughout the primate order with particular attention to the dynamic biocultural interactions between ecological settings and the construction of social groups and behaviors.
- To compare the gross anatomy of modern hominids and pongids, and gain knowledge of elementary geological, paleontological and dating principles and technologies.

• To demonstrate detailed paleoanthropological knowledge of fossil hominoids and hominids, enabling the contrast, comparison and construction of hypothetical phylogenetic interpretations of hominid lineages and the selective evaluation of competing theories of hominization.

GENERAL EDUCATION RATINGS

Biological Anthropology (ANTH 201) has the following General Education Ratings:

REA	COMMUNICATION						
Critical Thinking, Creativity, Problem- Solving	Quantitative/ Logical	Research/ Information Literacy	Reading	Writing	Listening, Speaking	Visual	Computer Literacy
3	2	2	2	0	2	0	0

RES	ITY	CULTURAL TRADITIONS				
Self-Assessment/ Life Goals	Group Processes	Ethics	Lifelong Learning	Historical & Intellectual Perspectives	Aesthetic Awareness	Cultural Diversity
0	0	1	1	2	0	1

SCIENCE & ENVIRONMENT					
Nature of Science	Science & the Natural World	Technology & Society			
3	2	1			

What do these ratings mean?

- 0 =Course does not include instruction and assessment of this area.
- 1 = Course includes instruction and practice of the general-education area, and performance/knowledge of this area is assessed.
- 2 = Course includes instruction and practice in two or more of the outcomes of this general-education area, performance/knowledge is assessed, and 20% or more of the course focuses on it.
- 3 = Course includes instruction and practice in at least half of the outcomes of this general-education area, performance/knowledge is assessed, and 1/3 or more of the course focuses on it.

Please consult BCC's Course Catalog for more information on General Education Ratings.

PROCEDURES AND GUIDELINES OF THE SOCIAL SCIENCE DIVISION Revised Fall 2007

Cheating, Stealing and Plagiarizing*

Cheating, stealing and plagiarizing (using the ideas or words of another as one's own without crediting the source) and inappropriate/disruptive classroom behavior are violations of the Student Code of Conduct at Bellevue Community College. Examples of unacceptable behavior include, but are not limited to: talking out of turn, arriving late or leaving early without a valid reason, allowing cell phones/pagers to ring, and inappropriate behavior toward the instructor or classmates. The instructor can refer any violation of the Student Code of Conduct to the Dean of Student Services for possible probation or suspension from Bellevue Community College. Specific student rights, responsibilities and appeal procedures are listed in the Student Code of Conduct, available in the office of the Dean of Student Services.

Incomplete

If a student fails to complete all the required work for a course, an instructor may assign the grade of Incomplete ("I"). The student must complete the coursework by the end of the next quarter, or receive the assigned letter grade (usually an "F").

F Grade

Students who fail a course will receive a letter grade of "F."

Final Examination Schedule

The Social Science Division will adhere to the final examination schedule as stated in the BCC Schedule. Final examinations will be held at the end of each quarter at fixed times. Instructors will not give examinations in advance of the regular schedule. A student who is absent from any examination held at any time during the quarter may forfeit the right to make up the examination. If, for illness or some other circumstance beyond the student's control, the student is unable to be present at any scheduled examination and has contacted the instructor on a timely basis, the student may be permitted to take such examination at a time designated by the instructor.

Withdrawal From Class

College policy states that students must formally withdraw from a class by the end of the seventh week of the quarter (Registration Office, B125). If a student has not withdrawn by that date, an appropriate letter grade will be assigned for the course.

Hardship Withdrawal

Instructors may assign the grade of "HW" (hardship withdrawal) at their discretion in the event that a student cannot complete the coursework due to extreme and exceptional circumstances. Students may also contact the Enrollment Services office BEFORE grades are assigned in cases of hardship.

Students Who Require Disability Accommodations:

Students with disabilities who have accommodation needs are encouraged to meet with the Disability Support Services (DSS) office located in B132 (telephone 425.564.2498 or TTY 425.564.4110), to establish their eligibility for accommodation. The DSS office will provide each eligible student with an accommodation letter. Students who require accommodation in class should review the DSS accommodation letter with each instructor during the first week of the quarter.

Students with mobility challenges who may need assistance in case of an emergency situation or evacuation should register with Disability Support Services, and review those needs with the instructor as well.

Distribution of Grades

Grades will not be posted in the Social Science Division or in faculty offices, and secretaries will not give out grades. Students should access their grades through the BCC Web site.

Return of Papers and Tests

Paper and/or Scantron score sheet returns will be arranged in the following ways ONLY: by mail, if student supplies the instructor with stamped, self-addressed envelope (with appropriate postage); or by the instructor designating a time and place whereby the student may retrieve his/her papers. Unclaimed papers and/or Scantron score sheets must be kept by the instructor for a minimum of sixty (60) instructional days following the end of the quarter.

*If you are accused of cheating, stealing exams and/or plagiarism, there is a Bellevue Community College Student Discipline and Appeals Procedure (the right to due process) which you may pursue. Contact the office of Division Chair (A251), the Dean of Student Services (B231A) or the Associated Student Body (C212) for information regarding the appeals process.